

Mindful Parenting, Affective Attunement, and Maternal Depression: A Call for Research

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This paper introduces the construct of mindfulness and highlights research findings on the benefits of mindfulness-based clinical interventions. Drawing on the theoretical perspective of Daniel Stern (1985), mindfulness can be understood as a necessary prerequisite for the affective attunement that occurs within the intersubjective relatedness of mother and infant. The negative consequences of maternal depression are discussed, and the notion that maternal depression can prevent a mother from being mindful is suggested. The case is made that research is needed on child outcomes in existing mindfulness-based interventions for adult depression, and that such empirically validated interventions should be modified for specific use with women experiencing antepartum and postpartum depression. Furthermore, mindfulness as a potential mechanism of change in dyadic interventions for this population should be examined. This paper also highlights the positive psychology view that interventions can focus on enhancing current strengths and need not focus solely on deficits.

“Mindful parenting calls us to wake up to the possibilities, the benefits, and the challenges of parenting with new awareness and intentionality, not only as if what we did mattered, but as if our conscious engagement in parenting were virtually the most important thing we could be doing, both for our children and for ourselves.” (Kabat-Zinn & Kabat-Zinn, 1997, p. 22).

The study of mindfulness-based clinical interventions is an emerging area of interest for both researchers and clinicians (e.g., Baer & Kreitemeyer, 2006). Mindfulness is considered “an enhanced attention to and awareness of current experience or present reality” (Brown & Ryan, 2003, p. 822) and “the awareness that emerges through paying attention on purpose, in the present moment, and nonjudgmentally to the unfolding of experience moment-by-moment” (Kabat-Zinn, 2003, p. 145). The state of nonjudgmental observation of an always-changing stream of thoughts has been called “bare attention” or “choice-less awareness” (Kabat-Zinn, 1982). Mindfulness is also defined as “the clear and single-minded awareness of what actually happens to us and in us at the successive moments of perception” (Nyanaponika Thera, 1972, p. 5) and as the experience of “keeping one’s consciousness alive in the present reality” (Hahn, 1976, p. 11).

It is important to differentiate mindfulness from that which is commonly meant by the notion of self-awareness. Although a key aspect of the construct of mindfulness is the capacity for self-awareness, the two terms are not synonymous. Generally, self-awareness refers to the acute awareness of internal states and is used to describe a process of

self-examination by which one’s own cognitive operations (i.e., thinking) are focused on aspects of the self. One is, in essence, thinking about or reflecting on one’s own thoughts (see Duval & Wicklund, 1972; Buss, 1980; and Carver & Scheier, 1981 for variations on the notion of self-awareness as knowledge about the self). In contrast, mindfulness encompasses awareness of both self *and* other, of both internal *and* external; mindfulness is more accurately conceptualized as awareness-centered rather than self-centered.

Brown and Ryan’s Mindful Attention Awareness Scale (MAAS; 2003) further elucidates the construct of mindfulness with descriptions of the experience of not being mindful: “I find it difficult to stay focused on what’s happening in the present”; “It seems I am ‘running on automatic’ without much awareness of what I’m doing”; and, “I find myself preoccupied with the future or the past.”

Mindfulness: A Promising Intervention

Interventions that promote mindfulness through the use of mindfulness meditation have been shown to be effective in a variety of clinical domains, and approaches using meditation to treat individuals for a wide range of mental and physical health problems are receiving increasing attention and interest. This includes the use of meditation as an adjunct to more traditional cognitive-behavior therapy (CBT) with difficult to treat patients (Linehan, 1993), as a depression relapse prevention strategy (Teasdale, Segal, & Williams, 1995), as a relapse prevention program for alcohol and substance use disorders (Witkiewitz, Marlatt, & Walker, 2005), and as central to a therapeutic program aimed at stress reduction (Kabat-Zinn et al., 1992).

