Mindfulness-Based Therapies

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Introduction

African American youth and their families are at increased risk of experiencing high levels of multiple types of stressors that may increase maladaptive coping strategies to manage negative affective experiences. Compared to White youth, ethnic minority youth are disproportionately exposed to a range of stressors (American Psychological Association, 2008) from daily hassles to chronic conditions such as poverty and racism (Miller, Webster, & MacIntosh, 2002), stress-related health problems (Woods-Giscombé & Gaylord, 2014), and traumatic events such as exposure to violence (Kliewer et al., 2004). Although emotion regulation and coping protect youth by reducing the impact of negative stressors (Barbarin, 1993), continued exposure to stressors may overload the coping resources of youth (Kliewer et al., 2004). Given the potential for increased exposure to both chronic and acute stressors and the general importance of coping/regulatory efforts in moderating the effect of those stressors, the emotion regulation and coping processes of African American youth are critically important targets of future research and intervention efforts. Mindfulness interventions are theorized to target regulation of emotion and coping processes associated with chronic stress, and thus may represent a helpful branch of psychotherapies to address the suffering experienced by many African American youth.

Mindfulness has been described as "paying attention in a particular way: on purpose, in the present moment, and nonjudgmentally" (Kabat-Zinn, 1994, p. 4). In essence, mindfulness is the complete awareness of what is happening right now, or "being in the zone." Therefore, mindfulness instruction is intended to enhance an individual's innate ability to be aware. Formal mindfulness instruction entails a range of techniques that help foster an intentional focusing of attention on one's present-moment experience while letting go of negative, self-critical judgments. As detailed explicitly in many mindfulness programs, this type of training aims to help individuals accept unpleasant and painful experiences without reactively attempting to change the experience (O'Brien, Larson, & Murrell, 2008). However, as most of us would prefer to reduce or eliminate pain and discomfort as much as possible, some mindfulness-based programs additionally adopt a dialectical position of balancing desire for change alongside intentional acceptance of the inevitability of suffering (O'Brien et al., 2008). As moment-to-moment awareness through the day is the ultimate goal of mindfulness programs, there is also instruction of informal techniques that can be used at any time.

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The application of mindfulness meditation to reduce suffering has been a feature of behavioral medicine in the West for well over 30 years (Kabat-Zinn, Lipworth, & Burney, 1985). Meditation practices complement a group of established psychological approaches to reduce stress and discomfort (Baer, 2003), including cognitive-behavioral therapies and relaxation techniques (see Chap. 4). Mindfulness-based stress reduction (MBSR) is one of the more well-known programs, which initially was developed for use with adults presenting with chronic pain and other chronic and stressful conditions (Kabat-Zinn et al., 1985). Since the establishment of MBSR, several mindfulness-based interventions have been developed and applied to treat a range of psychological problems among adults (Baer, 2003), including Dialectical Behavior Therapy (DBT; Linehan, 1993), Acceptance and Commitment Therapy (ACT; Hayes & Strosahl, 2004), Mindfulness-based Cognitive Therapy (MBCT; Segal, Williams, & Teasdale, 2002), and Mindfulness-based Relapse Prevention (MBRP; Witkiewitz, Marlatt, & Walker, 2005). The common thread among these other approaches is a dual emphasis on mindfulness and behavioral change as core processes to alleviate suffering. In this chapter, we will review the literature pertaining to coping with stressors among African American youth, the role of stress exposure/experience in regulation and coping, and highlight the role of mindfulness-based therapies to improve self-regulation among African American youth.

Role of Stress Exposure in African American Youth

Stressors experienced in childhood and adolescence have been linked to a number of negative mental health outcomes, including internalizing problems, externalizing behaviors, academic difficulties, and health risk behaviors (e.g., Grant et al., 2006; Lambert, Copeland-Linder, & Ialongo, 2008). African American youth, particularly those residing in low-income neighborhoods, encounter a disproportionate share of acute and chronic stressors due to their social position in American society (Garcia Coll et al., 2008). Historical and present-day inequality faced by African Americans has resulted in disparities in exposure to stressors that impact children across a variety of domains including the home, school, and community (Garcia Coll et al., 2008).

A number of cross-ethnic comparison studies suggest that ethnic minority youth experience more stressors than their White peers (e.g., Choi, Meininger, & Roberts, 2006). African American youth are more likely than White youth to experience the death of a loved one, to have a family member who has been arrested or jailed, to have to take care of a loved one, and to be placed in a foster home (Kilmer, Cowen, Wyman, Work, & Magnus, 1998). In addition, African American youth are twice as likely as White youth to experience maltreatment according to data from Fourth National Incidence Study of Child Abuse and Neglect (Sedlack et al., 2010).

In recent years, a number of studies have examined specific domains of stressors that disproportionately affect African American youth including poverty, neighborhood disorder, community violence, and racial discrimination. Census Bureau findings indicate that, in 2012, 27.2 % of African Americans were living in poverty compared to 9.7 % of Whites (DeNavas-Walt, Proctor, & Smith, 2013). In addition, African American youth disproportionately reside in neighborhoods characterized by high levels of neighborhood disorder (Peterson & Krivo, 2005), and they rate their communities as more threatening than adolescents of other racial groups (Aneshensel & Sucoff, 1996). Neighborhood stressors may have more harmful effects than general negative life events (Scheier, Botvin, & Miller, 1999).

Violence exposure is a frequently occurring stressor for African American youth who reside in low-income communities (Sanchez, Lambert, & Cooley-Strickland, 2013). African American youth are disproportionately affected by violence as victims and witnesses. In addition, some research indicates that between 50 and 96 % of urban youth have witnessed community violence (Gorman-Smith, Henry, & Tolan, 2004). The fact that homicide is the leading cause of death for African American youth (Centers for Disease

Control and Prevention, 2012) is evidence of the pervasiveness of community violence in their lives. In addition, exposure to community violence as a victim or witness is associated with a number of adverse outcomes including posttraumatic stress symptoms, internalizing symptoms, suicidal behavior, antisocial behavior, social withdrawal, substance use, and academic problems (e.g., Gorman-Smith & Tolan, 1998). In addition, these negative mental health effects may persist over time (e.g., Lambert et al., 2008).

Experiencing racial discrimination is stressful for youth and has been associated with negative mental health outcomes (e.g., Greene, Way, & Pahl, 2006; Simons et al., 2002). African American youth are at risk for being targets of discrimination (Greene et al., 2006; Romero & Roberts, 1998) and they often report experiencing discrimination in their daily lives (e.g., Greene et al., 2006; Seaton, Caldwell, Sellers, & Jackson, 2008; Sellers, Copeland-Linder, Martin, & Lewis, 2006; Simons, Chen, Stewart, & Brody, 2003). According to data from a nationally representative sample of African American adolescents, 87 % reported experiencing at least one discriminatory incident in the past year (Seaton et al., 2008). Recent research conducted by Seaton and Douglas (2014) indicated that African American adolescents reported an average of 2.5 discriminatory events occurring daily. Simons et al. (2003) reported that 46 % of their sample of preadolescents had experienced racial slurs, 33 % had experienced some form of exclusion due to race, and 18 % reported that they had been threatened with physical harm due to race.

