

St. Catherine University

SOPHIA

Masters of Arts in Education Action Research
Papers

Education

12-2020

Mindfulness and the Virtual School: Effects of Mindfulness Interventions in the Aftermath of Emotional Trauma and Isolation.

Kulliki Kuningas

Follow this and additional works at: <https://sophia.stkate.edu/maed>



Part of the [Educational Methods Commons](#), [Educational Psychology Commons](#), and the [Elementary Education Commons](#)

Recommended Citation

Kuningas, Kulliki. (2020). Mindfulness and the Virtual School: Effects of Mindfulness Interventions in the Aftermath of Emotional Trauma and Isolation.. Retrieved from Sophia, the St. Catherine University repository website: <https://sophia.stkate.edu/maed/386>

This Action Research Project is brought to you for free and open access by the Education at SOPHIA. It has been accepted for inclusion in Masters of Arts in Education Action Research Papers by an authorized administrator of SOPHIA. For more information, please contact sagray@stkate.edu.

Mindfulness and the Virtual School: Effects of Mindfulness Interventions in the
Aftermath of Emotional Trauma and Isolation.

Submitted on December 17, 2020

in fulfillment of final requirements for the MAED degree

Kulliki Kuningas

Saint Catherine University

St. Paul, Minnesota

Advisor _____

Date _____

Acknowledgements

I would like to say thank you to my colleagues, professors, and my coach who supported me during the beginning of the COVID-19 virtual school year. You are the best teammates! Thank you to all students who participated.

Abstract

This action research studied the effects of mindfulness, meditation, and simple yoga exercises on children in the aftermath of emotional trauma and isolation due to COVID-19. The research further explored how these strategies interact with Montessori philosophy and whether a public Montessori school's virtual upper elementary environment can accommodate such practices. The study took place over four weeks. Thirty-one upper elementary students in a public metropolitan Montessori school received daily guidance on mindfulness and mediation via Google Meet and instructional videos. The researcher used online pre- and post-surveys, checklists, and students' journals to collect data. Over the course of the study students demonstrated increased comfort level when expressing emotions. Further study could examine the impact these interventions have if delivered in the non-virtual Montessori classroom.

Keywords: Montessori, normalized classroom, mindfulness, meditation, childhood trauma, childhood isolation, adverse childhood experiences

In the Montessori universe, the phenomenon of children harmoniously working and interacting with each other, seemingly with no distraction from the teacher, has a name: “normalized” classroom environment. “Success in student learning likely requires a non-disruptive classroom environment so students can fully concentrate on educational material” (Black & Fernando, 2014, p. 1242). To achieve this balance is no easy task. Teachers, traditional and Montessori alike, face many challenges to balance the learning needs of the children while simultaneously managing disruptive behaviors.

The year 2020 brought unique challenges into the lives of children and the teachers. On the first day of the 2020 – 2021 school year, the welcoming message board in my classroom still displayed Friday, March 13, 2020 – the last day when the classroom witnessed students engulfed in their work, and the hallways echoed with children’s laughter. If you entered my classroom today, you would see a set-up that resembles a NASA command center; a large table covered with multiple laptops, several other gadgets, and a large computer screen behind which I conduct my daily operations. In the COVID-19 educational setting my students enter their class on a humongous smartboard screen – as do thousands of children all over the world. Still, rooted in the Montessori principles, now more than ever, I believe in the importance of community building and taking care of the students’ emotional well-being.

It is fair to say that COVID-19 has altered our way of living. Children, social creatures by nature, have not seen their friends and classmates for many months. For many children, the school has historically been the environment where they practice

social interactions with others. Students can “manage” their own learning path in the Montessori classroom and follow their instincts under the teacher’s watchful eye. In the Montessori classroom, students can feel safe, make mistakes, and learn from them. The COVID-19 virtual school has eliminated many of these choices. It is no surprise that many students feel isolated, sad, and trapped in the house. Donida (2018) stated that childhood trauma could make it difficult for the children to cope with unpredictable and stressful life events. Already, with limited data, the signs point to increased anxiety and fear of the unknown in my students. During an impromptu sharing of artwork, several student drawings and paintings clearly displayed tears.

According to research, one of the most effective ways to deal with trauma is by providing children with resilience skills and practicing them in an environment that offers trustworthy relationships (Bethell et al., 2017). In recent years, mindfulness practice has found its way into education as a way to create peaceful classroom environments by simply teaching the children how to deal with emotions. Mindfulness can be cultivated formally, through meditation, or informally, by being purposefully present (Goodman & Calderon, 2012). It can easily adjust to any form of the classroom – even the virtual kind.

This action research will examine findings regarding what effect do a combination of mindfulness, meditation, and simple yoga exercises have on children in the aftermath of emotional trauma and isolation. This study will explore how these strategies interact with Montessori philosophy and whether a public Montessori school’s virtual upper elementary environment can accommodate such practices.

Theoretical Framework

I believe that Maria Montessori's Education as an Aid to Life is the theoretical framework that best guides my action research paper. Montessori modeled her educational method around the individual's experience and believed that each individual must construct their own knowledge by manipulating the environment, the physical and the emotional environment alike.

"Help me to help myself" is a phrase often used to describe the foundation of the Montessori way of teaching. As Montessorians, our challenge is nurturing wholesome young individuals who value independence, respect others, and enjoy learning. As teachers, we embrace their individuality, we show them how to use each other as inspiration, while making sure their psychological and emotional well-being is held as high of a regard as their intellectual abilities. Montessori calls it a "normalized" classroom. Achieving this type of learning environment is no easy task. In hopes of providing "aid to life" in dealing with emotional stress and anxiety after experiencing the closure of schools and isolation from friends, I will design a combination of mindfulness, meditation, and art activities to guide my 9–12-year-old students.

This action research paper looks for answers to the question: What effect do a combination of mindfulness, meditation, and yoga interventions have on students in the aftermath of emotional trauma and isolation?

Review of Literature

Many students are exposed to adverse childhood experiences (ACEs) that range from household dysfunction to abuse and neglect (Conley, McDonald, & Shin, 2018).

