

Early Care and Education Research Scholars: Head Start Dissertation Grants 2023

Sarah Braaten, M.S.

Project Title: Improving the Quality of Early Head Start Home Visits

Mentor: Dr. Robert Nix

Project Funding Years: 1

University Affiliation: University of Wisconsin-Madison

Project Abstract:

Early childhood home visiting programs are intended to alleviate the adverse effects of growing up in poverty by providing comprehensive parent education services and resources to pregnant people and families with infants and young children. Evaluation studies identify positive effects of home visiting on parental responsiveness and rates of abuse and neglect, as well as children's cognitive and language development (Green et al., 2014; Love et al., 2005). Often, however, these effects are linked to how well home visits are conducted, which is known as implementation quality (Durlak & DuPre, 2008). Indeed, evidence-based programs which are implemented with high-quality tend to produce larger intervention effects than those that are not (Washington State Institute for Public Policy, 2019).

The proposed dissertation project will examine how a new preventive intervention, Recipe 4 Success, which was embedded within Early Head Start home visits, can enhance implementation quality, leading to greater improvements in parent and toddler functioning across multiple domains. The goal of this dissertation is to gain a deeper understanding of what comprises high-quality early childhood home visiting and identify ways to improve home visiting services so all families can benefit. This dissertation will consist of three distinct but related empirical studies, each with a unique aim: (1) assess heterogeneity among home visits and whether being randomly assigned to participate in Recipe 4 Success is associated with higher quality home visits, (2) examine whether the Recipe 4 Success curriculum will help mitigate the barriers associated with having a still-developing parent-home visitor working alliance, and (3) determine how implementation fidelity to the Recipe 4 Success curriculum and family enjoyment are related to one another and to gains in parent sensitivity and learning support and toddler self-regulation.

Taken together, the proposed project will contribute to a more comprehensive understanding of the nuances of home visit quality within Early Head Start. The findings from these studies will help identify areas in which Early Head Start – and other home visit programs– can improve, such as setting standards around fidelity to evidence-based curricula, with the goal of achieving high-quality home visits for all families enrolled.

Lily S. Fritz

Project Title: An Ecological Approach to Emotion Socialization in the Early Childhood Classroom: Examining Contextual Influences on Children's Early Social-Emotional Development

Mentor: Stephanie Jones

Project Funding Years: 2

University Affiliation: Harvard University

Project Abstract:

Social-emotional competencies in early childhood are critical to young children's long-term educational success and holistic development (Greenberg et al., 2017). These skills are known to be influenced by features of children's contexts and relationships (Dunn, 2003; Jones et al., 2019) and are amenable to intervention early on (Murano et al., 2020). Yet, despite consensus on the importance of social-emotional skills in early childhood, much is still unknown about the developmental pathways by which early educational contexts affect the development of these skills. Research on emotion socialization in the classroom has begun to shed light on specific teacher behaviors hypothesized to contribute to children's social-emotional development, focusing on interactions characterized by modeling, direct teaching, and contingent responding (Denham et al., 2012). However, developmental theory and research has emphasized the need to situate analyses of dyadic adult-child interactions within broader ecological contexts (Bronfenbrenner, 1979), a perspective which has been largely absent from research on classroom emotion socialization thus far. This dissertation research applies an ecological perspective to classroom-based emotion socialization to examine how relational features of educational environments outside the home are related to children's social-emotional development. It will be a three-paper dissertation comprising one theoretical and two empirical papers. This research is motivated by the following objectives:

- (1) to explore a conceptual model **elucidating the relational processes underlying emotion-related socialization in the classroom**, with a particular focus on how these processes differ from current models for parent socialization;
- (2) to test this model by **investigating associations between various socialization processes within the preschool setting**, as well as their relation to children's social emotional skill development; and
- (3) to examine the degree to which early educational contexts can be grouped according to particular profiles of socialization and **determine whether socialization profiles are differentially related to children's social-emotional development**.

To address these objectives, this study uses data from the Early Learning Study at Harvard collected in 2018-19 and the Head Start CARES study collected in 2009. Both studies include rich child- and setting-level data on three- and four-year-old children attending early education and care settings in the US and allow for a thorough examination of the classroom based relational processes hypothesized to be important for social-emotional development. The proposed study makes two primary contributions to existing research. First, it offers and empirically tests a novel way to conceptualize emotion socialization within the classroom, and in doing so aim to guide future study on this topic in early educational settings. Second, it contributes empirical evidence on typologies of socializing contexts and their associations with children's development. These findings can be used by researchers, policymakers, and practitioners to shape ongoing and future efforts to promote high-quality social-emotional teaching practices in the classroom by pinpointing specific

targets for intervention and professional development and identifying key mechanisms for supporting children's social-emotional development and long-term success.

