EARLY HEAD START HOME VISITOR PERCEPTIONS OF PROGRAM ENVIRONMENT AND LEADERSHIP

by

Deborah Diane Fuller

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PROJECT ABSTRACT

Early Head Start home visitors support the development of infants and toddlers by providing parent- education, support, and coaching directly in the family home. Families served often experience complex challenges and trauma. To better support families, home visitors receive professional development including training, coaching, and reflective supervision. However, much less is known about how the program environment as a work environment and program leadership support home visitors, or how they relate to professional development and home visitor retention. This study examines home visitor perceptions of the program environment and leadership and their relationship to professional development. Specifically, the research questions for this study include: 1) How are home visitor perceptions of program supports (work environment and programmatic leadership) similar and different across home visitors? 2) How does home visitor job satisfaction relate to perceptions of work environment, programmatic leadership, and retention? 3) What experiences explain local-level EHS home visitor perceptions of program supports and job satisfaction? Results indicated that home visitor education, especially an associate degree was predictive of profiles reflecting more positive perceptions of work environment and leadership and lower stress while vacancies were predictive of profiles reflecting more neutral or negative perceptions and higher stress. Results also indicate that home visitors feel satisfied when successfully helping families but stress and dissatisfaction when families are disengaged.

Chapter 1

INTRODUCTION

Head Start/Early Head Start (HS/EHS) is a two-generation service delivery program for low-income young children and their families and priority populations to include children who are in foster care, have a diagnosed disability, or are experiencing homelessness. Early Head Start (EHS) specifically serves pregnant people and very young children aged from birth to three years old. A two-generation intervention promotes parent and family engagement and involvement in the life of their child. As a strategy, the two-generation approach has been integral to the program since its inception (Lamb-Parker et al., 2001) under the rationale that parents or other legal guardians make both the largest number of and most impactful decisions in the life of their child (Cannon et al., 2017).

Early Head Start has multiple service delivery modes: center-based care, family child care in which care is provided in the home of a non-relative, and home-based in which home visitors provide parent support, coaching, and referrals. Early Head Start-home based (home visiting) further concentrates the approach of "maximum feasible participation" (Lamb-Parker et al., 2001, p.36) of parents in their child's development and learning by bringing service delivery directly into the home of the child and family

by providing parent support and coaching and support in connecting families to needed resources.

However, research on early childhood home visiting has revealed that home visitors face challenges in engaging families who experience complex needs and risks. In addition to the emotional labor of working with both children and families directly, home visitors face a unique work setting as they deliver services directly in the enrolled family's home. There are also other competing demands on home visitor time and attention to include the time and physical demands of driving and transitioning between office, car, and multiple homes and the administrative labor of detailed documentation required by performance standards (Office of Head Start, 2016; Simpson et al., 2018). Specific challenges can include balancing program performance targets with what children and families actually need or are willing and/or able to do (Kitzman, 1998; McKelvey & Fitzgerald, 2020); and balancing time needed to connect families, social services, and promote child development (McKelvey & Fitzgerald, 2020). There is also the cumulative weight of home visitor caseloads when adding up each family's unique needs and challenges (Begic et al., 2019).

Prior research has shown that program implementation in fidelity to an evidence-based home visiting model becomes more difficult when more families enrolled have higher numbers of individual risk factors (Cluxton-Keller et al., 2014; Duggan et al., 2009; Kisker et al., 2004). Caseloads heavy with families facing numerous complex issues also make home visitors more susceptible to secondary stress and burnout (Esaki & Larkin, 2013) and possibly low job satisfaction (Gill et al., 2007; Lou et al.,

2021)which may influence retention. Recent research has indicated that home visitors desire more training and support from their programs (Burrell et al., 2009; Duggan et al., 2005). However, professional development strategies in home visiting, while helpful, may not be a panacea in supporting home visitors' work to address the many issues faced by families (Burrell et al., 2009; Duggan et al., 2005; West et al., 2018).

The Office of Head Start defines professional development as "the process of acquiring new knowledge and skills that relate to current job duties and allow for growth along a career path" (Early Childhood Learning and Knowledge Center, 2024). Professional development opportunities may encompass a wide variety of formal and informal learning opportunities, but 15 clock hours of formal professional development annually are required for all staff and must be research-based (Office of Head Start, 2016). Major professional development strategies in home visiting programs and models commonly included in EHS are training, coaching, and reflective supervision (Walsh et al., 2022).

Training in HS/EHS is directly connected to federal performance standards and for home visitors must include training on child maltreatment, family engagement, child and family services related to health and special needs, and child development and early learning (Office of Head Start, 2016). Coaching is a broad professional development practice and generally is defined as a person who has expertise in specific areas and who models practices, who assesses participant strengths and areas of need, and provides personalized training and support to help staff skills or improve their performance relate to program goals (Office of Head Start, 2016; Walsh et al., 2022). However, coaching in

early childhood specific to the context of home visiting remains an emerging practice (Walsh et al., 2023). Reflective supervision (also called reflective consultation) has a wide variety of definitions and implementation practices (West et al., 2022). Given the common aspects of reflective supervision, it can be broadly defined as a relationship-based collaborative or mutual process of reflecting on the challenges and/or strong emotional reactions that home visitors may have in serving children and families (Duggan et al., 2018; Head Start Early Childhood Learning & Knowledge Center, 2023; Sandstrom et al., 2020; West et al., 2022). These reflections are often intended to address work-related stress but may also aid in problem solving, decision making, and improving a home visitor's own ability to be reflective with families.

Professional development on its own may not be enough to support home visitation staff. Rather, research suggests that *in addition to professional development,* the work environment and programmatic leadership also enable home visitor capacity to effectively serve families. The work environment is important as it encompasses the quality of organizational communication, staff cohesion, and work stress. Programmatic leadership is important as it promotes or suppresses staff empowerment, psychological safety, trust, and transparency.

This project focuses on EHS home visitors. The aims of the project are to advance the understanding of (1) home visitor perceptions of program support found in the work environment and programmatic leadership, and how they relate to professional development; (2) home visitor job satisfaction as it relates to work environment, programmatic leadership, and retention; and (3) what experiences explain home visitor

perceptions of work environment, leadership, job satisfaction, and professional development.

These aims were achieved through a three-phase study. Phase I of the project identified the differences in perceptions across home visitors regarding the work environment, programmatic leadership, and their relationship to professional development. This phase used quantitative data from a nationally representative sample of EHS-home visitors from the 2018 Early Head Start Family and Child Experiences Survey (Baby FACES; Cannon, et al., 2020). Phase II of the project sought to identify how perceptions of the work environment and perceptions of programmatic leadership relate to job satisfaction and retention among home visitors. This phase also used 2018 Baby FACES data on EHS home visitors.

Phase III of the project used an explanatory sequential mixed methods design using surveys and semi-structured interview data collected and analyzed from two local-level EHS-home based grantees in the Mid-Atlantic. This phase was used to understand EHS home visitor perceptions, experiences, and job satisfaction in more depth. At the conclusion of all three phases, the results are integrated and discussed.

Also discussed in this project is the theoretical framework for this study. Head Start/Early Head Start (HS/EHS) is a program design based in bioecological theory (Bronfenbrenner, 1977; 2005). Stemming from this is the HS/EHS Parent Family and Community Engagement Framework (PFCE; National Center on Parent Family and Community Engagement, 2018), which provides a contextual framework for understanding the how EHS home visitor work is situated within programmatic systems

and supports. Finally, due to the nature of home visitor work with families experiencing complex issues and challenges, to include trauma, a trauma-informed lens (Substance Abuse and Mental Health Services Administration; SAMHSA, 2014) was applied throughout the study as a means of interpretation and application.

Chapter Organization

This study is presented in eight chapters. In Chapter 2, the theoretical foundations for the study are presented, tying together bioecological theory (Bronfenbrenner, 1977; 2005) with the Head Start PFCE Framework (National Center on Parent, Family, and Community Engagement, 2018) and principles of Trauma Informed Care (TIC; SAMHSA, 2014). Chapter 3 presents the literature review making the case for the importance of examining the EHS home visitor work environment and programmatic leadership more closely *in addition to* professional development efforts. This chapter also concludes with the research questions, hypotheses, and constructs of the project. Chapter 4 addresses the study methods in three phases. Chapter 5 discusses Phase I results addressing how home visitors group into profiles across perceptions of work environment and leadership together and predictors of group membership to include demographic characteristics, program characteristics, and professional development. Chapter 6 presents Phase II results in which the profile analysis from Phase I is extended and refined to focus on home visitor profiles based on job satisfaction and work environment as a second profile and job satisfaction and program leadership as a third profile. Predictors of retention were also examined for each profile. Chapter 7 presents Phase III results of a local-level mixed approach of surveys and semi-structured interviews with

EHS home visitors. Finally, Chapter 8 discusses results of each phase, provides an integrated discussion, implications, and a review of strengths, limitations, and future directions for research.

Chapter 2

THEORETICAL FRAMEWORKS

The two-generation intervention strategy of HS/EHS is designed for staff, such as home visitors, to serve the whole child and whole family by supporting parents to attain positive family outcomes that in turn support positive child developmental outcomes (National Center on Parent, Family, and Community Engagement, 2018). For example, home visitors are supported by their program though the provision of leadership, professional development, and continuous learning and quality improvement. The home visitor in turn provides family support such as facilitating family partnerships, teaching and learning for the parent, and a positive program environment. Such activities on the part of the home visitor can cultivate family outcomes such as positive parent-child relationships and then support the child in engaging in positive relationships with adults and other children (National Center on Parent, Family, and Community Engagement, 2018).

This approach to the HS/EHS program models applies bioecological theory (Bronfenbrenner, 1977; 2005) and as a result, it is also the theory applied to this project. Bioecological theory is a bi-directional and whole systems approach. As a federal program, HS/EHS operationalizes this theory through the Parent, Family, and

Community Engagement Framework (PFCE; National Center on Parent, Family and Community Engagement, 2018). The PFCE provides a contextual framework for the theoretical underpinning of this project as the home visitor work environment, where they implement the elements that comprise program impact, and program foundations, which are intended to support home visitors in their role and includes leadership, are included in the PFCE. Further, guidance on the integration of TIC has more recently been created as a means to support home visitors in their work with families facing complex challenges and trauma (National Center on Parent, Family and Community Engagement, 2020). This theoretical framework and its concepts as well as the context provided by the PFCE are discussed below. First, bioecological theory is presented. Second the PFCE is summarized with a focus on the support provided to and work delivered by EHS home visitors. Third, TIC is discussed regarding its fit with the PFCE and how its principles are a lens for interpretation.

Bioecological Theory and the Process-Person-Context-Time Model

Bioecological theory and its Process-Person-Context-Time (PPCT) model are a Relational Developmental Systems-based theory (RDS; Lerner et al., 2015). This theory family emphasizes that development is not only both biology and contextual environment but that the two are rather a multitude of ever shifting yet interwoven layers. Human organization is the ongoing integration and interaction of these layers that contribute to development across a lifetime (Lerner et al., 2015). The PPCT, as an RDS systems theory model posits that over time development arises from the processes found in person-

environment interactions to include personal characteristics, relationship context, and the continuity and change found within these processes (Bronfenbrenner, 2005).

Processes, both functional and dysfunctional, occur between persons and environment (the context) and grow increasingly complex as person characteristics, events, and social contexts interact over a span of time (Rosa & Tudge, 2013). There are three person characteristics identified in the PPCT: demand, resource, and force (Green & Piel, 2010). Demand characteristics are observable traits that evoke or suppress responses from others depending on the environmental context. Resources are tangible assets as well as personal knowledge, skills, and abilities. Force encompasses temperament and personality as well as motivation. All three person characteristics can be either passive or active.

The context is an individual's environment that directly and indirectly influences development (Bronfenbrenner, 1977). The context is divided into the microsystem, mesosystem, exosystem, and macrosystem. The microsystem is the immediate environment. The mesosystem is the collection of immediate environments that an individual regularly moves through over time. The exosystem is the level of the environment that influences the individual without direct interaction. The macrosystem consists of culture and extended social structures in which individuals share common values and beliefs. In bioecological theory, the context is a whole system and as the number of people involved in interactions increases, so does the complexity of the influence of that system on development. However, each person perceives these systems from their own phenomenological field, i.e. from their own unique set of contexts and

lived experiences (Lerner et al., 2015). Finally, time, in the PPCT model includes microtime, related to the timing of specific events in specific interactions and their proximal processes, for example a single home visit; mesotime involving the span of time that interactions and proximal processes take place, such as the duration that a home visitor has a family enrolled on their caseload to visit; and macrotime related to the timing of lives and historic time further that shape the experiences and interactions of individuals with their environment (Xia et al., 2019). For example, conducting home visits in a pre- vs. post-Covid 19 pandemic.

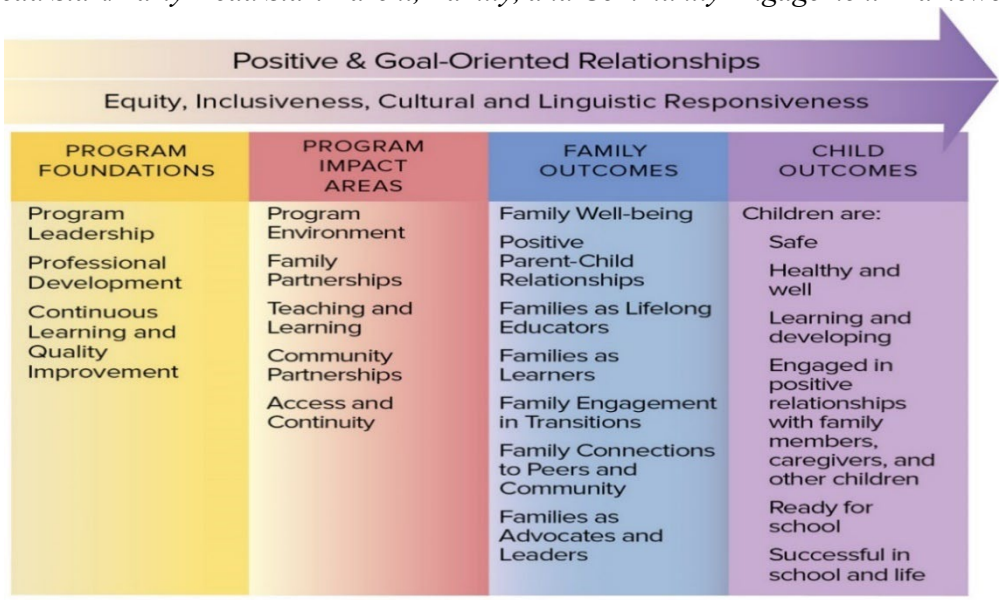
The influence of relationships between individual people and across multiple contexts is particularly salient to EHS home visiting. Specifically, the parallel process (Saul & Jones Harden, 2009) can facilitate practical and emotional support and nurturance of individuals existing across multiple levels of a system: children through the nurturance of parents *and* parents through the nurturance of home visitors *and* home visitors through the nurturance of their program leaders. In essence, not only are supportive and responsive relationships and environments important to the development of children but for development across the lifespan and across the program system to include parents, home visitors who care for the caregivers, and the program leadership who support home visitors (Boris et al., 2006; Heller et al., 2012; Roberts et al., 2019; Saul & Jones Harden, 2009; Simpson et al., 2018; Zeanah, et al. 2006).

The Parent Family and Community Engagement Framework and Bioecological Theory

In HS/EHS, bioecological theory (Bronfenbrenner1977; 2005) is operationalized through the program's PFCE framework (See Figure 1). The framework is layered from child outcomes in the microsystem, family outcomes in the mesosystem, program impact areas overlapping the meso-and exosystem, and program foundations in the exosystem. A culture of equity, and cultural and linguistic responsiveness reside in the macrosystem and are represented by an arrow to indicate that the macrosystem does not simply exist as a layer that indirectly influences lower layers of context but that policies and cultures cut across all levels of context (National Center on Parent, Family, and Community Engagement, 2018). The primary processes occurring in this model are intended to be positive goal-oriented relationships which take place across time from a child's enrollment to exit for the child and family and for the home visitor across the duration of their employment in a program (Office of Head Start, 2016).

Figure 1

The Head Start/Early Head Start Parent, Family, and Community Engagement Framework



(National Center for Parent, Family, and Community Engagement, 2018)

The primary focus of the PFCE, as it applies to this study and home visitor program environment and leadership are the Program Foundations as they support home visitor work and the Program Impact Areas where the work of home visitors is conducted in order to promote positive outcomes for families and children (National Center on Parent, Family, and Community Engagement, 2018). In the PFCE model, home visitors are supported by the program foundations that are facilitated by the leadership of program directors, content area coordinators or specialists, and the supervisors who have day to day contact with home visitors and provide home visitors with support and guidance for their work in line with local policies and procedures and fidelity to the service delivery model (Office of Head Start, 2016). Program Foundations also include systems of professional development that require home visitors to receive both training and coaching. Training is intended to include addressing ongoing topics, such as pre-

service training, and special topics that may be specific to the program (Office of Head Start, 2016). Coaching in HS/EHS is typically an ongoing process that includes a designated coach or the staff supervisor who meet with home visitors in a one-on-one or group context that is focused on current challenges faced by participating home visitor members. Reflective supervision is not required by performance standards but is broadly accepted in EHS as an additional professional development support for home visitors (West et al., 2022).

Continuous learning and quality improvement as elements of the Program Foundations function as communication and feedback tools to inform leadership and professional development as well as how the program is implemented in the program impact areas (National Center on Parent, Family, and Community Engagement, 2018). This is primarily accomplished through an annual self-assessment process including program data and monitoring as well as feedback from program staff and participating families in order to advance program planning and improvement (Office of Head Start, 2016).

While home visitors receive support from the elements found in the PFCE model's Program Foundations, the elements of the Program Impact Areas reflect their daily work. These elements are program environment, family partnerships, teaching and learning, community partnerships, and access and continuity of care for families and children (National Center on Parent, Family, and Community Engagement, 2018). These elements reflect the how home visitors interface with child and family contexts and the program contexts through service delivery. For example, the program environment is the

physical setting where home visitors work and where interactions take place to include a center or office with supervisors and co-workers, homes of participant families, and the community. As family home environments vary, the home visitors must bring the program impact element of the program environment with them through their comportment, clear and consistent communication, by fostering a sense of safety and trust with the participating family, and by demonstrating cultural and linguistic respect and responsiveness (National Center on Parent, Family, and Community Engagement, 2018).

