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**Mindfulness-Based Yoga and Stress Reduction:**

**A Study with Urban, Minority Youth**

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## **Mindfulness-Based Yoga and Stress Reduction: A Study with Urban, Minority Youth**

### **Introduction**

Youth in low-income, urban communities are often exposed to considerable stress, but many have not developed skills for effective coping. As a result, such youth are at risk for a range of negative outcomes, including social and emotional difficulties and impaired academic performance, delinquency, and school dropout. Training youth in the development of positive coping methods is critical for promoting healthy development. Mindfulness-based approaches, such as yoga and meditation, may offer unique advantages for enhancing resilience and effective coping and improving both stress management and attentional capacities among at-risk youth. Although these approaches have been studied extensively in adults, no published studies have carefully assessed their impact on youth, particularly low-income, urban youth populations.

The study utilizes a randomized controlled trial to examine the effectiveness of a mindfulness-based yoga program for low-income, urban youth in East Baltimore. The Traveling Yogis, a Baltimore-based group with extensive experience training inner-city youth in yoga and meditation. There were two primary aims. First, we evaluate intervention feasibility by assessing examine youth attendance, participation, and response to the intervention. Second, we assess preliminary intervention outcomes and predict that the intervention will reduce youth behavioral and emotional difficulties and will enhance skills associated with executive functioning and social learning.

### **Method**

Four Baltimore City public elementary schools were randomized to receive the mindfulness-based program immediately or to a wait-list control. Eighty 4<sup>th</sup> and 5<sup>th</sup> graders and their parents agreed to participate. Schools were then randomized and 40 students in the two intervention-condition schools participated a 12 week, mindfulness-based yoga program. No intervention was provided to the 40 students in the control schools – they received regular programming. The intervention was provided during school for 40 minutes/day, 4 days/ week for 12 weeks from February until May 2008.

The intervention is based on a series of yogic exercises that end with a period of mindfulness training. Mindfulness training involves guided experiences that occurs as students lie on their mats in the relaxation pose that traditionally concludes yoga practice. Students are instructed to withdraw their attention from the distractions around them to a focal point inside themselves. They are guided in how to keep their minds focused and centered, strengthening their capacity not to be distracted by thoughts,

Data was collected at baseline as well as following completion of the mindfulness program. In addition, process/implementation data was collected throughout the intervention period and focus groups were held with both students and teachers following the intervention. Measures included assessments by teachers of children social-emotional competence, attention and behavioral adjustment. Youth reported on their behavior, motivation towards school, and relationship with friends and teachers. Students participated in two neuropsychological tests that assess attentional capacities and executive functions that the logic model of the intervention was intended to improve. Initial results show high acceptability by both students and teachers and feasibility of the intervention model. Outcome results are currently being analyzed and will be presented on both behavioral and cognitive/attentional outcomes.