

An Exploration in Mindfulness: Classroom of Detectives

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Background/Context: *This exploratory feasibility study assesses a mindfulness program in a fifth-grade classroom. The research discussed herein was built on a previous study targeted at a specific population of children within the classroom and assessed the benefits of teaching mindfulness meditation to 7- and 8-year-old children who met criteria for generalized anxiety disorder.*

Purpose/Focus of Study: *The primary aim of this exploratory study was to investigate the feasibility of a mindfulness training workbook written for young children. The mindfulness workbook uses a fictional character in a storybook format. The goal was to help children understand and access their own mindfulness within the classroom setting without instruction by teachers and without using meditation techniques.*

Setting: *The study was conducted in a school-based setting.*

Participants: *Participants were 24 children of low socioeconomic status (SES) from urban areas in Fairfield County, Connecticut, who attended a summer program. The subjects described were of a nonclinical population, and all were rising fifth graders.*

Research Design: *The predominantly qualitative study was rooted in an action research design method, which allowed for program adjustments to be made as needed.*

Findings: *The mindfulness program was feasible, and overall improvements in attention were evident.*

Conclusions: *The children who needed the most help at the onset of the program showed the greatest improvement by the end.*

The primary aim of this study was to investigate the feasibility and effectiveness of a mindfulness training workbook for young children. The work builds on a previous pilot study (Semple, Reid, & Miller, 2005) that assessed the benefits of teaching mindfulness based on the mindfulness-based stress reduction program of Jon Kabat-Zinn (Kabat-Zinn et al., 1992) to 7- and 8-year-old children who met criteria for generalized anxiety disorder. The results from Semple et al. indicated some improvements, most notably, reduction in anxiety and increase in attention. Investigators concluded that mindfulness training is likely to be appropriate and beneficial for most children.

The school setting is an ideal environment to reach children because they are there for many hours per day, and school is the center of their learning and social experiences. The manual for this study was used in a fourth-grade classroom during a 6-week program. Mindful learning created an environment that nurtured creativity, compassion, and increased awareness. Mindful learning is best defined as: “(1) openness to novelty; (2) alertness to distinction; (3) sensitivity to different contexts; (4) implicit, if not explicit, awareness of multiple perspectives; and (5) orientation in the present” (Langer, 1997, p. 23). Ritchart and Perkins (2000) also outlined principles to encourage mindfulness: “looking closely, exploring possibilities and perspectives, and introducing ambiguity” (p. 27).

In a typical classroom, information is disseminated from the teachers to the students. Students memorize facts and take tests on the information. Constance Kamii and Barbara Ann Lewis (1991) posed the following question to intelligent (scoring above the 85th percentile on standardized tests) second-grade students: “There are 26 sheep and 10 goats on a ship. How old is the captain?” Not a single student commented that the question made no sense at all. Ellen Langer (2000) explained that mindlessness, as demonstrated in this example, occurs when one is initially exposed to information and accepts it as fact without considering another possible understanding or perspective; “schools must focus more on developing understanding than imparting knowledge and skills through mere practice and repetition. . . . Mindfulness means stepping outside of those grooves” (Ritchart & Perkins, 2000, p. 45).

The mindfulness workbook is called *Seymour N. B. Mack's Top Secret Detective Manual*. The workbook tries to bring mindful learning to the classroom setting. It is written in a child's voice and asks each of the students to become detectives. Each week, the children are asked to explore one of their five senses in their school environment by doing explorations. One example of a See exploration is as follows: *Draw a diagram of the outside of your school. Then go back and find what you are missing. Did you*

notice that the flowers are red or that there is a window above the door? One of the Touch explorations is: *With your eyes closed, can you figure out whose hand you are shaking merely by feeling it? How did you figure it out, or why was it easy or difficult to do?* The goal is to expand children's awareness of their everyday surroundings. The title is a mystery for the children to solve. It stands for "See More and Be a Mindful Aware Cool Kid." The manual encourages children to teach themselves and learn from each other. There are no wrong answers. The child as "detective" promotes belief in one's own attention and learning skills. Self-awareness, acceptance, increased attention, and working in groups are goals in using this manual. It focuses the children on one sense per week, and the final week is the sixth sense. Instruction by the teacher is optional but should not be necessary. To test the feasibility and acceptability of this workbook, we targeted children in Grade 4, because this is a stage marked by very high incidence of attention problems (Root & Resnick, 2003).