As a relational process, these are used to partner with the family to identify family strengths and needs and set goals, as well as teaching and learning about child development and parenting practices, in order to promote a safe and nurturing home environment for the child and family (National Center on Parent, Family, and Community Engagement, 2018). Relational process also includes connections to community partners through referrals and working with their program leadership to cultivate relationships with other community resources such as libraries, nutrition services, and health care providers (Office of Head Start, 2016). At this level, the person characteristics of home visitors, their developmental histories, and education or experience influence the processes involved in the interactions with families and children who each come with their own unique personal characteristics and experiences. For example, the home visitor response to the family and child needs or the family home environment requires skills of both empathy and self-reflection in addition to knowledge

of child development and community resources in order to partner with the family in prioritizing goals, services, and other supports (Office of Head Start, 2016).

From the elements of the Program Impact Areas, home visitors use a two-generation intervention strategy to support positive child and family development listed in the Family Outcomes and the Child Outcomes sections of the PFCE. Family Outcomes include family well-being, positive parent-child relationships, families as lifelong educators, families as learners, family engagement in transitions, family connections to peers and community, and families as advocates and leaders (National Center on Parent, Family, and Community Engagement, 2018). Home visitors use rapport building, collecting application and intake information, family strengths and needs assessments, and a variety of other required child and family screenings and assessments to help the parents identify priorities for themselves and their child.

Once needs are identified and goals set a home visitor can select appropriate teaching and learning materials and strategies as well as facilitate access to community partners, often through referrals, that can support child and family needs and goals over time. (National Center on Parent, Family, and Community Engagement, 2018). These activities in turn support the PFCE Child Outcomes of child safety, health and well-being, learning and developing, engagement in positive relationships with peers and significant adults, school readiness, and success in school and life (National Center on Parent, Family, and Community Engagement, 2018). Each section of the PFCE and its elements along with the people involved and program setting are all in ongoing interaction.

Trauma Informed Care and the Parent Family and Community Engagement Framework

Childhood adverse experiences, or trauma, have been identified as long-standing issues in both in EHS-home visiting, in HS/EHS, and in early childhood home visiting more broadly (Randell et al., 2015). The first major initiative in Head Start utilizing TIC was Head Start Trauma Smart (now just Trauma Smart), a supplemental program component available at cost. Trauma Smart was initially developed by a children's psychiatric center affiliated with Head Start in 2008 as a response to 40 Head Start family member and employee deaths in three years related to traumatic events (Randell et al., 2015). The Trauma Smart approach emphasizes social and emotional safety for children, families, and staff and teaches self-regulation skills. All staff who are in contact with children including educational, support, and leadership staff receive training. Supplemental training is also available for parents or family members who care for enrolled children.

More recently, the emphasis of TIC has been integrated into the PFCE framework remaining consistent with a bioecological approach. Through the PFCE, TIC strategies are primarily leveraged through program foundations and program impact areas. These strategies are first and foremost to support home visitors and other service delivery staff in supporting children and families while providing resources that promote home-visitor and staff well-being.

As with much of the field of early care and learning, current TIC efforts for home visitors, found in PFCE program foundations, are primarily directed toward professional

development strategies. These strategies include development of training, technical assistance plans, and the allocation of resources for professional development by program leadership. Program Foundations support TIC for home visitors through professional development strategies and home visitors implement TIC strategies in the Areas of Impact through teaching and learning. Continuous learning and quality improvement strategies are related to utilizing program data to facilitate team discussions on addressing trauma and its effects in the program and community (Table 1).

Table 1

PFCE Program Foundations, Impact Areas and Head Start Recommended TIC practices

Program foundations	Program impact areas
Program leadership • Development of policies and allocation of resources for staff training, coaching, supervision, and caseloads • Coordination of teamwork across systems • Creation of opportunities for staff to come together ***Professional development*** • Staff training on recognizing and resisting trauma in families and in co-workers • Supporting knowledge of TIC through supervision and coaching • Reflective supervision for staff to check-in, debrief, and reflect • Self-care and mindfulness training ***Continuous learning and quality improvement*** Use of continuous quality improvement practices to foster team work on family, community data related to trauma and its effects	***Program environment*** • Recognition and respect for family diversity to include language and culture • Provision of information on trauma to families of enrolled children ***Family partnerships*** • Connect families to resources for trauma • Ensure that families were treated with respect in their interactions with other community organizations ***Teaching and learning*** • TIC knowledge to guide staff conversations with families and goal setting • Recognition of signs and symptoms of trauma in children and families, and how they influence teaching and learning ***Community partnerships*** • Strengthen partnerships with other trauma-informed organizations ***Access and continuity*** Engagement of current and past families to help new families orient to understanding the effects of trauma, TIC, and related opportunities to strengthen family well-being (a family outcome)

(National Center on Parent, Family, and Community Engagement, 2020, a, b)

As for family outcomes and TIC strategies, home visitors support parents in reducing stress through mental health screening and referrals, needs assessment and referrals to community resources to ensure basic needs are met, and referrals to resources to address other family functioning issues to include substance use or family violence.

Home visitors further work with parents to support child outcomes by identifying needs and supports related to social-emotional and other developmental needs that may require additional professional support. Home visitors also support and educate parents to provide their children with responsive and nurturing environments that act as a buffer to stress and trauma.

Trauma Informed Care (TIC) as an approach is consistent with bioecological theory as a systems framework as it is predicated upon secure and responsive relationships and environments across levels of context. The integration of the PFCE, Bioecological Theory, and TIC are illustrated in Table 2. Not only does TIC include an awareness of client trauma, of the children and families served in early care and learning settings, but also acknowledges that staff and administrators can also have their own trauma histories that influence their work with clients and collaboration with co-workers (Bloom, 2007). As an approach, TIC is intended to address all systems and requires intensive and extensive involvement of program leaders (Bloom, 2007) in order to realize the impacts of trauma and paths to recovery, recognize signs and symptoms of trauma in staff and clients, and respond to trauma by full integration of the knowledge of trauma, its effects, and recovery across organizational systems (SAMHSA, 2014).

The Office of Head Start has integrated TIC into its PFCE framework. The principles of TIC as summarized by SAMHSA (2014) are applied to the PFCE framework and include physical and psychological safety, organizational trustworthiness and transparency, peer support and mutual self-help, collaboration and mutuality, empowerment and voice and choice, historic and contemporary issues of gender and

culture. While SAMHSA (2014), which is the primary source of TIC strategies in the PFCE, does not specify a specific leadership approach it does reflect characteristics of Spillaine's (2012) distributed leadership model. Alternatively, Bloom's Sanctuary Model (2007) of TIC utilizes transformative leadership, while Mahon (2021) recommends Greenleaf's (1970) servant leadership model as an appropriate leadership approach to TIC. Leadership strategies in practice will be examined in the literature review.

Table 2

Integrated model of PPCT model, the PFCE Framework and PFCE-Identified Trauma-Informed Practices

Program foundations	Program impact areas	Family Outcomes	Child Outcomes
Process: Program directors support coordinators, supervisors, coaches and direct service staff, Organizational leadership supports director and other leaders. Program organization and systems of support across leadership may vary **Person:** Characteristics of program leaders **Context:** Exo system **Time:** Beginning and end of program year, federal reporting periods for enrollment (monthly) Program Information report, self-assessment, and grant (annually), Community needs assessment (every 3 years with annual update) **Outcomes:** Leaders set clear policies, procedures, and organizational goals and model effective practice; PD is co-designed and led by leaders, staff, and parents and creates a learning community; A culture of quality-leaders, staff, families and community	**Process:** Program coordinators, supervisors, and coaches supporting home visitors as they support families **Person:** Home visitor characteristics as they interface with family and child characteristics **Context:** Meso-exo systems. Home visitor success and challenges with families **Time:** Beginning and end of program year, enrollment and exit of individual families, annual performance review **Outcomes:** Welcoming program environment, program-family partnerships to achieve child and	**Process:** Home visitor supporting family outcomes that in turn support child outcomes **Person:** Family characteristics **Context:** Mesosystem Family and needs that inform goals **Time:** Beginning and end of program year, enrollment and exit, age of the parent when child was born and when enrolled in program **Outcomes:** Well-being, positive relationships, lifelong learners and educators, engagement in transitions, connected to peers and community, advocates and leaders	**Process:** Parent(s) /family supporting child outcomes **Person:** Child characteristics, developmental stage **Context:** Microsystem Child and family strengths and needs that inform both child and family goals **Time**: Beginning and end of program year, enrollment and exit, age of the child at enrollment **Outcomes:** Safe, healthy and well, learning and developing, positive relationships, school ready, successful in school and life **TIC Strategy:** Screen for social/emotional health and referrals as needed, promoting/teaching self-regulation skills, consistent routines,

Program foundations	Program impact areas	Family Outcomes	Child Outcomes
partners identify indicators of progress together and conduct continuous improvement together **TIC Strategy:** Policy alignment, allocation of resources, cross-system collaboration, training/coaching/reflective supervision on TIC and staff self-care, continuous quality improvement	family goals, support of family/parent teaching and learning, provision of access and continuity of services for children and families **TIC Strategy:** Cultural competence, information sharing with families, resource referral and follow-up, TIC knowledge guides staff conversations with families and enables recognition of trauma, strong partnerships with other trauma-informed organizations	**TIC Strategy:** Families learn about and understand the effects of trauma; current and past families help orient new families to information, families access opportunities to strengthen family well-being; caregivers receive mental health screening (depression screen is mandatory) as well as supplemental assessments for family violence and substance use; referrals from home visitor or mental health consultant when needs are identified; improved financial stability and ability to meet basic needs; access to transportation for parents and children to participate in programming; parent stress decreased while safe and nurturing relationships are increased	developmental screening and referrals as needed, promote nurturing relationships with caregivers, enriched learning environments

Chapter 3

LITERATURE REVIEW

Program supports for early childhood home visitors refer to programmatic strategies used to aid home visitor effectiveness in their role working with children and families. Program supports discussed in this project are the work environment, programmatic leadership, and how they relate to professional development (Bloom, 2007; Burrell et al., 2009; Green et al., 2019; National Center on Parent, Family, and Community Engagement, 2018; Office of Head Start, 2016). Current research suggests that the primary supports provided for home visitors rely on professional development, specifically training, coaching, and reflective supervision (Duggan, 2005; Green et al., 2019; Office of Head Start, 2016; West et al., 2018). However, recent research has shown that these strategies on their own may not be enough to assist home visitors who often work with families and children experiencing complex challenges to include trauma (Duggan, 2005; Green et al., 2019; West et al., 2018). Existing research also indicates that factors related to the work environment as well as program leadership practices may further support early childhood home visitors (Esaki & Larkin, 2013; Simpson et al., 2018; Wolf et al., 2014).

While current literature focuses heavily on professional development supports for home visitors, a smaller body of literature suggests that work environment and leadership are also important. Further the current body of that addresses how home visitors themselves view the organizational supports offered to them is also relatively small. As a result, additional research is needed regarding how home visitors perceive their work environment and program leadership in order to strengthen systems and strategies that assist the work of home visiting. Such strategies may also lead to higher levels of job satisfaction and retention as they might address challenges related to job stress and caseloads made heavy by the issues and challenges faced by children and families served (Begic et al., 2019; Gill et al., 2007; Lou et al., 2021; Sandstrom et al., 2020).

This study focuses on how Early Head Start (EHS) home visitors perceive their work environment, and programmatic leadership, and how it relates to professional development, job satisfaction, and retention. Study results provide greater clarity on how EHS program foundations can be strengthened to support home visitors through their work environment and programmatic leadership practices. Additionally, a lens of TIC and its practices is used throughout the study to interpret literature, findings, and identify strategies to help home visitors in their work with children and families. Implementing TIC as a system-wide practice has been found to help support staff who work with families and children with complex issues or their own trauma through the provision of resources to families as well as resources intended to mitigate the stress and potential secondary trauma to direct service staff like home visitors (Bloom, 2007; Holmes et al., 2015; Orapallo et al., 2021).

This literature review is in three sections. First, the primary strategy for home visitor support, professional development and its current implementation is reviewed. Second, the literature addressing the need for work environment and programmatic leadership supports *in addition to professional development* is presented. Third, the literature connecting home visitor program supports, job satisfaction, and retention is discussed. After the literature is summarized, the research questions and hypotheses are presented. While the focus of this study is on EHS-home based programs, the literature for this model as well as home visiting service delivery in general is limited. As a result, this literature review not only draws from EHS-home based findings but other evidence-based home visiting models, pre-K settings, as well as relevant examples from human services.

Background

This section discusses the context of EHS-home based as a program model and the challenges in delivering services to families who experience complex or multiple risks. First, the delivery model and the role of home visitors in serving very young children and their families is briefly described. Second, the unique context of home visit service delivery is presented. Third, the implementation challenges related to working with families experiencing multiple or complex issues are discussed.

Early Head Start serves low-income pregnant women, infants, and toddlers birth through age three and their families in a two-generation intervention model. The program also prioritizes families with an age eligible child with a diagnosed disability, foster children, and families experiencing homelessness (Office of Head Start, 2016). Early

Head Start-home based is an established Evidence Based Home Visiting (EBHV) early childhood program model (Home Visiting Evidence of Effectiveness; HOMVEE, 2016). Home visiting models like EHS-home based deliver services directly to participating families in their homes. Home visitors work with families to promote child developmental outcomes. Home visitors foster a parent's capacity to appropriately respond to their children's needs both physically and emotionally as well as help parents provide a home learning environment supportive of the child's development (Bigelow et al., 2020; Cannon et al., 2017). EHS home visitors facilitate these goals through a parent support and coaching approach that includes in-home facilitation of the parent-child relationship; education and information on child development and family well-being; strengths-based goal setting; and the provision of referrals to resources. EHS-home based has demonstrated efficacy related to child development and school readiness, family economic self-sufficiency, linkages to resources and referrals, maternal health, and positive parenting practices (HOMVEE, 2016).

Home Visiting- A Unique Context for Early Childhood Service Delivery

The nature of home visiting work is uniquely challenging. While home visitors can bring their experience and expertise directly to clients, they provide services as a guest at the home of the participant family with little control over the client's home environment or others who may be present (Simpson, et al., 2018). This adds to the emotional and physical labor of travel to and interacting with families and their very young children. There is also the administrative labor of documentation and data collection within strict time limits (Office of Head Start, 2016).

This context can result in conflicting priorities that have long been established as sources of stress for home visitors (Kitzman et al., 1998). Family priorities can conflict with the program, to include when and how families are accessed, and the limitations of the program in terms of balancing when and how child development and parent needs are addressed. Challenges of poverty and housing may also constrict the capacity of families and providers to improve the home learning environment. Within-program priorities may also conflict with one another, such as balancing the focus on child development, parental personal development goals such as education and employment, and addressing urgent or emergent issues related to basic needs—all while maintaining model fidelity (Kitzman, et al., 1998).

Complex Challenges and Home Visiting Efficacy

According to findings from the Early Head Start Research and Evaluation Project (EHSREP; Administration for Children and Families, 2002), EHS home visiting was found to be effective for families experiencing moderate levels of risk factors. However, for families experiencing high levels of risk factors programming was less effective and far more challenging for providers. Kisker and colleagues (2004) identified that families who participated in the EHSREP experienced up to four or five factors at the highest levels of risk to include receipt of welfare, unemployed or not in school/job training, lacking a high school diploma or equivalent, a single parent, or a teen parent. Families in this category were more difficult to involve in program services and were more likely to disenroll, on average, two months earlier than families with lower risks and have fewer home visits. Families experiencing high risks and who were not highly engaged did not

have any significant improvements in child or family outcomes. Families in this category who were more highly engaged with program services did have significant improvements in child development language and cognitive outcomes as well as reduced harsh discipline by parents.

The researchers also found that programs with high concentrations of families experiencing high levels of risk had weaker implementation and were in programs with either low or high staff turnover rather than programs with moderate turnover. Home visitors also struggled to balance addressing family needs with the facilitation of parent-child interaction and the provision of child development education. The researchers concluded that strong implementation was more difficult to attain for programs with high concentrations of families experiencing high levels of risk. Further, the researchers found that the work requirements of the Personal Responsibility and Work Opportunity Reconciliation Act of 1996 were a limitation for parent involvement.

Research from other EBHV program models also indicates that multiple issues within a single risk factor category experienced by enrolled families can also moderate program outcomes. For example, complex factors related to family mental health can reduce program efficacy in home visiting. Duggan and colleges (2009) conducted a study of expectant mothers and mothers of newborns enrolled in Healthy Families Alaska (part of the EBHV program model Healthy Families America) and a comparison group referred to other community-based services. Groups were randomized. Mothers were interviewed within one month of enrollment in the study and intake records collected. Follow up interviews with mothers were conducted when the child was two years old.

Parent-child observations were also conducted, and state records collected to include child welfare reporting.

The researchers found that home visiting did improve outcomes related to the home learning environment, maternal sensitivity, depression, and intimate partner violence. However, multiple maternal mental health concerns at baseline moderated outcomes. This included baseline measures of depression and high attachment anxiety *or* depression and high discomfort. When mothers experienced more than one mental health concern program outcomes were less positive. The researchers do note that their findings conflicted with prior findings but attribute this to a higher threshold for identifying depression.

A more recent study of Healthy Families Alaska (Cluxton-Keller, et al., 2014) corroborated the findings of Duggan and colleagues' 2009 work. Cluxton-Keller and associates (2014) used a similar design and measured outcomes of child cognitive development and internalizing and externalizing behaviors. The researchers found that families with mothers who had either depression or high levels of discomfort with trust at baseline benefited from the program. However, for more distressed families, depression and low trust together moderated program effectiveness.

In summary, this literature shows that effectively serving families with complex needs and issues has been a long-standing challenge in home visiting. Implementing programs according to model fidelity was more challenging when programs had higher concentrations of families experiencing higher numbers of risk factors. Such families were more challenging for home visitors to serve. Evidence suggests that layers of a

single type of risk, such as mental health, may also moderate the effects of EBHV. Finally, home visiting services create a uniquely challenging context in which services are delivered within the homes of participating families and home visitors must navigate multiple competing priorities.