Childhood abuse can be physical, psychological, or sexual, whereas household dysfunction can involve a family member's mental illness, exposure to substance abuse, or criminal behavior in the household (Donida, 2018). Additionally, childhood trauma can make it difficult for children to cope with unpredictable and stressful life events, and they may exhibit symptoms of anxiety, aggression, sleep deprivation, or social withdrawal (2018). Their sense of safety and security is affected. Negative emotions of fear and anxiety are often linked to internalizing problems, while anger causes disruptive behavior (Rydell, Berlin, & Bohlin, 2003).

Research has shown that the most effective ways to address childhood trauma require learning and practicing resilience skills in an environment that provides trustworthy relationships (Bethell et al., 2017). Most children will face social-emotional, or academic challenges at some point. However, based on analysis of data from the 2016 National Survey of Children's Health (NSCH), children that learn to stay calm and in control when faced with challenges are over three times more likely to be engaged in school than children who have not learned the skills (2017).

The Montessori classroom is a perfect fit to incorporate a variety of therapeutic interventions. The method is a unique curriculum that does not follow textbooks or pacing guides, allowing the teacher and students to fit in activities when most appropriate. In the traditional school setting, dialogue between a teacher and a student is often prescribed by a textbook or teacher manual, and it is usually tied to a specific lesson. Conversation between the students during the instructional time is almost taboo. The Montessori method is radically different from conventional approaches to teaching and learning (Cossentino & Whitescarver, 2008). As Montessorians, we have the freedom

to best take care of children's emotional needs, because we can easily make it part of their daily learning.

The Montessori environment is an integral part of the philosophy. In the classroom, children can follow their interests. It starts with a prepared environment. The thoughtfully organized and beautiful classroom environment is essential to cultivating independence in the Montessori classroom because it enables children to satisfy their curiosity. Therefore, it is very suitable for any intervention because it can be tailored to best fit individual student's needs. In a Montessori classroom, children's mental development and learning do not come from a teacher but from interacting with the materials in the environment (Lillard & McHugh, 2019). Abraham states that in Montessori classrooms, an essential element of success lies in the guide's ability to observe and respond to each student's individual needs (2012).

The teacher and students use dialogue as a tool to eliminate any misconceptions. In the Montessori classroom, the teacher guides the children on their independent pursuit of knowledge. Frierson wrote that Montessori classrooms are deliberately social places, which cultivate respect for and solidarity with others (Frierson, 2016). Every year, a group of new students enter the community; the teacher must take time to assess their needs and likes and adjust the classroom environment accordingly. Frequently, when discussing the classroom environment, the physical environment comes to mind. The importance of creating an environment that welcomes conversation and interaction between kids of different ages is essential to the Montessori classroom. It is the adult's responsibility to foster an atmosphere of respect and guide the children on their journey to autonomy.

“Montessori education at its best is a combination of art and science, and exquisite balance of subjectivity and objectivity” (Haskins, 2012, p. 34). A Montessori classroom is a magical place where older children are guiding younger ones. It is a place where children want to be because they feel at home. Donida (2018) explained that regarding treating children, therapy should “offer an opportunity for them to experience a secure, close relationship with a caring and empathetic individual” (p. 2). A Montessori teacher can get to know the children and their families very well because the teacher generally works with a family for three years.

If implemented carefully, a combination of different therapeutic interventions in a Montessori classroom could be very beneficial to students who have experienced emotional distress. Mindfulness has been proven to fit well with Montessori philosophy. Goodman and Calderon (2012) stated that mindfulness has potential because it can easily be combined with many other methods and can be both preventative and remedial. Black and Fernando (2014) wrote that mindfulness training involves developing mindful awareness acquired through intentional practice. They further explained that mindful awareness is, therefore, a trainable skill of “intentionally remembering to pay attention in the present moment without a habitual reaction” (Black & Fernando, 2014, p. 1242). Mindfulness is associated with improved self-regulation because it limits unwanted emotional or behavioral reactions. In addition to learning how to sit still and breathe, techniques also used in yoga and meditation practices, mindfulness training teaches how to recognize emotions and feelings by being aware of the sensations in the body. Coholic, Eys, and Lougheed (2012) mentioned that young people in crisis often have difficulty articulating their thoughts and have trouble staying grounded.

Mindfulness can be cultivated formally, through meditation, or informally, by being purposefully present (Goodman & Calderon, 2012). They explained that meditation develops awareness, concentration, and attention, allowing “present-moment experiences rather than fighting against or clinging to emotions and thoughts that are assessed either positive or negative” (2012, p. 255). Often, avoidance of feelings and emotional numbing is common in trauma surviving, creating disconnects from self and others (2012).

A dynamic form of treatment for children with adverse childhood experiences is art therapy (Donida, 2018). Art is interwoven into most learning activities in a Montessori classroom; therefore, it is natural to incorporate it as a therapeutic intervention. Coholic, Eys, and Lougheed (2012) argued that creative methods are essential to use in work with children who have experienced significant life challenges since they usually avoid talking about these experiences. They are often more willing to communicate nonverbally through creative activities that are pleasurable and can stimulate a desire to express hidden wishes and relieve tension.

Methodology

This action research studied mindfulness, yoga, and meditation effect on children after long isolation from school and friends. The researcher conducted her study over four weeks in a public midwestern metropolitan area Montessori school’s virtual setting. This study’s participants were the researcher’s upper elementary students who had previously received instruction and opportunities to practice mindfulness in the school setting. The parents received a passive consent form (Appendix A) at the beginning of the research period, which explained the study’s process and the data tools used to collect students’

input. The passive consent form gave the parents a choice not to include their child's data in the study.

