MINDFULNESS

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SUPPORT PARENTING AND CAREGIVING?

A LITERATURE REVIEW

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MINDFULNESS

The practice of mindfulness has roots in Buddhist traditions spanning more than 2,500 years, and the practice has been adapted frequently to clinical populations for the relief of both physical and psychological symptoms for almost 40 years. Mindfulness "is not a religion," and instead has "come to be seen as a mode of being" (Shahmoon-Shanok & Carlton Stevenson 2015, p. 19).

In this piece, *mindfulness* is defined as "intending and developing the capacity to come back to center; to pay close attention to the internal experience of sensations, thoughts, and emotions with engaged curiosity, equanimity, deep compassion, and acceptance. Thus, mindfulness is defined as moment-by-moment awareness of thoughts, feelings, bodily sensations, and surrounding environment, characterized mainly by "acceptance"—paying attention to thoughts and feelings without trying to distinguish whether they are right or wrong" (Shahmoon-Shanok & Carlton Stevenson 2015, p. 18).





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Shahmoon-Shanok & Carlton Stevenson, 2015



An Overview of Mindful Parenting From Prenatal to 3: Critical Years

The architecture of the brain begins developing before birth, so experiences during the prenatal period, including maternal stress, can have significant impacts on fetal development (Davis & Thompson, 2014)

From birth to 3 years old, babies produce more than 1 million neural connections per second (Center on the Developing Child, 2009). Babies are born learning, and by 3 years old they have matured from infants fully dependent on their caregivers to capable, competent toddlers. Relationships are the primary context for this learning and development. Young children thrive when their parents and caregivers tune in to and respond to their cues and communications; in fact, this type of responsive caregiving supports the development of secure attachment between adult and child (Meins, 2013).

Sensitivity to a child's cues occurs when the caregiver is able to take the child's perspective and respond in line with the child's needs in that moment. This experience of being "heard" and understood is critically important to the child, because even just one steadfast, loving caregiver can nurture a child's resilience in the face of adversity and help set the foundation for health and development across the lifespan (Center on the Developing Child, 2017) Duncan, Coatsworth, and Greenberg (2009) identified the following five dimensions of interpersonal mindfulness applied

in everyday, moment-to-moment interactions between adults and children, either while parenting or when engaging with children as an educator:

- listening to children with full attention (or fully noticing babies' cues);
- bringing acceptance to themselves as parents (or teachers) and to helping children feel loving acceptance without judgment, even in the presence of clear boundaries and necessary rules;
- noticing their emotions and those of children, even when they are subtle or just starting to arise;
- finding ways to calm themselves down and self-regulate during interactions with children that are upsetting; and
- 5. bringing compassion to their experience as parents and to the experiences of the children, knowing that parenting and growing up in the world are oftentimes difficult and that those struggles are felt by many and deserving of compassion.

In this way, mindful parenting (or mindful teaching) is both intrapersonal (a reflection on one's own thoughts and feelings) and interpersonal, experienced in the interactions of the unfolding relationship. The descriptions that follow provide examples of how these components are brought to life through adult attitudes, behaviors, and interactions with children.

Listening With Full Attention

In infancy, listening is characterized by attending to a child's vocalizations (such as cooing or crying) and physical cues (such as eye contact or turning away). This attention helps a parent or caregiver develop an understanding of a child's perspective and reinforces the child's sense of attachment, that is, her understanding of the caregiving relationship as trustworthy and nurturing, and of the world as a safe, predictable place in which her needs will be met.

In the toddler years, listening with full attention includes being on the child's level, respectfully staying focused on his communications, and recognizing and acknowledging the emotions behind his words, giving a toddler a sense of feeling understood.

Nonjudgmental Acceptance of Self and Child

Nonjudgmental acceptance does not require that a parent relinquish "responsibility for enacting discipline and guidance when necessary. rather it means that caregiving adults accept



MINDFULNESS IS INTENTIONALLY BRINGING MOMENT-TO-MOMENT AWARENESS TO THE PRESENT EXPERIENCE WITH A NON-JUDGMENTAL STANCE.