Professional Development as a Home Visitor Support

The Head Start PFCE Framework identifies the strategies of program leadership, professional development, and continuous learning and quality improvement as the key program foundations (National Center on Parent, Family, and Community Engagement, 2018). Program foundations are the underlying systems that are intended to support program impact areas and in turn family and child outcomes. Among the three program foundation strategies, professional development is the central, although not a singular, strategy to implementing supports for home visitors to address the challenges that they encounter in their work with children and families, especially when applying a TIC approach. This section first identifies home visitor demand for professional development as a response to the complex challenges experienced by families. Second, notable interventions using professional development that incorporate a TIC approach in the field of early care and learning are presented. Third, interventions using a TIC approach that are specific to home visiting are discussed.

Home Visitor Demand for Professional Development

The literature in the field of early childhood home visitation identifies home visitors' requests for support and training on complex issues related to family functioning and adversity as well as their related trauma (Burrell et al., 2009; Duggan, 2005). Major

challenges identified include intimate partner violence, substance use, mental health, and family conflict. Home visitors have expressed that they struggle to address these complex and overlapping issues with families. Many home visitors find it challenging to balance addressing family functioning and maintaining the top priority of facilitating responsive parent-child relationships and providing child development education (McKelvey & Fitzgerald, 2020). As a result, much time and effort has been dedicated to training and coaching home visitors to better understand and discuss these issues with parents as well as provide referrals to families for additional services (Duggan, 2005; Green et al., 2019; West et al., 2018).

Trauma Informed Care Strategies in Early Childhood

Trauma-informed strategies to help home visitors (at the program foundations level of the PFCE) have primarily been in the form of professional development initiatives of training, coaching, and reflective supervision. From the few studies available on TIC in early childhood settings, more successful strategies also include elements that address the work environment or program leadership , but these additional strategies are often ancillary to professional development (Loomis & Felt 2020; Shamblin et al., 2016).

For example, the application of TIC in early childhood has most notably been applied and studied through a Project LAUNCH intervention for schools in rural Appalachia (Shamblin et al., 2016). This project focused on the relationship between teachers and the children in their classroom as well as the classroom environment. Teachers were provided with mental health staff to help them reflect on their experiences

and practices. Results indicated that the intervention improved teacher confidence in addressing challenging child behaviors (Shamblin et al., 2016). Additionally, the initiative improved teacher ratings of the work environment. This is an important finding as it demonstrates that professional development efforts can be connected with perceptions of the work environment as partnering with mental health providers situated in the classrooms may have created a sense of peer support for teachers.

Additional research has illustrated how TIC at the staff level focuses primarily on professional development strategies (Douglass et al., 2021; Loomis & Felt, 2020). Douglass and colleagues (2021) conducted an intervention that included learning sessions, which were followed by periods of application using continuous quality improvement. Results indicated that professional development, combined with quality improvement efforts can help both classroom and administrative staff to facilitate and coordinate more family centered communication and a more caring workplace in the form of increased empathy, empowered teacher leadership, shared leadership, and collaboration (Douglass et al., 2021). Quality improvement efforts, and the related culture of quality, likely contributed by creating a sense of collaboration and mutuality through a sense of shared decision making.

Findings by Loomis and Felt (2020), also suggest that professional development supports may be less effective on their own. The researchers conducted a study of trauma-informed training and skill development already received by Head Start classroom teachers. Skills included identifying and managing trauma-related behaviors in children and reflecting on exposure to secondary trauma from children and families

served. The researchers found that teachers with trauma-informed training only had a small but significant positive correlation with trauma-informed attitudes and a small but significant negative correlation with work-related stress (both results at $p < 0.05$). However, teachers who had received both training and coaching for skill development had large and significant positive correlation with trauma-informed attitudes and a large and significant negative correlation with work-related stress (both results at $p < 0.001$). Trauma-related attitudes are an individual's perception and characterization of trauma-related behavior and beliefs about how to respond to those behaviors (Loomis & Felt, 2020).

Loomis and Felt (2020) concluded that training on its own is helpful but not enough to support teachers. Rather, skills such as the ability to identify and respond to trauma-related behaviors *and* the ability to reflect on how exposure to vicarious trauma influences professional practice are also important in supporting trauma-informed attitudes. Skill development in this study was a form of coaching. As a result, this may be linked to the TIC principle of peer-support and mutual self-help as a way to promote trauma-informed skills and attitudes. However, other aspects that shape attitudes at an organizational level were not addressed in this study.

An exemplar for training support in early childhood, specifically in Head Start preschool settings, is the Trauma Smart program. In this intervention, staff are also trained to identify and refer children suffering from trauma for mental health interventions, such as trauma-focused cognitive behavior therapy (Holmes et al., 2015). In the classroom, a mental health consultant is available to provide coaching and

resources to classroom teachers and assistants for a child-friendly trauma-informed environment. Peer mentoring offers further reflection on applying strategies with children. The Trauma Smart model, while focused on children, also supports the view that staff can also adapt the information and strategies to support their own developmental histories of trauma or secondary stress and trauma that results from working with children and families who have experienced such adversity.

Using program evaluation data Holmes and colleagues (2015) examined the culture of quality on the Trauma Smart program, with a sample of 81 children who were referred for intensive services. These services included 12-24 weeks of therapy for the children and classroom consultation as support for staff. Among children 74% had been exposed to one or more trauma, 60% to two or more traumas, and 45% to three or more traumas. A pre-and post-intervention comparison using paired-samples *t*-tests found that classroom teachers reported a significant difference post intervention for children for improved attention, improved ability to receive instruction, reduced externalizing behavior, and reduced oppositional defiance. Parents reported similar results with a smaller significance ($p < 0.05$), for improved attention and reduced internalizing behaviors. Additionally, parents reported reduced internalizing behaviors at a small significance. Classroom environment was also assessed, but turnover in the classroom made it difficult to statistically analyze although the trends of the environment related to the quality of relationships did improve.

This study finds that for children screened for additional therapeutic intervention, training for direct service providers *and* all other support staff and administration, along

with additional supports in the classroom, and peer mentoring proved to be effective per teacher and parent reports. Again, all of these outcomes are dependent on professional development only and do not identify how other aspects of the work environment or leadership are addressed. While this seems to be a part of the systems addressed in Trauma Smart, they are not assessed, and this is a proprietary program with systems and practices added on to rather than built into HS/EHS service delivery (Holmes et al., 2015).

What can be assessed however, are staff knowledge of TIC, attitudes towards TIC and satisfaction with the Trauma Smart model (Orapallo et al., 2021) using program evaluation data collected as a self-report post-training module survey of staff, with responses per assessment ranging from 1,229 to 2,418. Satisfaction with the 10 training modules consistently exceeded 80% of participants with a mean of 92%. As for staff knowledge, a knowledge check was presented at the end of each training session as a multiple-choice quiz covering the contents of the module it followed. Average scores ranged from 85% to 97% across modules with an overall mean of 90%. Seven assessments were administered to track changes in attitudes towards trauma informed approaches with significant positive change with effect size overall (R^2=.21).

Trauma Informed Care Strategies Within Home Visiting Programs

Within evidence-based home visiting, there are also several examples of initiatives to promote TIC among home visiting programs. For example, in a summary of strategies for home visiting programs compiled by the Health Resources and Services Administration, Wisconsin's Family Foundation's Home Visiting program has applied

the National Child Traumatic Stress Network's framework for trauma informed systems. For families, strategies for support include frequent screening and identification of trauma in children and families; using a strengths-based approach to discussing trauma with families; and offering resources to families (Carione et al., 2017). Strategies for helping program staff included training for staff and supervisors, monthly group reflective supervision, and communities of practice for peer-to-peer support.

As for the evaluation of strategies applying TIC in home visiting, Region X home visiting programs funded by the federal home visiting program developed and implemented a toolkit to help home visitors discuss adverse childhood experiences (ACEs; Felitti et al., 1998) with families. Professional development included training to understand how home visitors' own ACEs influenced their interactions with families as well as reflective supervision (Green et al., 2019). The Region X initiative also attempted to address major risk factors that have long challenged home visitors by hosting a facilitated discussion to develop a toolkit for staff using a human-centered design process. The effort was initially met with resistance as some participants expressed discomfort with the toolkit development discussion.

Participating home visitors (n =38) were surveyed with follow up interviews from a subset of participants (n = 8). At the end of the workshop, most participants felt satisfied that their ideas were listened to and they were able to express them safely (98%). However, interviewees indicated that there was also some confusion as to the roles that participants and content experts should take and even the content experts seemed

confused by the design process. Evaluation of the implementation of strategies developed in the toolkit workshop was not reported.

As for an ACEs assessment toolkit (NEAR@Home; Region X ACE Planning Team, 2016), while 78% of home visitors expressed that they felt confident in using the toolkit in the activity in the home with enrolled families, only 10% of home visitors had presented the toolkit activity to all families on their caseload and 21% none of their families (Green et al., 2019). Only 3% offered the ACE questionnaire to all families and 24% to most families on their caseload. The evaluators concluded that staff would benefit from support to use the toolkit and activities with families beyond four months.

In contrast, the federally funded home visiting program in Maryland was able to assess its home visiting programs in order to develop a toolkit and training tailored to their local agencies and home visitors (West et al., 2018). The training program was assessed by examining the results of a cluster-randomized trial with seven programs in the intervention group with 30 home visitors and seven programs with 34 home visitors on a wait list. Training outcomes were assessed through home visit simulations with trained actors (so as to reduce harm) just prior to training, two weeks post training, and two months post training. Immediately at the first post-training assessment, home visitors in the intervention group performed better than those on the waitlist. However, after two months, while home visitors in the intervention group maintained their increased levels of knowledge and attitudes, the program did not demonstrate any long-term improvement of home visitor confidence nor the skills for screening, discussing, and referring on the difficult issues of substance use, intimate partner violence, and mental health.

The literature illustrates that home visitor requests for training to assist complex family needs have been heard by program leaders and met. Further, professional development, particularly through training, coaching, and reflective supervision has been the primary strategy to implement professional development using a TIC approach broadly in the field of early childhood (Douglass et al., 2021; Holmes et al., 2015; Loomis & Felt, 2020; Orapallo et al., 2021; Shamblin et al., 2016) as well as specifically for home visitors (Green et al., 2019; West et al., 2018) in order to more effectively work with families who have experienced trauma. However, the literature also suggests that professional development alone is only somewhat effective. Further, a TIC approach is intended to be a systemic and program-wide approach (Bloom, 2007; Gilkerson & Kopel, 2005; Holmes et al., 2015; Simpson et al., 2018) and professional development while important, only covers one aspect of how home visitors interact with their programs. Rather, a more comprehensive systems approach to supporting EHS home visitors is warranted.

The Need for Work Environment and Programmatic Leadership Supports

This section discusses the need for research and practice to further address the home visitor work environment and programmatic leadership levels of EHS home visiting programs. First, the risks and protective factors associated with home visiting are presented, especially as they relate to home visitors' own developmental histories. Second, research on reflective supervision, another professional development strategy is discussed, as well as the related findings and conclusions by researchers that illustrate the need to augment this support with those related to the work environment and leadership.

Finally, issues related to TIC and how leaders understand them related to the program environment are discussed.

Home Visitor Trauma and Programmatic Protective Factors

Working with families who experience protracted adversity and complex risks requires significant emotional labor (Simpson et al., 2018). The effects of family stress on home visitors manifest as secondary traumatic stress, vicarious trauma, and compassion fatigue (Boris et al., 2006; Zeanah et al., 2006). Further, consistent with findings related to social workers, home visitors have experienced higher levels of childhood trauma than the general population. ACE prevalence data from a home visitor workforce study revealed higher adverse child experience scores than the general population (Roberts et al., 2019) in the Wave II ACE Study (Merrick et al., 2017). Providers with childhood adversity have been found to be more susceptible to secondary traumatic stress, vicarious trauma, and compassion fatigue or burnout. This may lead to increased errors in decision making, compromised boundaries as either withdrawn or overly intrusive, increased frustration, and burnout (Esaki & Larkin, 2013).

Within a TIC framework, the work environment can either create risk or protective factors for staff, and in turn children and families (Bloom, 2007). Workplaces that exacerbate risk provide low wages, low staff support, and high administrative pressure. Conversely, workplaces that provide higher wages, higher staff support includes promoting self-care, trauma education, and a trauma-informed culture may promote more resilience. It is important to note that due to the nature of home visiting, staff spend much of their time with clients or in vehicles and little time directly with co-workers. Creating

time and space for support may be crucial to helping home visitors who are working with families with trauma and/or who may be dealing with a history of trauma themselves (Simpson et al., 2018). As indicated in the literature, home visitors working with families with trauma need organizational support to effectively work with families and avoid the unintended consequences of secondary stress, vicarious trauma, and compassion fatigue.

Reflective Supervision and the Work Environment

One of the approaches often recommended to help prevent and address home visitor stress, depression, and burnout is reflective supervision (Boris et al., 2006; Heller et al., 2012; Zeanah et al., 2006). Reflective supervision is also a form of professional development. It is a specialist-facilitated practice of considering personal ideas, behaviors, and emotional responses that extends beyond professional skills (Schon, 1987) in order to think about thinking and doing. Reflective supervision in the clinical setting has been found to provide clarity of decision-making for thoughts, feelings, and actions against the pressure to act in stressful situations (Simpson et al., 2018).

Reflective supervision has also been found to buffer stress and promote psychological health (Grant & Kinman, 2012). Among early care and learning professionals the ability to cope with job-related stress, manage responses of conflict in client families, and maintain positive co-worker relationships (Frosch et al., 2019), increase responsiveness and engagement with children (Amini Virmani & Ontai, 2010) as well as workplace satisfaction among home visitors (Pridham et al., 2006). However, Green and colleagues (2019) also found in the evaluation of an intervention that augmented staff training with reflective supervision, that home visitor performance was

consistently higher for home visitors whose supervisors already valued reflective supervision than those who did not. Overall, long-term performance did not change pre- and post-training intervention.

As a contrast, in an evaluation of reflective supervision in state Part-C early intervention program, researchers Gilkerson and Kopel (2005) found that providing administrative supervisors with reflective supervision, in addition to staff (i.e., a parallel process), promoted reflective practice and was associated with more effective screening and referral of children. Further, supervisors were also included in the process of problem definition and intervention design, demonstrating the importance not only of reflective supervision but inclusion in decision-making in the receipt of this mode of professional development, a form of empowerment, voice, and choice.

Further, findings from Simpson and colleagues (2018) suggest that *in addition* to reflective supervision, other variables are important for supporting services including organizational culture, a factor dependent upon program leadership including supervisors. Through qualitative interviews Simpson and colleagues (2018) found that among early care and learning professionals including home visitors, that reflective supervision was, on its own, not enough. Rather the work environment for staff also needed to be addressed. Esaki and Larkin (2013) also recommend that program directors set the tone and example for a positive work culture and that policies, procedures, and systems be further developed to promote staff self-care.

Similarly, Frosch and colleagues (2019) conducted a study of a reflective supervision program for early childhood intervention professionals. The study consisted

of pre- and post-semi structured interviews. While there were findings that reflective supervision improved work and relationship stress, the researchers identified the need for augmentation of reflective practices. In particular, the study found multiple layers of stress: personal, interpersonal, and organizational. Findings and implications are discussed level by level. At the personal level, staff experienced secondary stress in working with families. Here the researchers recommend that reflective practice should be augmented with employer-provided resources to help staff cope including access to formal mental health services such as Employee Action Programs. Further, the researchers found that the quality of co-worker relationships influenced the participation in and therefore perceived effectiveness of peer-to-peer reflective supervision. The researchers recommended that programs promote positive working relationships.

As for findings related to organizational-level stressors, supervisor to staff relationships were found to be an issue as supervisors continued to not understand the perspective of providers who raised concerns about the demands of their caseloads. In order to address organizational stressors, the researchers recommended that programs could ensure clear and consistent communication, clear and consistent sets of policies and procedures, and ensure that caseload assignments are manageable for each provider.

The Work Environment: Positive Working Relationships Through Communication and Cohesion

Communication is a structural function of organizations that operates in both vertical form, i.e., to and from directors, managers, and direct service providers as well as in lateral form across peers and within teams (Bolman & Deal, 2003). Organizational

communication is an important aspect of coordinating services in early childhood home visiting. For example, in a qualitative study conducted across six Nurse-Family Partnership home vising programs Williams and colleagues (2022) found that the key characteristics of effective collaboration with home visiting programs and healthcare included policies and systems that facilitated formal communication (to include access to records) as well as informal communication through shared physical space. This communication was further supported by shared perceptions of trust in each other, mutual respect, and value of program participants and program goals. Additionally, supportive leadership attitudes that expressed commitment to championed program partnerships were also identified as supporting collaboration.

Further it has been found that focusing on positive aspects of change in organizational communication can support a sense of cohesion as well. For example, within early childhood technical assistance systems, Douglass (2014) found that the positive communication strategies of ensuring the flow of information across a program and to its partners as well and the use of communication as coordination supported a sense of compassion and appreciation towards the organizational changes experienced by professional development providers, who, in this context are the direct service staff. These communication strategies were also found to foster a sense of agency, mutual support, and shared goals and meaning during the development of a new professional development system.

In addition to supporting the implementation of organizational change, cohesion among staff may also improve outcomes for children. Dennis and O'Connor (2013)

examined the organizational and relational organizational climate across 37 preschool centers serving children and their families who had low incomes. The researchers used multiple regression models to identify that climate was more strongly associated with classroom quality on the Early Childhood Environment Rating Scale–Revised (ECERS-R; Harms et al., 2005) than teacher-child ratios. However, it was also found that preschool teachers with less education but more experience had a stronger association with organizational climate than teachers who had more education.

Finally, regarding staff cohesion, Fitzgerald and Theilheimer (2014) found that, in a survey-based study of teachers from three large Head Start Centers (n = 67), a sense of cohesion (trust and respect and shared organizational values) and clear communication were important to working as a team in the context of professional development activities. The researchers also found that professional development could also be used to purposefully promote teamwork by program managers. This included collecting input from staff on professional development topics and strategies, demonstrating an understanding of professional needs, constant communication about staff needs, and creative problem solving to use professional development address staff needs. Further, organizational climate reinforced negative perceptions of teamwork and the value of professional development when leadership used program requirements as a barrier to stifle staff input.