Thus, African American youth are at high risk for experiencing exposure to many stressors that may increase likelihood for developing emotional and behavioral problems. High rates of stressful experiences may result in the reliance on maladaptive coping and emotion regulation strategies that contribute to psychopathology and maladjustment. As reviewed, many sources of stress are difficult to change, and unlike some targets of evidence-based psychotherapy (e.g., cognitive distortions), negative thoughts associated with these stressors may be quite valid and accurately reflect genuinely negative experiences. Mindfulness-based interventions target emotional and attentional processes associated with chronic and acute stress and may therefore support the development of African American children's self-regulation in a unique way. Likewise, mindfulness-enhanced approaches to well-established, evidence-based treatments (e.g., mindfulness-based cognitive therapy, mindfulness-enhanced parent training) may provide complementary benefit. In the next section, we will review theoretical models that further detail how mindfulness-based treatments may reduce the negative effects of stress and influences on emotion regulation and coping. We will then review empirically evaluated mindfulness treatments for youth and their families, with a focus on studies that have included African American youth.

Effects of Mindfulness on Self-Regulation

Empirical interest in the potential theoretical mechanisms of mindfulness-based treatments has grown significantly since the initial introduction of mindfulness into psychotherapy over the past 2 decades. Mindfulness has been broadly theorized to improve affect regulation, a term which encompasses the processes of emotion regulation, mood regulation, and self-regulation, as well as specific strategies such as nonreactivity and acceptance (Jimenez, Niles, & Park, 2010). Similar models pose mindfulness as a catalyst for changes in various forms of self-regulation, with distal improvements hypothesized for psychological symptoms. Emotion regulation has been proposed as a fundamental component of many kinds of youth psychopathology generally (e.g., Frick & Morris, 2004) and a potential mediator of the relationship between exposure to risk and healthy developmental outcomes for African American youth specifically (Barbarin, 1993).

Multiple models have been proposed for explaining mindfulness mechanisms generally, and we will focus a selection of those theoretical models. An information-processing model has been proposed (Breslin, Zack, & McMain, 2002) that identifies several ways in which mindfulness

could work by modifying attentional and emotional self-regulation processes: (1) Interrupting automatic, "mindless" habits and cognitive scripts associated with maladaptive behavior; (2) Changing an individual's relationship to his or her own memory activation (e.g., neutrally observing a memory, rather than attempting to inhibit it, or reacting emotionally in a negative way); (3) Becoming desensitized to previous emotional triggers for behavior; and (4) Developing increased attention to and awareness of one's own general cognitive and emotional processes. It has been theorized that mindfulness "may change automatic response tendencies when the patient observes, describes, and participates in emotional experiences without acting on them" (Lynch, Chapman, Rosenthal, Kuo, & Linehan, 2006, p. 465). Indeed, the proposed mechanism of therapeutic change in DBT is the reduction of ineffective action tendencies that are linked with emotion dysregulation (Lynch et al., 2006). Similarly, the reduction of psychological inflexibility and experiential avoidance within ACT theory are proposed to allow individuals to observe their psychological experiences instead of attempting to control them (Hayes, Strosahl, & Wilson, 1999). This psychological shift may promote a number of associated cognitive, emotional, and behavioral changes, including reduced belief in automatic thoughts, increased flexibility of attention, improved intentional shifts in attention, reduced emotional intensity/duration and secondary emotional responses, enhanced ability for learning, and enhanced treatment motivation.

Mindfulness training is also theorized to result in improved self-regulation that emerges from increased acceptance and self-awareness, such as noticing unpleasant emotions and distress as experiences that can be accepted, rather than impulsively reacted to, ruminated over, or chronically avoided in an ineffective manner (Baer, 2003; Kavanagh, Andrade, & May, 2004; Williams, Teasdale, Segal, & Kabat-Zinn, 2007). This enhanced acceptance of one's internal experiences is thought to lead to reduced suffering and distress in response to stress. Thus, mindfulness training may result in symptom reduction through exposure to emotional and psychological sensations, changes in attitude/cognitive stance, greater use of self-regulation and coping skills, and acceptance of psychological experiences (Baer, 2003).

In addition, behavioral and learning theory may also explain the potential utility of mindfulness-based interventions for working with African American youth. First, mindfulness-based interventions may reduce emotion regulation problems that precipitate and follow social/interpersonal conflicts and stressors that often function as triggers for exacerbations in managing chronic stress. Second, mindfulness may also reduce high arousal and emotional reactivity from which individuals may seek immediate relief, thus counteracting the negative reinforcement value that maladaptive coping efforts may have previously provided (e.g., aggression, avoidance). Thus, in many ways, mindfulness may address maladaptive homeostasis, self-soothing, and avoidant responses that may accompany many forms of psychological disorders, including anxiety, depression, inattention/hyperactivity disorder, and oppositional behavior.

In summary, various theoretical models have offered philosophically complementary explanations for the potential benefits afforded by mindfulness training. These models may be relevant for working with African American youth in dealing with the effects of exposure to stress as well as for reducing multiple forms of psychopathology (e.g., anxiety, depression, aggression). As noted in a review (Baer, 2003), mindfulness-based interventions emphasize exposure to internal experiences, cognitive changes in one's relationship to internal events, self-regulation, acceptance of experiences, and relaxation rather than autonomic arousal. In short, mindfulness approaches emphasize approaching and accepting one's experiences, rather than chronic efforts in avoiding uncomfortable or undesired experiences (Hayes & Strosahl, 2004). While this stance of approach is similar to many cognitive-behavioral treatments, it is important to note that mindfulness-based therapies focus on a change in the contextual relationship between a person and his/her experiences, whereas CBT approaches actively change the content of those experiences (e.g., thoughts, behaviors). Our theoretical model

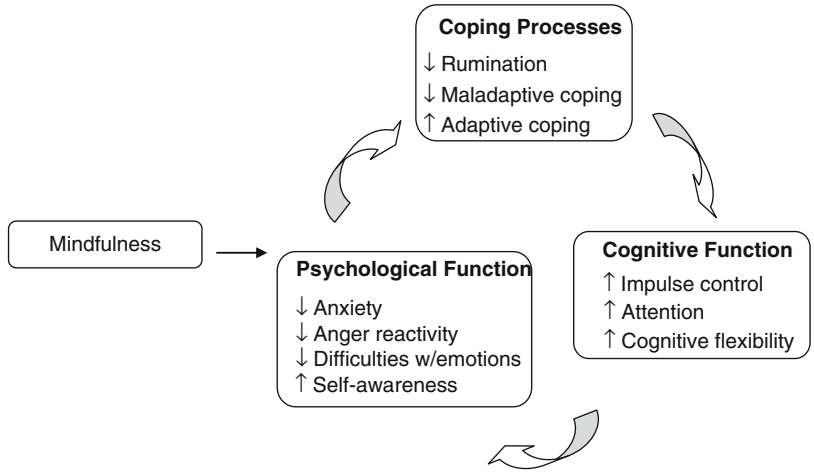

Fig. 6.1 Mindfulness and improved self-regulation

(Fig. 6.1) reflects the range of potential changes associated with mindfulness, including improved coping, positive cognitive changes, and improved psychological self-regulatory abilities.