Thirty-one students whose parents passively consented to their involvement in the research, 18 boys and 13 girls, participated in the study. Per the typical Montessori setting, the action researcher was teaching three grade levels simultaneously. Therefore, she was familiar with many of the students in her classroom already. Out of nine sixth grade students, eight had been students in the same classroom for the two previous years, one of the students was new to the school and had not met any of the students in person. All 11 fifth grade students had been with the teacher in the 2019 – 2020 school year. The teacher had not worked with the 11 fourth grade students previously. The researcher had participated in mindfulness training provided by the school district and completed a graduate course in mindfulness offered by a local college. She practiced yoga consistently for approximately six years before conducting this study and used mindfulness strategies in her classroom and her personal life for about five years prior to this action research.

The researcher followed an established mindfulness curriculum created by Growing Minds and Children's Hospital of Milwaukee and approved by the school district as a blueprint. The curriculum offered three different types of guided activities: exercises to develop focus and attention skills, practices to cultivate everyday kindness strategies, kindness and gratitude towards others and themselves, and routines to reset and attune the mind-body connection through movement. The teacher introduced each exercise, shared examples from her practice, and invited students to share stories about

their experiences. After the initial introduction, the researcher posted a short daily video relating to the topic discussed with the class.

Most videos centered on developing attention and focus skills and were designed to be pulled up on a screen and featured nature scenes with voiced instructions through the practice. Some exercises were movement-based but created so that they worked in any space. The students were encouraged to find a quiet place in their home and practice at a specific time of the day: the first two weeks during the morning work-cycle and the next two weeks during the afternoon work cycle to determine what time students needed a break the most. The students learned to use the guiding videos in the low-stress environment so that the skills learned through practice could be utilized in a high-stress situation.

Another skill introduced by the researcher helped build resiliency in students experiencing difficulties coping with the isolation during the COVID-19 pandemic. The practice involved talking about healthy ways to self-regulate. The teacher walked the students through mindful awareness and self-compassion exercises. The teacher posted videos similar to the focus and attention videos and invited them to practice in their quiet place at home. The students had an opportunity to share their practice using a video application or extra journal entries.

Following a typical Montessori virtual classroom procedure, all students attended the morning Google Meet; therefore, the researcher chose to conduct the first two weeks' interventions during the morning Google Meets. Since the participants had previously learned basic Mindfulness terminology, the early five interventions centered around

familiar concepts to reintroduce the terms to students, assess their comfort level and build trust.

During the first week of interventions, the teacher guided the students through a sequence of daily focus and attention activities. She began demonstrating how to sit mindfully on the floor or in the chair; she invited the students to follow her example and practice three different breathing strategies. Since the virtual environment did not allow her to observe students' daily practicing in person, she invited them to share daily videos of their practice. The length of the videos varied from 30 seconds to a minute. The researcher posted Mindfulness videos in Google Classroom to aid the students' independent practice.

The researcher began the second week of interventions by reading "Ahn's Anger" by Gail Silver. In the book, a little boy met his Anger and learned how to deal with it. In addition to daily meditation and breathing practices, the researcher introduced the concept of pleasant and unpleasant feelings to the students and invited them to share various emotions in the daily discussions. The students continued with their daily sharing of independent meditation practices. The researcher presented an additional opportunity to express their feelings through art utilizing the Google Chrome Canvas application.

The third and fourth weeks of interventions took place during the afternoon work cycle to investigate which time worked best for the students. This task presented some difficulties to the researcher since all students were not required to attend the first afternoon Google Meet. The researcher conducted the demonstrations, gave directions at the end of the last morning Google Meet, and scheduled videos in Google Classroom that the students could access during the afternoon.

During the third week of Mindfulness activities, students learned to listen mindfully to concentrate their mind on just one sound. The teacher used a chime familiar to the students and asked them to find something that makes a similar sound at home for their independent practice. Another activity the students practiced was mindful eating. The researcher asked them to find something that tasted good to them and eat it mindfully, noticing the thoughts that came to their mind. She asked the students to find something they did not like very much, eat it mindfully while completing their independent practice, and record their thought on the video thread they shared with the teacher. The rest of the third-week activities centered on mindful movements, such as walking, stretching, and simple yoga poses—a video posted in Google Classroom to help the students with their independent practice accompanied each session. The week culminated with journaling about the experience.

The fourth week of intervention involved all of the strategies mentioned above. Students shared a different independent practice every day via video. The interventions were discussions rather than demonstrations. The theme of the fourth week was expressing gratitude; to others and themselves. The researcher guided the discussions through various self-awareness and compassion discussions. Additionally, she introduced the students to a different body-scan each day.

This study used an experimental design to gather information from classroom observations, student journals, teacher checklists, and surveys. However, because of the COVID-19 pandemic, the school year began virtually, and in-person observations were impossible. The teacher designed surveys, checklists, and studied student journals that were submitted electronically to collect data. During the first week, the students

completed the initial Google Form pre-survey (Appendix B) to establish a baseline of what the students were thinking and feeling after a long period away from a structured school environment. Students answered six questions measured in Likert Scale and one open-ended question that helped researcher gain insight into their ability to deal with emotions and stress. The students completed the same Google Form post-survey during the last Mindfulness session to show whether their mindset had changed.

Additionally, as a part of their daily journaling, the children filled out simple emotions chart (Appendix C) by signaling with thumbs-up or thumbs-down how they felt while marking the boxes. The chart listed eight emotions ranging from happy to angry. The students filled out the table after the guided activity during the morning Google Meet during the first two weeks. During the last two weeks, they practiced independently while on the lunch break. Therefore, to measure whether the practice influenced their afternoon focus, the students filled out the same emotions chart as part of their afternoon Google Meet.

The researcher reviewed student journals for evidence. During the four week-long research cycle, the students freely reflected on their weekly practice and how it affected their concentration or overall wellbeing in their Friday's weekly reflection journal writing. The teacher posted some guiding questions (Appendix D) related to the topics discussed and activities done during the week as starting points to students who struggled with expressing their thoughts in writing (i.e. What will I do if I feel anxious, stressed, or worried today?).