Programmatic Leadership as a Support for Work Environment and Professional Development

The examples illustrated above not only demonstrate the importance of communication and cohesion for the early childhood and home visitor work environment, but also demonstrate that supportive leadership is also integral. Leadership facilitates the circumstances under which good communication and staff cohesion exist. Leadership strategies include demonstrating commitment of the organization at the highest levels, championing communication and cooperation (Williams et al., 2022), and listening to staff feedback. These strategies provide opportunities for cohesion and teambuilding using professional development as a means to do so (Fitzgerald & Theilheimer, 2013).

In addition to these aspects of programmatic leadership, early childhood professionals in direct services and in leadership positions have identified additional facets that are important to programmatic leadership. In a descriptive study of principals and teachers of kindergarten through second grade (Boardman, 2014), both teachers and principals identified that trust and support were the single most important characteristics, followed only by ensuring that teachers had access to the resources needed for their job. The teachers, but not principals, also identified help for improving teacher practice through providing ongoing professional development, as well as positive leadership presence, or taking time to interact with teachers and children with the goal of strengthening a sense of school community. Teachers also expressed the importance for principals to make them feel equally valued for their work.

As for facets of leadership that are specifically valued in Head Start, Gonzalez (2015) identified ideal leadership practices by both directors and teachers in a mixed methods study of survey and semi-structured interviews. Gonzalez analyzed results through a transformational leadership framework. The study identified and found that staff motivation was most important for directors. This meant recognizing the skills that staff already had, further supporting the building on those skills, and providing verbal and written praise. Directors second identified a clear and shared vision that is developed with staff, used to set program goals, and maintained in partnership with staff. Third for directors was connection and collaboration to work towards goals with staff and understand that leadership is not a job that must ultimately be shared in order to achieve those goals.

As for Head Start teachers, their ideal leadership practices related to encouragement as the most important leadership practice (Gonzalez, 2015). This was considered the best means of staff motivation to feel good about the work that they accomplish and enjoy coming to work, i.e., job satisfaction. The visibility of directors in the program was the second most important skill. This meant visibility by being present in the classroom and providing constructive criticism to teachers and to ensure that directors are aware of the work being done in the classroom. Teachers also expected directors to lead by example. Finally, teachers prioritized the provision of professional development as an important aspect of leadership in order for teachers to meet program goals, personal professional development goals, and learn new ideas and strategies for classroom instruction.

Programmatic Leadership and TIC Awareness

While leadership is clearly valued in early childhood and in Head Start programs, one reason that TIC practices at the program foundations level have been found to be limited may be that staff at different levels of the organization have different experiences with TIC. For example, Kusmaul and colleagues (2015) in a cross-sectional survey-based study, examined how social workers experience the different principles of TIC within their organizations. The researchers found that experiences of TIC differed across staff levels, with administrative staff (i.e., program leaders) experiencing the highest levels across the TIC dimensions and support staff the lowest levels (except for physical safety). Similarly, the researchers found that experiences across TIC dimensions were higher across staff with advanced degrees compared to those with a bachelor's degree or lower. It should be noted that some support and direct service staff had advanced degrees, however, when organizational role/position was tested controlling for education, the significance in the differences across TIC experiences remained.

Further, program leadership may not be aware that TIC does not just occur at the level of the client/child and their family but also needs additional attention at the staff level, both likely due to a lack of realization of a difference in organizational experience but also due to a focus on clients without a full understanding of parallel process. Wolf and colleagues (2014) conducted focus groups and key informant interviews with social workers to better understand what policies and programs social work agencies had in place to uphold the principles of TIC. The researchers found that the primary focus for TIC was for program participants. Across systems physical safety was heavily

emphasized, but program staff were unaware that TIC could or should be as a systems-wide parallel process (Bloom, 2007) especially in terms of other dimensions to include emotional safety, trustworthiness and transparency, and empowerment, voice, and choice. Processes were in place for clients, but staff study participants struggled to think of examples at the staff level of specific policies, procedures, or experiences that reinforced TIC.

Overall, implementation of TIC does have implications for programmatic leadership. Middleton and associates (2015) examined the implementation of the TIC process across five social service agencies through semi-structured interviews with program leaders. The researchers found that program leaders felt that with the addition of TIC to their programs, they were responsible to be role models both in order to help teach TIC to staff but also to create buy-in for staff to adopt TIC behaviors. One participant noted that attitudes and behaviors at the top of an organization will be viewed as the expectation for staff rather than the program's written policies. Program leaders also viewed their role as one of ensuring that staff were included in each step of the TIC implementation process as well as performing TIC by listening to staff to help them solve a professional issue or attain better work-life balance.

A successful example, studied by Elwin and colleagues (2017) examined program leadership and employee engagement of a TIC implementation in a juvenile corrections facility through qualitative interviews. In this case, a TIC model was adopted as an effort to address organizational dysfunction. The TIC model was implemented through on-site trainings across the organization, steering and core teams were formed, signs with TIC

principals posted, staff and residents were required to carry safety plans, and managers were required to model behavior to staff and residents. After the first year of implementation, resident handbooks were also updated, community meetings included discussion on TIC principles, and incentive programs developed to reward staff and residents who modeled TIC behaviors. After the second year of implementation, resident treatment plans were also revised to reflect how TIC principles were being used.

These strategies can be useful to reduce secondary stress and trauma in staff, especially if they have their own childhood trauma. Again, however, it should be noted that in early childhood and human services literature the focus is on the trauma histories of clients without also integrating the trauma histories of the staff. Human services professionals generally have ACEs higher than the general population (Candib, 2012; Tink et al., 2017; Weinreb et al., 2010). Home visitors specifically have ACEs above the general population as identified in a Region X workforce study (Alaska, Idaho, Oregon, and Washington) which found that 67% had experienced two or more ACEs, 50% had experienced three or more ACEs, and alarmingly, 36% had experienced four or more ACEs (Roberts et al., 2019). These results are well above the Wave II ACE study (Merrick et al., 2017) in which 38% of respondents (who were primarily middle class) had two or more ACEs, but usually not directly addressed.

There is little research on staff/provider developmental histories of trauma such as ACEs as it is applied to practice. Reflective supervision (discussed earlier) can help home visitors, supervisors, and leaders to begin to integrate how they respond to families by reflecting on the sources of their own responses to the family, but this is not yet well

studied in early childhood home visiting. The Region X innovation project did ask staff to assess their own ACEs as a part of their project, in order to help them understand how they relate to and respond to trauma in families (Green et al., 2019). When surveyed, 83% of participants found it helpful in their practice in working with enrolled children and their families.

In their qualitative study, Elwin and colleagues (2017) in juvenile corrections found that while there was initial resistance to TIC implementation as it was perceived as "too soft" of an approach, over time, the processes became meaningful to staff and program leadership. Pre-existing efforts or behaviors used by staff and management that mirrored TIC principles were also named and as a result, conferred with value. Due to the nature of juvenile corrections, improvements in emotional safety for staff and residents also improved physical safety with fewer incidents of violent outbursts. Staff-manager relationships also improved through more open communication, which was followed by trust and collaboration.

As a systems-wide approach, TIC promotes leadership that encourages empowerment, voice, choice, and mutuality, similar to distributed leadership (Spillane, 2012). Staff felt that their managers listened to them when they expressed a need or an idea for program improvement. Program managers also benefited in their leadership from the TIC model, through promoting the model, listening to staff, and applying mutual problem-solving strategies. Program managers and also felt empowered as they felt a sense of trust from their director to do their jobs. These strategies clearly reflect Mahon's (2021) recommendations, but also illustrate additional strategies such as clear

communication, acknowledging staff efforts past and present to promote TIC practices, as well as sharing power.

These results suggest that a focus on professional development alone may not be enough to support home visitors in working with families with adverse experiences and complex needs. In particular, these findings raise the issue of the role of home visitor perceptions of the work environment and programmatic leadership in addition to professional development. These findings further suggest that supporting home visitors' competencies also means addressing work environment and programmatic leadership in a manner that mirrors the responsiveness of parents to children and home visitors to parents and families through a parallel process (Saul & Jones-Harden, 2009). It is also important to note that there is also, generally, a lack of awareness that TIC is intended for all levels of an organization, but when the responsibility to set an example is embraced by program leadership, multi-level success in implementing the TIC framework as a protective factor across organizations, to include EHS home-based, may be possible.

Home Visitor Support Strategies, Job Satisfaction, and Retention

Home visitor perceptions of the work environment and programmatic leadership have also been found to be related to job satisfaction (Gill et al., 2007; Lou et al., 2021). The relationship between home visitors' job satisfaction and retention is also discussed in the literature but as a concept rather than a statistical association. Much of the home visiting literature focuses on the relationship between stress and job satisfaction and stress and intention to leave or remain in a home visiting program. First, this section discusses findings of home visitor emotional exhaustion over time and job satisfaction.

Second, the challenge of stress and heavy caseloads is discussed. Finally, findings identifying possible strategies related to mitigating stress and promoting retention are discussed.

Regarding the program environment, in a longitudinal study of EHS home visitors who were a part of the second wave of federal funding for EHS (beginning in 1996), Gill and colleagues (2007) found that ongoing job-related stress led to emotional exhaustion and was significantly related to job satisfaction, specifically their job satisfaction related to the interpersonal climate at time two and three, which were about one year apart. The researchers also found that over time home visitors reported significantly higher levels of emotional exhaustion at time point two and three as compared to time point one. The number of home visitors reporting emotional exhaustion also rose from 30% at time one, to 86% at time two, and then declined to 60% at time three. The researchers attribute the peak at time two to a program restructuring but levels of emotional exhaustion never returned to time one levels. Further, Gill and colleagues (2007) found that while home visitor knowledge of child development increased over time, supervisor-rated competence was curvilinear, peaking at time two with a slight decrease at time three. However, the overall trend from time one to three indicated an upward trajectory.

Further, from the national home visitor workforce study, Sandstrom and associates (2020) found that following just behind low salaries and wages, the top reason for home visitors leaving their positions was work-related stress due to burnout or heavy caseloads. Some home visiting models, such as Parents as Teachers, attempt to mitigate this problem through weighted caseloads based on the challenges faced by each enrolled

family. However, EHS home-based does not weight caseloads, only providing home visitors a range of 10-12 families for their caseload, but a program must maintain full enrollment of funded slots (Office of Head Start, 2016). It should also be noted that the federal home visiting program, while funding home visiting models that weight caseloads, places pressure on state grantees to ensure that all local home visiting programs maintain full enrollment of funded slots.

Heavy caseloads of home visitors in the federal home visiting program were examined by researchers Begic and colleagues (2019) through semi-structured interviews and quantitative surveys at two time points. Home visitors were located in a large western state within counties identified with the highest total risk scores to include poverty, maternal and child health outcomes, substance use, family violence, employment, and completion of a high school education. EHS home-based programs were included in the study. The provision of reflective supervision was a requirement for all programs in this study.

The researchers found that two-thirds of home visitors experienced secondary stress or burnout between the two time points of the study. One quarter of home visitors expressed their intention to quit. In addition to the high levels of needs of families and children served, stress and burnout were also attributed to negative work cultures and the lack of understanding of how the trauma of children and families served may influence their work and intersect with their own developmental histories. Open and honest communication with a trusted and supportive supervisor was found to be a protective factor against stress, burnout, and intention to quit. Work schedule, flexibility, and

benefits were also identified as protective factors. Similarly, Sandstrom and colleagues (2021) found that home visitors identified that having consistent yet flexible schedules aids in retaining home visitors.

Begic and colleagues (2019) also discuss the importance of reflective supervision to address secondary stress. Based on the TIC model, and current integration with the Head Start PFCE model, home visitors can be equipped to recognize how their history of trauma and the trauma of families affects them (National Center on Parent, Family and Community Engagement, 2020b). Further, professional development practices of reflective supervision can be used to support ongoing home visitor reflection of experiences. However, the consistency and quality of reflective supervision is also important (Begic et al., 2019; Eaves et al., 2021) as is the support of supervisors and program leaders of direct service staff in obtaining this and other job-related support.

There is also evidence that other retention strategies may also include a sense of peer support as well as inclusion in decision-making. In a national workforce study of home visitors Lou and colleagues (2021) found that program features that were associated with home visitor retention included the assignment of peer mentors to home visitors as well as inclusion of staff on decisions related to the physical work environment. Home visitors were more likely to leave their job when it was reported they had little input into program policies and procedures and more likely to stay when they felt included. Program policies and procedures identify how a program will meet the requirements of service delivery model developers as well as funders in a way that is tailored to the local context of children and families in the community. (In the case of

EHS-home based, the Office of Head Start fills both roles). While the development of policies and procedures is considered a leadership activity it directly affects how home visitors are able to conduct services with families.

This literature illustrates that the work environment, especially stress, is associated with home visitor job satisfaction and sense of work-related efficacy. Further, stress may also reduce the effectiveness of professional development over time. Home visitor inclusion in program leadership decisions may also influence job satisfaction particularly in terms of including home visitors in making program decisions, i.e., TIC principles of communication, collaboration and mutuality, and empowerment, voice, and choice (SAMHSA, 2014) as identified in the theory chapter. Open and honest communication with program leadership may also help to moderate the effects of work-related stress as well. However, there are also structural challenges related to federal policies that emphasize full enrollment that pose a challenge to managing heavy caseloads.

In summary of this literature review, overall, it is important to note that the literature does not discount professional development as a TIC strategy to aid home visitors who work with families experiencing complex challenges as it promotes communication of program expectations and best practices. Rather, professional development is only one of several strategies. Regarding work environment, the literature suggests that cohesion, through practices such as reflective supervision mitigates stress levels due to burdens of emotional and administrative labor, but other supports are needed. Program leaders can also promote positive work environment factors. However,

it is important that leaders understand and embrace TIC as a whole-system approach and set an example to ensure implementation at every level of the organization. Findings also suggest that quality improvement and shared decision making related to leaders sharing power are also important, as is the management of heavy caseloads and ensuring consistent quality access to supports that help home visitors manage work related stress.

Research Questions and Hypotheses

Although studies of home visitors consistently demonstrate common concerns and challenges in serving families, managing administrative burdens, and experiencing stress, home visitors are not a homogenous group (Lou et al., 2021). Specifically, research suggests that organization conditions, including work environment, programmatic leadership, and the quality of professional development play a role in home visitor performance, job satisfaction, and possibly retention. As a result, each home visitor may perceive their experiences with their work environment, programmatic leadership, and the quality of professional development differently. Second, while home visitor experiences are conceptually related to retention, there is little quantitative data on how these experiences or perceptions of the home visitor experience of program foundations relates to retention through statistical analysis. Third, it is important to not only identify the existence of TIC strategies but how they are both perceived and experienced by home visitors in order to identify and build upon areas of strength and to identify and address areas of opportunity for improvement.

This project is comprised of two quantitative studies (Phases I and II) and a third explanatory sequential mixed-methods design (QUANT + QUAL; Leech & Onwegbuzie,

2009) in Phase III utilizing a survey and semi-structured interviews, with results integrated and interpreted. Integration the findings of all three phases and implications are then discussed. Local EHS program partners have both assisted in developing the research questions for this project and aided in interpretation of results at each stage. Findings expand the literature of home visitor program supports beyond professional development to include home visitors' own perceptions of work environment, programmatic leadership, and their relationship to job satisfaction.

The research questions (See Table 3) first address home visitor perceptions of program foundations (professional development, work environment, and programmatic leadership) through a person-centered approach. The research questions also attempt to address another gap in TIC literature at the staff level, the application of TIC principle of addressing race by identifying what home visitor characteristics predict profile membership. Unfortunately the same cannot be done for gender in this study (the majority of home visitors were identified by researchers in the study as female and unfortunately no data has not been collected on trans or nonbinary providers). The study will also seek to identify a statistical association between home visitor experiences and program retention. Finally, the study will collect qualitative data to explain quantitative findings. Also, in Table 3 are the hypotheses and the anticipated findings of the study.

Table 3

Research Questions and Hypotheses

Research Question	Hypotheses
Phase I: Research Question #1: How are home visitor perceptions of program supports (work environment and programmatic leadership) similar and different across home visitors?	
RQ.1a) Do home visitors group into profiles based on perceptions of program supports? (work environment and programmatic leadership)	H.1a) It his hypothesized that home visitors' profiles of work environment, program leadership, and job satisfaction will increase or decrease together, while stress will increase or decrease inverse to the other variables of cohesion, communication and leadership.
RQ.1b) What home visitor characteristics predict profile membership? ((personal characteristics, program characteristics, and professional development)?	H.1b) It is hypothesized that home visitors in different profiles will have different characteristics across personal characteristics, program characteristics, and professional development experiences of home visitors.
Phase II: Research Question #2: How does home visitor job satisfaction relate to perceptions of work environment, programmatic leadership, and retention?	
RQ.2a) How do job satisfaction, perceptions of the work environment, and stress group together (excluding leadership)?	H.2a) It is hypothesized that in this isolated model perceptions of work environment and job satisfaction will increase together across profiles while stress will move inversely across profiles to the other variables.
RQ.2b) Does retention predict profile membership in profiles of job satisfaction, perceptions of work environment, and stress?	H.2b) It is hypothesized prior program retention will predict profile membership.
RQ. 2c) How do job satisfaction, perceptions of program leadership, and stress group together (excluding work environment)?	H. 2c) It is hypothesized that in this isolated model perceptions of program leadership and job satisfaction will increase together across profiles while stress will move inversely across profiles to the other variables.

Research Question	Hypotheses
RQ.2d) Does retention predict profile membership in profiles of job satisfaction, perceptions of program leadership, and stress?	H.2d) It is hypothesized that program retention will predict profile membership.
Phase III: Research Question #3: What experiences explain local-level EHS home visitor perceptions of program supports and job satisfaction?	
RQ.3a) What experiences explain local-level EHS home visitor perceptions of program supports (professional development, work environment and programmatic leadership)? RQ.3b) How are local-level home visitor experiences of program supports related to job satisfaction?	Qualitative research places the emphasis on research questions and not hypotheses. Best practices for qualitative research do not include the use of hypothesis. Rather an iterative process was used to uncover answers to research questions (Cresswell & Plano Clark, 2018).

Note: Presence or absence of coaching is selected as one of the predictors of profile membership as in the 2018 Baby FACES, 44.8% of home visitors indicated that they did not receive coaching.

Constructs

The key constructs for the study are work environment, programmatic leadership, and job satisfaction. Each key construct contains elements of SAMHSA's (2014) key principles of TIC. Additional constructs are described in the covariate subsection.