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The most frequently cited mindfulness training approach (Baer, 2003), mindfulness-based stress reduction (MSBR), was developed for populations with chronic pain and a range of stress-related disorders in a behavioral medicine setting at The Center for Mindfulness at the University of Massachusetts Medical School (Kabat-Zinn, 1982, 1990). Trained instructors teach the MBSR program as an 8- to 10-week group course consisting of up to 30 participants who meet for 2-2.5 hours per week for instruction plus an additional daylong mindfulness session held during the sixth week. The groups are often composed of individuals with varying clinical complaints, though MBSR has been modified for work with specific populations. In the highly experiential sessions, participants practice mindfulness meditation skills and discuss stress and coping. Each participant is asked to commit to completing daily homework assignments for at least 45 minutes per day, six days per week, and a large emphasis is placed on practicing mindfulness in daily life (Baer & Kreitemeyer, 2006). MSBR has been shown to be an effective treatment for a variety of clinical conditions including anxiety and panic disorders (Kabat-Zinn et al., 1992), fibromyalgia (Kaplan, Golderberg, & Galvin-Nadeau, 1993), and chronic pain (Kabat-Zinn, Lipworth, Burney, & Sellers, 1986).

Increasingly, researchers and practitioners are investigating mindfulness-based interventions for specific populations, such as mindfulness-based cognitive therapy (MBCT) for the prevention of depressive relapse (e.g., Teasdale, 1999). Through the use of mindfulness training, MBCT encourages individuals to “disengage from habitual (‘automatic’) dysfunctional routines, in particular depression-related ruminative thought patterns” (Teasdale, Segal, Williams, Rideway, Soulsby, & Lau, 2000, p. 618). A multi-site study of 145 adult subjects in remission or recovery from major depression suggests that MBCT can significantly reduce the risk of future relapse and recurrence in patients with MDD (Teasdale et al., 2000).

In a recent meta-analysis of research into the efficacy of mindfulness practice published in *Clinical Psychology*, Ruth Baer (2003) assessed the impact of mindfulness on problems such as depression and anxiety, and found that 74% of those individuals in groups receiving mindfulness training had better outcomes than those receiving another treatment or no treatment—a significantly large effect for these interventions.

Said one molecular biologist who participated in an eight-week experimental study on the impact of meditation: “I could tell I was less irritable. I had more capacity to take on more stressors. My wife felt I was easier to be around. So there were tangible impacts. For an empiricist, that was enough” (Hall, 2003, p. 49). Paul Eckman, Richard Davidson, Matthieu Ricard and Allan Wallace, in an article on Buddhist and psychological perspectives on emotions and well-being, described the results of mindfulness meditation training as follows: “As a result of such training, one perceives what is presented to the senses, including one’s own mental states, in a way that is closer to their true nature,

undistorted by the projections people habitually mistake for reality” (Ekman, Davidson, Ricard, & Wallace, 2005, p. 60).

Mindfulness: Necessary for Parental Attunement

Attunement refers to particular affective experiences that occur during developmentally achieved intersubjective relatedness—a period wherein the developmental focus shifts from the mutual regulation of behavior to the mutual sharing of experience. Stern’s (1985) conceptualization of the infant’s developing theory of mind suggests that intersubjective relatedness occurs around the infant’s seventh to ninth month, when infants develop a sense of self as separate from other; self and other are now interfaceable separate minds (Bretherton & Bates, 1979). This experience of intersubjectivity is “crucial for creating experiences of being-with-other and for furthering individuation and autonomy” (Stern, 1985, p. 127).

The most important mode of sharing subjective experiences, Stern proposes, is affective attunement. Affective attunement is specifically defined as “the crossmodal matching of intensity, timing, and ‘shape’ (contour) of behavior, based on microdynamic micromomentary shifts over time, perceived as patterns of change that are similar in self and other” (Beebe, Knoblauch, Rustin, & Sorter, 2005, p. 47). When a parent is attuned to his or her child, moments of particular connectedness are possible, and the child feels understood and accepted (Siegel & Hertzell, 2003). Preconditions for attunement include 1) a parent being able to read the infant’s feeling state and overt behavior, 2) the parent being able to perform a behavior that corresponds to the infant’s overt behavior and that is more than strict imitation, and 3) the infant being able to read the parent’s response as being related to the infant’s original feeling experience (Stern, 1985). Although an elaboration of the processes involved in attunement and crossmodal matching is beyond the scope of this paper (see Stern, 1985; and Beebe et al., 2005 for more), most relevant to this discussion is the understanding that attunement is a form of communing, rather than a communication, which refers to *sharing without altering* in order to maintain “the thread of feeling-connectedness” (Beebe et al., 2005, p. 48).

