Project Title: Characteristics of Head Start Teaching Teams: Associations with Classroom Quality and Child Outcomes

Mentor: Diane Horm, Ph.D.

Project Funding Years: 2016-2017

University Affiliation: University of Oklahoma

Project Abstract:
A plethora of research exists regarding how teacher interactions influence classroom quality (Bailey, Zinsser, Curby, Denham, & Bassett, 2013; Castle et al, 2015; Howes & Smith, 1995; Phillipsen, Burchinal, Howes, & Cryers, 1997). Many of those studies used data gathered from lead teachers without much, if any, consideration of the other adults in the classroom. However, most early childhood classrooms are staffed by more than one adult (Ratcliff et al., 2011). In fact, two Head Start Performance Standards, 1306.20 and 1306.32, call for this staffing pattern. Head Start requires that classroom staff work together to plan, organize, and provide activities that promote care and development of young children. Previous studies that focus on the lead teacher overlook a key component of the classroom—the teaching team. The interactions and characteristics of the assistant teachers combined with those of the lead teachers are important contextual factors that must be examined in order to understand the dynamics of classroom environments. Gathering information on how the two staff work together as a team will fill gaps in the current body of early childhood education literature.

The proposed study will examine associations among teaching team characteristics, classroom quality, and child outcomes within a large Head Start agency. This mixed method study will examine data from 45 Head Start toddler and preschool classrooms including 45 lead and assistant teacher pairs and approximately 148 children. Multiple data collection methods include classroom observations to document teacher-child interactions, teacher’s ratings of their perceptions and beliefs related to their teaching team and pre- and post-assessments of child outcomes on measures of cognitive development, receptive and expressive vocabulary, social emotional development, and executive function.

The results generated will describe the characteristics of existing teaching teams. The results will also provide information on how teaching staff describe their current team functioning and perceive their level of teamwork. This study hypothesizes that classroom staff with positive perceptions of their existing teams will have higher classroom quality scores and better child outcomes than those teams that have less positive perceptions of their current teaching team. Management research shows that individuals with positive perceptions of their team are more effective and generate positive outcomes (Kozlowski & Bell, 2013; Leana, Appelbaum, & Shevchuk, 2009).

The study results will be useful to the local Head Start agency collaborating with this research study and to the field of early childhood by providing insight on teaching team practices and perceptions of teamwork. Classroom staff could benefit by understanding the teamwork processes that are successful and challenging and how those behaviors relate to interactions with children and resulting child outcomes. This information will provide insight to administrators on how to promote effective teaching teams through monitoring and professional development.
**Project Title:** Young Children’s Use and Parent-child Co-use of Tablets: Investigating Mobile Media’s Effects on Children’s Executive Function

**Mentor:** Helen Raikes, Ph.D.

**Project Funding Years:** 2016-2017

**University Affiliation:** University of Nebraska

**Project Abstract:**
Young children’s daily use of digital mobile media is becoming undeniably prevalent. It was reported that the daily amount of time children 8-years-old and under spent on mobile devices tripled between 2010 and 2012 (Common Sense Media, 2013). Children’s seemingly intense interest in mobile devices and increased usage has prompted substantial public interest in mobile media’s potential effects, benefits and consequences to children’s development. Many organizations, program administrators, parents, and teachers are turning to research for answers. Unfortunately there is a paucity of direct evidence in this area, especially pertaining to young children from families who are managing poverty. Experimental studies examining the relationship between mobile media use and social-emotional outcomes such as executive function are non-existent.

Utilizing an experimental research design, this 12-week randomized control trial (RCT) will investigate the relationships among Head Start (HS) preschool children’s use of tablets, parent-child co-use of tablets and the children’s executive function. Seventy-two (72) HS preschool children (ages 3 and up) and their parents will be recruited from 3 HS programs in the Midwest to participate in this study.

The primary aim of the research is to ascertain whether HS children who independently and purposefully use educational apps on tablets demonstrate greater executive function than children who independently use apps of their choice, and whether children who co-use educational apps with their parents demonstrate greater executive function than children who use the same educational apps independently. Additional exploratory analyses will examine the relationships among children’s executive function, the amount of time spent using a tablet, types of content being used, and parents’ co-use of tablets with their children. This study also will introduce new, innovative, and more accurate methods of measuring the amount of time children and parents use mobile media, resulting in stronger validity of the study’s analytical findings.

