

# Secondary Analyses of Head Start and Early Head Start Data Grants (2022-2024)

## Project Abstracts

### University of Arkansas

- PI: Dr. Leanne Whiteside-Mansell
- Moderation of Adverse Childhood Experiences with support for Protective Child Experiences

Disrupting the mechanisms through which adverse childhood experiences (ACEs) impede health provides an opportunity to prevent illness, disease, and early death. Protective childhood experiences (PCEs) have shown early promise in mitigating both the effects of the direct experiences of maltreatment (e.g., physical, sexual, or emotional abuse or neglect) and less direct parent/family characteristics composing ACEs. Intervention supporting increased PCEs while reducing ACEs offers an opportunity for Early Childhood Education (ECE) programs such as Early Head Start and Head Start (EHS/HS) to develop and implement actionable ACEs prevention and resiliency strategies through parenting education. Screening, coupled with intervention, is one of a few recommended approaches to support children at risk for consequences of ACEs. At present, no known parenting education strategy uses tools that combine family friendly ACEs screening and PCEs assessment. Development of proof-of-concept data that identify the association of ACEs and PCEs, as well as the moderating (i.e., interaction) effect of PCEs on health outcomes is required to establish a basis of understanding of such tool's potential impacts on children's health and wellbeing.

Our study is a secondary data analysis of The Family Map Inventory (FMI) linked to Arkansas All-Payer Claims (APCD) health insurance data. The FMI is a validated survey system designed to strengthen parent-provider relationships in ECE serving children birth to age 5 years. The FMI includes items that have been validated as an early screen for ACEs (FMI- ACEs). The FMI includes an array of candidate items for the development of an FMI-PCEs scale using the Health Outcomes for Positive Experiences (HOPE) framework. FMI items represent 3 of the 4 HOPE categories: supportive relationships; safe/stable environment; and social integration.

Our *objective* is to construct FMI-PCEs as productive targets for ECE intervention. For the proposed study, using 15 years FMI data, we will examine the association of FMI-ACEs and FMI-PCEs with healthcare utilization and chronic conditions (e.g., asthma and ADHD) among EHS/HS children. Our central ***hypotheses*** are that PCEs reduce the risk of ACEs; ACEs elevates the risk of adverse health outcomes; and PCEs moderate the adverse health risks of ACEs. Understanding the relationship between PCEs, ACEs, and early health indicators will lead to better, actionable strategies to prevent ACEs through ECEs. Our specific aims will focus on a ***population*** of families living in poverty with children under the age of six years with a history of enrollment in EHS/HS, other childcare, or home visiting programs.

Aim1: Identify FMI items that reproduce the constructs similar to retrospective tools for adults. We will identify items in the three categories of HOPE cross walked with other tools (e.g., BCEs) that function distinctly from ACEs (i.e., not just the opposite end of a continuum).

Aim2: Test the usefulness of FMI-PCEs in reducing the risk of FMI-ACEs. We postulate that the FMI-PCEs will be associated with reductions in FMI-ACEs.

Aim3: Test the ability of FMI-PCEs to protect against ACEs in the context of elevated risks of health outcomes (e.g., chronic conditions). We postulated that FMI-PCEs will be associated with reductions in the negative impact on FMI-ACEs on risk of health outcomes.

We plan extensive dissemination activities targeting EHS/HS providers, early childhood researchers, and policy makers. Finally, we hope to develop a process to allow other researchers to access the FMI data base.

## Child Trends, Inc.

- PI: Dr. Christina Padilla
- *Which Head Start (HS) services and supports were most supportive of family well-being during the COVID-19 pandemic?*

The COVID-19 pandemic (“the pandemic”) has impacted many families’ financial, mental, and physical well-being, with impacts felt more heavily by parents of young children and by low-income, Black, and Hispanic families. HS provided a crucial lifeline to enrolled families at the beginning of the pandemic. In addition to the family supports and services that HS typically provides, HS began extending additional support to enrolled families from the start of the pandemic, such as providing meals; increasing assistance with transportation, health care, and mental health services; and providing parents with educational activities to support children’s learning at home. *The overall objective of the proposed project is to deepen our understanding of HS families’ experiences and to examine which HS services and supports were most supportive of family well-being during the pandemic.*

In this proposed secondary data analysis study, we draw data from the recently released HS Family and Child Experiences Survey 2019 (FACES 2019), which is the only nationally representative study that can tell us about HS family, child, and center experiences during the pandemic. HS’s Parent, Family, Community Engagement (PFCE) Framework emphasizes the importance of family and community partnerships, which connect families to needed services and supports, as important inputs to family outcomes. The framework also emphasizes equity, inclusiveness, and cultural and linguistic responsiveness (EICLR) as important drivers of outcomes. In the context of service provision, EICLR involves meeting each family’s individual and unique needs. Guided by this framework, we focus the proposed investigation on the ways in which HS family and community partnerships promoted stability in family well-being and parent-child relationships for families with different baseline characteristics during the pandemic.

