



Applications of Mindfulness in an Urban, Elementary After-School Program



Adrienne Garro, PhD, Dominique Reminick, MA, Yael Osman, Bracha Katz, Cristin Pontillo, MA, Danielle Fishbein, Vanessa Vega, MS, MPH, Department of Advanced Studies in Psychology, Kean University

INTRODUCTION

The application of mindfulness practices in US school settings has steadily increased over the past 15 years (Semple, Droutman, & Reid, 2017). A number of studies have found positive effects of mindfulness on aspects of students' social-emotional functioning, including social competence and emotional well-being (Schonert-Reichl & Lawlor, 2010; Viafora, Mathiesen and Unsworth, 2015). Despite the widespread use of mindfulness in schools, there is little information regarding its implementation in the context of after-school programs. The present study seeks to address this gap by investigating the impact of mindfulness-based activities on children's ability to understand and regulate their emotions in an urban, elementary after-school program. Eighteen 4th grade students in this program participated in weekly mindfulness sessions including breathing exercises, sensory awareness, and art-based emotional awareness activities. Students' self-reports of their thoughts and feelings about their emotions, via the Emotional Awareness Questionnaire (Rieffe et al, 2008) and management of their anger and sadness, via the Children's Emotion Management Scales for Anger/Sadness (Zeman et al., 2001) were assessed at baseline, midway through the intervention, and at the school year's end. We hypothesized that students would show increased awareness and more positive management of their emotions as a result of participating in our program.

OBJECTIVES

- To examine the utility of mindfulness practices in an after-school program
- To assess feasibility, logistics, and challenges
- To see if mindfulness has positive effects on children's emotional awareness and emotion management skills
- To determine if the mindfulness exercises allow for further development of students' social emotional skills and communication abilities
- To provide a foundation for potentially expanding the use of mindfulness practices in this particular school district

METHOD

Participants

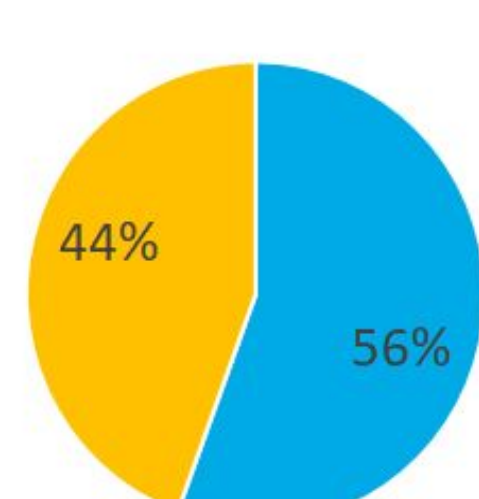
- Participants were 4th grade students (N = 18) enrolled in a special after school program in an urban school district in Northeastern US
- Majority were bilingual, 17 were Latinx, mean age of 9 years, 11 months

English Language Learners



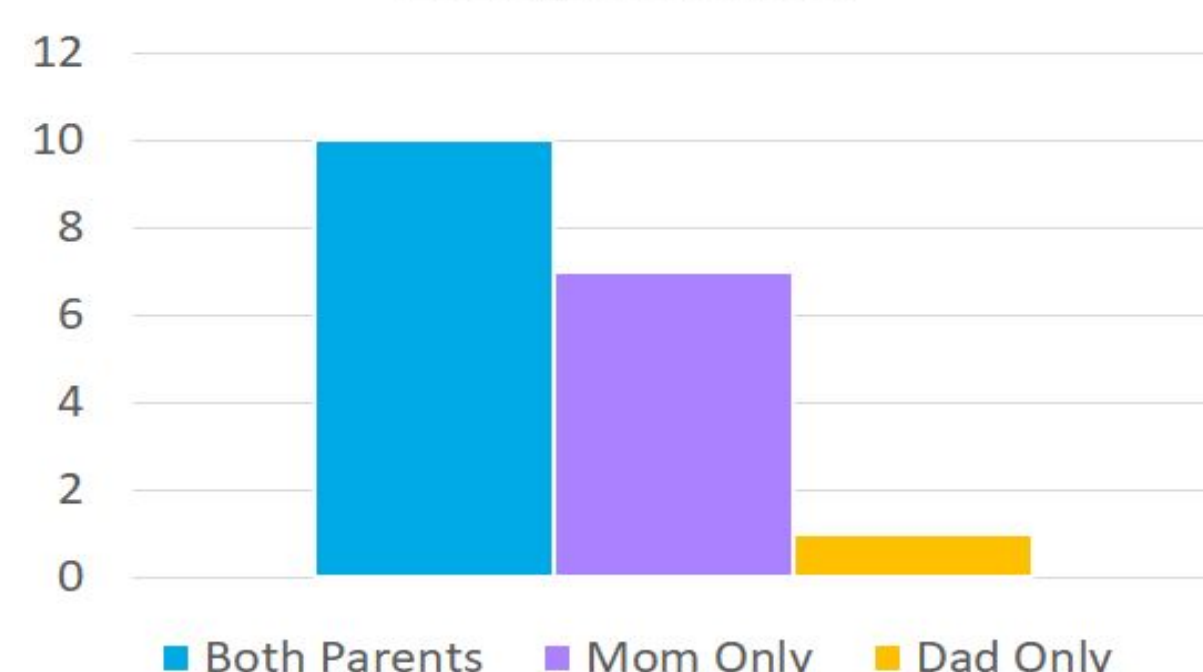
■ English Language Learner
■ Native English Speaker