Practical Application: A Sample Mindfulness Meditation Practice

Many clinicians who teach mindfulness techniques across a variety of empirically supported approaches, such as MBSR, ACT, DBT, and MBCT, emphasize the need for the practitioner to gain personal experience with mindfulness meditation. Experience in mindfulness then enables the practitioner to help children and adolescents learn through their own experiences what mindfulness is and is not (e.g., auto-pilot), and how mindfulness techniques can be used to cope with a range of stressors. Providing a definition of what mindfulness is can be a helpful first step. In our work, we often use Jon Kabat-Zinn's classic conceptualization, in which mindfulness is simply directing attention in a particular way: on purpose, in the present moment, and nonjudgmentally. By contrast, mindfulness is the opposite of mindlessness or being on "auto-pilot" (Kabat-Zinn, 1994).

Mindfulness training on one's breathing is a traditional starting point in meditation. The following text is a sample script for a brief meditation on one's breath:

1. *Sit in a comfortable position in your chair. Sit upright, with your back straight* (but not uncomfortably so) *and your feet flat on the floor.*
2. *Gently bring your attention to your breath. There's no need to change how you are breathing in any way, but just notice each breath as you inhale and exhale.*
3. *Be aware of the sensations in your body as you breathe; notice the sensation of the in-breath as it enters your nose, throat, lungs; notice your out-breath as you exhale.*
4. *Observe what parts of your body move as you breathe. Your shoulders, chest, stomach may move. Perhaps other parts of your body move too—such as your arms and feet.*
5. *If other thoughts come in to your mind as you practice, acknowledge them and then gently shift your awareness back to your breathing again. It is okay to notice these other thoughts; let them go and return your attention to your in-breath and out-breath.*
6. *Continue for two to three minutes or more, as you like.*
7. AFTER: *What did you notice? What was it like?*

Although this is a simple mindfulness exercise, it may not be easy to maintain focus on the breath; this is common and reassurance that lots of practice is needed can be given. Also, it allows what may be a very different experience than a typical moment spent worrying about whether an uncomfortable feeling will not end, or ruminating about how one is frequently bothered by an unwanted experience (e.g., itching in atopic dermatitis; abdominal upset/pain). This simple exercise can be modified and expanded in a number of ways. For example, as one breathes in, a simple phrase to describe that action could be added ("I am breathing in my breath, I am breathing out my breath"). Likewise, a general coping statement could be added (e.g., "I breathe in peace, I breathe out stress"), or an observation of undesired sensations could be noticed and described nonjudgmentally (e.g., "I notice an itch on my arm"). As Thich Nhat Hanh writes in *The Miracle of Mindfulness*, "Mindfulness frees us from forgetfulness…and enables us to live" (Hanh, 1975, p. 15). Since enhancing awareness of what is happening in the present moment is the intention of mindfulness instruction, discussion of what *actually* happens during such an exercise provides an opportunity for the patient to gain understanding of how his or her mind "works." Practice of such techniques allows for more facility in that awareness and greater ability to manage one's attention.

Repeated over days and weeks, the goal of mindfulness training is to help individuals stay in their present experience, whether enjoyable or uncomfortable, and see things nonjudgmentally and clearly as they are. Seeing one's experience clearly means not catastrophizing (i.e., seeing things worse than they are) and not denying (i.e., not ignoring when things are truly undesirable). Rather, purposefully staying in the moment, with full, clear attention and without judgment, can lead to many positive outcomes for psychological and physical health. Mindfulness instruction provides simple techniques to "check in" with oneself to assess what is actually happening in the present moment. This "checking in" often leads to enhanced perspective-taking (Kerrigan et al., 2011; Shapiro, Carlson, Astin, & Freedman, 2006; Sibinga et al., 2008) and enhanced self-regulation (Sibinga, Perry-Parrish, Thorpe, Mika, & Ellen, 2014). While mindfulness techniques can enhance individuals' abilities to see their present-moment lives more clearly, it is typically believed that benefits will be sustained through regular practice.

Clinical Examples

To help illustrate how mindfulness approaches may be used in clinical practice, we present two examples of clinical cases that represent how mindfulness may be used to augment existing evidence-based treatments for working with African American youth and their families. The vignettes will represent the range of potential applications: working with youth individually to reduce psychopathology (e.g., anxiety) and working with parents to improve child behavioral functioning.

Anxiety Anxiety is a common childhood disorder, and many youth experience upsetting somatic symptoms as part of anxiety. Some children develop fears of their own somatic sensations, which then become a focus of experiential avoidance. Consider adolescents who present with anxiety and somatic complaints. Adolescents may report a history of significant stress, declining functioning (e.g., missed school, social isolation), and negative changes in routines (e.g., irregular sleep schedule). After ruling out potential medical and physical explanations, many youth benefit from cognitive-behavioral treatments to reduce avoidance and improve functioning associated with anxiety. Mindfulness training could be used to focus on observing thoughts and working to change one's relationship to those thoughts. For example, youth can practice noticing their thoughts that predicted the worst possible outcome (i.e., throwing up) and consciously attending to actual experience in those moments that demonstrated the opposite (i.e., not throwing up). Over time, youth are increasingly able to accept thoughts as just that—thoughts—that do not necessarily reflect reality. With increasing experience, a mindful stance toward thoughts may allow

adolescents to see them as thoughts rather than facts. These mindfulness exercises may help teens reduce anxiety and pain complaints and resume more normative functioning.

Behavioral Problems For children with behavior problems, somatic complaints, and even for healthy children, clinicians working with children have long recognized the need to encourage parents to nurture positive relationships with their children through positive parental attention. The recommendation for regular, recurrent "special time" or child-directed time has been a popular approach to this need (e.g., McMahon & Forehand, 2003; McNeil & Hembree-Kigin, 2011). The practice of mindfulness in its fullest expression means living and attending to the present moment at all times, with implications for how we manage our lives and our relationships (Kabat-Zinn, 2005). Although not typically conceptualized as a formal mindfulness technique, one-on-one parent–child time is intended to increase awareness of the present-moment experience of the parent–child dyad, and can be seen as supporting mindfulness in the parent–child relationship, particularly for the parent. "Special time" is time when child and parent spend time together that is free from other tasks or interruptions such as televisions, cell phones, etc. (Howard, 2002); ideally, the time is fundamentally about being together with a present-focused attitude. Often, it is recommended that the child choose the activity for the time together, that the parent brings an open and positive attitude, and that the parent be in tune with their child for that period of time, however briefly. Thus, the parent is instructed to be aware, open, positive, and attentive to the experience of being with their child as it unfolds in the present; the parent is instructed to be mindful. This mindful attending to one's child is a critical part of existing behavioral parent training programs, and researchers and clinicians are increasingly encouraging mindfulness-based parent programs to address childhood disruptive behavior (Dumas, 2005). A mindfulness-based model of parenting focuses on changing maladaptive behavior that is largely automatic and difficult to change because parents are generally unaware of these transactions (or ways of modifying them) in the moment. Mindfulness in parent training could target nonjudgmental listening, maintaining distance from upsetting emotions, and creating action plans that are consistent with parenting goals (Dumas, 2005). Consistent with this notion, emerging empirical work on this topic would suggest that maternal mindfulness is related to parenting practices among African American families (Parent et al., 2014).