In the proposed project, we address four specific goals: to (1) examine HS families’ stability during the pandemic in the domains of economic well-being, mental health, health care access, and parent-child activities both overall and for different groups of families (i.e., those that differed at baseline on financial strain, material hardship, food security, number of parents in the household, language(s) spoken, immigrant status, and race/ethnicity); (2) understand the variation in services and supports (e.g., food and nutrition services, health care, community partnerships) that families had access to during the pandemic; (3) investigate which HS services and supports were associated with family stability during the pandemic; and (4) consider whether HS services and supports offered during the pandemic were differentially supportive of family stability for families with different characteristics.

Findings from the proposed project could help inform HS’s ongoing pandemic response, as well as professional development and resources that help centers tailor their services to the specific needs of the communities they serve. Deepening our understanding of what worked best for different families during the pandemic could contribute to more equitably supporting and serving HS children and families, both during times of emergency and otherwise. To help meet these goals, the proposed project includes several specific dissemination activities aimed at practitioners, policymakers, and researchers.

## University of Connecticut

- PI: Dr. Rachel Chazan Cohen and Dr. Caitlin Lombardi
- *Understanding How Early Head Start Contributes to Long-term Social Emotional Outcomes for Black Children*

A large body of research has documented the developmental risks associated with economic disadvantage during early childhood. Theory and evidence suggest that these income-based gaps influence caregiving environments, and thus children's development (Berger et al., 2009; Bradley & Corwyn, 2004). Research has demonstrated income-based gaps in child outcomes emerge by age 3 (Heckman & Masterov, 2007; Johnson et al., 2016; Troller-Renfree et al., 2022) and persist into later schooling (Reardon et al., 2011). In addition, structural racism places additional stress on Black families, putting Black children at heightened risk for developmental concerns (Garcia Coll et al., 1996) including expulsion and school dropout (McFarland, et al, 2019; Murnane, 2013), although Black children and families also thrive despite the oppression they face (Murry et al., 2018). As a two-generation comprehensive child development program, Early Head Start (EHS) can play a unique protective role in supporting families and reducing gaps caused by poverty and racism. In fact, EHS research has documented many significant impacts for Black children and families. Understanding the mechanisms of *how the EHS program leads to long term positive impact for Black children* offers the opportunity to inform the targeting and delivery of services to best support Black children and families.

Led by Drs. Rachel Chazan Cohen and Caitlin Lombardi at the University of Connecticut, the goal of this project is twofold: 1) to understand what early impacts of EHS lead to better social emotional well-being at age 5 and grade 5 for Black children and 2) to explore whether the findings are similar across primary mode of EHS service delivery, home visiting or child care. We will accomplish these goals by addressing three aims utilizing the subsample of Black children from the National Early Head Start Research and Evaluation Project, an experimental evaluation of EHS. First, we will examine how early impacts of EHS on children at age 36 months lead to later social emotional outcomes at age 5 and grade 5. Second, we will investigate how early impacts of EHS on parenting and family well-being when children are 36 months old lead to later social emotional outcomes at age 5 and grade 5. Finally, we will examine how these associations between early impacts of EHS and later social emotional outcomes vary by children's EHS experiences (center based child care or home visiting).

This study will contribute to our understanding of the role of EHS in children's development and parenting within Black families. Findings will inform the design and targeting of EHS services and help to inform other programs and policies aimed at supporting low-income children's development and the capacities of their parents.

## Georgia State University

- PI: Dr. Ann DiGirolamo
- *Early Head Start Services as a Buffer of the Effects of Maternal Depression on Child Development*

Maternal depression, particularly during the first years of a child's life, can have a significant negative impact on both the lives of the mother and child. Early Head Start (EHS), which serves nearly 185,000 families with young children across the United States, represents an excellent point of intervention to provide resources and referrals to caregivers who may be in need of them. As part of its ongoing mission to provide evidence-based early childhood services to families, ACF has issued a request for *Secondary Analyses of Head Start and Early Head Start Data*. GSURF, in collaboration with the Center of Excellence for Children's Behavioral Health (COE), is proud to propose a study that will look at these issues from a developmental, systemic perspective and provide data-informed recommendations.