According to Stern, during intersubjective relatedness, the subjective “state-sharing other [the mother] acts with her *mental presence*” (Stern, 1985, p. 211; italics added). It follows logically that the mother (or parent) must be mentally present in order to relate intersubjectively with her infant; she cannot be authentically attuned if she is having difficulty staying focused in the present, if she is running on automatic, or if she is preoccupied with the future or past (see Brown & Ryan, 2003). In other words, attuned communications rely on a parent’s ability to be mentally present, or mindful; an ability to be mindful is a prerequisite for the possibility of authentic attunement. Mindfulness can be understood as a necessary though not sufficient condition for this affective attunement. Utilizing the language of

mindfulness, we can say that intersubjective relatedness is facilitated by the ability to hold the present moment with awareness and attention.

In his discussion of intersubjective relatedness, Stern illustrates, with case study examples, clinically relevant patterns of mal-attunement (e.g., non-attunement, selective attunement, and misattunement) as causally relevant to a child's development of psychopathology. For example, a parent who selectively attunes to one aspect of the child's emotional experience leads the child to utilize "that portion of inner experience that can achieve intersubjective acceptance with the inner experience of the other, at the expense of the remaining, equally legitimate, portions of inner experience" (Stern, 1985, p. 210). This is the beginning of the development of a "false self" (see Winnicott, 1960). In contrast, authentic attunement validates the child's inner experience and allows the child to internalize a sense of acceptance.

Of course, no parent can be attuned all of the time—nor would the child benefit if this were the case. Stern (1985) describes the notion of overattunement, or "psychic hovering," which is experienced by the child as intrusive. The mindful parent, in contrast, is authentically attuned to the child such that he or she respects "the natural oscillating rhythms of the child's need for connection," because "attuned relationships give respect to the rhythm of these changing needs," (Siegel & Hertzell, 2003, p. 68).

Maternal Depression and the Early Mother-Child Relationship

Having explored the importance of intersubjective relatedness and understanding mindfulness as a prerequisite for the affective attunement that is central to the development of an infant's intersubjective relatedness, we now turn to a brief examination of the impact of maternal depression on the mother-child relationship and suggest that depression interferes with a mother's ability to be present in the moment with her child.

There is a wealth of research literature examining the negative impact of parental psychopathology on young children's well-being. Specifically, maternal depression greatly affects the quality of the mother-child relationship. A meta-analysis of 46 studies (Lovejoy, Graczyk, O'Hare, & Neuman, 2000) found consistent differences between depressed and non-depressed mothers, and patterns linking maternal depression with less positive and more negative and disengaged behaviors. Research on depressed mothers and their infants indicates that these infants are at increased risk for insecure attachments and compromised cognitive outcomes (Murray & Cooper, 1997). Post-partum depression (PDD), with a prevalence rate of up to 15% in new mothers (O'Hara, 1997), has been linked to impairments in parenting and to a high incidence of insecure attachment, cognitive delays, and dysregulation related to depressed affect, irregular sleep, higher norepinephrine levels and

lower vagal tone in infants of PPD mothers compared to infants of non-depressed mothers (Clark, Tluczek, & Wenzel, 2003).

In a study conducted by the National Institute of Child Health and Human Development (NICHD; 1999), maternal depression was found to negatively affect parenting sensitivity, which was, in turn, uniquely associated with child outcomes such as school readiness, expressive language, and verbal comprehension. In this study, sensitivity was measured via a composite score created during mother-child play by observer ratings, and sensitivity scores encompassed ratings of the mother's positive regard, lack of intrusiveness, supportive presence, respect for autonomy, and lack of hostility (NICHD, 1999). These findings suggest that maternal depression limits a mother's ability to be a sensitive, supportive presence for her child. Studies using global assessments and clinical ratings have shown that the security of the child's attachment to the parent is dependent on the emotional availability of the parent (see De Wolff & van Ijzendor, 1997, for a review).

Mindfulness-Based Interventions for Depressed Mothers

The negative consequences of maternal depression on the early mother-child relationship are well documented (e.g., insecure attachments, dysregulation, decreased maternal sensitivity; see above). This paper suggests that depression may prohibit a mother from being fully present, or mindful, when interacting with her infant, thus influencing her ability for authentic affective attunement during the developmental period of intersubjective relatedness. Interventions aimed at maternal depression during the antepartum and postpartum periods are therefore vital to the well-being of both mother and child.