In the examples described here, mindfulness techniques could be added to an array of cognitive-behavioral strategies for supporting improvement in functioning. While the concept of mindfulness may seem simple, its practice and the ability to provide quality mindfulness instruction are far from easy.

Mindfulness-Based Therapies: Empirical Evidence

Mindfulness-based interventions represent a third wave of psychotherapies rooted firmly in the empirically supported therapy movement. We will be focusing on the treatment models that emerged from two major traditions: mindfulness meditation, based on ancient contemplative practices, to reduce stress in medical populations on the one hand, and behavioral and cognitive-behavioral therapies to treat psychiatric disorders on the other. MBSR was developed in 1979 to reduce stress among adults with chronic health conditions (for detailed description, see Kabat-Zinn, 1990). In particular, adults with chronic medical conditions were referred to the MBSR clinic at the University of Massachusetts Medical Center to reduce stress and improve functioning. The structure of MBSR programs is an 8–10 week program of 2 h per session of groups of participants, with an expectation that participants will commit to regular daily practice during program participation (Kabat-Zinn, 1990). MBSR instructional content focuses on mindfulness meditation practice, self-awareness during yoga practice, and use of mindfulness practices during stressful moments.

Early studies examined adults with chronic pain (Kabat-Zinn et al., 1985), psoriasis (Kabat-Zinn et al., 1998), and hypertension (Schneider et al., 1995), with empirical evidence demonstrating significant reductions in psychological symptoms (e.g., present-moment pain, mood symptoms; Kabat-Zinn et al., 1985); increased rate of resolution of psoriatic lesions (Kabat-Zinn et al., 1998), and reduced systolic and diastolic blood pressure among older African American adults with mild hypertension (Schneider et al., 1995). Later studies have demonstrated improved quality of life, reduced physical symptoms, and improved social functioning among samples of heterogeneous adult medical patients (10 % of sample was African American; Reibel, Greeson, George, Brainard, & Rosenzweig, 2001) and improved glycemic regulation among a small group of adults with type II diabetes (approximately 30 % African American; Rosenzweig et al., 2007).

Since the introduction of MBSR in 1979, several other psychological treatments emphasizing mindfulness and mindful acceptance have emerged within the behavioral and cognitive-behavioral movement. A common theme among these third-wave behavioral approaches was a new focus and legitimation of affect and emotional experiences as a primary target for treatment. For example, DBT incorporated mindfulness and acceptance practices to address severe emotional dysregulation among individuals with borderline personality disorder (Linehan, 1993). ACT focused on the importance of the function and context of experiential avoidance in understanding and changing behavior as well as emotions (Hayes & Wilson, 1994). Mindfulness-based cognitive therapy (MBCT; Teasdale, Segal, & Williams, 1995) modified cognitive therapy as applied to depression in an effort to reduce risk for depressive episodes by targeting processes involved in maladaptive mood regulation. In addition to focusing on affect, these mindfulness-based approaches share another common link that distinguishes them from other cognitive-behavioral treatments. In CBT approaches, the clinician helps an individual change the *content* of one's thoughts (e.g., cognitive restructuring) and behavior (e.g., activation). In contrast, mindfulness-based approaches focus on changing the *context* in which those internal experiences occur. Thoughts and feelings are cast as experiences or events rather than facts (Teasdale et al., 2000). Thus, these treatments based on mindfulness actively balance desire for changed experiences on one hand and mindful acceptance of the present moment on the other.

Despite decades of research in adults, studies of mindfulness-based interventions for use with children and youth are still emerging, but few studies focus on African American youth and their families. However, this small literature provides preliminary evidence that mindfulness-based treatments are feasible and beneficial for use in pediatric populations (for reviews, see Meiklejohn et al., 2012; Sibinga & Kemper, 2010) and well accepted by African American youth (e.g., Sibinga et al., 2013, 2014). A number of mindfulness programs have been adapted for use with children and youth. Adaptations typically involve shortening the formal mindfulness techniques when they are introduced, with a gradual increase in duration as the course progresses; clarifying and concretizing language used for instruction; and providing age-appropriate mindfulness activities (e.g., Sibinga et al., 2011). Adaptations specifically for African American populations have noted the need for cultural sensitivity to ensure relevance (e.g., Woods-Giscombé & Gaylord, 2014). For example, in our own studies and clinical work, we have found that many African American youth do not identify themselves as "stressed" despite describing experiences with ongoing stressors (e.g., financial disadvantage, racial tension, community violence); indeed, terms associated with stress may be interpreted as reflecting personal shortcomings or lack of ability to manage one's experiences.

A small feasibility trial of mindfulness-based cognitive therapy for children (MBCT-C) found support for acceptability and reduction of internalizing (e.g., anxiety, depression) and externalizing symptoms (e.g., disruptive behavior) among a non-referred sample of preadolescents (Lee, Semple, Rosa, & Miller, 2008). Another randomized trial of MBCT-C recruited a predominantly

ethnic minority sample (25 % African American) and found reductions in attention problems (Semple, Lee, Rosa, & Miller, 2010). The authors also found a strong association between attention problems and behavior problems and speculated that MBCT-C could help promote improved behavioral functioning by reducing inattention (Semple et al., 2010). Studies of MBSR for youth recruited from an urban outpatient primary care clinic (100 % African American) have shown program acceptability, feasibility, and benefit related to improved relationships and coping, and reductions in conflict engagement, anxiety, and stress (Kerrigan et al., 2011; Sibinga et al., 2008, 2011). In African American high school students, mindfulness instruction led to reductions in elevated blood pressure (Barnes, Treiber, & Johnson, 2004). Additionally, mindfulness instruction (with age-appropriate adaptations, such as belly breathing, focusing on breath, and the use of "mind jars") has been studied in younger students, showing benefits in attention and executive function (Flook et al., 2010; Lee et al., 2008; Semple, Reid, & Miller, 2005).

Several studies have examined MBSR with African American youth. A small, randomized control trial of MBSR for urban youth ages 13–21 (all African American) recruited from an outpatient pediatric primary care clinic demonstrated that MBSR could be feasibly and acceptably adapted for African American youth (Sibinga et al., 2014). Qualitative data suggested that African American youth from the MBSR program perceived improved self-regulation following instruction in mindfulness, including increased feelings of calm, self-awareness, and conflict avoidance, compared with youth in the active control program. Another small randomized control trial of MBSR compared with an active control program focused on boys in an urban school setting (95 % African American) and documented decreased anxiety and rumination, with a trend for reduced negative coping and possible attenuation of cortisol response over the academic year (Sibinga et al., 2013).

A small randomized controlled trial of HIV-positive, predominantly African American youth found improvements in both self-regulation and physiological outcomes (Webb, Ghazarian, Perry-Parrish, Ellen, & Sibinga, in preparation). Compared with participants in a health education program, youth aged 14–22 years old, who participated in the clinic-based MBSR program had improved mindfulness, life satisfaction, and problem-solving coping skills, as well as a decrease in aggression. Youth in this group also took more time to dwell in positive emotions when they were given an emotion Stroop task. Moreover, MBSR participants were more likely to have a decrease in their HIV viral load compared to the control group (an age-appropriate general health course; Webb et al., in preparation). These preliminary studies are small but importantly demonstrate that these emerging mindfulness-based psychotherapies can be successfully adapted for use with African American youth.