COE proposes to analyze the 2009-2012 version of the Baby FACES study, which includes several years of longitudinal data, collected from a nationally representative sample of EHS families, to conduct a study that will support ACF in its mission to inform EHS policy on responding to maternal depression. COE proposes to conduct secondary analyses on the Baby FACES 2009-2012 data set in order to investigate two over-arching research areas, looking to see whether EHS services impact maternal depressive symptoms and whether changes in those symptoms influence children's early developmental outcomes (e.g., cognitive and social- emotional development). COE will focus on how EHS policies and practices might promote health for both mother and child. COE proposes to leverage the longitudinal nature of the data and growth curve and structural equation modeling to search for factors that might influence the severity of depressive symptoms in mothers and might impact the relationship between depression and child development.

COE is uniquely placed in Georgia to bring together research capacity with close relationships formed with "on the ground" state-level directors and other policymakers who can both inform this work and benefit from the recommendations that it produces. COE's goal is to analyze the proposed research questions, conduct additional follow-up analysis where warranted, and provide data-driven policy recommendations on how EHS can be a force to promote the well-being of both mothers and children over the course of their involvement in the EHS program and beyond. By looking at points of contact at several levels of influence within an ecological model, COE will be able to provide recommendations that address the topic of maternal depression from the lens of the caregiver, EHS staff, EHS programs, and EHS policymakers.

## Iowa State University

- PIs: Dr. Ji Young Choi, Dr. Laura Betancur and Dr. Heather Rouse
- *Head Start children's concurrent and sequential enrollment in public early childhood education programs*

Increasing public investments in early childhood education (ECE) means that US children are more commonly attending some type of ECE program before age 5. Yet, we know little about how myriad public ECE programs are utilized, who experiences them, nor what effects such experiences have on diverse groups of children's school performance. Focusing on children attending Head Start (HS), this proposed project aims to identify patterns and outcomes of HS children's additional public ECE utilization before, during, and after HS participation.

For over three decades, Iowa has invested in coordinated early childhood services across public health, education, HS, and child welfare. These efforts also include a comprehensive integrated data system (IDS) designed to use administrative data in stakeholder-engaged inquiry processes to inform data-driven decisions and continuous quality improvement. Iowa's Integrated Data System for Decision-Making (I2D2) was first used to for a comprehensive statewide needs assessment with funding from a Preschool Development Grant B-5 (PDG). Recently, with funding from ACF's secondary data analysis grant program, initial investments were expanded to include integrated HS enrollment records and ECE partnership data to study HS children's multiple, concurrent care utilization one year before kindergarten (K).

Capitalizing on these investments and the momentum of using I2D2 for ECE policy research, this project will expand the prior project by adding additional data (Early Head Start [EHS], more comprehensive demographic information, and longitudinal school performance records) to the representative K cohort dataset involving over 27,000 children in Iowa. We will focus on a subsample from this population of children who attended HS any of the two years before entering K in SY2016-17 or SY2017-18 (expected N = 5,780). First, we will study HS children's participation in other public ECE programs by identifying (1) the sequential patterns of EHS/HS utilization during the infant/toddler and preschool years (0-5 years) and (2) concurrent and sequential utilization of other public ECE programs during the preschool years (3-5 years). Then, we will examine how such ECE utilization patterns differ by child and family characteristics, and how ECE utilization patterns differently predict school outcomes for diverse children based on race/ethnicity, home language, residential area (urbanicity), and poverty status. Analytic approaches include basic descriptive statistics, multiple regression, logistic regression, and latent profile analysis.

One key value of I2D2 is the strategic stakeholder engagement processes that ensure analytic questions are relevant and findings are translated for use in partnership with community leaders. Questions for this project were developed in discussions with these leaders about findings from the prior study, and current challenges and opportunities for expanding HS partnerships among local districts and child care centers to meet the needs of Iowa families. Understanding the typologies and outcomes related to HS children's multiple ECE utilization patterns will inform strategic approaches supporting low-income children's early development by highlighting patterns of ECE participation that best relate to school readiness and identifying groups of families who have the least access to successful participation patterns.