Kabat-Zinn, 2003

what is happening in the present moment" (Duncan et al., 2009, p. 259). For example, a parent can accept that a toddler's temper tantrum is occurring and respond to it without judging the child as selfish or bad. In a larger sense, nonjudgmental acceptance means that parents and caregiving adults recognize that struggles in parent-child relationships are normal; that child rearing can be challenging; and that mastering new skills and abilities can be difficult for children. In short, "acceptance means recognizing that these challenges we confront and the mistakes we make are all a healthy part of life" (Duncan et al., 2009, pp. 259–260).

Emotional Awareness of Self and Child

Emotional awareness is a foundation of mindful parenting because strong emotions have a powerful influence on igniting automatic cognitive processes and behaviors that are likely to undermine parenting practices" (Duncan et al., 2009, p. 260). In short, when parents' own emotions are triggered, they are more likely to react without thinking, rather than to respond with intention. By noticing when emotions are arising in themselves and in their children, parents can more readily use calming strategies that assist them in becoming more

SELF-COMPASSION IN PARENTING MEANS AVOIDING SELF-BLAME WHEN PARENTING GOALS ARE NOT ACHIEVED, WHICH MAY FACILITATE PARENTS' ABILITY TO TRY ADIFFERENT, MORE POTENTIALLY EFFECTIVE APPROACH



Duncan, 2009



regulated, thus avoiding the use of harsher parenting techniques. This state of calm also allows parents to better support children in noticing, labeling, and managing their own emotions.

Compassion for Self and Child

Sometimes when young children are very upset, it can be hard to accept their strong emotions and remember how hard and overwhelming it can be to be so small and powerless in the world. When adults compassionately respond, remembering how much they love their children and recognizing the validity of the child's emotional experience, children feel understood and may have an easier time recovering from their upset.

Adults also deserve compassion for themselves. Self-compassion in parenting means avoiding selfblame when parenting goals are not achieved, which may facilitate parents' ability to try a different, more potentially effective approach (Duncan et al., 2009).

Mindful Parenting in Early Childhood

Most mindful parenting research to date has focused on the period immediately after a child's birth or much later, when a child has reached school age.

Researchers' knowledge of early childhood provides compelling reasons to introduce mindful parenting during this key period of development.

For example, research has demonstrated that a supportive parent-child relationship during early childhood can have a physical effect on a child's brain. In one study (Luby, Belden, Harms, Tillman, & Barch, 2016), a series of three MRI scans taken of children's brains from early school age through early adolescence showed physical evidence of early maternal support. Children whose mothers were observed to be more supportive and nurturing during a stressful early childhood interaction had a larger hippocampus (the part of the brain responsible for learning, memory, and regulating emotions) at school age than those whose mothers were less nurturing, and this difference increased over time. Maternal support provided later—in elementary or middle school—did not have the same effect. This difference is likely due to the greater plasticity in the brain when children are younger, meaning that the brain is affected more profoundly by experiences that occur very early in life (Luby, as quoted in Dryden, 2016).

In short, an early, positive relationship context — nurturing, trusting, responsive — is critical for the healthy development of young children.

A SUPPORTIVE PARENT-CHILD RELATIONSHIP DURING EARLY CHILDHOOD CAN HAVE A PHYSICAL EFFECT ON A CHILD'S BRAIN.

WHAT IS MINDFULNESS?

MINDFULNESS IS

"PAYING ATTENTION IN A PARTICULAR WAY: ON PURPOSE, IN THE PRESENT MOMENT, NONJUDGMENTALLY."

What this means is that we are *intentionally* paying attention to:

What is happening *around us*

What is happening *inside us*

What we are doing

How we are doing and feeling



And we are aware of these things without judging them.

By accepting these feelings and experiences, we are better able to stay present without becoming overly reactive or overwhelmed.