A larger randomized controlled trial compared a school-based MBSR program with an active control program in two public schools ($n = 299$) consisting of 99 % African American youth. This trial showed that MBSR participants had statistically significant reductions in symptoms of depression, negative coping, negative affect, somatization, self-hostility, post-traumatic stress symptoms (depressive and re-experiencing domains), and increased scores on standardized reading tests (Sibinga, Webb, Ghazarian, & Ellen, in preparation).

Other trials of MBSR with primarily White samples are promising as well. A randomized trial of MBSR compared with usual care for adolescents (2 % African American) in outpatient psychiatric treatment showed significant reductions in anxiety and depression and improvements in global psychiatric functioning (Biegel, Brown, Shapiro, & Schubert, 2009). In a study of substance-abusing adolescents (4 % African American; Bootzin & Stevens, 2005), MBSR was well tolerated and accepted and seemed to effectively complement other therapeutic components (sleep hygiene, stimulus control, and cognitive therapy) in reducing sleep problems. Due to the unbalanced group sizes, between-group differences could not be examined, leaving a gap in our knowledge regarding how African

American youth may respond differentially to mindfulness interventions.

Beyond clinic-based evaluations of mindfulness, there are also school-based models for teaching mindfulness to school age youth. One study examined the effects of a teacher-implemented 6-week mindfulness intervention in a private school of predominantly White youth (Britton et al., 2014). This intervention was provided by a history teacher during class, and the materials were based on Integrative Contemplative Pedagogy with three mindfulness components: breath awareness, awareness of thoughts, feelings, and sensations, and body sweeps. Results indicated significant decreases in clinical symptoms from baseline to follow-up for the both meditating and the non-meditating control group; in contrast, unique effects in decreased self-harm tendencies were observed for the mindfulness condition only (Britton et al., 2014).

Another examination used the *Mindful Schools* curriculum in an elementary school with ethnic minority students in one of the largest evaluations of mindfulness instruction for youth ($n = 409$; 95 % ethnic minority; 28 % African American) at two intensity levels; the first group received 15-minute sessions three times per week for 5 weeks, and the second group also received a 15-minute weekly session for an additional 7 weeks, for a total of 12 weeks (Black & Fernando, 2014). The *Mindful Schools* program includes training in attention to breath, body awareness, emotion knowledge, kindness meditations, and mindful activities (e.g., eating a raisin, walking meditation). This naturalistic field evaluation design suggested that students across both groups improved on teacher ratings of behavior, including improved attention, self-control, participation, and respect for others (Black & Fernando, 2014). These results are promising, yet both studies denote the need for ongoing studies that adhere to rigorous study design to enhance the methodological evaluation of mindfulness instruction for youth (e.g., randomization, active control arm, raters blind to assignment).

DBT is a cognitive-behavioral therapy that incorporates mindfulness to treat individuals with emotional dysregulation. As detailed in Chap. 5, DBT involves four major treatment modules: mindfulness; distress tolerance (e.g., self-soothing, radical acceptance); emotion regulation; and interpersonal effectiveness (e.g., communication, social goals). DBT has been modified for use with adolescents (DBT-A) to include an emphasis on improving parent–child interactions. Among adolescents (43 % African American) with oppositional defiant disorder, 16 weeks of DBT-A skills training was shown to reduce self- and parent-reported internalizing and externalizing symptoms (Nelson-Gray et al., 2006).

A year-long trial of DBT-A involving family skills training and individual therapy in a small sample of adolescents (10 % African American) with bipolar disorder demonstrated feasibility and acceptability of the treatment, as well as indicated significant improvements in feelings of suicidality, self-harm, emotional dysregulation, and depressive symptoms (Goldstein, Axelson, Birmaher, & Brent, 2007). DBT-A was well received among adolescents with severe emotional dysregulation (e.g., significant self-harming behavior), with mindfulness and distress tolerance skills were rated as particularly helpful components of the intervention by adolescents (33 % African American; Miller, Wyman, Huppert, Glassman, & Rathus, 2000).

DBT-A has been shown to reduce behavior problems among incarcerated adolescent females with mental health problems, the majority also presenting with comorbid substance abuse (23 % African American; Trupin, Stewart, Beach, & Boesky, 2002). Implementation of DBT-A resulted in decreased premature terminations from residential treatment facilities, due to self-harm and psychiatric hospitalization; it also reduced the number of days spent in psychiatric hospitals among a sample of predominantly White adolescent young women (Sunseri, 2004).

In addition to interventions that provide individual or group-based treatment to target individuals, there is also a growing body of mindfulness-based approaches that target parents of youth (e.g., Coatsworth et al., 2015). Similar to potential mechanisms of individually based approaches, mindfulness-based parenting

programs theoretically reduce maladaptive response tendencies. However, rather than working directly with youth, parent programs would instead focus on changing parenting practices to improve child behavior. Many families with disruptive children display evidence of overlearned, habitual response that sustain children's behavioral difficulties (Dumas, 2005), a pattern that may reflect mindlessness or a lack of attention to the role that parent–child interactions play. Mindfulness-based parent training was proposed as a potential intervention to augment and enhance traditional behavioral methods for improving parent–child interactions and reducing child behavioral difficulties.

One early study investigated mindfulness instruction with a small cohort of four African American mothers and their young children (ages 4–6 years old) with developmental disabilities (Singh et al., 2007). Mothers received individual instruction in mindfulness over the course of 12 sessions; course content focused on individual mindfulness practices as well as meditation methods to guide them in practicing mindfulness when interacting with their children. Following this treatment, children's aggressive behavior decreased and social skills increased (Singh et al., 2007).

A larger study ($n=432$; 15 % African American, 16 % other ethnic minorities) focused on youth in middle school in integrated mindfulness practices into a well-established parenting program (Strengthening Families; Coatsworth et al., 2015). Parents and youth participated in seven 2-hour weekly group sessions; parents and youth met separately for one hour and then together for the second hour. Results indicated that this mindfulness-enhanced parent training program was as effective as standard parent training in improving parent–youth relationship quality and improving youth behavior management (Coatsworth et al., 2015). There were some trends that suggested that fathers in particular responded well to the mindfulness-enhanced treatment; for example, youth reported that fathers who received mindfulness instruction displayed a better approach to emotions and were more supportive and understanding.

In summary, evidence suggests that mindfulness-based interventions are beneficial for African American children and adolescents to enhance their self-regulation and coping, which are aspects central to the management of psychological symptoms associated with stress.

Recommendations for Future Research and Clinical Care

Mindfulness meditation instruction has been shown to improve mental health and quality of life outcomes. Mindfulness instruction leads to reduced stress and enhanced self-regulation, which can be thought of as the intertwined processes of psychological functioning, cognitive functioning, and coping (Fig. 6.1). In particular, mindfulness has been found to reduce psychological symptoms, such as anxiety, and improve emotion regulation; improve attention and the ability to focus; and reduce maladaptive coping and rumination. These outcomes have been associated with increased calm, improved relationships, and reduced stress and anxiety. There is a great deal of enthusiasm among many who study mindfulness instruction for youth and are hopeful for the benefits that mindfulness practices may yield. However, as noted above, there is still a need for rigorous scientific evaluation of mindfulness interventions, among youth as well as among African American youth in particular.