Analysis of Data

The purpose of this study was to explore how a combination of mindfulness, meditation, and yoga affects students' wellbeing after a long period of isolation from their friends due to COVID-19 pandemic. The world-wide health crisis ended the 2019-2020 school year early and began the 2020-2021 school year virtually. The subjects of this study were students in grades four, five, and six in a public Montessori school. Overall 31 students participated. The researcher started her study after the students acclimated to the online learning environment and had access to the necessary technology.

Prior to the start of the interventions, the students were asked which issues were hardest for them to deal with. Fourteen students indicated that online schoolwork caused them stress. Another issue that made them angry were siblings. Three students said that they were either feeling alone, depressed, or "would not be able to tell."

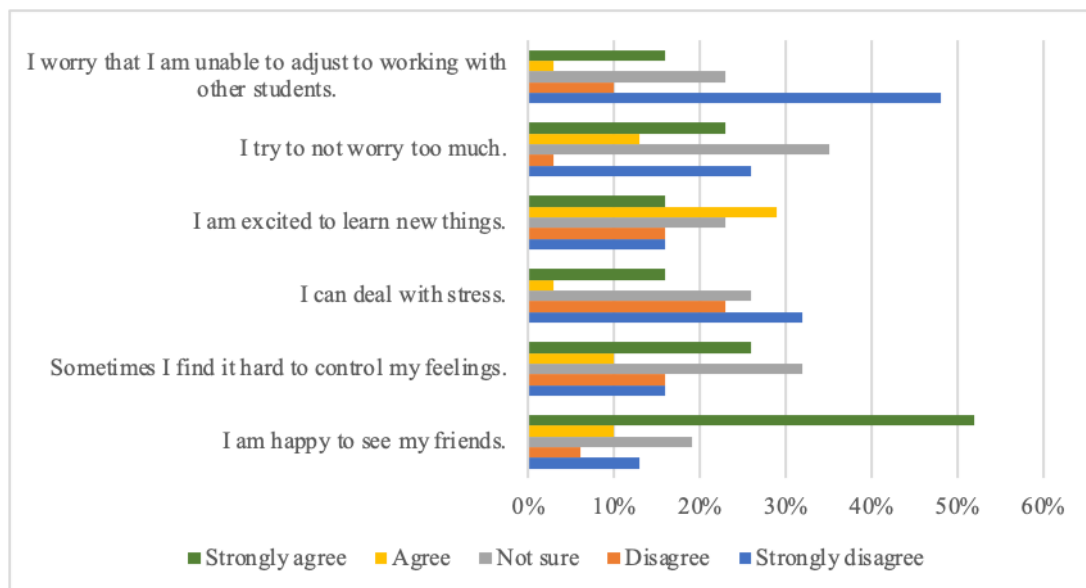
The researcher analyzed the pre-surveys completed by participants to find out what the students were thinking about their ability to deal with stress and how they were feeling about seeing their friends again prior to the mindfulness exercises and discussions. The survey used 5-point Likert scale (i.e., strongly agree; agree; not sure; disagree; strongly disagree). The researcher explained how to open and select the answers in the Google Form before the students completed the survey independently at home. The researcher was aware that all students had participated in mindfulness activities during the previous school year. The students visited Peace Learning Center in Milwaukee for a workshop on peaceful conflict resolution. The instructors from Peace Learning Center

conducted four follow-up classroom visits. Additionally, the students participated in 15-minute weekly mindfulness sessions taught by an instructor from the Growing Minds organization. After the conclusion of these programs, the students used the strategies in their everyday classroom life.

Figure 1 shows the results of the pre-survey (Appendix A). The researcher asked students six questions that they answered using a 5-point Likert scale.

Figure 1

Pre-survey: Help me to Help You



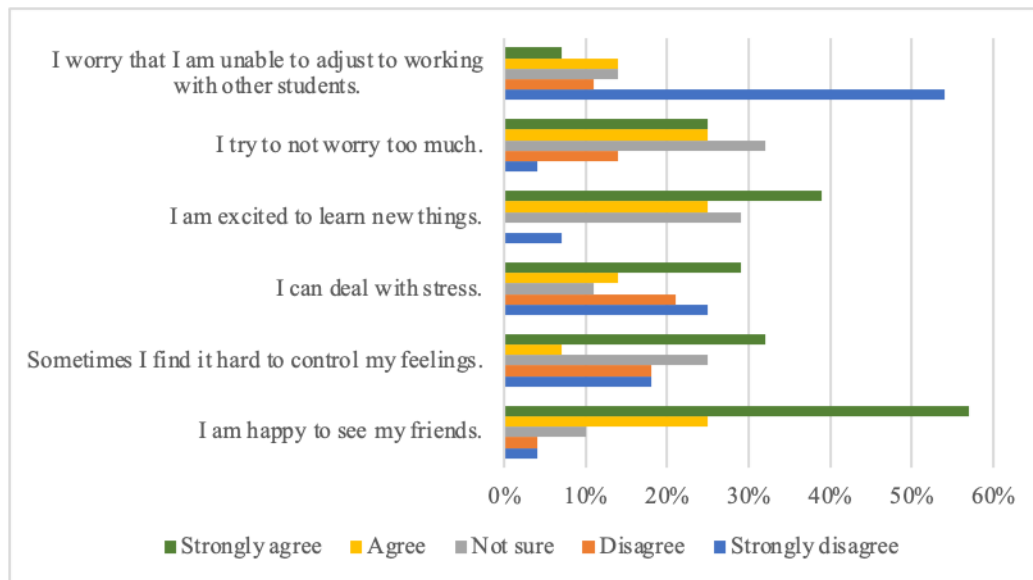
The survey demonstrated that 62% of the students were excited or somewhat excited to see their friends, while 19% were not looking forward to it and 19% of them said that they were not sure. Fifty-eight percent of the students were not worried about adjusting to working with their friends in the new virtual school year, 19% of them expressed concern, and 23% did not have an opinion. When asked about their ability to deal with stress, 26% of the students said they were not sure, while 55% admitted that

they had a difficult time dealing with stress, and 19% felt confident in their ability to handle stress. Thirty-six percent of the students shared that they had a hard time controlling their emotions and 32% were neutral, while 32% said they did not find it difficult to express their feelings.

