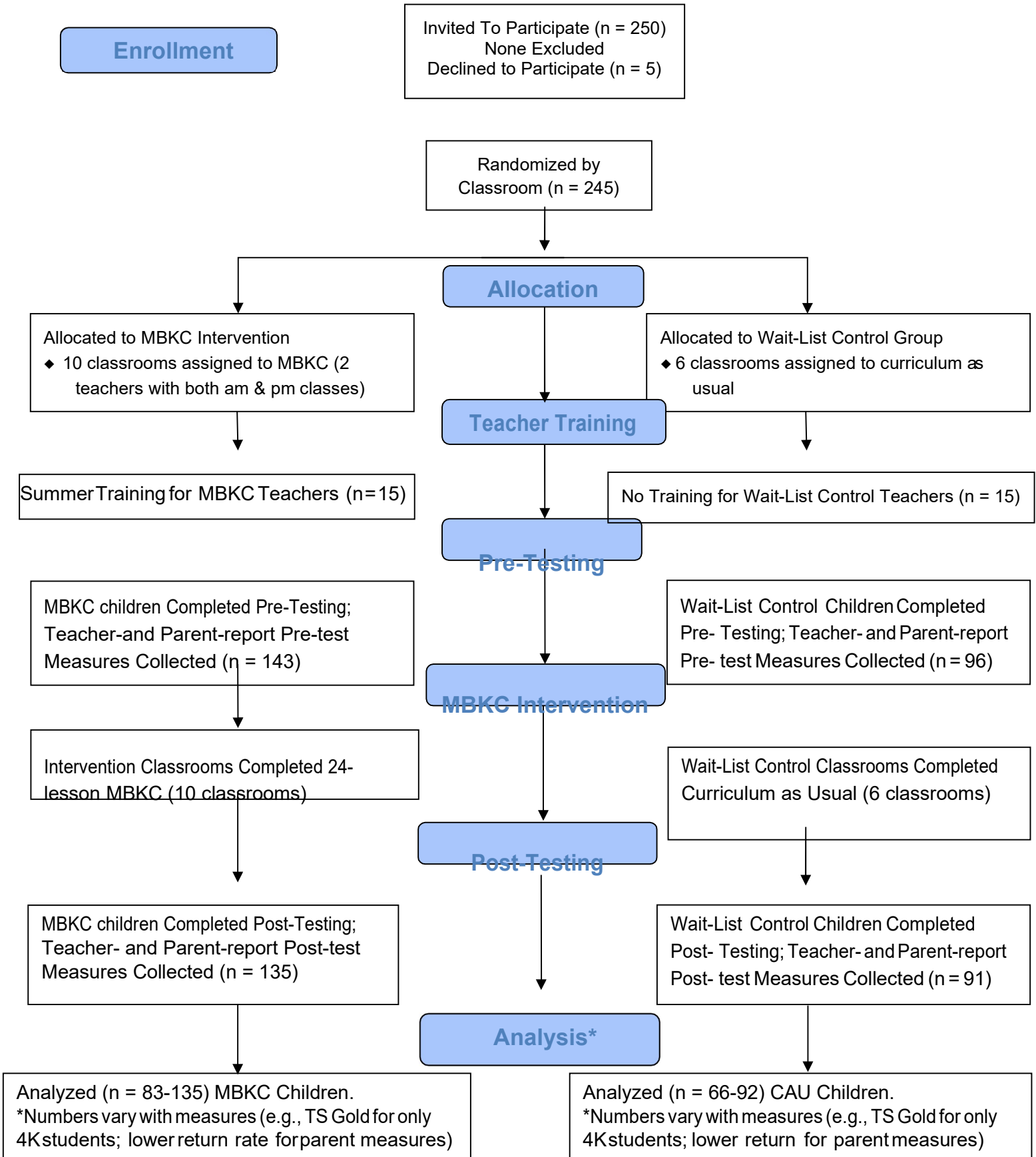


Supplementary Materials for Haines et al., 2023
The Mindfulness-Based Kindness Curriculum (MBKC)--Diagram of Study Flowchart