Work Environment

The construct of the work environment is based on the home visitor's perception of organizational climate to include communication, cohesion, and stress as sub-constructs. The construct of communication includes the TIC principles of psychological safety in terms of the openness of discussions related to program issues and confirm that staff have in speaking up about questions and concerns (SAMHSA, 2014). Communication also reflects the TIC principles of trustworthiness and transparency

(Fallot & Haris, 2006; SAMHSA, 2014) as they are related to the quality of communication and the perception that staff suggestions are taken into consideration by program leadership (Institute of Behavioral Research, 2005).

The sub-construct of cohesion includes the TIC concept of peer support and mutual self-help (SAMHSA, 2014) and collaboration (Fallot & Harris, 2006) in that there is a perception that co-workers have a good relationship with each other, engage in teamwork, mutual responsibility for the workload, and a sense that help is available when needed. The sub-construct of stress, or in reality, its opposite, is related to the TIC concept of empowerment, voice, and choice (SAMHSA, 2014). Low stress in home visitors in this regard reflects a higher sense of effectiveness in work and workload and lower levels of work-related frustration and strain (Institute of Behavioral Research, 2005).

Job Satisfaction

The construct of job satisfaction is related to home visitor job attitudes, and in regard to the TIC framework is most reflective of the outcome of higher staff morale and lower turnover (Bloom, 2007). Job satisfaction includes placing high value and pride in work, co-workers, and the organization, as well as a sense of satisfaction and desire to remain with the organization (Institute of Behavioral Research, 2005).

Programmatic Leadership

As a construct, programmatic leadership overlaps with the TIC concepts of collaboration and mutuality through the sharing of power (Fallot & Harris, 2006; SAMHSA, 2014) and in terms of treating home visitors as equals. In leadership,

collaboration and mutuality are further emphasized through a sense of choice and control. The TIC concepts of safety and trustworthiness are present in concern for home visitor welfare, helping home visitors, and providing feedback that is constructive criticism (Cannon et al., 2020; Hoy et al., 1991). Clear and constructive feedback also reflects communication, collaboration, and mutuality. Finally, in this clear and constructive feedback, and the perception of the relationship is the TIC dimension of empowerment and voice and choice in the recognition of staff strength and skills (Fallot & Harris, 2006).

Professional Development

The construct of professional development encompasses tangible efforts to support staff through the delivery of training and coaching. Training is reflective of the TIC principle of trustworthiness and transparency (SAMHSA, 2014) in communicating expectations of program requirements and best practices and how to carry them out. Coaching as a professional development activity is reflective of peer support and mutual self-help. There are also elements of empowerment voice and choice (SAMHSA, 2014) as home visitors reflect with their coaches on how to navigate individual work challenges with the children and families that they serve. In regard to this study, professional development is assessed through home visitors' perceptions of how well training and coaching help them do their jobs more effectively.

Chapter 4

RESEARCH DESIGN AND METHODOLOGY

This project is presented in three phases. In Phases I and II, quantitative data is used from a national data set on EHS home visitors. The third phase includes both quantitative and qualitative data from a local sample and used a mixed methods explanatory sequential design (Leech & Onwuegbuzie, 2009). Phase III was intended to understand the application of concepts and constructs found in Phases I and II from a local program context (See Table 4). There were two local home visiting program partners from the Mid-Atlantic who were recruited at the outset of the project. Program leaders were consulted on the development of research questions as providing an on-the-ground program perspective to the interpretation of results for both Phases I and II. This feedback also informed the development of the survey and semi-structured interview questions for Phase III. Home visitors from both programs were then recruited to participate in the surveys and semi-structured interviews in Phase III. This allowed for the integration of a local-level program perspective across the entirety of the project (Schoonenbloom, 2018).

Phases I and II were drawn from a national data set, the 2018 Baby FACES (Cannon et al., 2020) while Phase III, drew from quantitative surveys of home visitors from local programs and then examining their experiences though qualitative semi-structured interviews. The project process is further summarized in Figure 2 which illustrates the steps for each phase.

Table 4

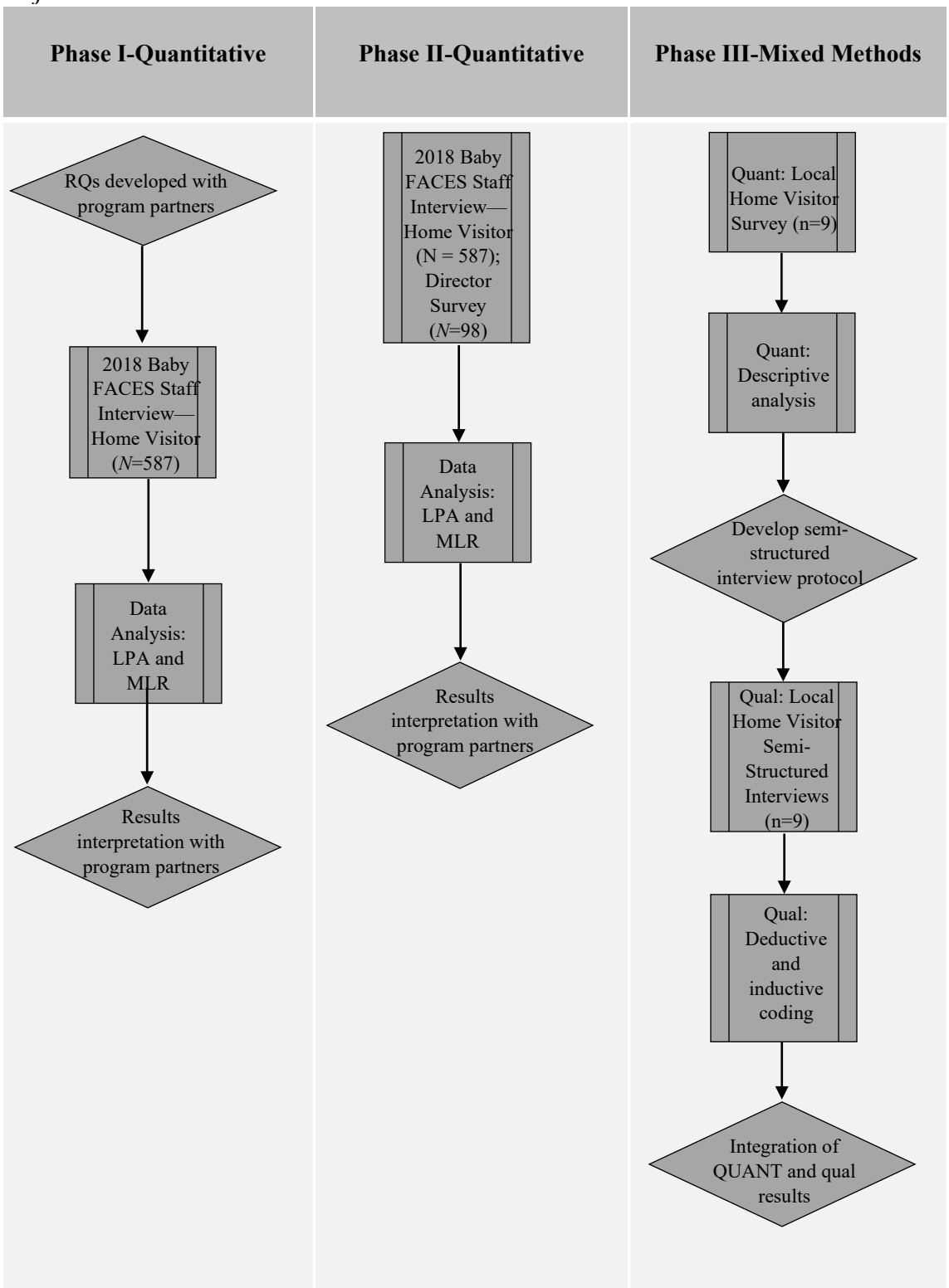
Research Design and Questions

Research Questions	**Data Sources**	**Analysis Plan**
Phase I: Research Question #1: How are home visitor perceptions of program supports (work environment, and programmatic leadership) similar and different across home visitors?		
RQ.1a) Do home visitors group into profiles based on perceptions of program supports (work environment, and programmatic leadership)	Baby FACES Staff Interview—Home Visitor (*N*=587), collected Spring 2018	Latent profile analysis (LPA)
RQ.1b) What home visitor characteristics predict profile membership? (personal characteristics, program characteristics, and professional development experiences)		Multinominal logistic regression
Phase II: Research Question #2: How does home visitor job satisfaction relate to perceptions of work environment, programmatic leadership, and retention?		
RQ.2a) How do job satisfaction, perceptions of the work environment, and stress group together (excluding leadership)?	Baby FACES Staff Interview—Home Visitor (*N*=587) and Director Survey (N =98), collected Spring 2018	Latent profile analysis (LPA)
RQ.2b) Does retention predict profile membership in profiles of job satisfaction, perceptions of work environment, and stress?		Multinominal logistic regression

Research Questions	Data Sources	Analysis Plan
RQ. 2c) How do job satisfaction, perceptions of program leadership, and stress group together (excluding work environment)?		Latent profile analysis (LPA)
RQ.2d) Does retention predict profile membership in profiles of job satisfaction, perceptions of program leadership, and stress?		Multinominal logistic regression
Phase III: Research Question #3: What experiences explain local-level EHS home visitor perceptions of program supports and job satisfaction?		
3a) What experiences explain local-level EHS home visitor perceptions of program supports (professional development, work environment and programmatic leadership)? 3b) How are local-level home visitor experiences of program supports related to job satisfaction?	Home visitor surveys using 2018 Baby FACES questions from Phase I and II and Semi-structured interviews with home visitors collected Project Quarter 3 Year 1(Spring 2023),	Descriptive analysis and Coding and thematic analysis

Figure 2

Project Methods Flow Chart



Measures

Phases I and II utilized validated assessments to address key constructs through the Texas Christian University Survey of Organizational Functioning (TCU SOF; Institute of Behavioral Research, 2005), and a modified Organizational Climate Description for Elementary Schools (OCDQ-RE; Hoy et al., 1991). Both assessments appeared in the Home Visitor Survey in the Baby FACES 2018 data set. Further, the construct of professional development for Phases I and II used the Baby FACES questions regarding home visitor perceptions of the effectiveness of training and coaching that they received (See Appendix A: Secondary Data Questions and Measures). Home visitor data for this iteration of the Baby FACES survey was collected in Spring 2018 and is cross-sectional. Technical adequacy data for quantitative data measures are discussed in the subsections below. Phase III measures were a local-level home visitor survey, mirroring the questions used to collect the Baby FACES data and applied to the proposed project in Phases I and II (See Appendix B: Home Visitor Survey). Results of Phases I and II as well as the local home visitor survey were used to develop a semi-structured interview protocol (See Appendix C: Home Visitor Interview Protocol). The responses to the survey underwent descriptive analysis.

Work Environment

In order to understand the program environment as a work environment, 2018 Baby FACES data from three subscales from the TCU SOF (Institute of Behavioral Research, 2005) of cohesion, communication, and stress were used. All subscales are on a five-point Likert scale. Cohesion contains six items ($\alpha = 0.88$), communication contains

5 items (α = 0.84), and stress contains four items (α = 0.84). The questions from the TCU SOF appear in the Staff Interview—Home Visitor, Section C: Organizational Climate of the 2018 Baby FACES.

Job Satisfaction

Job satisfaction is also derived from the 2018 Baby FACES data from the TCU SOF subscale of satisfaction. This subscale is also on a five-point Likert scale and contains five items (α = 0.82). This subscale also appears in the Staff Interview—Home Visitor, Section C: Organizational Climate of the Baby FACES home visitor survey. Additionally, job satisfaction at the home visitor level was assessed with home visitor retention at the program level.

Programmatic Leadership

In order to understand home visitor perceptions of program leadership, OCDQ-RE (Hoy et al., 1991) response data from the 2018 Baby FACES was used. The OCDQ-RE was originally developed for elementary schools and revised for early care and learning settings (Dennis & O'Connor, 2013). In the home visitor survey of Baby FACES the researchers modify further and the term "principal" is changed to "supervisor" and "teacher" to "home visitor" (Cannon et al., 2020). All items are presented as four-point Likert scales and the scores are added across the nine items of the assessment (α = 0.96). The adapted OCDQ-RE appears in Staff Interview—Home Visitor, Section: C Organizational Climate of the Baby FACES survey.

Covariates

For Phase I, covariates were divided into three main groups: personal characteristics, program characteristics, and professional development experiences. For Phase II, covariates were focused on home visitor retention but significant results with meaningful odds ratios from Phase I results were also revisited.

Personal Characteristics

These covariates included demographic data of race and ethnicity, education, and experience. For Phase I and II these were derived from the Staff Interview—Home Visitor, Section F: Demographics in the Baby FACES survey. Additional co-variates were home visitor stress and depression (Center for Epidemiologic Studies Depression Scale-Revised [CESD-R; Eaton et al., 2004], α=0.89), appearing in Section E: Health of the home visitor survey.

Program Characteristics

This is geographic location served by the program (urban and rural) drawn from the Program Director Survey dataset but determined by the Baby FACES researchers from the zip codes from each program's Program Information Report data.

Professional Development

Professional development consists of questions related to the receipt of coaching, perceptions of effectiveness of training, and receipt of reflective supervision. These include one variable on the receipt of coaching, identified by skip logic patterns for home visitors who do not have a coach or receive a coach on questions related to coaching effectiveness, (questions B10, B11, B12, and B14) as nearly half of home visitors

indicated that they did not receive coaching. A single question about the effectiveness of training is asked regarding its usefulness. This question is also on a four-point Likert scale (B14, 1=very useful to 4=not at all useful). Professional development questions appear in Staff Interview—Home Visitor, Section B. Staff Development and Supervision of the 2018 Baby FACES. The presence of reflective supervision was identified by the question addressing reflective supervision training to all supervisors (question D1.a) found in Director Survey, Section D: Staff Development and Training. As reflective supervision is not addressed in the home visitor survey, this question served as a proxy to determine its presence at the program level.

Home Visitor Retention

The home visitor retention covariates are used exclusively in Phase II as profile predictor variables. All questions come from the Program Director Survey, Section E. Data Use and Staffing and are responses to questions E11 difficulty of hiring highly qualified home visitors (from 1=Very Difficult to 4= Not at All Difficult), E12 difficulty retaining highly qualified home visitors (from 1=Very Difficult to 4= Not at All Difficult), E13 director estimated average years a home visitors stay in their role, E14 the number of home visitors had left the role since September 2017, and E15 the number of home visitors were new since September 2017.

Local Home Visitor Survey Data

Survey questions in Phase III of the project mirrored the questions from the 2018 Baby FACES survey questions from which Phase I and II data measures and covariates are derived. (See Appendix A). In addition to these questions, the researcher developed

additional questions for the survey to further examine the complexities of home visitor stress by asking about workloads through the number of families on a caseload and the hours dedicated to home visiting, paperwork, and service coordination; as well as sources of stress as personal, administrative, or the needs of families; and safety strategies used by the program. Coping strategies were also assessed. The structure and format of reflective supervision and coaching were further assessed by asking about the frequency of each, who conducted, and if formats were group or one-on-one. Finally, job satisfaction was further assessed related to satisfaction with pay, benefits, and the home visitor's intention to leave their job.

Phase I Sample, Data Collection, and Analysis

Data Source

The data for Phase I was drawn from the 2018 Baby FACES study, a comprehensive cross-sectional set of national data on EHS programs with home-based (home visiting), center-based, family child home, and mixed service delivery programs (Cannon et al., 2020). The intent of this data set is both to inform research, program planning, and practice. The full dataset includes data from 137 participating programs with three interviews (parents, classroom teachers, and home visitors), three child reports (by parents, teachers, and home visitors), a director survey, and two sets of classroom observations (CLASS and Q-CCIIT). The 2018 Baby FACES data was collected by Mathematica and funded by the Office of Planning, Research, and Evaluation (OPRE) in the Administration for Children and Families (ACF), in the U.S. Department of Health and Human Services. This study focuses on home visitor data with some supplemental

data from the director survey. The Staff Interview (Home Visitor) covers six major topical areas: Program Climate, Staff Development and Supervision, Organizational Climate, Language, Health, and Demographics. This study draws variables from each section of the Staff Interview (Home Visitor) with all measures listed above.

Data Collection

Data from Baby FACES 2018 national data set is stored through the Child and Family Data Archive managed by the Institute for Social Research at the University of Michigan (ICPSR). While the archive provides some descriptive statistics though the codebook, all data for further analysis is restricted. Data was accessed through submission of a Restricted Data Use Agreement as well as submission of a project description, IRB approval, data security plan, a roster of all project staff who are allowed to access the data, and confidentiality pledges from all project staff who had access to the data. All data was stored on a secure external hard drive stored in a locked filing cabinet while not in use in accordance with the Restricted Data Use Agreement. An annual report of publications and graduate student information was required, and submitted, to maintain permission to access the data.

Data Screening and Cleaning

Prior to analysis data was screened and cleaned. This included linking the Staff Interview (Home Visitor) data set to the Director Survey Data set by matching program identification numbers in SPSS. After the data sets were linked, it was discovered that there were 34 home visitors who were from programs offering only center-based services. While the methods of Cannon and colleagues (2020) regarding Baby FACES

home visitor data collection indicate that all home visitors should be a part of a home-based service delivery, the data, however, indicated otherwise. As a result, precaution was taken by excluding home visitors who were matched to the center-based only in further analysis.

Additionally, the OCDQ-RE Supportive Leadership subscale was only provided at the individual item level. As a result, the OCDQ-RE Supportive Leadership items were calculated per the OCDQ-RE instrument scoring guidelines (Hoy, n.d.) and added to the dataset. As for coaching for home visitors, it was discovered that only 44% of the sample actually received coaching. This was indicated by a "skip logic" that appeared in the data across responses to coaching questions. A "skip logic" code indicates that a question is not applicable and so was not asked rather than simply missing from the data. As a result, a new dummy coded indicator variable for home visitors who did and did not receive coaching was also created.