Mindful awareness helps us see and understand our experiences more clearly. *Mindfulness gives us the ability to respond calmly and thoughtfully no matter what is happening around us.*

WHAT THE RESEARCH SAYS

A GROWING BODY OF RESEARCH HAS SHOWN THAT PRACTICING MINDFULNESS CAN HAVE SIGNIFICANT BENEFITS.

Research has shown that when parents practice mindfulness, they are better able to be responsive to their children.ⁱⁱ

When teachers practice mindfulness, they are better able to manage their own stress and create a supportive learning environment for children.ⁱⁱⁱ

TRY IT!

SPEND A FEW MINUTES BEING MINDFUL OF YOUR BREATH

- Find a *comfortable and upright seat*.
- Close your eyes or soften your gaze.
- Start with a *deep inhale* through your nostrils. Pause. Then *exhale slowly* and fully through your mouth.
- Now allow your breath to come in and out naturally.
- Pay attention to where you feel your breath most clearly. It might be the flow of air through your nostrils, the rise and fall of your chest, or the movement of breath lower in your abdomen.
- Notice if your breath is short or long, if

the inhales and exhales are balanced, or if one is longer than the other.

- Stay focused on the sensations of breathing.
- You might get distracted by a thought, noise, or a feeling. It's okay if you do. Just gently return your attention to your breath.
- Try to stay with the experience of breathing without judging. If your mind wanders, just notice that and come back to your breath.
- Stay with this *practice for 3–5 minutes*.

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Mindful Parenting: The Research

Research on dispositional mindfulness (a person's awareness of and attention to what they are thinking and feeling in the moment) and mindfulnessbased interventions (MBIs) have been designed to investigate the effect of mindfulness on many aspects of parenting, including parental wellbeing and the quality of the parent– child relationship.

Researchers have also investigated the effects of MBIs during specific periods, such as the pre- and perinatal period, and on specific conditions, such as children with special needs.

Parental Well-Being

Studies that examine the impact of mindfulness on aspects of parenting have established modest, but encouraging, results. A program at the University of Chicago's Behavioral Insights and Parenting Lab fosters parent mindfulness with the goal of reducing the cognitive demands of stress on low-income parents. Two small pilot studies used short MBIs (a 5-minute guided mindfulness practice in one study and 3 weeks of brief daily meditation in the other) to improve focus, attention, and decision-making skills, with modest but positive results on executive functioning tasks. These pilot studies will inform a future largescale randomized controlled trial (Kalil & Mayer, n.d.).

In a 2016 study, 290 mothers of school-aged children and adolescents completed self-reported measures of adult attachment, self-compassion, and mindful parenting. The authors concluded that "mothers who are more self-compassionate are more able to adopt a mindful stance in the parent-child relationship" (Moreira, Carona, Silva, Nunes, & Canavarro, 2016, p. 370). They recommended that self-compassion exercises be included in mindfulness interventions and suggested that these exercises are particularly important for parents with insecure attachment styles.

There are also lessons to learn from correlational studies; for example, a study of 485 parents investigated how parent dispositional mindfulness relates to parenting practices. The study indicated that higher dispositional mindfulness leads to higher levels of mindful parenting interactions, which in turn relates to higher levels of positive parenting practices and lower levels of negative parenting practices. In addition, higher levels of dispositional mindfulness are directly related to coparenting relationship quality (Parent et al. 2016).

Parent-Child Relationship

Additional studies consider the effects of mindful parenting on children.

A small randomized pilot intervention (Coatsworth, Duncan, Greenberg, & Nix, 2010) compared a modified, mindfulness-enhanced version of the Strengthening Families Program (MSFP): For Parents and Youth from 10- to 14 years old with the original Strengthening Families Program (SFP; an active control group), as well as with a third group (offered delayed intervention). The MSFP intervention increased mothers' use of mindful parenting and enhanced parent-adolescent relationships more than the original SFP intervention, showing medium to strong effects. The follow-up study included a larger sample (N = 432) and a more diverse population (31% racial/ethnic minority). Parents and youth were



MOTHERS WHO ARE MORE SELF-COMPASSIONATE ARE MORE ABLE TO ADOPT A MINDFUL STANCE IN THE PARENT-CHILD RELATIONSHIP

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Moreira, Carona, Silva, Nunes, & Canavarro, 2016



surveyed post-intervention and 1 year later. In general, MSFP was as effective as SFP in improving multiple dimensions of parenting, and in some areas it boosted and better sustained the effects of SFP, especially for fathers (Coatsworth et al., 2015).

