

## Bethany Williams

**Project Title:** Association Between Health-Enhancing Community Environment and Early Childhood Education Classroom Health Practices

**Mentor:** Dr. Susan Sisson

**Project Funding Years:** 2019-2020

**University Affiliation:** Board of Regents of the University of Oklahoma Health Sciences Center

**Project Abstract:**

Incidence of childhood obesity is twice as high during early childhood years compared to adolescence, and children who are overweight when they start kindergarten are four times more likely to be obese by adolescence. Adiposity clearly tracks into adulthood and is associated with burdensome chronic disease, and low-income children are most vulnerable to health risks. More than 12 million preschool-aged US children attend some form of non-parental childcare for an average of 33-40 hours/week. Our work identifies early care and education (ECE) settings as a promising avenue to establish health behaviors in young children, and indicates that supportive classroom practices can improve children's physical activity and dietary behaviors. Programs such as Head Start, serving primarily children from low-income and minority families, promote desirable teacher classroom practices and can improve health for high-risk children. Children's health behaviors are influenced by a variety of interactive community factors, including access to opportunities for physical activity and healthy nutrition options (i.e., safe sidewalks, parks, healthy eating establishments).

The influence of these environments on ECE program's classroom health practices and beliefs is unknown. In many ways, and especially in non-Head Start programs with fewer regulations and standards, teachers are the primary influencers of classroom physical activity and nutrition. By analyzing upstream and community determinants of program characteristics and program behaviors, interventions can be properly adapted to the community within which they are located to maximize impact. The goal of this study is to understand the relationship between the community around an ECE and classroom health quality by program arrangement (Head Start, community based childcare, family childcare home) by the following specific aims:

**Aim 1: Determine the relationship between ECE classroom health practices and access within health-enhancing environments in Oklahoma.** We hypothesize that closer community access to healthy environments will positively influence best practice implementation in the classroom. We will use mailed surveys to a statewide sample of directors at licensed childcare programs serving children 3- to 5-years in Oklahoma including Head Start, community based childcare centers, and family childcare homes. Respondents will provide information on program demographics, structure, classroom health practices and barriers. The location of community health options for each program will be geocoded to understand availability and access.

**Aim 2: Determine the relationship between barriers to implementing ECE classroom health practices and access within health-enhancing environments in Oklahoma.** We hypothesize that community access to healthy environments will influence type of perceived barriers reported by program directors. The methods described for Aim 1 will also address Aim 2.

This study addresses research priorities established by the National Institutes of Health, Centers for Disease Control and Prevention, and Department of Health and Human Services by

assembling an inter-professional team of researchers with expertise in early childhood education, health behaviors, and spatial epidemiology, and practitioners including Oklahoma Head Start and DHHS. Through further collaboration, our team established the Oklahoma ECE Obesity Prevention Action Plan; this study will advance our shared long-term goals of reducing childhood obesity and working with ECE programs in Oklahoma.