The covariates of education and race/ethnicity each had sub-categories that contained too few participants for effective analysis on their own for multinomial logistic regression (MLR; Steyerberg, 2008). Further, the repository for 2018 Baby FACES data, the Institute for Social Research (ICPSR) data agreement recommends an event per variable of ≥ 10 to ensure confidentiality in the reporting of results. In the race and ethnicity variable, the American Indian/Alaska Native category removed as there were 0 responses in the final sample used in the analysis after home visitors in center-based only programs were removed. This left the categories of White, non-Hispanic; Black, non-Hispanic; Hispanic/Latino; Multiracial, non-Hispanic; and Other, non-Hispanic. Primary

language was consolidated from English, Spanish, and Other into dummy coded categories of English as a First Language and English as a Second Language due to the small number of "Other" responses. As for education, the original variables were: Less than a High School Diploma; High School Diploma/Equivalent; Some vocational/Technical school but no diploma or some college courses but no degree; Vocational/Technical Diploma; Associate degree; Bachelor's Degree; Graduate School or Professional School but no Degree; Professional Degree - Masters, Doctorate, or Other. These variables were consolidated as follows in Table 5:

Table 5

Recoded 2018 Baby FACES data

Original Data	Recoded data
1=Less than High school diploma	1=High School Diploma/Equivalent or less
2=High school Diploma/Equivalent	
3=Some vocational/Technical school but no diploma or some college courses but no degree	2=Some vocational/Technical school but no diploma or some college courses but no degree
4=Vocational/Technical Diploma	3=Vocational/Technical Diploma or Associate degree
6= Associate degree	
7=Bachelor's Degree	4=Bachelor's Degree or higher
8=Graduate school or professional school, but no degree 9=Professional Degree - Masters, Doctorate, or Other (Medicine/ND; Dentistry/DDS; Law/JD/LLB; Etc.)	

After the sample was refined, it was analyzed for missing data in SPSS using a Missing Variable Analysis (MVA) protocol (Tabachnick & Fidel, 2019). Only the Supportive Leadership subscale had missing data above 5%. As for the expectation-maximization correlation from Little's MCAR test (missing completely at random), the

results were Chi Square = 68.595, DF=44, p= 0.10 indicating data was not missing completely at random. An examination of the separate variance t-tests again only indicated significance for the OCDQ-RE_S subscale and the TCU SOF-ST subscale (p = 0.032) indicating data was missing not at random. Missing data was addressed as a part of the R3STEP LPA protocol (Asparouhv & Muthén, 2014; Vermunt, 2010).

Missing data was addressed in the profile analysis process itself discussed below in the home visitor profiles section. An R3STEP LPA (Asparouhv & Muthén, 2014; Vermunt, 2010) through the application of a full information maximum likelihood (FIML) construct (Asparouhv & Muthén 2014; Edwards, et al 2015) in step one and multiple imputation in steps two and three (Asparouhv & Muthén, 2014; Vermunt, 2010), per the R3STEP LPA protocol to address the missing data in the supportive leadership subscale.

After missing data was assessed, the variables for the profile analysis were more closely examined through a Pearson-correlation (Table 6). Correlational analysis is typically used in LPA to screen out variables that are highly correlated ($r \geq 0.8$) and as they run the risk of not converging during profile analysis. While all variables had a strong and significant correlation, they were acceptable for analysis.

Table 6

Correlational Analysis of Measures for Profile Analysis (Phases I and II)

	M	*SD*	*N*	1	2	3	4	5
1. Cohesion	0.02	0.98	538	1				
2. Communication	0.00	1.00	539	.63**	1			
3. Stress	0.01	1.00	539	-.44**	-.57**	1		
4. Job Satisfaction	-0.01	1.00	537	.63**	.61**	-.42**	1	
5. Supportive Leadership	-0.02	1.00	487	.44**	.66**	-.42**	.53**	1

** Correlation is significant at the 0.01 level (2-tailed). *Note*: All variables are *z*-scored

Sample

The Baby FACES data is nationally representative of the EHS program (n = 137) with an average of six home visitor participants per program. This study utilized the home visitor survey dataset (N = 587). Only home visitors from home-based (n = 94) and mixed (n = 458) service delivery programs were included in Phase I of this study. The vast majority of participants identified as women (97.6%) with 1.8% identifying as men, and 1.1% with a missing response. Participants identified English as their first language (72.1%) and 27.5% spoke Spanish or Other languages. (Other languages was too small to include on its own and was combined with Spanish to create dummy coded English as a Second Language variable). There was not a majority race/ethnicity, but most identified as Hispanic/Latino(a) (47.6%), followed by White, non-Hispanic/Latino(a) and Black, non-Hispanic/Latino(a) (9.6%) home visitors. As for home visitors who were multi-racial or identified as other non-Hispanic/Latino(a) comprised the smallest groups 4.1% together.

The majority of the EHS home visitors included in the study held a bachelor's degree or higher (54.0%) followed by an associate degree or technical certificate (25.4%). The majority of home visitors (83.0%) were a part of mixed service delivery EHS programs (n = 458). Mixed service delivery programs in EHS are defined as programs that provide both home-visiting and center-based care. Among those left in the sample delivery programs, 56.0% had home visitors who received coaching and 82.2% had reflective supervision available to them. Availability of reflective supervision is derived from the Director Survey. Home visitors were predominately serving families in urban or suburban settings (77.5%). On average EHS home visitors responding to the survey had worked as a home visitor for six years but in EHS for just over seven. Finally, average depression screening scores using the CESD-R total score were at 5.51 points, but the range was 53 points indicating a broad range of experiences. Demographic information is detailed in Table 7.

Table 7

Demographics of Home Visitors

Variable	%	N	Mean	SD	Range
CESD-R total score			5.51	6.88	53
Number of years worked as a home visitor			6.07	6.34	42
Number of years working in EHS			7.38	7.01	42
Race					
White, non-Hispanic	38.6%	213			
Black, non-Hispanic	9.6%	53			
Hispanic/Latino	47.6%	263			
Multiracial, non-Hispanic	1.8%	10			
Other, non-Hispanic	1.8%	10			
Missing	0.5%	3			
Gender					
Female	97.6%	539			
Male	1.30%	7			
Missing	1.10%	6			
Education					
High school diploma or equivalent or less	4.50%	25			
Some College or technical school	15.6%	86			
Associate degree or technical certificate	25.4%	140			
Bachelor's degree or higher	54.0%	298			
Missing	0.50%	3			
Primary language					
English	72.1%	398			
Spanish or other	27.5%	152			
Missing	0.40%	2			
Program type					
Mixed service program	83.0%	458			
Home-based only program	17.0%	94			
Program location					
Rural	22.5%	124			
Urban or suburban	77.5%	428			
Home visitors receive any coaching					
Yes	56.0%	309			
No	44.0%	243			
Home visiting supervisors receive reflective supervision training					
Yes	82.2%	454			
No	13.9%	77			
Missing	3.80%	21			

Data Analysis

The first phase sought to examine how perceptions of the work environment, job satisfaction, as well as perceptions of program leadership grouped into profiles and their subsequent compositions. As a result, the work environment variables of cohesion, communication and stress, along with job satisfaction as well as the variable of supportive leadership were used in the analysis in order to answer RQ1a.

A person-centered approach to analysis was used in Phases I and II of the project. Person-centered approaches (i.e., profile, class, and cluster analysis) are considered a departure from the traditional variable-centered approach in that it identifies patterns and differences across individuals (Cook et al., 2012; Meyer & Morin, 2016). Rather than simply identifying directionality (i.e. regression), a person-centered approach analyzes different measures applied to participants to identify homogenous subgroups based on score patterns *and* the size of those subgroups within the larger sample (Geiser, 2013). Further, individual differences can be explained by differences in profile membership as well as additional analysis using MLR with the selected profile analysis solution. More traditional methods such as factor analysis, in contrast to profile analysis, are concerned with how scores vary across people. In other words, more traditional forms of analysis are concerned primarily with directionality of variation while profile analysis is concerned with a taxonomy of variation (Glutting et al., 1992) but can also address directionality. The purpose of the person-centered approach is consistent in understanding the purpose of this study in how home visitors perceive their work environment and leadership. This is theoretically consistent with the person-centered

parallel process approach found in this study in HS/EHS practice as previously discussed in Chapter 2: Theoretical Frameworks. The use of person-centered analysis in home visiting has primarily been focused on parents and families (Cook et al., 2012) with broader use in human resource literature related to workplace retention (Meyer & Morin, 2016). The identification of patterns or variation within a group can aid in the development and delivery of support be they for families or for workers.

In this case, a person-centered approach fits with a larger system of parallel process to individualize the support for home visitors receive from their work environment and leadership much as children, parents, and families receive individualized programmatic supports. Specifically, a latent profile analysis (LPA) using an R3STEP LPA protocol (Asparouhv & Muthén, 2014; Vermunt, 2010) was used to analyze Phase I data for RQ.1a. As suggested by the name, the R3STEP LPA protocol consists of three parts. First, the profile analysis is set up and run in MPlus repeatedly to generate a number of possible profile solutions. Once the profile data is analyzed for the selection of the best possible solution, the second step is an intermediate step between the profile analysis and the MLR in which previously identified missing data is further addressed using multiple imputation. As a third and final step the MLR is run with the imputed data. LPA is selected as the measures of concern are continuous and Likert-scale data. Further, the data is weighted and LPA can accommodate the weights of different types of data whereas cluster analysis cannot (Hancock & Mueller, 2013).

Several methods were used to evaluate the results to include Akaike's information criterion (AIC) and Bayesian information criteria (BIC). Once a profile solution was

selected the profile composition was examined. Missing data was addressed through the use of an MVA protocol (Tabachnick & Fidel, 2019). This was followed by the Full Information Maximum Likelihood technique. In order to answer RQ1b, predictive characteristics of each profile were identified through MLR using the covariate categories as a part of an R3STEP LPA process (Asparouhv & Muthén, 2014; Vermunt, 2010). In the R2STEP model first the LPA is identified, second each participant is assigned to their most likely profile, and third an MLR is conducted in order to identify predictors of profile membership. Data was analyzed using MPlus8.

Phase II Sample, Data Collection, and Analysis

Data Collection

As in Phase I, data for Phase II was drawn from the Baby FACES 2018 national data.

Data Screening and Cleaning

Data used for profile analyses was previously screened and cleaned in Phase I of this study. Additional screening and cleaning was conducted for the retention variables used in the MLR to answer research questions 2)RQ2 b and RQ2)d. This data was from the director's survey and included. Data was analyzed in SPSS using an MVA protocol (Tabachnick & Fidel, 2019). Several of the additional variables had missing data above 5%. These were director ratings of: difficulty of hiring highly qualified home visitors, retaining highly qualified home visitors, director estimated average years a home visitor stays in their role, how many home visitors had left the role since September 2017, and how many home visitors were new since September 2017. Missing data was addressed as

a part of the R3STEP LPA protocol (Asparouhv & Muthén, 2014; Vermunt, 2010) which uses multiple imputation for Step 2 to apply to the MLR in Step 3.

Sample

The sample of home visitors for Phase II of the project also came from the Baby FACES 2018 home visitor data (n = 587) (Cannon, et al., 2020) which is discussed above in the Phase I sample, data collection, and analysis section.

Data Analysis

For Phase II, two additional R3STEP LPA protocols were conducted. Phase II further explored job satisfaction by isolating it with home visitor perceptions of their program environment as a work environment and stress in one profile analysis. The variables for this LPA were cohesion, communication, stress, and job satisfaction (answering RQ.2a). Further, retention variables were examined as a possible predictor of the selected profile solution (answering RQ.2b) using MLR in a 3STEP LPA process (Asparouhv & Muthén, 2014; Vermunt, 2010). The retention variables are difficulty of hiring highly qualified home visitors; retaining highly qualified home visitors; director estimated average years home visitors stay in their role; how many home visitors had left the role since September 2017; and how many home visitors were new since September 2017. A second MLR model of the significant variables from Phase I were also examined (level of education and perceptions of the usefulness of training).

Similarly, perceptions of supportive leadership were also isolated with job satisfaction and stress in an LPA. The variables in this LPA were supportive leadership, stress, and job satisfaction (answering RQ.2c). Again, retention variables as predictors

were for the subsequent profile solution using MLR in a 3STEP LPA protocol (answering RQ. 2d). The retention variables are difficulty of hiring highly qualified home visitors; retaining highly qualified home visitors; director estimated average years home visitors stay in their role; how many home visitors had left the role since September 2017; and how many home visitors were new since September 2017. A second MLR model of the significant variables from Phase I were also examined (level of education and perceptions of the usefulness of training). Data was analyzed using MPlus8.

Phase III Sample, Data collection, and Analysis

Sample

The sample of participants for Phase III was drawn from two local EHS-home based program partners in the Mid-Atlantic region of the United States. The two programs provided an email list of home visitors ($N = 14$), of which 64% participated ($n = 9$). All nine home visitors participated in both the survey and semi-structured interview. On average respondents had worked as home visitors for 5.3 years with a range of 0 to 17 years of experience and in EHS in general for an average of 6.9 years with a range again of 0 to 17 years. The largest racial group of home visitors was White non-Hispanic at 55.6%, all respondents identified as female (100%), and most spoke English as a first language (77.8%). The majority of home visitors had a bachelor's degree or higher (77.8%) and an early childhood certification (54.5%). Drawing from the semi-structured interviews, all but one home visitor indicated that they felt that their education and prior professional experience had prepared them for their role in home visiting, ranging from their experience in early childhood education to human services, to working with adults

in customer-facing jobs. Additionally, home visitors completed the CESD-R (Eaton et al., 2004). Results indicated a mean score of 8.11 with scores ranging from 3 to 18 (the cut point for the CESD-R is a score of 16). See Table 8 for details.

Table 8

Local Home Visitor Demographics

Variable	%	N	Mean	SD	Range
Number of years worked as a home visitor			5.3	5.68	17
Number of years working in EHS			6.9	5.63	17
Center for Epidemiologic Studies Depression Scale - Revised (CESD-R) total score *(out of 60, cut score of 16)*			8.1	4.78	15
Race					
White, non-Hispanic	55.6%	5			
Black, non-Hispanic	22.2%	2			
Hispanic/Latino	11.1%	1			
Multiracial, non-Hispanic	11.1%	1			
Gender					
Female	100%	9			
Male	-	-			
Age					
36-40 years	22.2%	2			
41-45 years	33.3%	3			
46-50 years	-	-			
51-55 years	22.2%	2			
Missing	22.2%	2			
Education					
High school diploma or equivalent or less	-	-			
Some College or technical school	-	-			
Associate degree or technical certificate	22.2%	2			
Bachelor's degree	55.6%	5			
Master's degree or higher	22.2%	2			
Early Childhood Certification					
Yes	66.7%				
No	33.3%	6			
		3			
Primary language					
English	77.8%	7			
Spanish or other	11.1%	1			
Missing	11.1%	1			

Data Collection

Data for Phase III was collected from home visitors in partner EHS-home based programs via a survey that mirrors the questions used for the 2018 Baby FACES study used in Phases I and II. This included the validated instruments of the TCU SOF and the OCDQ-RE as well as questions related to home visitor perceptions of professional development and the covariates discussed in the measures section of this proposal. Additional researcher-created questions were developed from the results of Phases I and II as well as feedback from local level program partners on the interpretation of those results. Specifically, additional questions were added related to better understanding participant background, to include participant age; the types of stress that they experienced, related to complex family needs, administrative tasks, and personal stress; and what they personally did to mitigate work stress as well as supports received from supervisors and co-workers to mitigate work-related stress. The data was a sample of convenience collected in survey form via the online platform Qualtrics. All responses were stored on a secure server in a password protected file. All participating home visitors who completed the survey received a $30 virtual gift card. In addition to the survey $100 was provided as an honorarium to partnering local programs for each year of their participation. Data for Phase III was collected from home visitors who completed the local-level survey (n = 9).

A semi-structured interview protocol (Appendix C) was developed based on the findings from the survey and the interpretation of results from Phases I and II. The interviews were conducted via a recorded Zoom session, each taking approximately 45

minutes to 1 hour. Recordings and transcripts from Zoom were downloaded and cleaned. Each recorded session and their transcripts were stored on a secure server in a password protected file. In addition, the Head Start Performance Standards (Office of Head Start, 2016) and policies and procedures of participating programs were collected to support the interpretation of survey and semi structured interview results. While primary measures in the study used in Phases I, II, and the Phase III survey were used for a-priori coding, memos were created for each interview throughout the transcription cleaning process to identify emergent sub themes and expand upon the codebook.

Data Analysis

The third phase of the project consisted of home visitor surveys and home visitor semi-structured interviews. Program policies and procedures were also collected and reviewed in order to interpret, clarify, and create recommendations from the results. Surveys were distributed to all home visitors across the two program partners for the proposed project ($N = 14$) with a 64% response rate ($n = 9$). Survey results were analyzed as descriptive data in order to both identify interview participants and refine the semi-structured interview, and tailor individual interviews to participants. The survey results, along with the results of Phases I and II were used to develop semi-structured interview questions for home visitors. As the Phase I and II data do not represent the effects of Covid-19 on perceptions of the work environment, program leadership, and especially job satisfaction, the semi-structured interviews also asked participants about their perceptions and experiences before and after the pandemic.

Phases I and II and feedback on their results from the local home visiting program partners provided a strong set of a-priori (inductive) codes. Sub-codes were developed through a deductive process of memo writing during the interview, transcription, and coding stages, creating a "hybrid approach" (Fereday & Muir-Cochrane, 2006; Quinn et al. 2016) to the coding process. As a result, structural coding was used to analyze the semi-structured interviews. The nine home visitors who completed the survey were recruited to participate in the interview and all 9 responded. As with the surveys the interview participants were a sample of convenience. NVivo was used to analyze all interviews and three transcripts were double coded. Meeting with program partners to interpret the data served as a member check (Roller, 2019). The integration of Phase III quantitative and qualitative results is presented in a pillar integration joint display (Johnson et al., 2017) that is in Chapter 7: Phase III: Results with further integrative narrative in Chapter 8: Discussion.

Chapter 5

PHASE I: RESULTS

Introduction

This chapter presents the results of the Phase I analysis addressing the following research question: *RQ1) How are home visitor perceptions of program supports (professional development, work environment, and programmatic leadership) similar and different across home visitors? RQ1a) Do home visitors group into profiles based on perceptions of program supports (work environment, and programmatic leadership)? RQ1b) What home visitor characteristics predict profile membership (personal characteristics, program characteristics, and professional development)?*

This chapter also provides a brief summary of Phase I-specific methods that were fully described in Chapter 4: Research Design and Methodology. This is followed by the process of data screening and cleaning, the final sample for this phase and results for each research question.