## **The Ohio State University**

- PI: Dr. Scott L. Graves Jr.
- *Does One Size Fit All for Black Children: Exploring Intervention Effects from A Randomized Trial of Head Start CARES*

This rise in preschool suspensions has had a disproportionate impact on Black children. Data from the U.S. Department of Education indicates that Black children comprise for 18% of preschool enrollment but almost half (48%) of the children suspended more than once. To gain a better understanding of social-emotional intervention in preschool settings that may help suspension issues, the US Department of Health and Human Services commissioned the Head Start CARES study. CARES was the first largescale nationally randomized control trial of strategies for promoting the social and emotional development of four-year-olds. Two salient issues that are relevant to social-emotional functioning were not addressed in the original CARES evaluation that we will be addressing. These issues were conducting a subgroup analysis of Black children to understand their specific responses to each intervention and including an analysis of teacher-child ethnic match as a covariate. This project asks, Are specific social- emotional programs or practices more or less effective for Black children? Is intervention effectiveness in CARES impacted by teacher-child ethnic match? The results will provide knowledge on how to improve the social-emotional functioning of children in preschool settings and provide policy makers with evidence regarding what specific interventions work for Black children.

## University of Oklahoma

- PIs: Dr. Shinyoung Jeon and Dr. Elizabeth Frechette
- *Exploring Variations Among Head Start Dual Language Learners: What Factors Predict Different Longitudinal Developmental Patterns*

Head Start (HS) programs serve approximately one million children growing up in poverty. Among HS children nationally, one-third are dual language learners (DLLs) and 80% of HS DLLs speak Spanish. To date, Spanish-speaking DLL children in HS programs have generally been considered a homogeneous group, however they are likely developmentally heterogeneous given variability in language proficiency in English and Spanish and other developmental skills. Although the within-group variability of DLLs enrolled in HS programs is increasingly recognized, there remains a need for understanding variation in HS DLL children's longitudinal academic skill development after HS. In addition, very little is known about factors such as child/family characteristics and how HS program, school, and neighborhood environments are associated with the variations in the longitudinal academic skills of HS DLL children.

To address this gap, the proposed project will integrate multiple datasets including local HS evaluation data, public school administrative data, public school rating data, and census data to create a longitudinal and multi-layered dataset. One of the main goals of HS is to increase the school readiness of children from low-income families and enhance their long-term success in life. However, conducting a longitudinal study with a large study sample is expensive and requires tremendous effort and energy to follow the study sample over time. Data integration provides an alternative strategy and becomes a workable solution by using reliable public data that measures real-life outcomes in society. Using the integrated data, the following questions will be addressed:

- 1) Among Head Start dual language learners, are there distinct developmental patterns of academic skills from kindergarten to third grade?
- 2) Which child/family characteristics are associated with HS DLL children's profiles?
- 3) Which HS program, public school, and neighborhood environmental factors are associated with HS DLL children's profiles?

Detecting HS DLL subgroups showing different long-term academic growth can provide practitioners and policymakers with a deeper understanding of DLLs and inform comprehensive and ongoing educational planning for individuals and groups. Furthermore, findings of what child and family characteristics and early and ongoing school experiences and neighborhood environments are associated with the DLL subgroups will lead to targeted action plans calibrated to ensure equitable support for HS DLLs' development and learning as children grow. Thus, this project is not only beneficial for HS programs, but also provides rich practical insights for public school programming and community partners. Tulsa offers a setting where many DLL children attend HS programs that are demonstrated to be high-quality and have a history of collaboration with local researchers who have collected data and forged additional partnerships with public schools to combine data to build such a longitudinal study that will inform not only Tulsa but the nation as well.

## University of Oklahoma

- PI: Dr. Kyong-Ah Kwon, Dr. Wonkyung Jang, Dr. Tim Ford, and Dr. Diane Horm
- *Unpacking the Complex Story of Head Start Teacher Turnover: Patterns, Factors, Mechanisms, and Outcomes*

Recent studies have raised concerns about pressing challenges in the early care and education (ECE) teacher workforce including high levels of psychological distress and high rates of turnover. Research suggests that high teacher stress and turnover may be even more prevalent in Head Start (HS) programs (including Early Head Start) than in other ECE settings; however, there is limited research on HS teacher turnover. This information is critical for those working in HS programs who aspire to play a protective role by supporting children's learning development. Beyond the relative dearth of research focused on turnover in HS, the existing research has significant methodological limitations. Most studies have not used statistical approaches that can quantify the timing of teacher turnover. Although time-to-time changes in teacher turnover are often coded in ECE studies, these data are typically collapsed across time, creating summary variables (e.g., frequencies, averages) and analyzed using static statistical approaches (e.g., logistic regression) that mask dynamic processes. Thus, there is a mismatch between conceptual and practical questions about teacher turnover and the methods used to investigate them. One such gap involves questions about patterns, factors, and mechanisms of HS teacher turnover.