There are several promising directions for the future of mindfulness-based interventions for African American youth. Chief among the possibilities is the continued goal of improving the methods for evaluating mindfulness instructions to ensure that African American youth have access to optimal clinical care that is evidence-based. Mindfulness interventions need to demonstrate the same level of clinical and psychological value as other evidence-based treatments, and dissemination of these interventions needs to ensure fidelity. As with other efforts to disseminate treatments that have demonstrated efficacy, it will be crucial to determine how mindfulness-based treatment can survive the transfer from optimal delivery in rigorous studies to more

typical settings of care, such as community mental health centers.

A second goal is continue to expand the social contexts in which mindfulness instruction is evaluated. In this chapter, we reviewed clinic-based and school-based instruction, as well as interventions targeting parents of youth. Other exciting avenues for future research could target other important social figures in the lives of African American youth, including teachers. There are several programs under investigation that provide mindfulness instruction to teachers (Frank, Jennings, & Greenberg, 2013); this model may provide sustainability (e.g., Jennings, Frank, Snowberg, Coccia, & Greenberg, 2013). Finally, future research needs to continue to probe for the potential mechanisms of change associated with mindfulness instruction. Assuming that mindfulness instruction does lead to positive changes for African American youth, it will be important to identify which emotional and psychological processes are changed, and how they are improved.

Mindfulness techniques represent a group of complementary treatments that are beneficial for children presenting with a range of behavioral, emotional, and somatic symptoms, as mindfulness instruction supports a positive change in the relationship to one's experiences. Enhancing the mindful awareness of the present-moment experience of the bodily sensation or symptom itself, as well as the thoughts and emotions that may be associated with the symptom, allows the individual to recognize the sensation itself. In turn, individuals may become less attached to the associated thoughts and emotions, which enables more opportunities for flexible responding to stress and psychological symptoms. With practice, the sensation itself becomes more manageable and the child becomes less limited by it. When considering integrating mindfulness techniques into the care of African American youth and their parents, it is essential to identify mindfulness instructors with rigorous training and excellent experience, and ongoing support for their practice. In the right hands, mindfulness meditation instruction has extraordinary potential for benefit.

References

American Psychological Association, Task Force on Resilience and Strength in Black Children and Adolescents. (2008). *Resilience in African American children and adolescents: A vision for optimal development.* Washington, DC: Retrieved January 24, 2015, Available from http://www.apa.org/pi/families/resources/resiliencerpt.pdf

Aneshensel, C., & Sucoff, C. (1996). The neighborhood context of adolescent mental health. *Journal of Health and Social Behavior, 37*(4), 293–310.

Baer, R. A. (2003). Mindfulness training as a clinical intervention: A conceptual and empirical review. *Clinical Psychology: Science and Practice, 10*(2), 125–143.

Barbarin, O. (1993). Coping and resilience: Exploring the inner lives of African American children. *Journal of Black Psychology, 19*(4), 478–492.

Barnes, V. A., Treiber, F. A., & Johnson, M. H. (2004). Impact of transcendental meditation on ambulatory blood pressure in African-American adolescents. *American Journal of Hypertension, 17*(4), 366–369.

Biegel, G. M., Brown, K. W., Shapiro, S. L., & Schubert, C. M. (2009). Mindfulness-based stress reduction for the treatment of adolescent psychiatric outpatients: A randomized clinical trial. *Journal of Consulting and Clinical Psychology, 77*(5), 855–866.

Black, D. S., & Fernando, R. (2014). Mindfulness training and classroom behavior among lower-income and ethnic minority elementary school children. *Journal of Child and Family Studies, 23*(7), 1242–1246.

Bootzin, R. R., & Stevens, S. J. (2005). Adolescents, substance abuse, and the treatment of insomnia and daytime sleepiness. *Clinical Psychology Review, 25*(5), 629–644.

Breslin, F. C., Zack, M., & McMain, S. (2002). An information-processing analysis of mindfulness: Implications for relapse prevention in the treatment of substance abuse. *Clinical Psychology: Science and Practice, 9*(3), 275–299.

Britton, W. B., Lepp, N. E., Niles, H. F., Rocha, T., Fisher, N. E., & Gold, J. S. (2014). A randomized controlled pilot trial of classroom-based mindfulness meditation compared to an active control condition in sixth-grade children. *Journal of School Psychology, 52*(3), 263–278.

Centers for Disease Control and Prevention, National Centers for Injury Prevention and Control. Web-based Injury Statistics Query and Reporting System (WISQARS). Retrieved January 30, 2012. Available from: www.cdc.gov/injury/wisqars/

Choi, H., Meininger, J., & Roberts, R. (2006). Ethnic differences in adolescents' mental distress, social stress, and resources. *Adolescence, 41*(162), 263–283.

Coatsworth, J. D., Duncan, L. G., Nix, R. L., Greenberg, M. T., Gayles, J. G., Bamberger, K. T., … Demi, M. A. (2015). Integrating mindfulness with parent training: Effects of the mindfulness-enhanced strengthening

families program. *Developmental Psychology, 51*(1), 26–35.

DeNavas-Walt, C., Proctor, B. D., & Smith, J. C. (2013). U.S. Census Bureau, Current Population Reports, P60-245, *Income, Poverty, and Health Insurance Coverage in the United States: 2012*. Retrieved January 24, 2014 from https://www.census.gov/prod/2013pubs/p60-245.pdf

Dumas, J. E. (2005). Mindfulness-based parent training: Strategies to lessen the grip of automaticity in families with disruptive children. *Journal of Clinical Child and Adolescent Psychology, 34*(4), 779–791.

Flook, L., Smalley, S. L., Kitil, M. J., Galla, B. M., Kaiser-Greenland, S., Locke, J., … Kasari, C. (2010). Effects of mindful awareness practices on executive functions in elementary school children. *Journal of Applied School Psychology*, *26*(1), 70–95.

Frank, J. L., Jennings, P. A., & Greenberg, M. T. (2013). Mindfulness-based interventions in school settings. *Research in Human Development, 10*(3), 205–210.

Frick, P. J., & Morris, A. S. (2004). Temperament and developmental pathways to conduct problems. *Journal of Clinical Child and Adolescent Psychology, 33*(1), 54–68.

Garcia Coll, C., Crnic, K., Lamberty, G., Wasik, B. H., Jenkins, R., Garcia, H. V., & McAdoo, H. P. (2008). An integrative model for the study of developmental competences in minority children. *Child Development, 67*(5), 1891–1914.

Goldstein, T. R., Axelson, D. A., Birmaher, B., & Brent, D. A. (2007). Dialectical behavior therapy for adolescents with bipolar disorder: A 1-year open trial. *Journal of the American Academy of Child and Adolescent Psychiatry, 46*(7), 820–830.

Gorman-Smith, D., Henry, D., & Tolan, P. (2004). Exposure to community violence and violence perpetration: The protective effects of family functioning. *Journal of Clinical Child and Adolescent Psychology, 33*(3), 439–449.

Gorman-Smith, D., & Tolan, P. (1998). The role of exposure to community violence and developmental problems among inner-city youth. *Development and Psychopathology, 10*, 101–116.

Grant, K., Compas, B., Thurm, A., McMahon, S., Gipson, P., Campbell, A., … Westerholm, R. (2006). Stressors and child and adolescent psychopathology: Evidence of moderating and mediating effects. *Clinical Psychology Review, 26*(3), 257–283.