METHOD

OVERVIEW

The current study comprises data collected during a feasibility study assessing the effects of a mindfulness workbook in an elementary school-age classroom.

PARTICIPANTS

Participants in the study included 24 children of low socioeconomic status (SES) from urban areas in Connecticut who attended a summer program in the area. Admission to the program was through a competitive application process. The study assessed the feasibility of a mindfulness workbook in an existing classroom of children. Students were transported to the suburban school setting 5 days per week during a 6-week period. Participants ranged in age from 9 to 11 years old ($M = 10.2$, $SD = 1.31$). All the students completed fourth grade in June 2006 and were to attend fifth-grade classrooms in the fall of 2006. Forty-six percent of the students were African American, 46% were Hispanic, 4% were Asian, and 4% were Caucasian. The class comprised 13 girls and 11 boys, but for many activities, the class was split into two sections, Group A and Group B, each consisting of 12 students. These groups were assigned by the summer program for the purpose of creating smaller class sizes for certain activities. The teachers ($n = 4$) ranged in age from 17 to 35. The female head teacher (age 35) was Hispanic, and the female assistant teachers

(ages 22 and 25) were both Caucasian. Additionally, there was a male assistant teacher (age 17), a former student of the program, who was African American. The principal investigator, a 35-year-old Caucasian female, was also a presence in the classroom.

Data were collected from the following sources: four self-report measures, questionnaires, self-portraits, principal investigator's observations, field notes, and direct feedback to the principal investigator during the course of the 6-week program.

PROCEDURES

There were no special instructions given to participants. They had all signed up for the summer program, which involved a variety of academic and camp-related activities during the 6 weeks. At the beginning and end of the program, the children filled out four self-report questionnaires: Perceived Competence for Learning scale, Curiosity and Exploration Inventory, the Rosenberg Self-Esteem scale, and the Mindful Attention Awareness scale. Participants were accustomed to answering questionnaires regarding the program or other ongoing research, so the process of filling out forms was customary for the children. In addition, participants drew a self-portrait at the beginning and end of the program. Participants also filled out the Feely Faces scale and wrote worries for the Worry Warts Wastebasket at various times during the program (decided by the head teacher). The "detective manual" was used by the teacher and students 4–5 days a week, depending on the teacher's plan for the week. Students and teachers all filled out questionnaires regarding their experiences.

ASSESSMENTS

Outcome measures. The Perceived Competence for Learning scale (PCS) is four-item self-report questionnaire. It consists of four statements and responses based on a 7-point Likert scale that focuses on feelings of competence.

The Curiosity and Exploration Inventory (CEI) is a self-report measure comprising seven statements. Responses are chosen from a 7-point Likert scale. This measure consists of two subscales: the Exploration subscale and the Absorption subscale.

The Rosenberg Self-Esteem scale is a 10-item Likert scale. Statements are all about one's feelings toward oneself. Responses to statements are based on a 4-point Likert scale.

The Mindful Attention Awareness scale (MAAS) is a self-report

measure consisting of 15 items and based on a single factor. Responses are based on a 6-point Likert scale.

The Feely Faces scale is an opportunity for the young children to rate their own feelings at the beginning and end of each exercise (if they wish) without using words. The measure is based on a 7-point scale. The children place a certain number of face stickers in columns corresponding to the number of how they feel at that moment. This scale was created by the authors (Semple et al., 2005) in the original pilot study to help children become more aware of their changes in feelings over time. In the end, the children will all have a visual presentation of the wide variety of feeling states that they have encountered.

Self-portraits of each student were created twice. The initial instruction to students was “Draw yourself,” and several weeks later, “Draw yourself being mindful.”

The mindfulness workbook (*Seymour N. B. Mack’s Top Secret Detective Manual*) is a 57-page book created by the author and based on findings of the previous open trial (Semple et al., 2005). The workbook uses the idea of storytelling; it is based on a story of a young student who is forced to sit in silence, and the boredom that he fears because of this. The book encourages students to work together. The child as detective is meant to promote learning skills and his or her belief in his or her own attention, and to encourage the child’s presence as a vital group member. Therefore, the workbook (detective manual) is a fun, interactive way of encouraging what children have naturally—an intense curiosity about themselves and the world around them. Self-awareness, acceptance, increased attention, and working in groups are all part of the goals in using this manual. There is no right or wrong way to use this workbook. Some classrooms may wish to “transform” themselves (names and all) into a group of detectives, learning to live mindfully throughout the whole day, whether studying a map, dissecting a frog, or learning division. Others may wish to explore the workbook once per week, or as time allows. Teachers are referred to as “inspector connectors” because they help connect the detectives to the material. There are no limitations, and teachers can decide what best suits their classroom setting.