To address gaps in the literature, this project proposes to investigate HS teacher turnover using the Educare Learning Network (ELN) cross-site database that spans several years and includes rich data at the child, teacher, classroom, parent, and program-levels. In collaboration with researchers at the Frank Porter Graham Child Development Institute at the University of North Carolina at Chapel Hill and at the ELN, we plan innovative and advanced analytic methods including survival analysis and a combination of Bayesian Network learning algorithms with Structural Equation Modeling to answer several questions related to the complexity of HS teacher turnover and its correlates and outcomes. Research questions include the following:

- a. What patterns and variations exist in HS teacher turnover over time?
- b. What characteristics of children, teachers, classrooms, and programs are associated with
- c. HS teacher turnover?
- d. How are these factors associated with HS teacher turnover (i.e., moderation and
- e. mediation effects)?
- f. Is HS teacher turnover associated with child outcomes?
- g. Do associations between HS teacher turnover and child outcomes vary by teacher and
- h. child characteristics?

The findings of this study will provide a clearer, more nuanced understanding of HS teacher turnover to inform policy and practice targeted at fostering and maintaining stability within the HS workforce. This stability is essential for HS to meet its goal of preparing America's most vulnerable young children to succeed in school and in life beyond school.



## Research for Action

- PI: Dr. Kendall LaParo
- *Head Start Staff Turnover Before and During COVID-19*

During the pandemic, Head Start has served as an essential community support that bolstered our children, our youngest neighbors, and their families as they experienced quarantines, child care interruptions, economic stress, tragic loss of life, and exacerbated mental health challenges. Yet, Head Start programs experienced challenges as well. The child care sector overall saw unprecedented program closures and staff turnover (Bassok, et al., 2021a, NAEYC, 2021; Salzwedel, et al. 2020). Disruptions in caregiving due to early childhood program staffing challenges negatively impacted child development and wellbeing, particularly for marginalized children (Deoni, et al., 2021; Neece, et al. 2020). Because Head Start programs serve high-needs children and families, it is critical to understand the scope and variation of staffing challenges among Head Start programs as well as factors and policies that supported retention during the pandemic. This proposal seeks to understand the impact that COVID-19 had on Head Start employment stability, what factors determined whether staff stayed or left, and what policies contributed to strong staff retention during a public health crisis.

The proposed study leverages a decade of administrative panel data to understand Head Start staff turnover rates before and during COVID-19. The research addresses high priority topics of interest for Head Start leaders and grantees, including the retention of high-quality Head Start staff, staff wellbeing, and the impact of COVID-19 on the workforce and the community. The findings will identify the percentage of staff departure directly attributable to COVID-19 and will use qualitative, open-ended administrative data to disentangle the distinct COVID-related reasons for departure (e.g., fear, illness, child care, etc.) from well-established pre-pandemic drivers of turnover (e.g., compensation, workplace culture, etc.). The research will also identify disparities in staff turnover by program characteristics and service delivery models. Notably, this study will include often-overlooked data from the American Indian and Alaska Native (AIAN) Head Start Programs as well as the Migrant and Seasonal Head Start Programs. Preliminary data suggest that staff turnover is more prevalent in AIAN Early Head Start programs and that the staff turnover rate in all programs has steadily increased over the past decade.

## **Southern Methodist University**

- PI: Dr. Yusuf Kara
- *Exploring Tarrant County Head Start and Early Head Start Impacts Through Secondary Data*

Several national-level impact evaluations and robust secondary analyses of large national data sets have provided promising evidence on the effectiveness of Head Start (HS) programs on student- and parent-level outcomes. However, a comprehensive understanding of how variability at different levels (site, classroom and family) interact to produce desirable outcomes for students is still elusive. Importantly, the body of evidence on HS effectiveness points to variability in site-level factors that produce or promote quality classrooms, as well as variability in the delivery of HS family supports and family-level factors. Variability in both of these key factors point to important areas for additional research; understanding what works across a wide range of sites, and under what circumstances, is a critical piece of information to promote effectiveness at scale.

The current study seeks to add to existing evidence of an underlying theory of change whereby effective professional development can increase the quality of HS classrooms, family supports can improve family stability and school engagement, and that the interacting effects of these classroom quality and family influences promote child school readiness. The availability of strong and nuanced coaching data and robust, frequent CLASS observational data will enhance the existing body of knowledge. In total, being able to address the full model and a theory of change that incorporates site level, classroom level quality, family factors, and student outcomes, with improved high-integrity data is a significant contribution to the existing literature.