Other studies have examined the relationship between parent dispositional mindfulness, youth psychopathology, and mindful parenting and parenting practices. For example, a 2016 study of 615 parents and their children showed that "higher levels of parent dispositional mindfulness were indirectly related to lower levels of youth internalizing and externalizing problems through higher levels of mindful parenting and lower levels of negative parenting practices" (Parent, McKee, Mahon, and Foreh, 2016, p. 1). This relationship was consistent across developmental stages, from 3 through 17 years old.

Across these studies, parent mindfulness has shown positive impacts for children and the parent– child relationship, demonstrating the potential for MBIs and specific benefits of practicing mindful parenting.

Pre- and Perinatal Interventions

Researchers have also examined the effects of MBIs during and immediately following pregnancy. Bardacke (2012) adapted Mindfulness-Based Stress Reduction for use as a childbirth education program during the 2nd and 3rd trimesters of pregnancy, childbirth, and early parenting. This adaptation, Mindfulness-Based Childbirth and Parenting (MBCP), was designed to promote family health and well-being through the practice of mindfulness. In an initial pilot study of MBCP, 27 pregnant women were found to have large decreases in self-reported pregnancy anxiety and increases in mindfulness (from pre- to posttest: Duncan & Bardacke, 2010). In a later randomized controlled trial (N = 30) of an intensive weekend workshop version of MBCP, women who attended the mindfulness workshop experienced less depression postpartum compared to women who attended mainstream childbirth education (Duncan et al., 2017). These results suggest that mindfulness can help new parents cope with the stress associated with transitioning to their new role, which may have a longterm impact on well-being outcomes for parents and children.

Perez-Blasco and colleagues conducted a similar study in 2013, a test of a MBI in breastfeeding mothers using a randomized controlled, between-groups design (N = 26). Mothers in the treatment group scored significantly higher on maternal self-efficacy, as well as on some dimensions of mindfulness and self-compassion, following the intervention. They also exhibited significantly less anxiety and psychological stress (Perez-Blasco et al., 2013).

Van den Heuvel and colleagues (2015) measured maternal anxiety and mindfulness of 90 mothers during their second trimester of pregnancy and later assessed infants' social–emotional development and temperament at 10 months old. "Higher maternal mindfulness during pregnancy was associated with [fewer] infant self-regulation problems and less infant negative affectivity... These results suggest that maternal mindfulness during pregnancy may have positive effects on infant development" (p. 1).

In a longitudinal study (Pickard et al., 2017), researchers examined the relationship between prenatal mindfulness, attachment, and later sensitivity to distress. Thirty-seven participants reported on their



levels of mindfulness at 30 weeks' gestation, and were observed feeding their infants at 7-10 weeks postpartum. Observations supported the hypothesis that mothers with a secure attachment and high levels of mindfulness would be more responsive to their infants' cues, but mindfulness did not mediate the relationship between attachment style and maternal sensitivity. in addition, a parent's "non-reactivity to inner experiences" (a parent's ability to regulate her own emotional responses, and attend and respond appropriately to her baby) was predictive of a mother's ability to respond to a baby's distress postpartum, suggesting this aspect of mindfulness as a possible avenue for prenatal intervention (Pickard, 2017).

Taken together, these studies provide preliminary evidence supporting the use of MBIs as a means of reducing new parents' stress and facilitating positive infant development in the immediate period after birth.