Figure 2 shows the results of the post-survey. The researcher asked students the same six questions as in the pre-survey.

Figure 2

Post-survey: Help me to Help You



According to the post-survey 82% of students agreed or strongly agreed with the statement, “I am happy to see my friends.” Ten percent were not sure, and 8% answered they were not happy spending time with their friends. After the interventions, 46% of the students indicated that they could deal with stress, 11% were unsure, while 43% of the students did not feel confident about dealing with stress. After four weeks of mindfulness interventions, 67% of the students disagreed or strongly disagreed when asked if they were worried about adjusting to work with other students, 11% were not sure, and 22%

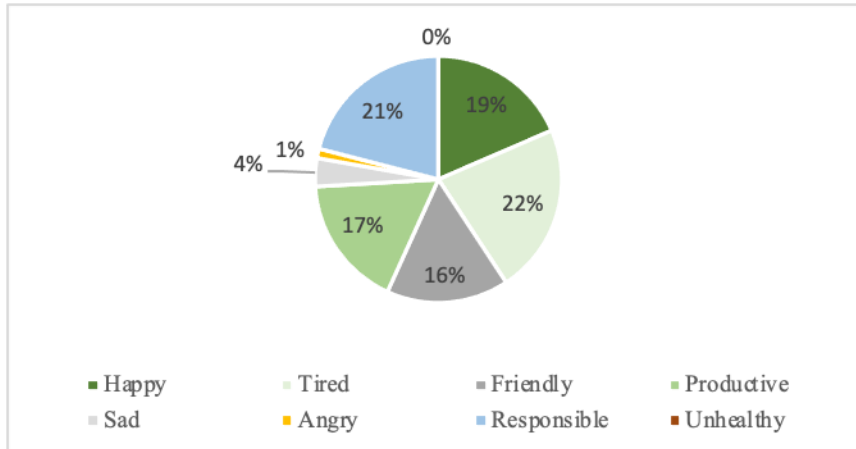
agreed or strongly agreed with the statement. When asked about their ability to deal with feelings, 39% of the subjects expressed confidence in their ability to deal with feelings, 36% said that they had difficulties, and 25% said they did not know.

After the four-week intervention period, the category that showed the most change was “not sure.” Twenty-six percent of the students stated that they were not sure when asked about their ability to deal with stress on the pre-survey while the post-survey showed that 11% of the students answered “not sure.” Thirty-two percent of the students were not sure about their ability to deal with feelings before the interventions, the number of unsure students decreased to 25%.

During the first two weeks of the action research, each day, during the morning Google Meet, students completed a simple survey by signaling thumbs-up or thumbs-down on a variety of emotions and feelings (Appendix B). The researcher tallied the number of thumbs up each emotion received during the first two weeks of research. This provided the researcher a snapshot of the students’ overall wellbeing during the morning work period. Figure 3 displays the results of student responses during the first two weeks, when the interventions occurred during the morning Google Meet.

Figure 3

The Emotional Wellbeing of Students During the First Two Weeks

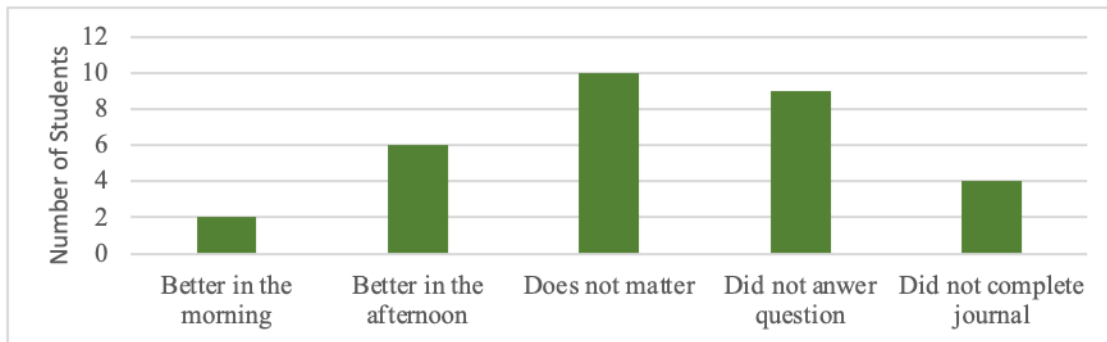


During the first two-week cycle, many students indicated that even though they were tired, they also felt happy and responsible. Data revealed the “Tired” column received 22% of the thumbs up, “Responsible” had 21% of the thumbs up, and “Happy” column had 19% of the thumbs up. No student indicated they felt unhealthy, and only% students indicated they felt either angry or sad during the morning work cycle.

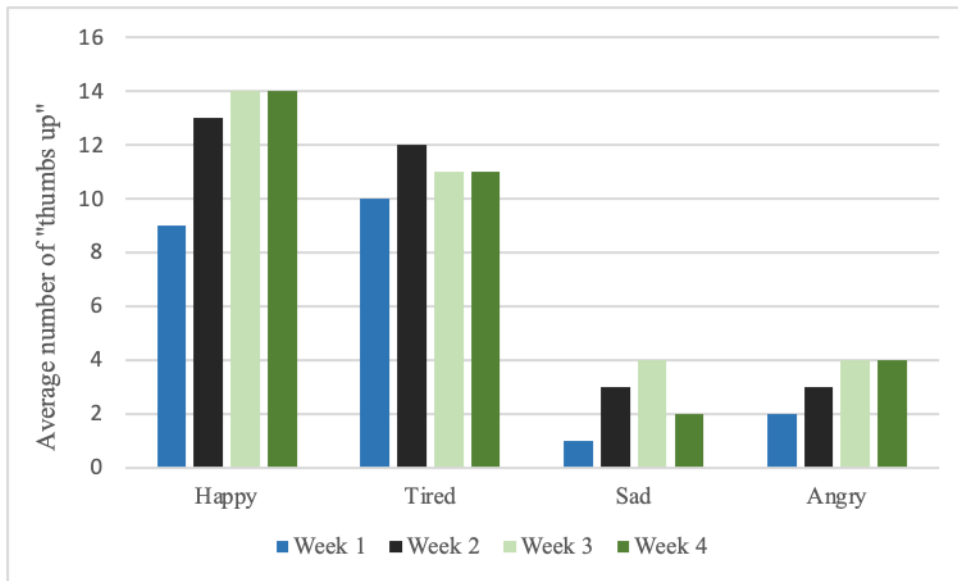
To analyze whether the time of day affects the outcome of mindfulness activities, the researcher changed the time of the interventions from the morning work cycle to the afternoon work cycle after the first two weeks. Figure 4 displays the results of student opinions expressed in their journaling activities. While four students did not complete the assignment and nine did not answer the question explicitly, 10 students indicated that it did not matter to them whether the intervention happened in the morning or afternoon, six students preferred the afternoon, and two students like the morning better.