A Mindfulness-Based Kindness Curriculum (MBKC) for Preschoolers (HMI, 2017)

<https://hminnovations.org/well-being-tools#Kindness-Curriculum>

Themes	Lessons	Students will learn about...
Theme 1: Mindful Bodies & Planting Seeds of Kindness	L1: Mindful bodies and awareness of attention and breath L2: Growing Seeds L3: Growing friendship with Kindness	<ul style="list-style-type: none"> • Paying attention to inside breath and feelings • Paying attention on the outside (bell practice, needs of plants and people) • Noticing, giving, and receiving acts of kindness (Kindness Garden, Growing Friendship Wish)
Theme 2: I Feel Emotions on the Inside	L4: Quiet emotions on the inside L5: I can notice things when I'm quiet on the inside L6: Different emotions feel differently on the inside	<ul style="list-style-type: none"> • Engaging in self-care and finding safe, peaceful internal states (Belly Buddies) • Self-calming to notice sounds and feelings • Communicating feelings and that all feelings, even difficult ones, are helpful
Theme 3: How I Feel on the Inside Shows on the Outside	L7: Emotions on the inside show on the outside L8: Working with emotions in a kind and friendly way L9: Emotions change many times each day	<ul style="list-style-type: none"> • How their feelings show on their faces (Emotion Cards) • Asking about others' feelings and understanding their feelings with kindness • Working out interpersonal problems
Theme 4: Taking Care of Strong Emotions on the Inside and Outside	L10: Busy mind and clear mind L11: Making mind jars and practice using them L12: What else can we do when we are upset?	<ul style="list-style-type: none"> • Calming a busy mind by focusing attention (Mind Jars) • Patience, waiting, and turn-taking • Using a safe place or activity to self-calm
Theme 5: Calming and Working Out Problems	L13: Mindful movement L14: Forgiving myself L15: Forgiving Others	<ul style="list-style-type: none"> • Using movement to calm their emotions (Yoga Movements) • Forgiving themselves for accidents and mistakes • Forgiving others for accidents or unkind behavior
Theme 6: Gratitude	L16: Gratitude for people or things in my life L17: Gratitude for my body L18: Gratitude for other people	<ul style="list-style-type: none"> • People and things they are grateful for, and that gratitude feels good • Gratitude for their bodies and healthy, mindful eating. • Showing gratitude and kindness to others
Theme 7: All People Depend on Each Other and The Earth	L19: People around the world want peace L20: Connections with others L21: Caring for animals and insects	<ul style="list-style-type: none"> • How people around the world share a desire for peace. • People having different customs and languages • Caring for others and animals in big and small ways
Theme 8: Gratitude and Caring for Our World and Wrap-Up	L22: Gratitude and caring for our world L23: Bringing it all together L24: Wrap up	<ul style="list-style-type: none"> • Caring and gratitude for our world • Remembering the kindness “a (attention) to g’s (gratitude)” • Remembering to do what they learned, like self-calming, kindness to others

Teacher Training

Expert mindfulness trainers affiliated with the Center for Healthy Minds (CHM), developers of the MBKC, taught the 26-hour training class over a two-week period to teachers randomly assigned to the MBKC condition. Our project employed two local experienced mindfulness coaches who also attended the training. Participants were paid \$30.00/hour to attend the training. CHM trainers first introduced and trained participants in the cultivation of their own mindfulness practice, showing how the mindfulness practices paralleled lessons in the MBKC, and then taught participants how to implement the 24 MBKC lessons in their classrooms. Cultivation of teacher mindfulness practice included focus on self-care and well-being, and mindfulness coaches also explicitly offered individualized support for self-care as well as group mindful movement classes and teacher support meetings. Local coaches and CHM trainers were available to answer teachers' questions and support them throughout MBKC implementation. Local coaches provided individual check ins on classroom progress, support for teachers' personal mindfulness practice, and provided implementation support such as videos of MBKC songs with sign language.