Greene, M., Way, N., & Pahl, K. (2006). Trajectories of perceived adult and peer discrimination among Black, Latino, and Asian American adolescents: Patterns and psychological correlates. *Developmental Psychology, 42*(2), 218–238.

Hanh, T. N. (1975). *The miracle of mindfulness: An introduction to the practice of meditation*. Boston, MA: Beacon.

Hayes, S. C., & Strosahl, K. D. (2004). *A practical guide to acceptance and commitment therapy*. New York, NY: Springer.

Hayes, S. C., Strosahl, K. D., & Wilson, K. G. (1999). *Acceptance and commitment therapy: An experiential approach to behavior change*. New York, NY: Guilford Press.

Hayes, S. C., & Wilson, K. G. (1994). Acceptance and commitment therapy: Altering the verbal support for experiential avoidance. *The Behavior Analyst, 17*(2), 289–303.

Howard, B. J. (2002). Guidelines for special time. In M. Jellinek, B. P. Patel, & M. C. Froehle (Eds.), *Bright futures in practice: Mental health—Volume II. Tool kit*. Arlington, VA: National Center for Education in Maternal and Child Health.

Jennings, P. A., Frank, J. L., Snowberg, K. E., Coccia, M. A., & Greenberg, M. T. (2013). Improving classroom learning environments by Cultivating Awareness and Resilience in Education (CARE): Results of a randomized controlled trial. *School Psychology Quarterly, 28*(4), 374–390.

Jimenez, S. S., Niles, B. L., & Park, C. L. (2010). A mindfulness model of affect regulation and depressive symptoms: Positive emotions, mood regulation expectancies, and self-acceptance as regulatory mechanisms. *Personality and Individual Differences, 49*(6), 645–650.

Kabat-Zinn, J. (1990). *Full catastrophe living: Using the wisdom of your body and mind to face stress, pain, and illness*. New York, NY: Bantam Books.

Kabat-Zinn, J. (1994). *Wherever you go, there you are*. New York, NY: Hyperion.

Kabat-Zinn, J. (2005). *Coming to our senses: Healing ourselves and the world through mindfulness*. New York, NY: Hyperion.

Kabat-Zinn, J., Lipworth, L., & Burney, R. (1985). The clinical use of mindfulness meditation for the self-regulation of chronic pain. *Journal of Behavioral Medicine, 8*(2), 163–190.

Kabat-Zinn, J., Wheeler, E., Light, T., Skillings, A., Scharf, M. H., Cropley, T. G., … Bernard, J. D. (1998). Influence of a mindfulness meditation-based stress reduction intervention on rates of skin clearing in patients with moderate to severe psoriasis undergoing phototherapy (UVB) and photochemotherapy (PUVA). *Psychosomatic Medicine, 60*(5), 625–632.

Kavanagh, D. J., Andrade, J., & May, J. (2004). Beating the urge: Implications of research into substance-related desires. *Addictive Behaviors, 29*(7), 1359–1372.

Kerrigan, D., Johnson, K., Stewart, M., Magyari, T., Hutton, N., Ellen, J. M., & Sibinga, E. M. (2011). Perceptions, experiences, and shifts in perspective occurring among urban youth participating in a mindfulness-based stress reduction program. *Complementary Therapies in Clinical Practice*, *17*(2), 96–101.

Kilmer, R., Cowen, E., Wyman, P., Work, W., & Magnus, K. (1998). Differences in stressors experienced by urban African American, White, and Hispanic children. *Journal of Community Psychology, 26*(5), 415–428.

Kliewer, W., Cunningham, J. N., Diehl, R., Parrish, K. A., Walker, J. M., Atiyeh, C., … Mejia, R. (2004). Violence exposure and adjustment in inner-city youth: Child and caregiver emotion regulation skill caregiver-child relationship quality, and neighborhood cohesion as protective factors. *Journal of Clinical Child and Adolescent Psychology*, *33*(3), 477–487.

Lambert, S., Copeland-Linder, N., & Ialongo, N. (2008). Longitudinal associations between community violence exposure and suicidality. *Journal of Adolescent Health, 43*(4), 380–386.

Lee, J., Semple, R. J., Rosa, D., & Miller, L. (2008). Mindfulness-based cognitive therapy for children: Results of a pilot study. *Journal of Cognitive Psychotherapy, 22*(1), 15–28.

Linehan, M. M. (1993). *Cognitive-behavioral treatment of borderline personality disorder*. New York, NY: Guilford Press.

Lynch, T. R., Chapman, A. L., Rosenthal, M. Z., Kuo, J. R., & Linehan, M. M. (2006). Mechanisms of change in dialectical behavior therapy: Theoretical and empirical observations. *Journal of Clinical Psychology, 62*(4), 459–480.

McMahon, R. J., & Forehand, R. L. (2003). *Helping the noncompliant child: Family-based treatment for oppositional behavior* (2nd ed.). New York, NY: Guilford.

McNeil, C. B., & Hembree-Kigin, T. L. (2011). *Parent-child interaction therapy* (2nd ed.). New York, NY: Springer.

Meiklejohn, J., Phillips, C., Freedman, M. L., Griffin, M. L., Biegel, G., Roach, A., … Saltzman, A. (2012). Integrating mindfulness training into K-12 education: Fostering the resilience of teachers and students. *Mindfulness*, *3*(4), 291–307.

Miller, A. L., Wyman, S. E., Huppert, J. D., Glassman, S. L., & Rathus, J. H. (2000). Analysis of behavioral skills utilized by suicidal adolescents receiving dialectical behavior therapy. *Cognitive and Behavioral Practice, 7*(2), 183–187.

Miller, D., Webster, S., & MacIntosh, R. (2002). What's there and what's not: Measuring daily hassles in urban African American adolescents. *Research on Social Work Practice, 12*(3), 375–388.

Nelson-Gray, R. O., Keane, S. P., Hurst, R. M., Mitchell, J. T., Warburton, J. B., Chok, J. T., & Cobb, A. R. (2006). A modified DBT skills training program for oppositional defiant adolescents: Promising preliminary findings. *Behaviour Research and Therapy*, *44*(12), 1811–1820.

O'Brien, K. M., Larson, C. M., & Murrell, A. R. (2008). Third-wave behavior therapies for children and adolescents: Progress, challenges, and future directions. In L. A. Greco & S. C. Hayes (Eds.), *Acceptance and mindfulness treatments for children and adolescents: A practitioner's guide* (pp. 15–35). Oakland, CA: New Harbinger.

Parent, J., Clifton, J., Forehand, R., Golub, A., Reid, M., & Pichler, E. R. (2014). Parental mindfulness and dyadic relationship quality in low-income cohabiting Black stepfamilies: Associations with parenting experienced by adolescents. *Couple and Family Psychology, 3*(2), 67–82.

Peterson, R. D., & Krivo, L. J. (2005). Macrostructural analyses of race, ethnicity and violent crime: Recent lessons and new directions for research. *Annual Review of Sociology, 31*, 331–356.

Reibel, D. K., Greeson, J. M., George, M. S., Brainard, C., & Rosenzweig, S. (2001). Mindfulness-based stress reduction and health-related quality of life in a heterogeneous patient population. *General Hospital Psychiatry, 23*, 183–192.