Figure 4

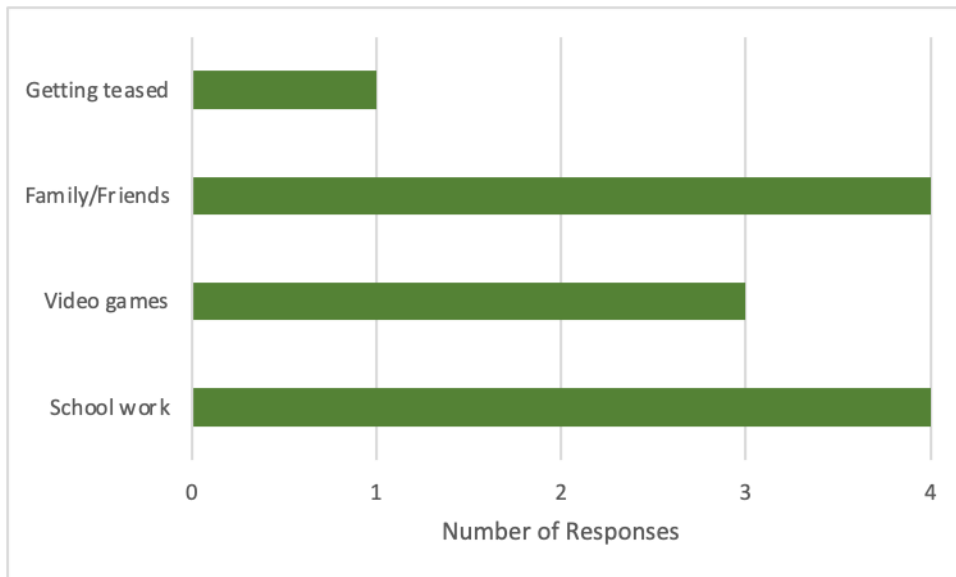
Student Feedback on Mindfulness Practice Time



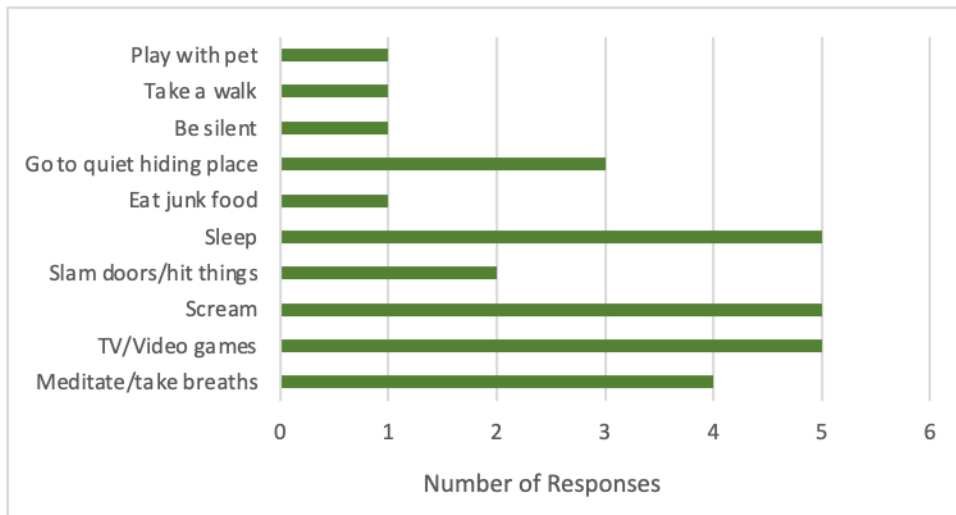
Additionally, the researcher compared the weekly average data on feeling happy, sad, angry, and tired. The data in Figure 5 reflects information collected from students' Emotions chart during the first two weeks. Twenty-two students on average indicated that they were happy, while 28 students expressed that they were happy during the last two weeks. On average, 22 students said they were tired during the first two weeks, and 22 students indicated that they were tired during the last two weeks of interventions. The average number of students to express sadness was four during the morning intervention sessions and six during the second session; on average five students expressed anger during the first cycle and eight expressed anger during the second cycle.

Figure 5*Emotions Comparison*

Throughout the duration of the action research, the researcher asked for students' feedback on topics they discussed and practiced during the interventions. At the end of the first week of interventions, the teacher analyzed students' journal writings on a topic that asked them to reflect on time when they got very frustrated and had to overcome stress. Figure 6 shows that four students indicated frustration with friends or family and schoolwork as issues that caused them the most stress. One student was stressed about getting teased, while three students mentioned video games as the main stressor.