This study aims to establish evidence for an underlying theory of change; that professional development can increase the quality of HS classrooms, family supports can improve family stability and school engagement, and that the interacting effects of these classroom quality and family influences promote child school readiness. The ultimate aim of this research is to better understand what components of HS programs effect students' level of school readiness. We propose to add to existing knowledge about this topic by modeling HS students' levels of school readiness measured at the age of 4, linking the data sources about classroom quality and family support as well as their interaction.

Our proposed research will serve the interest of HS practitioners, leaders, policymakers, and funding organizations. The methods and conclusions will serve the research community, including researchers focused on systems and impacts in early childhood as well as quantitative research methodologists.

## **SRI International**

- PI: Dr. Elisa Garcia
- *Understanding the Role of Classroom Quality in Dual Language Learners' Bilingual Development in Head Start Using the Family and Child Experiences Survey 2014*

A substantial proportion of young children attending Head Start and other early care and education (ECE) programs speak a language other than English at home. The majority of these dual language learners (DLLs) speak Spanish, but there is wide heterogeneity among even Spanish-speaking DLLs. Maintaining Spanish language skills while acquiring English language skills benefits DLLs (Han, 2010; Yow & Li, 2015), and high classroom quality is essential to support DLLs in realizing these benefits. The Head Start Program Performance Standards (Administration for Children and Families [ACF], 2016) therefore stipulate that Head Start classrooms provide all DLLs with enriching materials that support their bilingual learning and development. Despite this requirement, Head Start program quality varies widely (Moiduddin et al., 2017), as do DLLs' vocabulary trajectories in English and Spanish (Hoff & Core, 2013).

ACF, Head Start, and ECE practitioners need a nuanced understanding of DLLs' bilingual vocabulary strengths to better promote DLLs' development of these skills. Prior research does not provide this understanding, however, as many studies compare DLLs as a homogeneous group to monolingual children, and others assess skills in each language independently. These approaches preclude an examination of how bilingual strengths develop over a year in ECE programs. Moreover, although there is evidence that classroom quality promotes DLLs' language outcomes, studies have not examined the relationship of quality measures to bilingual vocabulary growth, which requires considering DLLs' skills in both languages simultaneously.

In the proposed study, SRI International will leverage a nationally representative sample of children attending Head Start, the Family and Child Experiences Survey 2014, to provide ACF, Head Start, and ECE practitioners with a detailed understanding of DLLs' bilingual vocabulary strengths. We will implement latent profile analyses, a person-centered, data-based approach to empirically derive bilingual vocabulary groups (i.e., latent profiles) in the fall and spring of Head Start, among Spanish-speaking DLLs. Profiles will reveal DLLs' relative strengths in each language. We will then examine how family characteristics, such as household income and parents' educational attainment relate to fall bilingual vocabulary profiles. Next, we will conduct latent transition analysis to assess how children's membership in bilingual vocabulary groups changes between the fall and spring. Finally, we will examine how measures of classroom quality predict changes among profiles between the fall and spring, to examine the role of high-quality classrooms in supporting bilingual vocabulary growth.

The results of these analyses will provide ACF, Head Start, and ECE practitioners with actionable insights about variability among Spanish-speaking DLLs' bilingual vocabulary strengths and about the family- and classroom-based factors that can support DLLs' bilingual vocabulary growth. This study will inform stakeholders of the characteristics of DLLs and families who may need more targeted supports for their children to attain strong bilingual vocabulary skills, and help ACF, Head Start, and ECE practitioners provide high-quality learning environments to meet these children's strengths and challenges.

## **Boston University**

- PI: Dr. Kyle DeMeo Cook
- *How do Early Head Start Educational Services Benefit Children from Low-Income Families?*

An extensive body of research has investigated the developmental risks of low family income during early childhood, finding substantial evidence of income-based gaps in children's development that emerge by age 3 years. This study focuses on how two-generation education services provided to low-income families during this important developmental time period through the federal Early Head Start (EHS) program may provide benefits to children. EHS serves pregnant mothers, infants, toddlers up to age 3 years, and their families, offering center-based and home visiting services to families with low incomes. While EHS has been rigorously evaluated, finding positive impacts for parents and children, we know less about how service type (center-based, home-visiting based or both) and dosage is associated with children's development among the diverse families served by contemporary EHS programs who are ages 1, 2 and 3 years old.