Parenting Children With Special Needs

Whittingham (2013) explained that parents of children with special needs often face unique challenges such as increased burden of care (Sawyer et al., 2011, as cited in Whittingham, 2013), grief (Eakes et al., 1998, as cited in Whittingham et al., 2013; Whittingham

et al., 2013) and greater parental stress (Gupta 2007; Rentinck et al. 2007; both as cited in Whittingham, 2013). Parents of children with special needs also are more likely to experience anxious and depressive symptoms (Barlow et al., 2006; Lachetal, 2009; both as cited in Whittingham, 2013). Further, children with disabilities are more likely to have behavioral and emotional problems that require sensitive and consistent parent (and teacher) responses to manage (Brereton et al., 2006; Carlsson et al., 2008; Einfeld & Tonge, 1996; Parkes et al., 2009; Parkes et al., 2008; all as cited in Whittingham, 2013).

MBIs for parents of children with special needs may reduce the stress associated with caregiving, and they may elicit changes in children and the parent-child relationship. Several very small studies by Singh and colleagues using case study designs show two-generation impacts. In the first study, four parents of children with developmental disabilities who utilized mindfulness training reported "increased satisfaction with their parenting, more social interactions with their children, and lower parenting stress" while their children were reported showing "increased positive and decreased negative social interactions with their siblings" (Singh et al., , 2007, p. 1). A study of two families with children with attention deficit hyperactivity disorder (ADHD) showed that mindfulness training for



the mothers improved compliance among the children and that, when children were given similar training, compliance increased even more markedly (Singh, Singh, et al., 2010).

Randomized controlled trials involving larger numbers of participants are needed to confirm these findings. One such trial provided a 5-week mindfulness training for parents and educators of children with special needs, and it showed "significant reductions in stress and anxiety and increased mindfulness, selfcompassion, and personal growth at program completion and at 2 months follow-up in contrast to waiting-list controls" (Benn, Akiva, Arel, & Roeser, 2012, p.1).

An 8-week mindfulness training for children 8–12 years old with ADHD included parallel training for their parents. Training sessions were very structured and included some joint sessions with parents and children. Parents reported a significant reduction of ADHD behavior in themselves and their children. a significant increase in mindful awareness, and a significant reduction in parental stress and over-reactivity from pre- to follow-up test. However, teacher ratings of ADHD symptoms did not show significant effects, which is important because teachers' reports provided "objective" evidence (i.e., from individuals not involved in the treatment; Van der Oord, Bögels, Peijnenburg, 2012).

However, the small size of interventions to date, as well as the wide variety of interventions, disabilities, and ages of children studied, currently make generalizations difficult.

MINDFULNESS TRAINING FOR PARENTS AND EDUCATORS OF CHILDREN WITH SPECIAL NEEDS SHOWED SIGNIFICANT REDUCTIONS IN STRESS AND ANXIETY

Mindful Teaching: The Research

The following sections explore the use of mindfulness and mindfulness-based self-compassion interventions in the context of the education/early education fields and summarize the known findings to date.

A Day in the Life

Turning to the impact of mindfulness practice on teachers, it is important to first consider their work-related stress and the impact of stress on their abilities to respond effectively to children. Roeser, Skinner, Beers, and Jennings provided a compelling portrait of the daily stressors faced by classroom teachers at every level:

Teachers' work lives are saturated with interactions with students, colleagues, administrators, and parents—interactions that require significant attentional and emotional resources and their effective regulation through habits of mind. For instance, teachers must often shift the focus of their attention in the classroom from particular students and their cognitive and emotional needs, to an overview of the entire classroom, and back again.

By cultivating the habit of being flexibly attentive, teachers may be

better able to respond to students' needs proactively, a key contributor to effective classroom management (Marzano, Marzano, & Pickering, 2003). In addition, teachers must problem solve "on the fly" as they interact with students of varying levels of maturity and readiness to learn. To do this in a manner that avoids unequal treatment and opportunities to learn among students with different backgrounds requires great awareness, empathy, and mental flexibility. Furthermore, in all of their interactions at work, teachers must use age-appropriate language and nonverbal behavior.