Summary of Methods

As detailed in Chapter 4, Research Design and Methodology, this first phase of the study used quantitative analysis of home visitor interview data (Staff Survey—Home Visitor) from the 2018 Baby FACES (Cannon et al., 2020) with additional variables

from the 2018 Baby FACES Director Survey. Research questions for this phase were developed in partnership with two local EHS programs. Research questions were answered using an LPA with an R3STEP process.

The measures used in Step 1 of the R3STEP Process (the LPA) were the program environment as a work environment, to include communication and cohesion subscales from the TCU SOF (Institute for Behavioral Research, 2005). From this same tool come the sub scale scores of job satisfaction and stress. Programmatic leadership is also used from a modified supportive leadership subscale from the OCDQ-RE (Hoy et al., 1991) with the role "principal" changed to "director." The second research question is answered through Steps 2 and 3 of the R3STEP LPA process in which an MLR is conducted with covariates. This analysis had three covariate models: Personal characteristics (race, ethnicity, English as a second language, level of education, years of experience in EHS, years of experience as a home visitor, and CESD-R depression score [Eaton et al., 2004]); Program characteristics (urban or rural geographic location); and Professional development experiences (receipt of coaching, perceptions of the effectiveness of training, and receipt of reflective supervision).

Sample

Among participating programs (n = 137) in the 2018 Baby FACES data collection, six home visitors were sampled from each program that provided home-based services (N = 611), with a 96% participation rate (n = 586; Cannon et al., 2020). Among the home visitors who participated in Baby FACES 2018, the majority were female (98%), White non-Hispanic/Latinx (73%), Hispanic/Latinx (52%), and speak English as

their primary language (73%). However, a majority also speak a language other than English (53%). Regarding experience and education, the highest percent of home visitors in the sample held a bachelor's degree (45%) and a majority had between 0 to 5 years of experience (63%) as a home visitor (Cannon et al., 2020).

Phase I Results

Home Visitor Profiles

In order to address *RQ1a) Do home visitors group into profiles based on perceptions of program supports (work environment, and programmatic leadership)?* the first step of the R3STEP LPA process was conducted. This was the first of three LPAs. Two through seven classes were analyzed in order to detect patterns in home visitor perceptions of program environment as a work environment and leadership. As items were included from two measures, the TCU SOF (Institute for Behavioral Research 2005) and the OCDQ-RE (Hoy et al., 1991), variables were *z*-scored prior to analysis to enable variables to converge and allow for interpretability once a solution was selected (Bulotsky-Shearer et al, 2012). Missing data from the OCDQ-RE supportive principal/director scale was addressed in this phase through conducting a Full Information Maximum Likelihood process as a part of the analysis (Asparouhov & Muthén 2014; Edwards et al., 2015). Profile solutions were estimated by evaluating the statistical indicators of AIC, BIC, SSBIC, entropy, and LMR p-values (Table 9).

Table 9

Phase I Fit Statistics for Home Visitor Data for the First Latent Profile Analysis

Model and Profile	Count	Proportion	Mean AIC	Mean BIC	SSBIC	Entropy	LMR test (*p*)
Two-Profile			6750.10	6819.12	6768.33	0.81	-3753.49
1	175	0.32					(0.01)
2	377	0.68					
Three-Profile			6459.39	6554.29	6484.46	0.81	-3359.05
1	76	0.14					(0.87)
2	253	0.46					
3	223	0.40					
Four-Profile			6372.69	6493.47	6404.59	0.82	-3207.70
1	28	0.05					(0.50)
2	88	0.16					
3	187	0.34					
4	249	0.45					
Five-Profile			6312.29	6458.95	6351.02	0.82	-3158.35
1	18	0.03					(0.38)
2	83	0.15					
3	53	0.10					
4	201	0.36					
5	198	0.36					
Six-Profile			6247.63	6420.17	6293.20	0.82	-3122.14
1	15	0.03					(0.71)
2	145	0.26					
3	58	0.11					
4	127	0.23					
5	156	0.28					
6	51	0.09					
Seven-Profile			6213.68	6412.10	6266.08	0.83	-3083.82
1	49	0.09					(1.00)
2	29	0.05					
3	16	0.03					
4	147	0.27					
5	125	0.23					
6	28	0.05					
7	158	0.29					

In order to aid in examining the output, the AIC and the adjusted BIC (SSBIC) were plotted into a scree-type test (Haughton et al., 2009) in which the fit statistic is plotted against the number of latent classes and the plots are examined for a leveling off in the curve of the line. The analysis of the AIC (Figure 3) suggested a three-profile or a six-profile solution, with the strongest "elbow" at a three-profile solution. The analysis of the SSBIC (Figure 4) also suggested a three-profile or a six-profile solution, with the strongest "elbow" at a three-profile solution.

Figure 3

Phase I Mean AIC Scree Test by Number of Profiles for the First Latent Profile Analysis

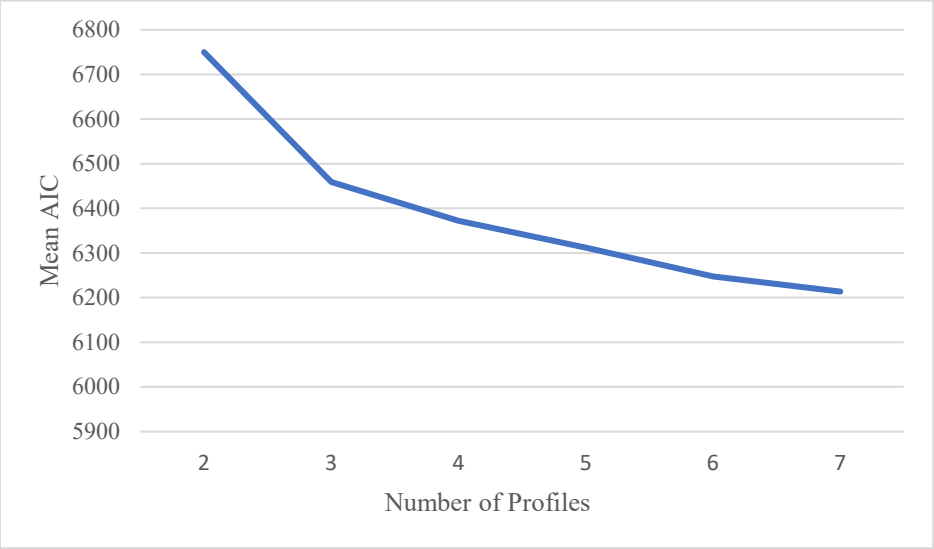


Figure 4

Phase I Mean SSBIC Scree Test by Number of Profiles for the First Latent Profile Analysis

An examination of the entropy statistic indicated that a seven-profile solution would be the best fit (0.83), however, all of the solutions were above the minimum cut value of $\geq .80$ recommended by Geiser (2013). The *p*-value for the Lo-Mendell-Rubin test (LMR; Lo et al., 2001) was only significant at the two-profile solution. A significant *p* value from the LMR indicates the model with the larger number of groups (*k* classes) should be preferred over the model with the smaller number of groups (*k*-1 classes; Nylund et al., 2007). In addition to the results of the fit statistics, the percentage of home visitors within each profile solution was also considered. Only the three-profile solution had all three groups at or above 10%. Further, the three-profile solution was the most parsimonious in terms of interpretability. As a result, the three-profile solution was selected.

The Three-Profile Solution

A three-profile solution was selected (Figure 5) and each profile was given the following names: Profile 1, was named *High Stress-Negative Perceptions* (14%); Profile two was named *Medium Stress-Neutral Perceptions* (46%); and Profile 3 was named *Low Stress-Positive Perceptions* (40%). The specific *z*-scores and for each profile and their comparison with the overall *z*-scores are depicted in Table 10.

Figure 5

Latent Profiles of EHS Home Visitor Perceptions of Work Environment and Leadership for the First Latent Profile Analysis

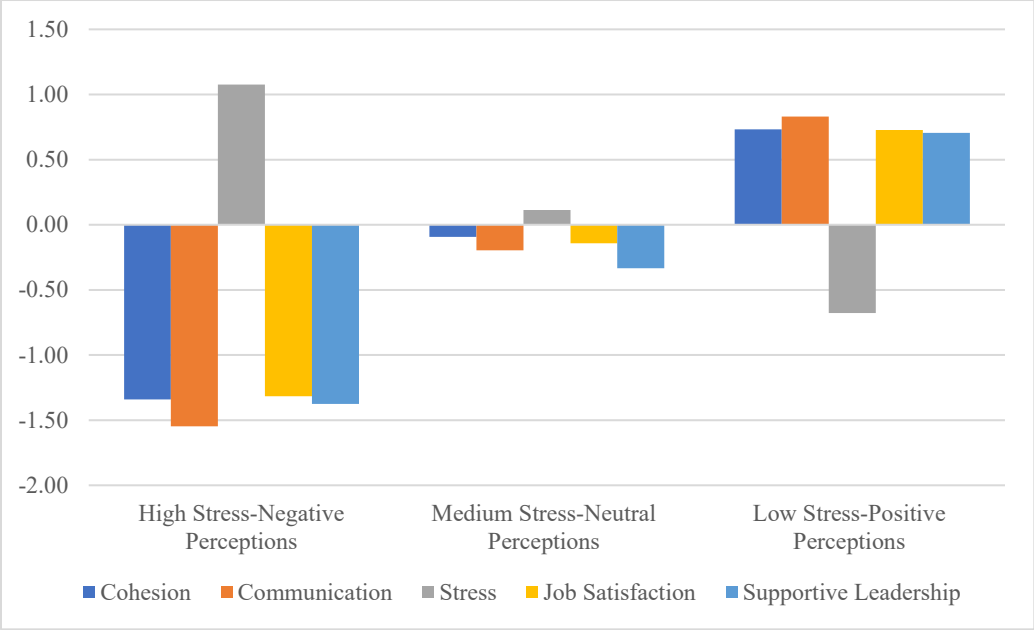


Table 10

Phase I Means and Comparisons for Profiles for the First Latent Profile Analysis

Variable	Overall Sample M(SE)	**Profile 1** High Stress-Negative Perceptions M(SE)	**Profile 2** Medium Stress-Neutral Perceptions M(SE)	**Profile 3** Low Stress-Positive Perceptions M(SE)
Cohesion Subscale Z-score	0.07(0.92)	-1.34(0.19)	-0.09(0.08)	0.73(0.08)
Communication Subscale Z-score	0.04(0.97)	-1.55(0.11)	-0.20(0.12)	0.83(0.08)
Stress Subscale Z-score	-0.08(0.05)	1.08(0.09)	0.11(0.10)	-0.68(0.08)
Job Satisfaction Subscale Z-score	0.05(0.90)	-1.32(0.22)	-0.14(0.07)	0.78(0.07)
Support Subscale Z-score	-0.04(0.96)	-1.38(0.10)	-0.33(0.12)	0.71(0.06)

The largest profile group was Profile 2, the *Medium Stress-Neutral Perceptions* (46%) group whose scores hovered closest to the *z*-score created mean with cohesion , communication, and job satisfaction as perceptions of the work environment hovering above the zero-line while stress was just below. Perceptions of cohesion and stress, however, did not have significant *p*-values. As for perceptions of supportive leadership, this also hovered above zero. The second largest profile group was Profile 3, the *Low Stress-Positive Perceptions* (40%) group, which carried a low mean for stress compared to the average but had high means for other perceptions of the work environment of cohesion, communication, and job satisfaction, while also carrying a high mean for perceptions of supportive leadership. Finally, the smallest group, Profile 1 *High Stress-Negative Perceptions* (14%) shows a level of stress above average while all other work environment perceptions and perceptions of supportive leadership are below average.

Profile Predictors

In order to address *RQ1b) What home visitor characteristics predict profile membership (personal characteristics, program characteristics, and professional development)?* three MLR models were conducted to examine differences in profile membership. The R3STEP procedure (steps two and three) were conducted. Model 1 analyzed differences in home visitor personal characteristics (race, ethnicity, language, years of experience in EHS, years of experience as a home visitor, education, and depression levels). Model 2 analyzed differences between the program setting of urban vs. rural. Model 3 analyzed differences in professional development engagement and perceptions (perceptions of the usefulness of training, receipt of coaching, receipt of reflective supervision). Variables that may predict profile membership were then examined using MLR.

Profile Predictors for Model 1: Personal Characteristics

In Model 1, (Table 11) home visitor personal characteristics, only formal education was found to be both significant and have a meaningful odds ratios. The most consistent result for education across all profile comparisons was an associate degree. Home visitors were 3.15 times more likely to be in Profile 3 than in Profile 1 (OR = 3.15, p = 0.00, 95% CI [2.76, 3.59]. Home visitors were also 2.10 times more likely to be in Profile 2, *Medium Stress-Neutral Perceptions* than in Profile 1 (OR = 2.10, p = 0.00, 95% CI [1.65, 2.67]). As for comparing Profiles 3 and 2, home visitors with an associate degree were 1.50 times more likely to be in Profile 3 than in Profile 2 (OR = 1.50, p = 0.02, 95% CI [1.07, 2.10]).

As for a bachelor's degree, home visitors were more likely to be in Profile 1, *High Stress-Negative Perceptions*, than in any other profile. Specifically, home visitors with a bachelor's degree were 1.07 times more likely to be in Profile 1 than in Profile 3, *Low Stress-Positive Perceptions* (OR = 1.07, $p = 0.00$, 95% CI [1.02, 1.11]). Home visitors with a bachelor's degree were also 1.12 times more likely to be in Profile 1 than in Profile 2, *Medium Stress-Neutral Perceptions* (OR = 1.12, $p = 0.00$, 95% CI [1.05, 1.18]). For a bachelor's degree, comparisons of Profiles 2 and 3 did not yield significant results.

As for home visitors with some college, they were 3.25 times more likely to be in Profile 2, *Medium Stress-Neutral Perceptions* than home visitors in Profile 1, *High Stress-Negative Perceptions* to have some college or technical school (OR = 3.25, $p = 0.01$, 95% CI [1.33, 7.91]).

Profile Predictors for Model 2: Program Characteristics

Model 2 addressed program characteristics, specifically home visitor program geography. However, none of the results were found to be statistically significant. Please see Table 12 for the details of Model 2 results.

Table 11
Effects of Model 1 Covariates on Profile Membership

Profile	Covariate	Coefficient	S.E.	*P*-Value	Odds Ratio (1/OR)	95% confidence intervals	
Profile 1: High Stress-Negative Perceptions vs. Profile 3: Low Stress-Positive Perceptions	Race						
	Black, non-Hispanic	-0.18	0.49	0.72	0.84	0.32	2.21
	Hispanic/Latino	-0.65	0.88	0.46	0.52	0.09	2.9
	Other	-0.09	0.8	0.91	0.91	0.19	4.38
	Education						
	High school diploma or equivalent or less	-0.87	0.56	0.12	0.42	0.14	1.25
	Some college or technical school	-0.87	0.50	0.08	0.42	0.16	1.11
	Associate degree or technical certificate	-1.15	0.07	0.00	0.32	0.28	0.36
	Bachelor's degree or higher	0.06	0.02	0.00	1.07	1.02	1.11
	CESD-R depression screener total score	0.20	0.55	0.72	1.22	0.41	3.57
	English as a second language	0.02	0.03	0.64	1.02	0.95	1.09
	Years working as a home visitor serving infants and toddlers	0.01	0.03	0.74	1.01	0.95	1.07

Profile	Covariate	Coefficient	S.E.	*P*-Value	Odds Ratio (1/OR)	95% confidence intervals	
	Years working in EHS	-0.03	0.04	0.45	0.97	0.90	1.05
Profile 3: Low Stress-Positive Perceptions vs. Profile 1: High Stress-Negative Perceptions	Race						
	Black, non-Hispanic	0.18	0.49	0.72	1.19	0.45	3.14
	Hispanic/Latino	0.65	0.88	0.46	1.92	0.34	10.74
	Other	0.09	0.80	0.91	1.09	0.23	5.25
	Education						
	High school diploma or equivalent or less	0.87	0.56	0.12	2.39	0.80	7.12
	Some college	0.87	0.50	0.08	2.38	0.90	6.28
	Associate degree or technical certificate	1.15	0.07	0.00	3.15	2.76	3.59
	Bachelor's degree or higher	-0.06	0.02	0.00	0.94	0.90	0.98
	CESD-R depression screener total score	-0.2	0.55	0.72	0.82	0.28	2.42
	English as a second language	-0.02	0.03	0.64	0.99	0.92	1.05
	Years working as a home visitor serving infants and toddlers	-0.01	0.03	0.74	0.99	0.93	1.05
	Years working in EHS	0.03	0.04	0.45	1.03	0.95	1.11

Profile	Covariate	Coefficient	S.E.	*P*-Value	Odds Ratio (1/OR)	95% confidence intervals	
Profile 2: Medium Stress-Neutral Perceptions vs. Profile 3: Low Stress-Positive Perceptions	Race						
	Black, non-Hispanic	-0.1	0.36	0.78	0.91	0.45	1.82
	Hispanic/Latino	0.17	0.73	0.81	1.19	0.29	4.97
	Other	-0.09	0.78	0.91	0.92	0.20	4.27
	Education						
	High school diploma or equivalent or less	-0.15	0.43	0.73	0.86	0.37	2.02
	Some college	0.31	0.39	0.43	1.37	0.63	2.94
	Associate degree or technical certificate	-0.40	0.17	0.02	0.67	0.48	0.94
	Bachelor's degree or higher	-0.05	0.03	0.08	0.96	0.91	1.01
	CESD-R depression screener total score	0.36	0.38	0.34	1.44	0.68	3.03
	English as a second language	-0.04	0.03	0.17	0.96	0.91	1.02
	Years working as a home visitor serving infants and toddlers	0.01	0.03	0.64	1.01	0.96	1.06
	Years working in EHS	0.01	0.03	0.61	1.01	0.96	1.07
Profile 3: Low Stress-Positive Perceptions vs. Profile 2: Medium Stress-Neutral Perceptions	Race						
	Black, non-Hispanic	0.10	0.36	0.78	1.10	0.55	2.22
	Hispanic/Latino	-0.17	0.73	0.81	0.84	0.2	3.51
	Other	0.09	0.78	0.91	1.09	0.23	5.06