Fidelity Measures

Teachers typically taught two MBKC lessons weekly and completed an adherence form. Each weekly form asked teachers to rate two of the 24 lessons on 9 -10 objectives, report on the amount of time spent on each lesson, and complete 4-5 open-ended questions. For example, the content of the adherence form for Lessons 5 and 6 of Theme 2 is listed below.

THEME 2: I FEEL EMOTIONS ON THE INSIDE

Lesson 5: I can notice things when I'm quiet on the inside.

Date of Lesson: _____ **Approximate length of lesson:** _____

For each lesson objective, teachers indicated either (0 = I did NOT introduce or address this objective) or rated the objective on a 7-point scale (1 = Introduced it, but did not explain or practice; 4 = introduced & provided some explanation & practice; 7 = introduced & provided detailed explanation and practice)

<i>Lesson Objectives</i>
1. Introduced paying attention and being like an elephant.
2. Introduced the concept of how it can be "noisy" on the outside but we can be quiet on the inside (<i>The Listening Walk</i> book).
3. Introduced the bell, listening to the bell, and noticing quiet place on inside as we feel our breath.
4. Introduced being on the farm and doing the listening walk (walk around room and quiet on the inside with attention to outside/inside).
5. Introduced attention to animals sounds and freeze in place each time the bell sounds with <i>Sounds on the Farm</i> .
6. Introduced feeling walk, paying attention to our bodies as we are still and when we walk (e.g., legs, feet).
7. Introduced discussion with kids around feeling our bodies (provided kids with a model and asked for examples).

8. Introduced concept: When we are quiet, we notice things

9. Introduced concept: We can notice sounds and feelings

Open-Ended Questions

1. How did this lesson go? What worked well in this lesson? What did you find to be particularly effective?
2. What was challenging? Did you notice anything that the children didn't seem to understand or struggled with?
3. Did you modify or add anything?
4. What would you do differently the next time you implement this lesson?

THEME 2: I FEEL EMOTIONS ON THE INSIDE

Lesson 6: Different emotions feel differently on the inside.

Date of Lesson: _____ **Approximate length of lesson:** _____

<i>Lesson Objectives</i>
1. Introduced inviting of the bell and discussion of seeds in the Kindness Garden and acts of kindness in the classroom.
2. Introduced review exercise on noticing how you feel on the inside.
3 Introduced "Quick as a Cricket"
4. Introduced being: Bee - excited/calm, Basset - sad/heavy/relaxed/busy, Lark - happy/light/scared/flying, Tiger - brave/big/afraid, Shrimp - shy/small/afraid
5. Introduced Feeling Walk back to rug and feel steps and bottoms when sitting
6. Introduced E = Emotions and add to letters on wall. Introduce preferred and not preferred emotions via discussion.
7. Introduced concept of how some emotions are preferred and others not, but all emotions are helpful. Discussion of why they are helpful.
8. Introduced quieting of body and Belly Buddy with Breathing in, Breathing out song.
9. Introduced concept: I can tell someone how I feel on the inside.
10. Introduced concept: I like some feelings and don't like other feelings but all feelings are helpful.

Open-Ended Questions

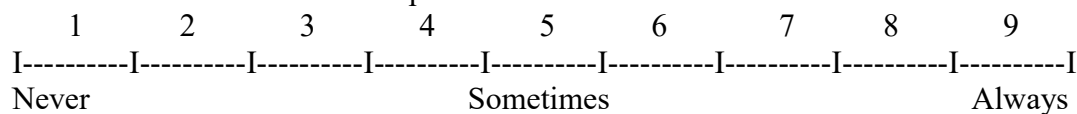
1. How did this lesson go? What worked well in this lesson? What did you find to be particularly effective?
2. What was challenging? Did you notice anything that the children didn't seem to understand or struggled with?