Participant Gender



■ Male ■ Female

Living Situation



■ Both Parents ■ Mom Only ■ Dad Only

METHOD (Cont'd.)

Procedures

- Participants were recruited through a specialized after-school program for students considered to have academic and/or social emotional risk or in need of extra support after school.
- Mindfulness interventions done once per week for about 2 hours, mostly carried out in large-group format (all students present).
- Project did not use specific mindfulness curriculum, though each session involved a combination of physical activities, breathing exercises, sensory activities, and emotion awareness activities (usually with art-based component).
- Among the 18 participants, there were 4 whose parents only consented to them doing the mindfulness activities, not completing surveys.
- The remaining 14 students completed surveys at baseline (early January), mid-point (early April), and at end-of-year (mid-June).

Measures

- **Emotion Awareness Questionnaire (EAQ)** (Rieffe, Oosterveld, Miers, Meerum Terwogt & Ly, 2008)- developed for the purpose of understanding how children think and feel about their feelings.
 - Includes 30 items and 6 scales supported by factor analyses: Differentiating Emotions, Verbal Sharing of Emotions, Bodily Awareness of Emotions, Not Hiding Emotions, Analyses of Emotions, Attention to Others' Emotions.
- **Children's Emotion Management Scales for Anger and Sadness** (Zeman, Shipman, & Penza-Clyve, 2001)- developed to assess children's self-reports of sadness management and anger management
 - 11 items for Sadness and 12 items for Anger. Anger & Sadness scales are each comprised of 3 subscales:
 - a) Inhibition/suppression of emotional expression
 - b) Dysregulated expression and
 - c) Adaptive regulation/coping

Data Analyses

Statistical analyses were conducted using SPSS. A series of dependent samples t-tests were used to look at potential changes in students' thoughts and feelings about their general emotional experiences as well as potential changes in their recognition and management of anger and sadness. We will be using additional t-tests to look at potential changes across all three stages of data collection.

RESULTS

A total of twelve dependent samples t-tests were used to look at potential changes in variables, as described above, between baseline and midpoint. Six t-tests were used to look at potential changes in EAQ scores. The results from these analyses indicated no significant changes. Six t-tests were also used to look at potential changes in CEMS scores between baseline and midpoint. There were no significant changes in these scores. Despite the lack of statistically significant changes between baseline and midpoint, we noted some qualitative changes across time. For example, many of the students showed increased willingness to talk about their family and school experiences and increased openness to expressing difficult emotions during the sessions. We will be running additional analyses to look at potential changes in these variables from mid-point to end of intervention and from baseline to end of intervention.

ACTIVITY EXAMPLES

Art

- Mandala coloring
- Where do we feel it (e.g., anxiety) on our bodies (coloring sheet)
- Creating a "calm down sandwich"

Writing

- How I show my feelings activity

Physical/Movement

- Breathing exercises
- Yoga poses/exercise

Social

- Yarn activity - Pass/toss a ball of yarn and say something positive about yourself or others, connecting all the students in a "web"

Group Discussion

- Comparing activities done on "automatic pilot" to those requiring conscious effort and attention
- Students wrote down responses to the prompt "When I feel angry I..." and then engaged in a group discussion about the universality of emotional responding



DISCUSSION

Strengths of Project

- Support from the school administration
- Culturally accessible recruitment and consent materials
- Great enrollment (every child in the after-school program!)
- High participant engagement in activities

Challenges of Project

- Behavior and emotional management in groups
- Providing individualized attention
- Finding activities well-suited for varied attentional and intellectual abilities
- Explaining mindfulness terms in simple, age-appropriate language
- Navigating difficult topics such as depression and suicide

Research Limitations

- Small sample size
- Lack of uniformity in participation across project
- Measures do not have norms or cut-off scores
- EAQ has not been extensively used with US child populations
- Small "dosage" of mindfulness- how effective?
- Use of child self-report measures only

Future Implications for Research and Practice

- Use of more standardized approach/curriculum
- Use of additional assessments
- Consider what makes for most effective implementation (i.e., frequency, duration, content, etc.)
- Improve collaboration and involvement of school personnel

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