They must recruit and express a range of socially appropriate emotions (such as enthusiasm, interest, or intentionally expressed displeasure) and, at the same time, they must regulate more distressing emotions like frustration or fear that can arise in such interactions (e.g., Chang, 2009). Emotion regulation is especially important because if teachers become overly stressed in the classroom, they cannot leave in order to compose themselves, but must self-regulate in the presence of the class and the stressor itself (such as a student's disruptive behavior). (2012, p. 2).

Add diapering, feeding, and the responsibility of building unique, loving relationships with each child, and you have the landscape of early childhood education. Research has indicated "that children's scores of security with their child care teachers in toddlerhood were . . . the most important predictor of the quality of their relationship with a teacher in the elementary grades" (Howes, Hamilton, & Philipsen, 1998, as cited in Shine, 2016, p. 65). The relationship between a child and his teacher during early childhood sets the stage for the learning that follows.

However, the stress that early childhood educators (ECEs) experience may impact the quality of their interactions with the young children they care for and teach. Whitaker et al. (2015, as cited in Cumming, 2016) linked high levels of ECE stress with depressive symptoms and high levels of conflict in relationships with children. King et al. (2015, as cited in Cumming, 2016)) reported that greater financial well-being and an ECE's perception of the ability to meet expenses seemed to demonstrate greater emotional availability in interactions with children. De Schipper et al. (2008, as cited in Cumming, 2016)

connected educators' positive mood and optimism with their caregiving behaviors and children's well-being.

High turnover rates in the early childhood field, supported by a growing body of research, indicate that teacher stress is common (Fieldman-Krauss et al., 2013, as cited in Allen & Kelly, 2015) and likely to have a negative impact on children during a period when they most need a nurturing, stable relationship to support healthy learning and development. A more comprehensive approach toward the well-being of early childhood educators is called for, and one such approach is mindfulness.

How Mindful Practices May Affect Teachers and Students

Mindfulness training for teachers seeks to improve teachers' well-being and, more importantly, the relationship between teacher and child. The overarching goal of teachers' mindfulness practice is improved learning outcomes for children. Within a primary school setting, Roeser and colleagues (2013) developed a theory of change to describe how mindfulness interventions may ultimately affect students.

First, a mindfulness intervention might support the development of teachers'

CHILDREN'S SCORES OF SECURITY WITH THEIR CHILD CARE TEACHERS IN TODDLERHOOD WERE THE MOST IMPORTANT PREDICTOR OF THE QUALITY OF THEIR RELATIONSHIP WITH A TEACHER IN THE ELEMENTARY GRADES



SEVERAL STUDIES HAVE FOUND THAT TEACHER PSYCHOLOGICAL VARIABLES WERE STRONGER PREDICTORS OF CLASSROOM QUALITY THAN WERE TEACHER EDUCATIONAL ATTAINMENT AND EXPERIENCE

mindfulness and self-compassion skills, which serve to enhance teachers' coping skills and resilience. These changes can lead to more effective classroom management and the development of an emotionally supportive classroom environment. Together, these factors nurture positive teacher-student relationships, leading to students' engagement in learning, increased student motivation, and improved classroom behavior. In turn, positive student behaviors (e.g., engagement, motivation, and prosocial conduct) could improve teachers' sense of self-efficacy.

Jennings, Frank, Snowberg, Coccia, and Greenberg (2013) made a similar case for mindfulness-based interventions, demonstrating the significance of alleviating stress and improving mental health among teachers, with the specific goal of improving classroom climate:

Several studies have found significant relationships between teachers' psychosocial characteristics and classroom climate. For example, in a study that examined 730 kindergarten classrooms, teacher psychological variables were stronger predictors of classroom quality than were teacher educational attainment and experience (La Paro et al., 2009).

Furthermore, de Schipper, Riksen-Walraven, Geurts, and Derksen (2008) reported that teacher positive mood was positively related to high quality caregiving among a sample of 238 early childhood educators. (p. 376).