3. Did you modify or add anything?
4. What would you do differently the next time you implement this lesson?
5. Are the activities in this week's lessons similar to activities you do as part of your other programming or Pyramid programming? That is, do you think there is major overlap?

Mindfulness Children's Assessment Task Scale (MCATS)

All items are illustrated and read aloud to children. Children are shown several examples to practice using the rating scale, and complete five sample items. Children point to their ratings on a visually-graduated rating scale. Stem question: I'm going to read this book and show you some pictures, and you can show me if you do these things sometimes, all of the time, or never. Items were delivered in a random order.

The Mindfulness task uses a 9-point scale:



Self-Mindfulness/Regulation Subscale: Open-hearted acceptance, nonjudgmental awareness, and participation in the present moment.

1. Do you pay attention to what is happening around you?
2. Do you calm yourself by breathing?
3. Do you notice when your body feels tense or upset?
4. Do you talk to someone about how you feel? Who do you talk to?
5. Do you notice how your feelings change from moment to moment?
6. You may not like all feelings, but do you know that they are important?

Self-oriented kindness (self-acceptance)

7. When you are sad, are you kind and gentle with yourself?
8. Do you tell yourself it is OK to feel scared?
9. When you make a mistake, do you tell yourself it is OK?
10. Do you like your body and all you can do with it?

Other-oriented kindness (other-acceptance)

11. When someone else is sad, do you try to help.
12. When a kid makes a mistake, like bumping into you, do you forgive them & try to work it out?
13. Do you ask other kids to play when they look sad or lonely?
14. Are you kind to others?
15. Do you tell others (e.g., parents, siblings, friends) that you care about them?
16. Do you play with kids even if they look different from you?
17. Are you kind to the earth and take care of it?

Development and Pilot Testing of the MCATS

The 17-item MCATS was constructed by modifying the Mindful Attention Awareness Scale Adapted for Children (originally designed for children in 4-7th grade; Lawlor et al., 2014) to better fit the preschool age and more specifically measure the constructs of interest taught in the MBKC, specifically,

openhearted, nonjudgmental awareness and participation; kindness, compassion, and acceptance of self; and kindness, compassion, and acceptance of others. For example, the wording on the item, “Usually, I do not notice if my body feels tense or uncomfortable until it gets really bad” was simplified to “Do you notice when your body feels tense or upset?” for MCATS. Further, the MCATS has illustrations and practice items to help children understand and relate to the items, and to familiarize them with the rating scale. There is a follow-up question on item 4 (who do you talk to?) as another check of their understanding. The scale also has an optional section with three illustrated short scenarios that provide qualitative and quantitative data about how children handle challenging social interactions: 1) another child being teased, 2) being excluded from group play, and 3) accidentally hurting another child and the child yells at them.

Initial pilot testing was done with several 3- to 5-year-olds, and then at a public non-profit early learning center with a group of 20 preschool children (54.5% female, $M_{\text{age}} = 47.4$ months (36 to 60 months), 86.4% White; 100% middle income), who completed the MCATS in the fall and again in the spring of the school year. The reliability analysis revealed acceptable reliability overall, with lower subscale reliability. Overall full-scale reliability, Cronbach’s α pre/post = 0.85/0.81; reliability for the three subscales: Self-Mindfulness/Regulation (SMR, Cronbach’s α pre/post = 0.58/0.49); Self-Oriented Kindness (SOK, Cronbach’s α pre/post = 0.65/0.40); and Other-Oriented Kindness (OOK, Cronbach’s α pre/post = 0.73/0.48). The full-scale reliability was good for the small sample size of very young children, though the subscale reliabilities were low to moderate. Further, in the pilot testing, we hypothesized no change in mindfulness skills over the school year as no mindfulness-based intervention was done. However, we found a significant increase on the Other-oriented Kindness subscale of the MCATS ($t(19) = 2.162, p = 0.04$), which may reflect promotion of positive social interactions in the high-quality preschool setting.