Students filled out questionnaires asking them to critique the workbook. There were a few open-ended questions (e.g., *How are you more mindful now? Any ideas or improvements to the workbook?*), and a few yes-or-no questions (e.g., *Did you enjoy being a detective? Will you continue doing detective work after the program ends?*). All the questions were directed toward their personal experience with the workbook and suggestions for changes to the book. In addition to the open-ended questions, all students were provided with the opportunity to give any additional feedback

about their experiences with the workbook.

The teachers also answered questionnaires. Most of the questions were open-ended questions about the workbook and the experience of using it. For example, *What are your thoughts about the detective manual? About the mindfulness program? Would you recommend this program? Why?*

The head teacher also wrote brief comments on each child.

Process measures. Observations and a journal were also documented and transcribed by the principal investigator throughout the program. The children usually sat in a circle, and the principal investigator sat just outside the circle. She was not part of the circle but was easily accessible to the group. Upon each visit, she wrote what she saw and heard from the children, but not in a way that made her feel separate from the process. Many times, she would observe and then write notes after she left the children. Additionally, the teachers were asked to keep journals if they wished to do so. Only one of the assistant teachers took notes, but all the teachers related stories to the principal investigator throughout the program, and these interactions were transcribed.

A photo journal was also created by the principal investigator.

RESULTS

The results of the data from the four scales suggest that the greatest improvements, on average, were in increased mindfulness. The group as a whole improved 14% from pretest to posttest on their scores of the MAAS. The C EI also demonstrated an overall increase of 6%. PCS (increase of 1%) was relatively stable, and the Rosenberg Self-Esteem scale indicated a 4% overall decrease in self-esteem.

More specifically, results indicate a trend that the lowest scoring students generally show the greatest improvement between pretest and posttest. Although there is no control group to test these results against, the tendency may indicate that the children who gained the most from this program were those who needed the most help. Conversely, the results also indicate a trend in the opposite direction for the children who began the program with the highest scores at Time 1. Many of those students seemed to show noticeable decreases in their scores from pretest to posttest. This unexpected trend might be attributable to several factors; one influence may be found in the cooperative learning environment. Perhaps the children who needed the most help received it in a group learning environment. They may have benefited from the intellect or knowledge base of their peers. A positive cooperative learning environment is often dependent on the skill levels of the group members and creating a group that makes sense in terms of ability levels. The children

who began the program at higher levels (upon pretest) may not have been stimulated sufficiently by other group members and therefore may have felt uninterested or bored.

In addition, the decrease in self-esteem should be looked at more carefully in future studies. Is it possible that the increase in mindful awareness resulted in lower self-esteem scores for some children? All these students were from low-income families. Because there was no control group in this study, causation in score changes between and posttest is impossible to state, but correlations can be made. Results indicate a strong correlation between awareness (MAAS) and creativity (CEI; .82), awareness (MAAS) and a perceived capacity for learning (PCL; .71), and creativity (CEI) and perceived capacity for learning (PCL; .71). The measure of self-esteem did not result in any significant correlations.

Although the quantitative data suggest an overall increase in mindfulness, the qualitative data richly illustrate the story of this exploratory mindfulness program.

The results of the students' questionnaire data demonstrate that the students in both groups enjoyed being detectives. Of the 24 students, questionnaire data were collected from 22 (2 were absent), and 100% stated their enjoyment. Their reasons can be broken down into several categories, but the overwhelming majority expressed that their enjoyment of the experience was due to "learning and fun." The results suggest that the children's experience might be broken down into three themes: creativity, connectedness, and compassion.