This study will provide research-based information to HS programs and parents, to increase parents’ understanding of how mobile media use at home may impact their child’s development. HS program administrators will also be provided with needed empirical evidence as they consider how to use mobile media in their programs and practices, especially when working with parents. Also, the introduction of new methods of measuring time spent on mobile devices will improve the methodology practices used by researchers, strengthening the validity of future studies. And finally, the study’s results will help to advance the nascent research found at the intersection of child development and mobile media.
**Johayra Bouza**

**Project Title:** Developing a Multidimensional Measure of Family Engagement for Toddlers in the Early Head Start Program: A Mixed Methods Approach

**Mentor:** Rebecca Bulotsky-Shearer, Ph.D.

**Project Funding Years:** 2016-2018

**University Affiliation:** University of Miami

**Project Abstract:**

There has been a national investment of $635 million dollars to support early intervention efforts for infants and toddlers through the Early Head Start (EHS)-Child Care partnerships and expansion grants. EHS focuses on sustainable intervention efforts to support families in their role “as children’s first teachers.” As one of the earliest prevention and intervention programs for low-income children and families, Early Head Start (EHS) incorporates a comprehensive “whole child” and two-generational approach that acknowledges the foundational role that parents play in their children’s early learning and social-emotional development (Sheridan, Marvin, Knoche, & Edwards, 2008). As part of this national initiative, three local Miami-Dade community agencies (Miami-Dade County/Monroe Early Learning Coalition, Miami Dade County Action and Human Services Department; The United Way of Miami-Dade County) were funded to implement high-quality Early Head Start center-based programs. These agencies have identified “engaging families” as a top priority, yet there are no validated measures that capture multiple dimensions of family engagement for toddlers enrolled in center-based programs. In fact, most measures focus on tracking the number of family participation hours, rather than collecting meaningful measures that will help support family engagement intervention efforts implemented by Early Head Start programs.

This dissertation project will develop a family engagement measure in partnership with EHS staff and families that is appropriate for use with ethnically diverse families of toddlers enrolled in center-based programs. The project has the following objectives: (1) To gain an understanding of family engagement from the perspective of EHS family support staff, teachers, and ethnically diverse families of toddlers (2) To develop and obtain construct validity evidence for a measure of family engagement that is relevant for ethnically diverse Early Head Start families of toddlers (3) To investigate the concurrent validity of the family engagement measure by examining its relationship with other family engagement measures, children’s social emotional skills, and language outcomes and (4) To investigate the practical utility of the family engagement measure in informing appropriate and effective family intervention efforts in the Early Head Start programs.

This project will result in the first validated measure of family engagement available for ethnically diverse families of toddlers in center-based programs. Additionally, practical ways to use the measure and share results with teachers and families will be co-constructed with EHS programs. This will facilitate program administrators’ use of the newly developed measure for implementation and continuous improvement of family intervention efforts.
Kimberly Hile

**Project Title:** Would You Like to Hear a Story? Exploring Photo Elicitation as a Means of Engaging Families of Young Children with Disabilities in Head Start

**Mentor:** Rosa Milagros Santos, Ph.D.

**Project Funding Years:** 2016-2017

**University Affiliation:** University of Illinois, Urbana-Champaign

**Project Abstract:**

The Individuals with Disabilities Education Act (IDEA) mandates that children with disabilities be provided with individualized supports to maximize their overall development and learning. Caregivers of young children (ages birth-five years) play an integral role in determining what supports are most beneficial for the child and their family. Research related to family empowerment and capacity-building suggest that families facing multiple risk factors (e.g., presence of a disability, poverty, single parents, and low levels of maternal education) may experience feelings of powerlessness when asked by professionals to make decisions on behalf of themselves and their families. In order to mitigate such feelings, early childhood professionals tasked with supporting families experiencing multiple risk factors must employ effective strategies for empowering families to serve as equal partners within a collaborative relationship.

The purpose of this project is to identify effective ways to engage families who are experiencing multiple risk factors including caring for young children with disabilities, to work collaboratively with Head Start professionals when planning and implementing family-centered interventions. This project will specifically examine the collaborative relationship between families and Head Start Family Service Workers and the potential utility for a particular strategy “Photo Elicitation” to support an even greater collaboration by empowering families to share their personal stories. We will explore the use of photo elicitation to give families a voice to share their stories and how Head Start professionals can use photo elicitation to gather in-depth information on families and their individual needs.

This study will utilize an exploratory mixed methods approach including descriptive quantitative analysis and qualitative thematic analysis. Participants will be recruited through the statewide Head Start system in a large Midwestern state. Families and Head Start Family Service Workers will be invited to complete a survey focusing on their attitudes, knowledge, practices, and environmental features that may impact their ability to effectively collaborate with one another. Families will be invited to complete the photo elicitation aspect of the project wherein they take photos depicting what it is like to care for a young child with a disability. Follow-up interviews with the families will address how sharing their family story in using the photo elicitation strategy could lead to greater collaboration with Head Start professionals. Finally, the Head Start Family Service Workers will be invited to participate in focus groups to elicit their views on their training needs and specifically discuss how they might incorporate photo elicitation strategies in their efforts to effectively support families of children with and without disabilities.

Results of this study will begin to address the need for identifying innovative strategies for building family capacity with Head Start families specially those caring for young children with a disability.
Kyle DeMeo Cook

**Project Title:** Transitioning Across Systems: Head Start & Elementary School Coordination Efforts to Enhance Low-Income Children’s Academic and Social Success in Kindergarten

**Mentor:** Rebekah Levine Coley, Ph.D.

**Project Funding Years:** 2016-2018

**University Affiliation:** Boston College

**Project Abstract:**
Children’s positive transitions across systems in the early years is a concern nationally and locally, as states, early education programs, and public schools seek to have better collaboration, coordination and alignment across the systems that serve our youngest children. Yet, there is very little research available on coordination practices and the transition to school to inform policy and practice. This project seeks to fill a void in the current literature base in order to provide recommendations for policy and practices to improve Head Start and other programs serving young children. In close partnership with Communities United Head Start in Massachusetts, this proposal seeks funding for research to study the vertical coordination efforts between Head Start programs and elementary schools to enhance successful kindergarten transitions for low-income children. This topic directly addresses priority areas of the grant call, including the “transition from Head Start to Kindergarten” and “community engagement and collaboration” (ACF, 2016).