Figure 6*Student Stressors*

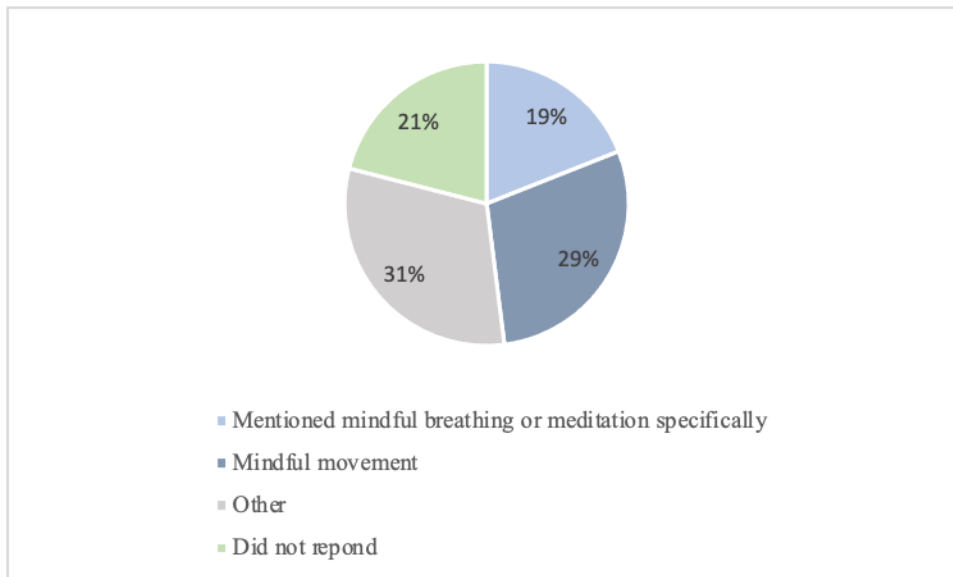
At the beginning of the interventions, the students were asked to reflect on the following journal topic: “What do you do to deal with frustration? Tell me about times you have become very frustrated with something and how you got over the stress” (Figure 7). Answers, such as “going to sleep,” “screaming” (either out loud or into the pillow), and “watching TV or playing video games” were given most frequently. Four students mentioned meditating or breathing specifically, while going into “hiding in a secret place,” and “slamming doors or hitting things” were mentioned by two students.

Figure 7*Students' Response to Frustration and Stress in the Beginning of Interventions*

During the fourth week of interventions, the researcher asked the students to reflect on the question: What will you do if you feel anxious, worried, or stressed today? Figure 8 analyses the student responses after receiving four weeks of mindfulness instructions. Nineteen percent of the students answered that they did some type of mindfulness breathing or meditation. One fourth grade girl wrote, “If I am feeling anxious, stressed, or worried today I will just do my meditation work – it actually helps.” Twenty-nine percent of the students mentioned an activity that was calming to them; taking a walk, riding a bike, or hitting tennis balls against the garage wall were mentioned. Thirty percent of the students mentioned other ways to cope with stress.

Figure 8

Students' Responses to Frustration and Stress at the End of Interventions



After four weeks of instruction and guided practice in mindfulness, meditation, and yoga exercises, students learned to use various strategies to deal with stress. The mindfulness curriculum offered three different types of guided activities: exercises to develop focus and attention skills, practices to cultivate everyday kindness strategies towards others and themselves, and routines to reset and attune the mind-body connection through movement. Despite some limitations, the study showed that daily guided activities positively impacted the students' ability to handle difficult situations. The student journals revealed that more students started to use strategies learned during the interventions while handling stressful situations. While the students initially indicated they would like the afternoon interventions better, the data showed that more students were tired or angry during the afternoon emotions check.

Action Plan

The purpose of this action research was to study how a combination of mindfulness, yoga, and meditation strategies affected student well-being in a Montessori upper elementary classroom after a period of isolation. The research was initially designed to take place in an in-person classroom in an established public Montessori classroom. However, due to COVID-19 pandemic restrictions, it was implemented in a virtual format which created challenges in student participation and collecting data.

Since the delivery of interventions took place virtually in the Google Meet platform, I could not observe the actual participation of the students who turned off their cameras. Additionally, the same students often did not contribute to the discussions that followed. To resolve that problem, I invited all students to share their meditation and yoga practice videos as a tool to observe participation. Some students eagerly participated, while others did not. I pushed back the research's start date to accommodate students with limited internet access or lack of personal electronic devices and to allow students to become familiar with learning in the virtual classroom. I discovered that many students had difficulties manipulating the online data tools by leaving the forms blank or did not turn in the forms.

Use of technology in a Montessori classroom is a controversial topic. As Montessori teachers, we value beautiful handwritten work and use manipulatives to teach most academic concepts. However, technology is becoming more prevalent in our everyday lives. In hindsight, if the students had learned basic typing skills, accessing and turning in documents in Google, and communicating in a virtual world before the

pandemic, the pressure of learning everything at once would have been eliminated, and perhaps the students would have not been stressed out about the school work..

Based on the research and my experience, I will continue to incorporate mindfulness, meditation, and yoga activities in the virtual classroom setting. Students who participated were better able to identify their feelings and, in turn, manage their emotions more effectively. The importance of creating an environment that welcomes caring and productive interaction between the children, and where the adult's responsibility is to foster an atmosphere of respect, is essential to the Montessori classroom, virtual or not. One of the Montessori teacher's primary duties is to observe and respond to children's individual social, emotional, and academic needs. This educational practice, in turn, enables the inclusion of therapeutics that best serve them. Future research could focus on how purely providing students with vocabulary to express their feelings would help them deal with stress. Also, interventions in an in-person Montessori classroom, instead of a virtual setting, is another potential for further research.

References

- Abraham, J. (2012). How much water can you add and still call it lemonade? *Montessori Life*, 24, 22 – 25.
- Bethell, C., Davis, M., Gombojav, N., Stumbo, S., & Powers, K. (2017). Issue Brief: A national and across state profile on adverse childhood experiences among the children and possibilities to heal and thrive. *Johns Hopkins Bloomberg School of Public Health*, 10, 1-8.
- Black, D. & Fernando, R. (2014). Mindfulness training and classroom behavior among lower-income and ethnic minority elementary school children. *Journal of Child and Family Studies*, 23(7), 1242-1246.
- Calderon, A. & Goodman, R. (2012). The use of mindfulness in trauma counseling. *Journal of Mental Health Counseling*, 34, 254-268.
- Coholic, D., Eys, M., & Loughheed, S. (2012). Investigating the effectiveness of an arts-based and mindfulness-based group program for the improvement of resilience in children in need. *Journal of Child and Family Studies*, 21(5), 833-844.
- Conley, D., McDonald, S., & Shin, S. (2018). Profiles of adverse childhood experiences and impulsivity. *Child Abuse & Neglect*, 85, 118-126.
- Cossentino, J. & Whitescarver, K. (2008). Montessori and the mainstream: A century of reform on the margins. *Teachers College Record*, 110, 2571 – 2600.
- Donida, J. (2018). Art therapy for children with adverse childhood experiences: therapists' perspectives about art interventions (Publication No. 10982281) [Doctoral dissertation, Notre Dame de Namur University]. ProQuest Dissertations Publishing.