Although pregnant women may be unusually open to interventions directed at improving their own mental health before the birth of their child (Cowan & Cowan, 2000) and as such, pregnancy is known to be an opportune time for suggesting interventions (Institute of Medicine, 1996), many pregnant women refuse medication during this time, for fear of unknown consequences to their developing fetus. Along these lines, many women are unwilling to take medication during the postpartum period, primarily when breastfeeding. There is therefore an urgent need to develop effective, non-pharmacological treatment alternatives to antidepressant medication (Oren, James, & Prince, 2002).

Interpersonal Psychotherapy (IPT), a time-limited psychotherapeutic intervention that aims to relate depressive symptoms to an interpersonal context (Weissman, Markowitz, & Klerman, 2000) may be an effective non-psychopharmacological treatment for depressed women who are pregnant or suffering from postpartum depression (Bledsoe & Grote, 2006). However, a recent review of treatment approaches for postpartum depression concluded that when compared to interventions that treat the mother's

depression symptomatically, mother-baby dyadic interventions are more efficacious in helping mothers with postpartum depressions and their babies (Nylen, Moran, Franklin, & O'Hara, 2006). Abidi, Sawyer, Hoffman, & Tower (2007) stress the importance of trying to understand the mechanisms of change in these dyadic interventions. It is plausible that dyadic interventions increase a mother's ability to be present, or mindful, with her child, and that this increased mindfulness is an important mechanism of change.

To date, this author is not aware of any research examining mindfulness-based cognitive therapy (MBCT) as adapted for maternal depression. As discussed above, MBCT can significantly reduce the risk of future relapse and recurrence in adult patients with MDD (Teasdale et al., 2000). MBCT for maternal depression might enhance the mother-child relationship (and therefore promote healthy child development) indirectly by reducing the recurrence of depressive episodes, which are known to have a negative impact on the relationship and consequently on the child's development (e.g., NICHD, 1999). MBCT for maternal depression (and possibly dyadic interventions) might also impact the mother-child relationship more directly by increasing the mother's mindfulness in daily interactions with her child and thus enabling a more attuned connection between them. Research is needed on this and other mindfulness-based interventions that might enhance mother-child interactions and/or impact child outcomes. A modification of empirically validated MBCT specifically aimed at ante- and postpartum depression is also warranted, given the prevalence and severity of depression during these times and the need for non-psychopharmacological interventions. Furthermore, examining mindfulness as a potential mechanism of change in existing dyadic interventions for mothers with postpartum depression and their babies may serve to uncover the active ingredients of a particular therapeutic strategy (see Kazdin and Nock, 2003, for a discussion of mechanisms of change in child and adolescent therapy).

Mindful Parenting: A Move into Positive Psychology

Although there is ample research literature examining the impact of maternal depression on children's development, as a field we know little about the ways in which mindful parenting may positively impact children's development. Similarly, though the study of mindfulness-based clinical interventions is an emerging area of interest for both researchers and clinicians (e.g., Baer & Kreitemeyer, 2006), there is as yet limited research on the benefits of mindfulness training for non-clinical populations. Working within a positive psychology framework (see Seligman & Csikszentmihalyi, 2000), this paper suggests that research is needed on interventions that enhance mindfulness in healthy mothers and that such research is timely.

In what may become a significant contribution to the field of developmental psychopathology, Lieberman, Padron, Van Horn, & Harris (2005) recently published an article that, while acknowledging the ghosts, allows room for 'angels in the nursery.' The authors argue that uncovering 'angels' as growth-promoting factors in the lives of parents is just as critical to the work of therapy as is the interpretation and exorcizing of ghosts. Thirty years after the publication of Frailberg, Adelson, and Shapiro's (1975) classic paper, with the growing interest in positive psychology and resilience, the zeitgeist is shifting to enable the examination of factors that promote well-being, such as mindfulness. The time is now. The field is ready.

Further evidence that in-depth research into the benefits of mindful parenting is a timely pursuit can be found in popular culture. In 2005, a search for "mindful parenting" on the Google internet search engine revealed approximately 358,000 results, many of which describe mindful parenting classes and workshops aimed at helping parents to stay focused in the moments shared with their child. The same search in March 2007 revealed 664,000 hits. Popular books by Kabat-Zinn & Kabat-Zinn (1997), Costello & Haver (2004), Kramer (2004), and Siegel & Hartzell (2003) suggest that being mindful will enhance the quality of the parent-child relationship. Clearly there exists a pronounced gap between interest and personal experience as reflected in popular culture, and the lack of empirical evidence examining the relationship between mindfulness and parenting.