The objectives of the study are to: 1) describe the coordination efforts that are used by Head Start programs to smooth children’s transition to kindergarten, 2) examine the association between coordination practices and children’s social and academic outcomes in kindergarten, 3) test whether there is an additive or interactive relationship between Head Start coordination efforts and elementary school-based transition practices, 4) test whether the relationship between coordination efforts and children’s outcomes are moderated by child and family characteristics, and 5) gain a deeper understanding of the opportunities and barriers to coordinating across systems to support the transition to kindergarten. This study will provide a nuanced view of the coordination between preschool settings and elementary schools, going beyond prior research which solely examined sharing of information across systems. With the goal of extending implications for policy and practice to the diverse early education system and elementary schools, this project employs a two-phase explanatory sequential design, beginning with a quantitative phase, followed by a qualitative phase.

Phase I of the study addresses the first four study objectives through a secondary data analysis of the Head Start FACES 2009 data, assessing vertical coordination practices reported by Head Start center directors and their relationship to child outcomes in kindergarten, as well as factors that moderate the relationship. To contextualize the findings from phase I in the lived experiences of practitioners, phase II will employ a qualitative study technique to collect and analyze interview and focus group data from Head Start directors and teachers, and elementary school principals and teachers (addressing objective 4). Through close collaboration with the Head Start partner and an advisory committee of key early education policymakers and practitioners, this study seeks to delineate the direct needs of the field, and inform the next generation of policy and practice initiatives.
**Rachel B. Thibodeau**

**Project Title:** Improving School Readiness: Pretend-Play’s Impact on Emotion Regulation, Physiological Reactivity, and Executive Function Development

**Mentor:** Ansley Gilpin, Ph.D.

**Project Funding Years:** 2016-2018

**University Affiliation:** University of Alabama

**Project Abstract:**

Some children naturally engage in high levels of imaginative play (Taylor & Carlson, 1997) and demonstrate developmental benefits associated with their propensity towards pretend-play (e.g., Black, 1992; Carlson, White, & Davis-Unger, 2014; Thibodeau, Gilpin, Brown, & Meyer, 2016). However, these studies have been conducted with samples of convenience and not with children who are at-risk for school readiness deficits, such as those attending Head Start. Recent research suggests that certain abilities (i.e., emotion regulation, appropriate physiological reactivity, executive functions) support the development of school readiness skills, especially among at-risk children raised in low-income environments (Bierman, Nix, Greenberg, Blair, Domitrovich, 2008; Blair & Razza, 2007; Domitrovich, Greenberg, Kusche, & Cortes, 1999; Passolunghi, Vercelloni, & Schadee, 2006; Welsh, Nix, Blair, Bierman, & Nelson, 2011). Although many preschool curricula have been developed to help scaffold school readiness skills in at-risk preschoolers (e.g., Promoting Alternative THinking Strategies), these curricula are often very costly and require extensive training to implement. Furthermore, the complexity of these programs often places additional burdens on the preschool teachers, leading to poor implementation fidelity (Weiland & Yoshikawa, 2013).

In order to improve upon the sustainability of these programs, it is important to identify natural environmental experiences that are implicated in normative development. Consistent with Vygotskian theory, studies suggest that children incur both socio-emotional and cognitive benefits through pretend-play (e.g., Black, 1992; Carlson et al., 2014; Thibodeau et al., 2016). Engaging in pretend-play, which typically involves cooperation, shared affect, and support among peers and adults, naturally creates a positive environment that may buffer the observed negative effects of poor emotion regulation/high stress reactivity on cognitive development and school readiness. Unlike the play tested in Tools of the Mind (Bodrova & Leong, 2007), recent research suggests that the pretend play needs to be highly imaginative (fantastical) and child-generated with adult guidance in order for children to reap the most benefits (Russ, 2016; Thibodeau et al., 2016; Weisberg, 2016).

The proposed study aims to build upon previous research to identify how pretend-play can serve as a protective factor to minimize deficits in school readiness in an underserved Head Start population in West Alabama. Children’s emotion regulation skills, physiological reactivity to stress, executive functions (proximal measure of school readiness), grades and behavior in kindergarten (distal measure of school readiness), and level/style of pretend-play will be assessed to determine if pretend-play moderates the relationship between emotion regulation/physiological stress reactivity and school readiness, both proximally and distally. The findings from this study will inform Head Start researchers, practitioners, and policy makers on how pretend-play can be used as an additional, cost-effective method to facilitate school readiness among Head Start preschool children, and will spur future intervention research.