- Flook, L., Smalley, S., Kitil, M., Galla, B., Kaiser-Greenland, S., Locke, J., et al. (2010). Effects of mindful awareness practices on executive functions in elementary school children. *Journal of Applied School Psychology, 26*(1), 70-95.
- Frierson, P. (2016) Making room for children's autonomy: Maria Montessori's case for seeing children's incapacity for autonomy as an external failing. *Journal of Philosophy of Education, , 332 – 350.*
- Haskins, C. (2012). Order, organization, and beauty in the classroom: Prerequisite, not an option. *Montessori Life, 24*, 34-39.
- King, S. (2017). A case study of a yoga and meditation intervention in an urban school: A complex web of relationships and resilience in the search of student well-being. [Electronic Theses and Dissertations]. *UCLA*. ProQuest ID: King_ucla_0031D-_16307.
- Lillard, A. & McHugh, V. (2019). Authentic Montessori: The Dottoressa's view at the end of her life. Part I: The Environment. *Journal of Montessori Research, 5*.
- Linebarger, L. (2016). Beneficial effects of practical life activities and normalization. Retrieved from Sofia, the St. Catherine University repository website: <https://sophia.stkate.edu/maed/183>
- McLafferty, M., O'Neill, S., Armour, C., Murphy, S., Bunting, B., et al. (2018). The mediating role of various types of social networks of psychopathology following adverse childhood experiences. *Journal of Affective Disorders, 238*, 547-553.
- Rydell, A., Berlin, L., & Bohlin, G. (2003). Emotionality, emotion regulation, and adaptation among 5 to 8-year-old children. *Emotion, 3*(1), 30.

Appendix A
Passive Consent Form

**Teach Me to Help Myself
Assent Form**

September 14, 2020

Dear Parents,

In addition to being your child's Upper Elementary teacher, I am a St. Catherine University student pursuing a Masters of Education. As a capstone to my program, I need to complete an Action Research project. I am going to study how a combination of mindfulness, yoga, art, and nature-study activities help children to readjust into the physical school environment because the COVID-19 pandemic forced the students to be isolated from their peers for an extended period of time.

In the coming weeks, I will be meeting with students daily as a regular part of my mindfulness and meditation practices, and weekly to work on the art project. All students will participate as members of the class. In order to understand the outcomes, I plan to analyze the results of this Teach me to Help Myself project to determine if teaching a variety of calming strategies in combination is helpful to students in the beginning of the school year.

The purpose of this letter is to notify you of this research and to allow you the opportunity to exclude your child's data from my study.

If you decide you want your child's data to be in my study, you don't need to do anything at this point.

If you decide you do NOT want your child's data included in my study, please note that on this form below and return it by September 21, 2020. Note that your child will still participate in the Teach me to Help Myself but his/her data will not be included in my analysis.

In order to help you make an informed decision, please note the following:

- I am working with a faculty member at St. Kate's and an advisor to complete this particular project.
- I will be discussing with the students how to recognize feelings, such as anxiety, and teach them how to use a variety of strategies to calm down. In the course of the study, we will work on a communal art project that involves planting. Since the discussion involves sharing feelings, there is a risk that your student may feel emotional at times.
- I will be writing about the results that I get from this research. However, none of the writing that I do will include the name of this school, the names of any students, or any references that would make it possible to identify outcomes connected to a particular student. Other people will not know if your child is in my study.
- The final report of my study will be electronically available online at the St. Catherine University library. The goal of sharing my research study is to help other teachers who are also trying to improve their teaching.
- There is no penalty for not having your child's data involved in the study, I will simply delete his or her responses from my data set.

If you have any questions, please feel free to contact me, 414 9351400. You may ask questions now, or if you have any questions later, you can ask me, or my advisor Dawn Quigley at 612 414 9212 who will be happy to answer them. If you have questions or concerns regarding the study, and would like to talk to someone other than the researcher(s), you may also contact Dr. John Schmitt, Chair of the St. Catherine University Institutional Review Board, at [\(651\) 690-7739](tel:6516907739).

You may keep a copy of this form for your records.

Kulliki Kuningas

Date: 09/14/2020

OPT OUT: Parents, in order to exclude your child's data from the study, please sign and return by September 21, 2020.

I do NOT want my child's data to be included in this study.

Signature of Parent

Date

5. 5. I am excited to learn new things *

Mark only one oval.

	1	2	3	4	5	
Strongly Agree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Strongly Disagree

6. 6. I try to not worry too much about things *

Mark only one oval.

	1	2	3	4	5	
Strongly Agree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Strongly Disagree

7. 7. I worry that I am unable to adjust to working with other students *



Mark only one oval.

	1	2	3	4	5	
Strongly Agree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Strongly Disagree

8. What is the hardest thing for you to deal with right now? *

Appendix C
Emotions Chart

EMOTIONS: pleasant, unpleasant

Right now I feel...	Thumbs Up (YES) 	Thumbs Down (NO) 
... happy		
... tired		
... friendly		
... productive		
... sad		
... angry		
... responsible		
... unhealthy		

Appendix D
Sample Journal Topic

JOURNAL WRITING

Tuesday, September 29, 2020

Yesterday I was told to SCREAM really loud to let out my frustration and anger. What do you do to deal with frustration? Tell me about times you have become very frustrated with something and how you got over the stress.