Romero, A., & Roberts, R. (1998). Perception of discrimination and ethnocultural variables in a diverse group of adolescents. *Journal of Adolescence, 21*(6), 641–656.

Rosenzweig, S., Reibel, D. K., Greeson, J. M., Edman, J. S., Jasser, S. A., McMearty, K. D., & Goldstein, B. J. (2007). Mindfulness-based stress reduction is associated with improved glycemic control in type 2 diabetes mellitus: A pilot study. *Alternative Therapeutic Health Medicine, 13*(5), 36–38.

Sanchez, Y. M., Lambert, S. F., & Cooley-Strickland, M. (2013). Adverse life events, coping, and internalizing and externalizing behaviors in urban African American youth. *Journal of Family Studies, 22*, 38–47.

Scheier, L. M., Botvin, G. J., & Miller, N. L. (1999). Life events, neighborhood stress, psychosocial functioning, and alcohol use among urban minority youth. *Journal of Child and Adolescent Substance Abuse, 9*, 19–50.

Schneider, R. H., Staggers, F., Alexander, C. N., Sheppard, W., Rainforth, M., Kondwani, K., … King, C. G. (1995). A randomised controlled trial of stress reduction for hypertension in older African-Americans. *Hypertension*, *26*(5), 820–827.

Seaton, E., Caldwell, C., Sellers, R., & Jackson, J. (2008). The prevalence of perceived discrimination among African American and Caribbean black youth. *Developmental Psychology, 44*(5), 1288–1297.

Seaton, E. K., & Douglas, S. (2014). School diversity and racial discrimination among African-American adolescents. *Cultural Diversity and Ethnic Minority Psychology, 20*(2), 156–165.

Sedlack, A. J., Mettenburg, J., Basena, M., Petta, I., McPherson, K., Greene, A. & Li, S. (2010). *Fourth National Incidence Study of Child Abuse and Neglect (NIS-4). Report to Congress.* Washington, DC: US Department of Health and Human Services, Administration for Children and Families.

Segal, Z. V., Williams, J. G., & Teasdale, J. D. (2002). *Mindfulness-based cognitive therapy for depression: A new approach to preventing relapse*. New York, NY: Guilford Press.

Sellers, R., Copeland-Linder, N., Martin, P., & Lewis, R. (2006). Racial identity matters: The relationship between racial discrimination and psychological functioning in African American adolescents. *Journal of Research on Adolescence, 16*(2), 187–216.

Semple, R. J., Lee, J., Rosa, D., & Miller, L. F. (2010). A randomized trial of mindfulness-based cognitive therapy for children: Promoting mindful attention to

enhance social-emotional resiliency in children. *Journal of Child and Family Studies, 19*(2), 218–229.

Semple, R. J., Reid, E. G., & Miller, L. (2005). Treating anxiety with mindfulness: An open trial of mindfulness training for anxious children. *Journal of Cognitive Psychotherapy, 19*(4), 379–392.

Shapiro, S. L., Carlson, L. E., Astin, J. A., & Freedman, B. (2006). Mechanisms of mindfulness. *Journal of Clinical Psychology, 62*(3), 373–386.

Sibinga, E. M., Stewart, M., Magyari, T., Welsh, C. K., Hutton, N., & Ellen, J. M. (2008). Mindfulness-based stress reduction for HIV-infected youth: A pilot study. *Explore, 4*(1), 36–37.

Sibinga, E. M. S., Perry-Parrish, C., Thorpe, K., Mika, M., & Ellen, J. M. (2014). A small mixed-method RCT of mindfulness instruction for urban youth. *Explore, 10*(3), 180–186.

Sibinga, E. S., & Kemper, K. J. (2010). Complementary, holistic, and integrative medicine: Meditation practices for pediatric health. *Pediatrics in Review, 31*(12), 91–103.

Sibinga, E. S., Kerrigan, D., Stewart, M., Johnson, K., Magyari, T., & Ellen, J. M. (2011). Mindfulness-based stress reduction for urban youth. *The Journal of Alternative and Complementary Medicine, 17*(3), 213–218.

Sibinga, E. S., Perry-Parrish, C., Chung, S., Johnson, S. B., Smith, M., & Ellen, J. M. (2013). School-based mindfulness instruction for urban male youth: A small randomized controlled trial. *Preventive Medicine, 57*(6), 799–801.

Sibinga, E. S., Webb, L., Ghazarian, S., & Ellen, J. M. (in preparation). Primary prevention of mental health and behavioral problems in urban youth through mindfulness instruction: A population-based randomized controlled trial.

Simons, R., Chen, Y., Stewart, E., & Brody, G. (2003). Incidents of discrimination and risk for delinquency: A longitudinal test of strain theory with an African American sample. *Justice Quarterly, 20*(4), 827–854.

Simons, R., Murry, V., McLoyd, V., Lin, K., Cutrona, C., & Conger, R. (2002). Discrimination, crime, ethnic identity, and parenting as correlates of depressive symptoms among African American children: A multilevel analysis. *Development and Psychopathology, 14*, 371–393.

Singh, N. N., Lancioni, G. E., Winton, A. W., Singh, J., Curtis, W. J., Wahler, R. G., & McAleavey, K. M. (2007). Mindful parenting decreases aggression and increases social behavior in children with developmental disabilities. *Behavior Modification, 31*(6), 749–771.

Sunseri, P. A. (2004). Preliminary outcomes on the use of dialectical behavior therapy to reduce hospitalization among adolescents in residential care. *Residential Treatment for Children and Youth, 21*(4), 59–76.

Teasdale, J. D., Segal, Z., Williams, J. G., Ridgeway, V. A., Soulsby, J. M., & Lau, M. A. (2000). Prevention of relapse/recurrence in major depression by mindfulness-based cognitive therapy. *Journal of Consulting and Clinical Psychology, 68*(4), 615–623.

Teasdale, J. D., Segal, Z., & Williams, J. G. (1995). How does cognitive therapy prevent depressive relapse and why should attentional control (mindfulness) training help? *Behaviour Research and Therapy, 33*(1), 25–39.

Trupin, E. W., Stewart, D. G., Beach, B., & Boesky, L. (2002). Effectiveness of dialectical behaviour therapy program for incarcerated female juvenile offenders. *Child and Adolescent Mental Health, 7*(3), 121–127.

Webb, L., Ghazarian, S., Perry-Parrish, C., Ellen, J., & Sibinga, E. (in preparation). Mindfulness instruction for urban, HIV-positive youth: a small randomized controlled trial.

Williams, M., Teasdale, J., Segal, Z., & Kabat-Zinn, J. (2007). *The mindful way through depression: Freeing yourself from chronic unhappiness*. New York, NY: Guilford Press.

Witkiewitz, K., Marlatt, G. A., & Walker, D. (2005). Mindfulness-based relapse prevention for alcohol and substance use disorders. *Journal of Cognitive Psychotherapy, 19*(3), 211–228.

Woods-Giscombé, C. L., & Gaylord, S. A. (2014). The cultural relevance of mindfulness meditation as a health intervention for African Americans: Implications for reducing stress-related health disparities. *Journal of Holistic Nursing, 32*(3), 147–160.