Amber B. Sansbury

Project Title: Racial Identity Development of Young Black Children in Early Childhood Education: The Roles of Teachers and Families

Mentor: Dr. Colleen K. Vesely

Project Funding Years: 2023-2024

University Affiliation: George Mason University

Project Abstract:

The Educare model of Head Start provides high-quality instruction, intensive family engagement, and enriching learning environments with positive academic, behavioral, and social-emotional outcomes for children overall. A key component is the intensive family engagement that includes regular home visits, wraparound community and medical support, child development classes for families, and advocacy opportunities. This dissertation study prioritizes family engagement by advancing how the field conceptualizes the race-related and cultural dimensions of family-school relationships for African American teachers and economically vulnerable African American parents in early care and education (ECE) settings specifically. A race-conscious model of family engagement is essential to understand how responsive relationships between African American parents and African American teachers might contribute to African American young children's healthy racial identities by leveraging shared sociocultural assets.

This qualitative dissertation study will explore how family engagement vis-à-vis relationships between African American teachers and African American families supports racial socialization and young children's emergent racial identity. This study is guided by the following research questions: 1) How do African American teachers and African American families build relationships to support African American children's racial identity development? 2) How are these relationships reflected in African American teachers' and African American families' cultural values, race-related beliefs, and family-centered practices regarding their roles in racial identity development of African American young children? Overall, up to 10 African American parents and up to 10 African American teachers will be recruited in partnership with Sheltering Arms/Educare-Atlanta leaders and family services teams. Each participant will: a) be an African American parent or teacher in a Black-majority Sheltering Arms program; and b) share a parent-teacher link to a specific three- to six-year-old child in the Black-majority Sheltering Arms program. Participants in this study (N = up to 20) will be African American teachers and African American parents who identify as native United States-born citizens and having African American ancestry for at least three generations. Data collection constitutes four data sources (e.g., individual teacher interviews, individual parent interviews, dyadic parent-teacher interviews, and an interview-assisted demographic questionnaire).

Lauren E. Westerberg

Project Title: Developing and Evaluating an Assessment of Preschoolers' Science and Engineering Knowledge

Mentor: David Purpura

Project Funding Years: 1

University Affiliation: Purdue University

Project Abstract:

Children arrive to preschool already constructing science and engineering knowledge and their early understanding of science is predictive of their achievement in science, technology, engineering, and mathematics (STEM) courses in later grades. However, achievement gaps in children's science knowledge have been identified prior to kindergarten entry and remain stable throughout primary school. Therefore, it is critical children are provided with rich science and engineering instruction in the early childhood classroom that promotes deep learning of concepts and opportunities to engage in science and engineering practices (e.g., questioning, predicting). However, science instruction is rare in the preschool classroom setting and rarely includes opportunities for deep thinking and reasoning. One challenge to promoting early science and engineering instruction is the lack of modalities to measure young children's science and engineering knowledge and skills. Moreover, the field is limited in terms of understanding all that early science and engineering knowledge encompasses, how it can best be measured, and how it can be intervened upon to prevent later gaps. Additionally, having reliable and validated measures of science and engineering knowledge is important for teachers to be able to gauge children's learning and for making decisions about individualized instruction. The objectives of this study were to develop a preschool science and engineering knowledge assessment and to examine the factor structure of children's science and engineering knowledge using the newly developed assessment.

Children's science and engineering knowledge has been theorized to be made up of content-specific knowledge and the practices (i.e., inquiry processes) that give rise to this body of knowledge; therefore, it is hypothesized that a two-factor content knowledge and process solution will best depict preschooler's science and engineering knowledge. Specific aims of the proposed study include: 1) develop an assessment that reflects the best and most current understanding of preschooler's science and engineering knowledge and skills, 2) test the factor structure of science and engineering knowledge using the newly developed assessment, and 3) refine and evaluate the assessment using item response theory analysis and by examining convergent and discriminant validity with other science and literacy assessments. This study is novel in the approach that is being implemented to develop and evaluate the science and engineering assessment. Existing early science assessments either cover a narrow range of concepts and practices or are not designed in a way to test the theorized structures of science and engineering knowledge. The assessment designed in the present study encompasses content and practices depicted in national science and engineering education standards, early learning guidelines for all 50 states, the early science and engineering literature, and will also be informed by feedback from science content experts and early childhood educators. In addition, no work to date has examined the factor structure of children's science and engineering knowledge which is critical for understanding how to best support early learning in these domains. This study has important implications in that the newly developed science and engineering assessment can be used in both the research (e.g., evaluate curricula, interventions) and classroom (e.g., assess learning) settings and has the potential to transform how we view and

instruct science during the early childhood years.

Christina N. Wood, M.Ed.

Project Title: Interagency Training to Promote Culturally Responsive, Family-Centered Home Visiting and Pediatric Service Integration

Mentor: Dr. Patricia Manz

Project Funding Years: 2

University Affiliation: Lehigh University

Project Abstract:

Early childhood is characterized by rapid cognitive, language, and social-emotional development that is associated with long-term health and educational outcomes (Shonkoff et al., 2009). However, the experience of poverty can considerably limit children's development during these formative years (Morris et al., 2017). As such, it is crucial for infant- and toddler-serving agencies to promote positive outcomes for populations at-risk for delays or disorders due to their socioeconomic status.