Led by Dr. Kyle DeMeo Cook and Dr. Caitlin Lombardi (University of Connecticut), the goal of this secondary data analysis project is to better understand children's experiences in center-based and home-visiting based EHS educational services and the dosage of these services. Utilizing the Early Head Start Child & Family Experiences Study (Baby FACES) 2018 dataset, the most recent nationally representative data available on children and families in EHS. First, we examine which EHS educational service types (center-based, home-visiting based or both) children receive and the dosage of these services. We explore whether program characteristics, child/family characteristics, and child and family strengths and needs predict service type and dosage for children who are 1, 2, and 3 years old. Second, we investigate the association between children's EHS services type and dosage and child language and social emotional outcomes, when accounting for program characteristics, child/family characteristics, and child and family strengths and needs. Finally, we examine whether these relations vary for children and families with differential strengths and needs (i.e. depression, parenting stress, economic pressure, household chaos, social support). Since these relations may operate differently for infants and toddlers, we also explore associations for children who are 1, 2 and 3 years of age separately at the time of data collection.

This study contributes to our understanding of children's access to EHS services, types and dosage, and what program, child, and family characteristics explain differential experiences in programs. Study findings will enhance our understanding of EHS in children's development for the diverse families that EHS serves and inform the design and targeting of EHS services.

## Urban Institute

- PI: Dr. Heather Sandstrom
- *Early Head Start Jobs: An Inside Look at Early Head Start Home Visitors and Teachers, Their Turnover Patterns, and Workplace Supports That Promote Staff Well-Being*

The Early Head Start Home-Based Option stands out among evidence-based home visiting models for its positive impacts on parenting practices, child development, and family economic self-sufficiency, specifically parents' engagement in education and training. A healthy and stable workforce is key to delivering Early Head Start (EHS) home visiting services; however, high staff turnover is common in this field. Even before the COVID-19 pandemic, concerns about the stability and quality of the workforce prompted researchers to investigate reasons why home visitors leave their jobs (Begic, Weaver, and McDonald 2019; Dmytryshyn et al. 2015; Franko et al. 2019; Sandstrom et al. 2020). Recent efforts have identified possible strategies to support staff recruitment and retention, including workplace supports such as reflective supervision, coaching, and targeted training, as well as improvements in workplace culture. Yet EHS program service implementation varies widely, as does its home visiting workforce and their backgrounds. Little research has documented what supports are available to EHS home visitors and how these supports shape their professional well-being and their programs' ability to retain qualified staff members.

We will use two recent data sources to examine questions related to the EHS workforce and specifically home visitors: the Head Start Program Information Report (PIR) collected annually from every Head Start and Early Head Start program (except in 2019–20) and the 2018 Early Head Start Family and Child Experiences Survey (Baby FACES), a nationally representative descriptive study of EHS programs, centers, home visitors, teachers, and the children, families, and pregnant women they serve. Together, these two data sources provide a detailed picture of the EHS home visiting workforce.

With the PIR, we will conduct descriptive analyses of the qualifications and compensation levels of EHS home visitors and how they compare to EHS classroom teachers. We will explore the impact of the pandemic on the size and composition of the EHS workforce by comparing PIR data from 2018–19 and 2021–2022. These data also include reported staff turnover rates, vacancy levels, and reasons for staff departures. We will conduct multivariate regression analyses to examine how program-level characteristics, including local COVID-19 vaccination rates that we will link from CDC data, are associated with reported turnover and vacancies.

Baby FACES data provides rich data on *workplace supports* and *workplace culture* captured in surveys of EHS directors and home visitors. We will conduct a series of multivariate analyses to test our hypotheses that such workplace supports as reflective supervision, coaching, field safety protocols, and quality training, as well as strong team communication and cohesion, are associated with *high staff retention* (i.e., directors' reporting few challenges retaining qualified staff) and four key measures of home visitors' *professional well-being*: positive mental health (i.e., low report of depressive symptoms), low work stress, personal safety, and job satisfaction.

Study findings will point to key drivers related to EHS home visitors' retention and well-being that can inform future program planning and technical assistance efforts. The project also offers a unique opportunity to learn about the EHS workforce during the pandemic and address questions regarding equity in compensation and equitable access to workplace supports.

## Urban Institute

- PI: Dr. Diane Schilder
- *Head Start and Early Head Start Cost and Braided Funding Study*

Research shows that both Head Start and Early Head Start have long-term cost benefits, and some studies suggest that braiding funds from other early care and education (ECE) programs, such as child care and pre-K, is associated with increased quality. Despite this, limited up-to-date research exists that describes the costs of providing Head Start (HS) and Early Head Start (EHS) services, and the types and numbers of funding streams HS and EHS grantees braid. And current research does not explore the characteristics of HS grant recipients, the children and families attending HS and EHS, and state factors associated with the cost of offering HS/EHS services and HS grantees' likelihood of braiding funding. Finally, research is needed on HS costs and how they relate to quality.