A 2012 meta-analysis (Meiklejohn et al.) reviewed research and curricula pertaining to the integration of mindfulness training into K-12 education, including mindfulness training for educators and students. Three studies of mindfulness-based training for educators established results that were positive and significant. For example, Mindfulness-Based Wellness Education showed positive results such as increased teacher mindfulness and teaching self-efficacy (i.e., a sense of agency, that what one does matters). Cultivating Awareness and Resilience in Education (CARE) found that teachers demonstrated a classroom orientation that better supported the development of intrinsic motivation in students after mindfulness-based training, and Stress Management and **Relaxation Techniques in Education** established a positive influence on teachers' interactions with students and co-workers.

In 2011, two small pilot studies of the CARE program—one rural, one suburban/semi-rural—examined the program's feasibility and provided preliminary evidence of efficacy. Urban educators showed significant pre-post improvements in mindfulness, while their suburban/ semi-rural counterparts did not, "suggesting that CARE may be more efficacious in supporting teachers working in high-risk settings" (Jennings, Snowberg, Coccia, & Greenberg, 2011, p.1).

A 2013 pilot study to assess effects of mindfulness on stress, burnout, and teaching efficacy suggested a relationship between the use of mindfulness strategies and teacher well-being, but it should be noted that the number of participants was small. Ten teachers (control group = 8) from four schools serving predominantly low income and racial/ethnic minority populations were provided with a Mindfulness-Based Stress Reduction course focused on integrating mindfulness skills into the classroom setting (Flook, Goldberg, Pinger, Bonus, & Davidson, 2013). The study found that teachers who completed the mindfulness training showed higher levels of self-compassion and decreased reported anxiety, depression, and burnout (Zakrzewski, 2013). In comparison, a group of teachers placed on a wait list for the course actually reported increases in their stress and burnout levels across the intervention period.

An additional 2013 study demonstrated the promise of mindfulness training as means of improving classroom climate. In an 8-week mindfulness training for preschool teachers, "results showed that decreases in the students' challenging behaviors and increases in their compliance with teacher requests began during mindfulness training for the teachers and continued to change following the training" (Singh, Lancioni, Winton, Karazsia, & Singh, 2013, page 1).

Roeser and colleagues (2013) also explored the link between mindfulness and teacher emotional well-being/burnout. In this study, 113 elementary and secondary teachers in Canada and the United States completed an 8-week, 36-hour mindfulness training program. Compared to those in the control condition, teachers in the intervention condition reported large declines in occupational stress and symptoms of burnout, anxiety, and depression.

Not every mindfulness intervention for educators demonstrates a similar impact. For example, Poulin, Mackenzie, Soloway, and Karayolas (2013) conducted a study using mindfulness training to reduce stress and promote well-being among teacher trainees. Following an 8-week mindfulness intervention for teachers, researchers found expected positive changes in mindfulness, satisfaction with life, and teaching self-efficacy, as well as an improvement self-rated physical health. However, the intervention did not show the hypothesized reduction in teacher psychological distress.

Studies have also linked dispositional mindfulness to the quality of relationships early education professionals develop with parents and children. A survey of 307 Head Start and Early Head Start home visitors found that those who reported higher dispositional mindfulness tended to report a stronger working alliance with parents, mediated by the home visitors' positive psychological wellbeing (Becker, Patterson, Fagan, and Whitaker, 2016). Although this study suggests a relationship between mindfulness and perceived effective working relationships with parents, more research is needed to demonstrate the effects of mindfulness training for home visitors. An independent measure (i.e., not self-reported) of home visitors' working alliances with parents would also be helpful in this regard. A larger survey of 1,001 Head Start teachers showed a similar link between higher levels of dispositional mindfulness and higher-guality relationships with children (Becker, Gallagher, & Whitaker, 2017).

Finally, a large 2017 study (Jennings et al., 2017) revisited the impact of the CARE program on classroom outcomes. CARE was administered as "a 30-hour mindfulness-based training for teachers spread out over a 4-month period" and focused on a large (224 elementary school teachers) sample in an urban, lowincome, high-risk setting (New York City). The Jennings study is unusual due to its measurement of indirect classroom outcomes as well as the direct effect of training on teachers' well-being. Blind classroom observations found positive differences in classroom climate in classrooms where teachers had undergone mindfulness training as compared to control classrooms (Suttie, 2017).