The open learning environment encouraged this outcome. The flexible nature of the program allowed for students and teachers to make changes or adjustments to the program. In addition, the overall message of becoming a detective empowered students to seek out answers. The children became detectives in all their endeavors throughout the day. Whether it was crossing the street more mindfully or being more mindful of another's feelings or one's own feelings, the children were part of a mindful classroom. The word *mindful* became part of their vocabulary. More specifically, the children also chose their own detective names and discussed what it meant to be part of the MACK club. They chose very creative names, like ping pong 4 and red eye tiger, and became connected to the names and their personal meanings. The Worry Warts Wastebasket is another idea in the workbook to underscore. The children enjoyed this exercise and wished to continue writing down their worries, sharing (or not sharing) them, and then throwing them away after the program ended. The teachers also used ideas from the workbook to creatively explore new concepts with the children. For example, while exploring the hearing sense, they adopted a song ("Upside Down" by

Jack Johnson). This became their “detective song.” Even the teachers became more creative. One taught a segment on learning geography by using the five senses. She had the children locate their city or country of origin on a map and then describe that place using their five senses. The teachers also helped the children expand their vocabularies by creating crossword puzzles composed of new words they had learned in the Helen Keller book.

Incorporating Helen Keller into the workbook was driven by the hypothesis that to increase awareness of a sense, one should first imagine living without that sense. Her life story is powerful and enlightening for children who are attempting to increase sensory awareness and learn mindfully. The Helen Keller story had an unexpected impact on the children. Helen Keller also became a person whom they related to and referred to throughout the day. The children read *Helen Keller* (Davidson, 1969) and watched *The Miracle Worker*. They also learned basic sign language and Braille. Children often referred to Helen and what it would be like to only smell, taste, and touch life. As a result, the children became more aware of, curious about, and compassionate toward, themselves and others.

DISCUSSION

The most fascinating part of this feasibility study was that it evolved during the process. This study might best be described as action research—“a disciplined process of inquiry conducted by and for those taking the action. The primary reason for engaging in action research is to assist the actor in improving or refining his or actions” (Sagor, 2005, p. 1). This design created a more fruitful learning environment for all involved because it allowed the process to evolve naturally. The principal investigator was in the classroom, not teaching, but listening and thinking of new ideas. She was often quiet but did recommend or propose possible ideas. All the teachers in the classroom were encouraged to do the same. The study went in directions that were unforeseeable because of the pliable nature of the program. The original goal was to create a mindful learning environment with children. This program developed because of the work of every group member creating, expressing, and sharing ideas.

The open learning environment was an essential part of the mindfulness program. Although this manner of learning is less often used in traditional classrooms, a wide body of learning literature supports this more progressive approach to learning. Some of the significant points that appeared to impact the outcome of this program are the relevance of self-efficacy, adopting a different perspective, and the role of ambiguity.

The curriculum was open and flexible, and students were encouraged to be active participants (detectives) in their learning process. The ambiguous nature of the learning environment and flexible curriculum encouraged this active exploration. In addition, the concept of learning through the perspective of another (Helen Keller) helped to bring life to mindful exploration.

More research needs to be done in this area. Imagine a classroom where students see them themselves as mindful detectives who are coming to learn from each other and themselves, to explore possibilities, to question, to consider other perspectives, and to be accepted as they are in that moment. Imagine if children became mindful detectives of all subject areas—math, science, English, art, soccer... If the focus was shifted to process and learning instead of outcome and test scores, would school be a more interesting place for students and teachers?

The backbone of the study was the detective manual. Interestingly, several schools expressed interest in using it but ultimately could not find the time to assimilate it into the curriculum. The school that ultimately wished to use the workbook allowed it to become the basis for the 6-week program. This empowered the teacher to use it as she wished, and it also gave her the opportunity to empower the students to create, inquire, and learn in an open format. This type of learning environment is supported in the literature. As Nel Noddings (2005) stated,

empower teachers as we want them to empower students. We do not need to cram their head with specific information and rules. Instead we should help them learn how to inquire, to seek connections between their chosen subject and other subjects . . . to inquire deeply into its place in human life broadly construed. (p. 178)

David Perkins (1992) outlined smart schools as “wide awake to the opportunities of better teaching and learning . . . exhibiting three characteristics: informed . . . energetic . . . thoughtful (caring and mindful)” (p. 3).

In conclusion, some thoughts by Helen Keller (1933), whose explorative soul guided the energy of this program:

I who am blind can give one hint to those who see: Use your eyes as if tomorrow you would be stricken blind. Hear the music of voices, the song of a bird, the mighty strains of an orchestra, as if you would be stricken deaf tomorrow. Touch each object as if tomorrow your tactile sense would fail. Smell the perfume of

flowers, taste with relish each morsel, as if tomorrow you could never smell and taste again. Make the most of every sense; glory in all the facets of pleasure and beauty, which the world reveals to you through the several means of contact which nature provides. (p. 42)

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