Two prominent infant/toddler service systems, home visiting and pediatric primary care, share in their goals to provide culturally responsive, family-centered, coordinated care in order to promote health and development. However, guiding empirical literature on fostering care coordination for infants and toddlers is limited. One potential solution is the implementation of interagency training, whereby professionals from both agencies engage in joint training experiences aimed at developing consistent communication between agencies and a clearer understanding of each system's roles in the care of infants and toddlers. As such, the proposed project seeks to implement a collaborative interagency training for home visitors and pediatric residents that focuses on 1) agency-specific information regarding the mission, goals, infrastructure, roles and responsibilities of staff, and procedural information for collaboration efforts; and 2) culturally responsive family-centered care practices. The interagency training, *Linking for Little Ones*, will be developed using community based participatory research methods (Israel et al., 2005) in partnership with two home visiting and two pediatric residency training programs. *Linking for Little Ones* comprises five components: 1) a collaborative joint training session; 2) a home visiting case conference with pediatric residents; 3) a well-baby visit with a home visitor; 4) a home visit with a pediatric resident; and 5) a collaborative reflection session. Each component brings together home visitors and pediatric residents in interactive activities. *Linking for Little Ones* will be repeatedly implemented with small groups of home visitors and pediatric residents as part of naturally occurring training opportunities embedded within community health rotations in the pediatric residency training programs.

Measured outcomes at pre- and post-training and month follow up will include knowledge of each agency and its professionals' roles and responsibilities, utilization of culturally responsive family-centered care practices, and competency to engage in collaborative practices with professionals from the other agency. Usability of *Linking for Little Ones* will be measured once at post-training. It is hypothesized that home visitors and pediatric residents will demonstrate increased, sustained knowledge of each other's agencies, utilization of culturally responsive family-centered practices, and competency for interagency collaboration when comparing scores 1) pre- and post-training and 2) post-training and 1 month follow-up. Given that *Linking for Little Ones* will be developed in partnership based on the agencies' preferred content and procedures, it is also hypothesized that participants will rate usability dimensions favorably.

Kathryn Zimmermann, M.S.

Project Title: Addressing Children's Challenging Behaviors Early: Characterizing, Capturing, and Championing Head Start Teachers' Behavior Management

Mentor: Arya Ansari

Project Funding Years: 2

University Affiliation: The Ohio State University

Project Abstract:

Despite existing knowledge about what may promote or undermine children's positive behavior, there is a gap in our understanding of the practices actually used by teachers in their classrooms and their behavior management process (Degol & Bachman, 2015; Johnson et al., 2021; Ritz et al., 2014). Many practices that have been identified as effective are based in theory or work conducted outside of the classroom, and do not center teachers' voices (Johnson et al., 2021; Phillips, Johnson, et al., 2022); consequently, the limited existing measures may not fully reflect teachers' behavior management practices (BMP) or be useful for enhancing teachers' practices. Accordingly, the overarching goal of this project is to provide a better understanding of actual teacher BMP and their relations to children's outcomes in the context of Head Start. The process of achieving this goal will occur across three distinct but related studies, each aligned with one of the following aims and their corresponding research questions:

Aim 1: To gather Head Start teachers' perspectives on their BMP and process.

RQ1. What BMP do teachers report using in their classrooms?

RQ2. Why do teachers find certain BMP effective for addressing challenging behavior?

RQ3. How and when do teachers decide to use specific BMP in their classrooms?

RQ4. What resources and supports do teachers find most useful for learning and actualizing BMP in classrooms?

Aim 2: To characterize the day-to-day BMP of Head Start teachers in their classrooms using classroom observations and teacher interviews.

RQ4. What, with what kind of frequency, and under what conditions are the observed BMP used in Head Start classrooms?

RQ5. What are teachers' perspectives on the observed characterization of their BMP?

Aim 3: To develop a BMP measure and determine whether measured practices are associated with children's challenging behavior and social-emotional skills.

RQ6. To what extent are teachers' BMP associated with children's challenging behavior and social-emotional skills across the Head Start year?

RQ7. Do initial challenging behaviors moderate the associations between BMP and children's challenging behavior and social-emotional skills across the Head Start year?

To address these aims, the current project will use multiple methods with data drawn from teachers in local Head Start centers and previously recorded videos of Head Start classrooms. Using multiple methods will provide both breadth and depth in our understanding of teacher BMP, which will ensure that children have high quality Head Start experiences that contribute to healthy development. The project is also timely and relevant to Head Start as it addresses two priority areas of this funding opportunity: (1) to "measure, examine, and improve the features of quality in Head Start that impact outcomes" and (2) provide "continuous quality improvement through the use of data" (p. 7,

Administration for Children and Families Call for Proposals). Taken together, the results of this study will provide a comprehensive understanding of teachers' BMP and contribute to efforts to improve the quality of early childhood education.