Experimental classrooms also scored higher for emotional support, positive climate, and teacher sensitivity, with gains in classroom organization and productivity as well (Jennings et al., 2017). The study "adds to a growing body of research suggesting that mindfulness affects not only teacher stress, but also interpersonal interactions that can have an important impact on learning" (Suttie, 2017). RESULTS SHOWED THAT DECREASES IN THE STUDENTS' CHALLENGING BEHAVIORS AND INCREASES IN THEIR COMPLIANCE WITH TEACHER REQUESTS BEGAN DURING MINDFULNESS TRAINING FOR THE TEACHERS AND CONTINUED TO CHANGE FOLLOWING THE TRAINING.

Singh, Lancioni, Winton, Karazsia, & Singh, 2013

OBSERVATIONS FOUND POSITIVE DIFFERENCES IN CLASSROOM CLIMATE IN CLASSROOMS WHERE TEACHERS WHERE TEACHERS HAD UNDERGONE MINDFULNESS TRAINING AS COMPARED TO CONTROL CLASSROOMS

Summary

A 2017 review of the literature (Emerson et al.) included 13 studies (1966–2015) of MBIs for teachers of children 5–18 years old. Six of these studies (Flook et al., 2013; Frank, 2015; Gold, 2010; Jennings 1 & 2, 2011; and Jennings, 2013; all cited in Emerson et al., 2017) are described in detail above. The authors described some of their primary findings:

From the evidence reported across the 13 eligible studies, it is possible to conclude that MBIs for teachers show most promise for the proposed intermediary effect of emotion regulation. Effect sizes for emotion regulation tended to be larger with more of them showing statistical significance, although effects varied according to the measures used. This effect on emotion regulation, while important for teachers of children at all ages, may be particularly important for very young children as emotional regulation in the early years is highly dependent on their caregiver's ability to regulate effectively.

Some important limitations of the studies exist, including small sample sizes, insufficient statistical power, and the absence of active controls. Nevertheless, the argument for mindfulness training within education settings remains compelling as school districts and early education programs seek ways to alleviate teacher stress and help teachers function more effectively in the classroom/caregiving setting.

Conclusions

Mindfulness interventions for early childhood professionals and parents of young children offer promise in helping adults become more sensitive and attuned caregivers who are better regulated and thus better able to assist children in recognizing and learning to manage their own strong emotions. Through mindfulness practice, adults may learn to acknowledge difficulties without immediately reacting, honor the child's perspective, and respond with care and compassion (for themselves and the child).

More studies are needed to further understand the role of mindfulness in adult–child interaction as well as the impacts of mindfulness in parenting and caregiving. Research is also needed to identify mechanisms for increasing mindfulness in adult caregivers, and particularly among diverse cultural groups. Mindfulness practice takes place within the larger context of power and inequality in the United States. Because mindfulness is often perceived as a "White practice using Eastern traditions," (Proulx et al., 2017, p. 368) it is essential to include champions from within American minority communities who can advise on finding cultural congruence between community traditions and those that are central to the practice of mindfulness.

Research on mindful parenting and MBIs for parents and teachers continues to grow. Studies consistently find results that suggest benefits for both the adult practitioners and the children in their care. However, because of the limited nature of existing research it is difficult to generalize findings. In the research presented here, there is sound evidence that mindfulness can improve adult caregivers' and teachers' emotional regulation and response to stress, contributing to their well-being. Based on these findings, we believe mindfulness and mindfulness-based interventions are promising pathways to positively impact both caregiver and child outcomes.





Acknowledgements

We gratefully acknowledge Larissa Duncan, PhD and Lucianne Hackbert, PhD for sharing their expertise and helpful insights through reviews of this document.

Development of this document was generously supported by the Maritz Family Foundation.

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