The Mindful Parent

Authentic emotional relating requires a mindful awareness of one's own internal state as well as an openness to understanding and respecting the other's state of mind; the mindful parent would be aware of both the child's needs and his or her own needs within the experience of intersubjective relatedness. If parents are not mindfully present in the moment, perhaps because they are distracted by thoughts or feelings related to the past or the future, they are not truly emotionally available for their child at that moment. But "as every parent knows, your heart can't always be in it, for all of the obvious reasons from fatigue through competing agendas to external preoccupations that fluctuate from day to day," (Stern, 1985, p. 217). To be mindful, therefore, is not to hold perfectionist ideals for parenting or life; rather, to be mindful is to non-judgmentally hold an awareness of current experience. The current experience will inevitably be, at times, that of the awareness of not being authentically attuned.

In her book on Buddhism for mothers, author Sarah Naphali aptly describes a mindful mother. This, of course, is an ideal, but one worth striving for nonetheless:

Imagine a calm, serene mother who accepts whatever life presents her with... She's self-aware, but because she has fostered self-love, she is not self-conscious or self-absorbed when she

talks to others.... Her children delight in her company for she makes them feel important and understood... (Naphthali, 2003, p. 9).

Conclusion

To sum, the scientific study of mindfulness is a new and emerging field. Mindfulness as a psychological construct, though beginning to gain empirical support, is not yet widely understood. To date there is a dearth of empirical research investigating the efficacy of parenting interventions that utilize mindfulness meditation as a means to foster positive child outcomes. While research findings demonstrate that maternal depression negatively impacts children's well-being (Lovejoy et al., 2000) and that mindfulness meditation can be an effective approach to treating depression (Teasdale et al., 2000), there is no known empirical support for the use of mindfulness interventions targeting maternal depression and/or child outcomes.

Although child psychopathology is clearly multi-determined, we do know that parenting plays a major role. The theoretical literature (Stern, 1985) proposes that adequate parental attunement positively impacts a child's sense of self, whereas mal-attunement is implicated in the development of psychopathology (i.e., "false self"; Winnicott, 1960). The ability to be mindful is a necessary (though not sufficient) condition for authentic parental attunement. If one is not present, one cannot attune.

Future research would do well to investigate the impact of mindful parenting on child outcomes in 1) existing mindfulness-based interventions such as MBCT; 2) existing dyadic interventions that do not explicitly teach mindfulness; and 3) existing "mindful parenting" interventions that have not yet been researched.

Mindfulness is not a panacea, but in certain conditions or in conjunction with other approaches, it may be extremely beneficial. Any approach that enhances a parent's ability to be present and therefore available for his or her child intuitively makes sense; we now need research to support this notion.

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MINDFUL PARENTING

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Greater maternal positive affect, but not depression, predicted stronger cortisol attunement. In addition, infants' cortisol level following separation from the mother predicted mothers' cortisol level at the next time point. Mothers' cortisol level following the separation and the laboratory stress paradigm predicted infants' cortisol levels at each successive time point, over and above infants' own cortisol at the previous time point. These findings suggest that maternal and infant cortisol levels influence one another in a bidirectional fashion that may be temporally and context dependent. Mindful Parenting, Affective Attunement, and Maternal Depression: A Call for Research. Graduate Student Journal of Psychology, 9, 3-9. has been cited by the following article: TITLE: The Relationship between Child Stress, Child Mindfulness and Parent Mindfulness. AUTHORS: Lea Waters. Multiple regression analyses revealed that both parent mindfulness and child mindfulness were significantly and negatively related to child stress levels. However, mindfulness in children did not mediate the relationship between mindfulness in parents and stress in children. This study contributes to the emerging literature on the effects of mindful parenting on child wellbeing and provides practical suggestions for how parents and children can increase their mindfulness. "Mindful parenting may be more about attunement or emotional congruency in the interaction" not just parents smiling a lot," she says. Smiling during tense conversations might not actually be very constructive. Parent wants to further delineate how mindful parenting impacts emotional regulation in children. Chaplin is busy planning a randomized controlled study comparing an eight-week mindful parenting course to a conventional parenting course and measuring how it affects parent-child interactions. They hope that their research will eventually show mindful parenting to be a useful tool for helping parents to help their kids. "I don't know that we know enough about it yet.