Our study will produce policy-relevant information for the Office of Head Start, HS and EHS grantees, federally funded technical assistance (TA) providers, and ECE policymakers. We will produce fact sheets and a policy report describing (a) how grantee characteristics, characteristics of children and families attending HS, and state policy contexts are associated with different braided-funding approaches; (b) how these factors relate to HS service delivery costs; and (c) how these factors relate to HS service quality. We will submit a manuscript to a peer-reviewed journal that presents a regression analysis showing the relationships among grantee, child and family, and state policy variables; number and types of funds HS grantees access; and how these relate to quality indicators.

We propose a study with two components. For the first component, we will analyze the Family and Adult Child Experiences Survey (FACES), which contains a nationally representative sample of HS grantees. We will document how grantee characteristics (such as size and urbanicity) and child and family characteristics (such as race and ethnicity) are associated with the number and types of funding sources grantees braid. This analysis will inform the second component of the study, which will examine how grant recipient characteristics, characteristics of children and families served, and state policy context variables are associated with the likelihood that the grant recipients braid funds and with HS costs. State context variables will be from the Child Care and Development Fund (CCDF) database and the National Institutes for Early Education Research (NIEER) *State of Preschool Report*. We will analyze Public Information Report (PIR) data to capture grantee characteristics and the characteristics of children and families served. We will combine these data with coded data from a sample of proposals and budget narratives in the Head Start Enterprise System (HSES). We hypothesize that grantee characteristics, characteristics of children and families served, and state policy contexts (such as pre-K funding and CCDF policies) are related to the number and types of funding streams HS grantees braid and reported costs. These, in turn, are associated with quality. We will also perform exploratory analyses of a sample of applications submitted by HS and EHS to OHS to understand costs and approaches to braiding funds.

Information produced from this research is vital for federal policymakers, HS grant recipients and TA providers seeking to deliver HS as part of a mixed-delivery system. The project will result in a report, fact sheets, a manuscript, and presentations at key policy research conferences, as well as collaboration with other OPRE grantees.

## **Virginia Commonwealth University**

- PIs: Dr. Chin-Chih Chen and Dr. Yaoying Xu
- *Promoting Social Emotional Development of Head Start Children*

The primary goal of this project is to identify the family and classroom practices/experiences of the Head Start (HS) programs which best promote children's social emotional development over time. Young children living in low-income families are exposed to a wide array of social and systemic risks which increase the propensity for poor learning and social/emotional development. Head Start aims to support economically disadvantaged children and their families and prepare low-income children for school success by attempting to narrow gaps in school readiness. Supporting positive social emotional development is particularly critical as it likely affects both children's school readiness and future outcomes. This population-based project will be conducted by a team of investigators with extensive expertise in family/classroom practices and child development. We aim: 1) To identify social emotional development for HS children, in particular those with disabilities and dual language learners (DLLs); 2) To determine how home learning environment and experience and classroom quality contribute to social emotional development of HS children; and 3) To investigate the influence of teacher and parent mental health on the association between social contexts and HS children's social emotional development. The goal of this work is to identify potential malleable social environmental factors that can be targeted through programs and policies to benefit children's social emotional development, with an emphasis on populations of underserved children in low-resource environments.

Using data from the Head Start Family and Childhood Experiences Survey (FACES 2014), this study focuses on social emotional development for a nationally representative sample of young children in low-income families. FACES is a longitudinal, multistage study which focuses on program performance of nationally representative samples of Head Start children, families, programs, and centers. The FACES 2014 sample included nearly 2,000 children and their families. Children in this sample were racially/ethnically diverse, including Hispanic/Latino (42%), African American (22%), White (28%), and multi-racial (5%), with less than 3% of other race/ethnicities. Data were collected from multiple sources such as parent surveys, teacher child reports, classroom observations, and teacher surveys. We will identify HS children's patterns/subtypes of social emotional development using person-centered approaches (latent profile and transition analyses), and determine how home learning (activities, household routine, parental involvement, social support) and classroom quality (emotional support, instructional support, classroom organization) explain the social emotional development using a mixed-effect multinomial regression and Multi-level LTA. Further, we will examine how parent and teacher mental health (depression) moderate the relationship between home and classroom contexts and HS children's social emotional development using similar analyses.

This population-based project will characterize HS children's social emotional development, examine how proximal social contexts impact HS children's social emotional development, and further evaluate the influence of parent and teacher mental health. The evidence provided from this study will prove beneficial to Head Start in the aim to offset children's risk by providing high-quality early experiences to reduce socio-economic disparities in school readiness. This information could be leveraged to make future programmatic decisions to support parents and teachers in facilitating children's positive social emotional development.