Profile	Covariate	Coefficient	S.E.	*P*-Value	Odds Ratio (1/OR)	95% confidence intervals	
	Education						
	High school diploma or equivalent or less	0.15	0.43	0.73	1.16	0.5	2.71
	Some college	-0.31	0.39	0.43	0.73	0.34	1.58
	Associate degree or technical certificate	0.40	0.17	0.02	1.50	1.10	2.1
	Bachelor's degree or higher	0.05	0.03	0.08	1.05	1.00	1.10
	CESD-R depression screener total score	-0.36	0.38	0.34	0.70	0.33	1.47
	English as a second language	0.04	0.03	0.17	1.04	0.98	1.10
	Years working as a home visitor serving infants and toddlers	-0.01	0.03	0.64	0.99	0.94	1.04
	Years working in EHS	-0.01	0.03	0.61	0.99	0.93	1.04
Profile 2: Medium Stress-Neutral Perceptions vs. Profile 1: High Stress-Negative Perceptions	Race						
	Black, non-Hispanic	0.08	0.47	0.87	1.08	0.43	2.70
	Hispanic/Latino	0.83	0.87	0.34	2.29	0.42	12.6
	Other	0.01	0.76	1.00	1.01	0.23	4.42
	Education						
	High school diploma or equivalent or less	0.72	0.52	0.16	2.06	0.75	5.68
	Some college	1.18	0.45	0.01	3.25	1.33	7.91
	Associate degree or technical certificate	0.74	0.12	0.00	2.10	1.65	2.67
	Bachelor's degree or higher	-0.11	0.03	0.00	0.90	0.85	0.95
	CESD-R depression screener total score	0.17	0.53	0.75	1.18	0.42	3.33
	English as a second language	-0.05	0.03	0.12	0.95	0.89	1.01

Profile	Covariate	Coefficient	S.E.	*P*-Value	Odds Ratio (1/OR)	95% confidence intervals	
	Years working as a home visitor serving infants and toddlers	0.00	0.03	0.96	1.00	0.94	1.06
	Years working in EHS	0.04	0.04	0.23	1.04	0.97	1.12
Profile 1: High Stress-Negative Perceptions vs. Profile 2: Medium Stress-Neutral Perceptions	Race						
	Black, non-Hispanic	-0.08	0.47	0.87	0.93	0.37	2.32
	Hispanic/Latino	-0.83	0.87	0.34	0.44	0.08	2.40
	Other	-0.01	0.76	1	1.00	0.23	4.38
	Education						
	High school diploma or equivalent or less	-0.72	0.52	0.16	0.49	0.18	1.34
	Some college	-1.18	0.45	0.01	0.31	0.13	0.75
	Associate degree or technical certificate	-0.74	0.12	0.00	0.48	0.38	0.61
	Bachelor's degree or higher	0.11	0.03	0.00	1.12	1.05	1.18
	CESD-R depression screener total score	-0.17	0.53	0.75	0.85	0.30	2.38
	English as a second language	0.05	0.03	0.12	1.06	0.99	1.13
	Years working as a home visitor serving infants and toddlers	0.00	0.03	0.96	1.00	0.94	1.06
	Years working in EHS	-0.04	0.04	0.23	0.96	0.89	1.03

Table 12
Effects of Model 2 Covariates on Profile Membership

Profile	Covariate	Coefficient	SE	*P*-Value	Odds Ratio	95% confidence intervals	
Profile 1: High Stress-Negative Perceptions vs. Profile 3: Low Stress-Positive Perceptions	Rural	-0.25	0.41	0.55	0.78	0.35	1.76
	Urban	-0.05	0.03	0.14	0.96	0.9	1.02
Profile 3: Low Stress-Positive Perceptions vs. Profile 1: High Stress-Negative Perceptions	Rural	0.25	0.41	0.55	1.28	0.57	2.87
	Urban	0.05	0.03	0.14	1.05	0.99	1.11
Profile 2: Medium Stress-Neutral Perceptions vs. Profile 3: Low Stress-Positive Perceptions	Rural	-0.02	0.34	0.96	0.98	0.51	1.9
	Urban	-0.03	0.03	0.36	0.98	0.92	1.03
Profile 3: Low Stress-Positive Perceptions vs. Profile 2: Medium Stress-Neutral Perceptions	Rural	0.02	0.34	0.96	1.02	0.53	1.97
	Urban	0.03	0.03	0.36	1.03	0.97	1.08
Profile 2: Medium Stress-Neutral Perceptions vs. Profile 1: High Stress-Negative Perceptions	Rural	0.23	0.44	0.61	1.25	0.53	2.96
	Urban	0.02	0.03	0.54	1.02	0.96	1.09
Profile 1: High Stress-Negative Perceptions vs. Profile 2: Medium Stress-Neutral Perceptions	Rural	-0.23	0.44	0.61	0.8	0.34	1.88
	Urban	-0.02	0.03	0.54	0.98	0.92	1.05

Profile Predictors for Model 3: Professional Development

As for Model 3 (Table 13), addressing professional development predictors, the only significant predictor with a meaningful odds ratio was training. As the perceptions of training became more positive, home visitors were 1.81 times more likely to be in Profile 1, *High Stress-Negative Perceptions* than in Profile 3, *Low Stress-Positive Perceptions* (OR = 1.81, $p = 0.01$, 95% CI [1.18, 2.77]). No other comparisons had significant results.

Table 13

Effects of Model 3 Covariates on Profile Membership

Profile	Covariate	Coefficient	SE	*P*-Value	Odds Ratio (1/OR)	95% confidence intervals	
Profile 1: High Stress-Negative Perceptions vs. Profile 3: Low Stress-Positive Perceptions	Perceptions of training effectiveness	0.59	0.22	0.01	1.81	1.18	2.77
	Presence of home visitor coaching	-0.38	0.33	0.25	0.69	0.36	1.31
	Presence of home visitor reflective supervision	0.00	0.02	0.87	1.00	0.96	1.05
Profile 3: Low Stress-Positive Perceptions vs. Profile 1: High Stress-Negative Perceptions	Perceptions of training effectiveness	-0.59	0.22	0.01	0.55	0.36	0.85
	Presence of home visitor coaching	0.38	0.33	0.25	1.46	0.76	2.8
	Presence of home visitor reflective supervision	0.00	0.02	0.87	1.00	0.96	1.04
Profile 2: Medium Stress-Neutral Perceptions vs. Profile 3: Low Stress-Positive Perceptions	Perceptions of training effectiveness	-0.47	0.59	0.43	0.63	0.20	2.00
	Presence of home visitor coaching	1.17	1.12	0.30	3.20	0.36	28.49
	Presence of home visitor reflective supervision	-0.02	0.08	0.82	0.98	0.85	1.14
Profile 3: Low Stress-Positive Perceptions vs. Profile 2: Medium Stress-Neutral Perceptions	Perceptions of training effectiveness	0.47	0.59	0.43	1.60	0.50	5.11
	Presence of home visitor coaching	-1.17	1.12	0.30	0.31	0.04	2.78
	Presence of home visitor reflective supervision	0.02	0.08	0.82	1.02	0.88	1.18

Profile	Covariate	Coefficient	SE	*P*-Value	Odds Ratio (1/OR)	95% confidence intervals	
Profile 2: Medium Stress-Neutral Perceptions vs. Profile 1: High Stress-Negative Perceptions	Perceptions of training effectiveness	-1.06	0.58	0.07	0.35	0.11	1.07
	Presence of home visitor coaching	1.54	1.10	0.16	4.68	0.54	40.32
	Presence of home visitor reflective supervision	-0.02	0.07	0.78	0.98	0.85	1.13
Profile 1: High Stress-Negative Perceptions vs. Profile 2: Medium Stress-Neutral Perceptions	Perceptions of training effectiveness	1.06	0.58	0.07	2.90	0.94	8.95
	Presence of home visitor coaching	-1.54	1.10	0.16	0.21	0.03	1.84
	Presence of home visitor reflective supervision	0.02	0.07	0.78	1.02	0.88	1.18

Chapter 6

PHASE II: RESULTS

Introduction

Phase II of this study acts as an extension of Phase I. While the first phase examines work environment, leadership, and job satisfaction together, the second phase seeks to parse out work environment factors (cohesion and communication) and stress as they group with job satisfaction and program leadership and stress as they group with job satisfaction. This second phase seeks to further understand job satisfaction as it profiles with work environment factors and leadership separately as well as how each relates to retention. As a result, the results of Phase II presented in this chapter address the following research questions: *RQ2) How does home visitor job satisfaction relate to perceptions of work environment, programmatic leadership, and retention?; RQ.2a) How do job satisfaction, perceptions of the work environment, and stress group together?; RQ.2b) Does retention predict profile membership in profiles of job satisfaction, perceptions of work environment, and stress?; RQ. 2c) How do job satisfaction, perceptions of program leadership, and stress group together (excluding work environment)?; and RQ.2d) Does retention predict profile membership in profiles of job satisfaction, perceptions of program leadership, and stress?*

This chapter also includes a brief summary of Phase II-specific methods that were fully described in Chapter 4: Research Design and Methodology. This is followed by a discussion of the data screening and cleaning of additional data that was used in this phase, the director sample included in this phase, and the results for each research question.

Summary of Methods

As further detailed in Chapter 4. Research Design and Methodology, Phase II extends the quantitative analysis of Phase I Profile variables were revisited to create two new and separate latent profile analyses. A second LPA examined how job satisfaction profiled with work environment and stress. A third LPA examined how job satisfaction profiled with stress and program leadership. Each of the two new profiles is followed by an MLR that adds data from the 2018 Baby FACES (Cannon et al., 2020) Director Survey in order to examine home visitor retention.

As in Phase I, an R3STEP LPA (Asparouhv & Muthén, 2014; Vermunt, 2010) process was used. In the first profile, variables are entirely from the TCU SOF (Institute for Behavioral Research, 2005) and include the scales for work environment: cohesion, communication, and stress, as well as job satisfaction. The second profile includes the supportive leadership scale from the OCDQ-RE (Hoy et al., 1991) with the role "principal" changed to "director." This profile also includes the TCU SOF scale scores for stress and job satisfaction.

For each profile the MLR retention variables are drawn from the director survey and are difficulty of hiring highly qualified home visitors; retaining highly qualified home visitors; director estimated average years home visitors stay in their role; how

many home visitors had left the role since September 2017; and how many home visitors were new since September 2017. All questions were developed by the Baby FACES researchers. In addition, significant results from the MLRs conducted in Phase I are revisited and reanalyzed for the two new profiles. These revisited variables are home visitor perceptions of the usefulness of training received and home visitor education levels.

Sample

The demographic sample of home visitor respondents for this data analysis is fully described in Chapter 5. Phase I Results. In addition to home visitor demographics, additional program data from the 2018 Baby FACES survey (Cannon et al., 2020) identified that the average number of years home visitors stayed in their roles at EHS was 4.34 years and that 31.0% of programs had unfilled home visitor positions.

Phase II Results

Home Visitor Profiles on Job Satisfaction, Stress, and Work environment

In order to answer Research Question 2a) *How do job satisfaction, perceptions of the work environment, and stress group together?* a second LPA was conducted, isolating perceptions of home visitor job satisfaction, home visitor stress, and home visitor perceptions of the program environment as a work environment (cohesion and communication; See Table 14). In order to answer this research question, profiles were developed and analyzed as a part of the first step of a 3STEP LPA process with two through seven classes in order to detect patterns in home visitor perceptions of job satisfaction, stress, and other program environment variables. While all variables are from the TCU SOF (Institute for Behavioral Research 2005), *z*-scored variables were

used in order to maintain the ability to compare results with the second profile analysis in this phase to compare job satisfaction and stress with supportive leadership which derives from the OCDQ-RE (Hoy, 1991). This also ensured comparability of all Phase I and II results.

Table 14

Fit Statistics for Phase II Home Visitor Data on Work Environment, Stress, and Job Satisfaction (Leadership Removed), the Second Profile Analysis

Model and Profile		Count	Proportion	Mean AIC	Mean BIC	SSBIC	Entropy	LMR test (*p*)
Two-Profile				5538.677	5594.754	5553.49	0.798	0.006
	1	151	0.27					
	2	401	0.73					
Three-Profile				5313.32	5390.96	5333.82	0.80	0.00
	1	56	0.10					
	2	230	0.42					
	3	265	0.48					
Four-Profile				5241.68	5340.89	5267.88	0.81	0.08
	1	18	0.03					
	2	243	0.44					
	3	77	0.14					
	4	214	0.39					
Five-Profile				5176.52	5297.30	5208.41	0.85	0.89
	1	247	0.45					
	2	15	0.03					
	3	61	0.11					
	4	58	0.10					
	5	172	0.31					
Six-Profile								
	1	161	0.29	5129.75	5272.10	5167.34	0.83	0.89
	2	17	0.03					
	3	43	0.08					
	4	56	0.10					
	5	213	0.39					
	6	63	0.11					
Seven-Profile				5098.59	5262.51	5141.88	0.81	0.63
	1	29	0.05					
	2	31	0.06					
	3	50	0.09					
	4	16	0.03					
	5	147	0.27					
	6	136	0.25					
	7	142	0.26					

As was conducted in Phase I, the output was examined. The AIC and the adjusted BIC (SSBIC) were further examined by plotting them into a scree-type test (Haughton, et al., 2009) in order to identify where plotted fit statistic by latent class level off in the curve of the line. The analysis of the AIC using a scree-test (Figure 6) suggested a three-profile, five-profile, or six-profile solution, with the strongest "elbow" at a three-profile solution. The analysis of the scree test for SSBIC (Figure 7) similarly suggested a three-profile, five-profile, and six-profile solution, but the sharpest "elbow" also suggested a three-profile solution.

Figure 6

Phase II Mean AIC Scree Test by Number of Profiles for Work Environment and Job Satisfaction for the Second Profile Analysis

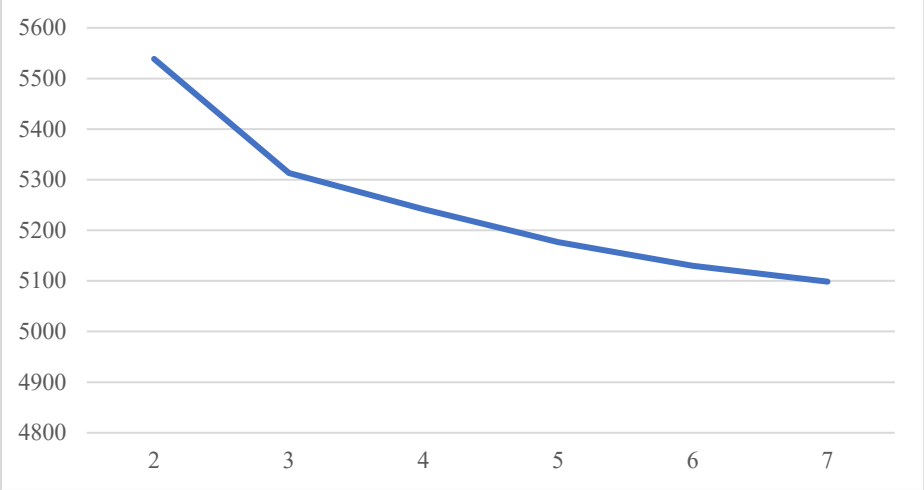
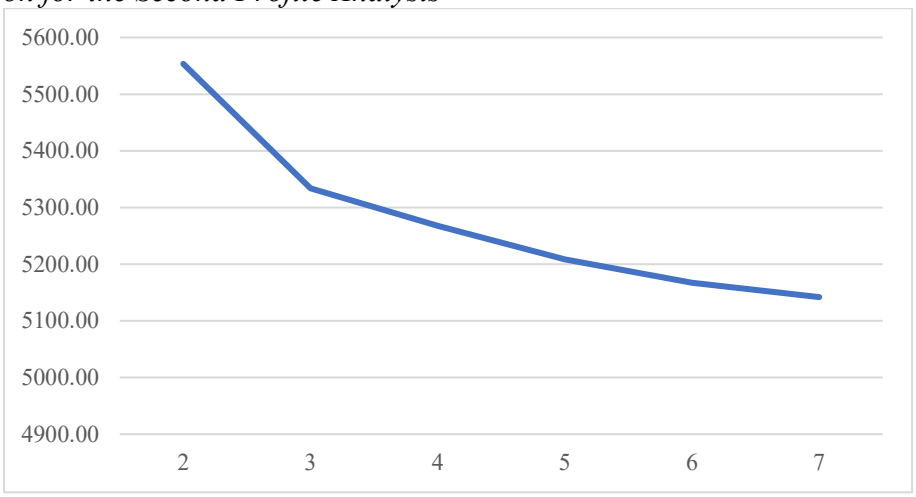


Figure 7

Phase II Mean SSBIC Scree Test by Number of Profiles for Work Environment and Job Satisfaction for the Second Profile Analysis



An examination of the entropy statistic indicated that a five-profile solution would be the best fit (0.85), however, all but two-profile solutions were above the minimum cut value of $\geq .80$ which is the minimum cut value recommended by Geiser (2013). The *p*-value for the Lo-Mendell-Rubin test (LMR; Lo, Mendell, & Rubin, 2001) was significant at the two-profile and three-profile solutions. As noted in the results for Phase I, a significant *p* value from the LMR indicates the model with the larger number of groups (*k* classes) should be preferred over the model with the smaller number of groups (*k*-1 classes; Nylund, Asparouhov, & Muthén, 2007). In addition to the results of the fit statistics, the percentage of home visitors within each profile solution was also considered. The three-profile solution had the highest number of profiles at or above 10% of the sample was the most parsimonious in terms of interpretability. As a result, the three-profile solution was selected.

The Three-Profile Solution

The three-profile solution (Figure 8) includes Profile 1, *High Stress-Low Job Satisfaction and Low Work Environment Perceptions* (10%); Profile 2, named *Low Stress-High Job Satisfaction and High Work Environment Perceptions* (42%); and Profile 3, named *Medium Stress, Job Satisfaction, and Work Environment Perceptions* (48%). The specific *z*-scores and for each profile and their comparison with the overall *z*-scores are depicted in Table 15.

Figure 8

Phase II Latent Profiles of EHS Home Visitor Perceptions of Work Environment, Stress, and Job Satisfaction (leadership removed) for the Second Profile Analysis

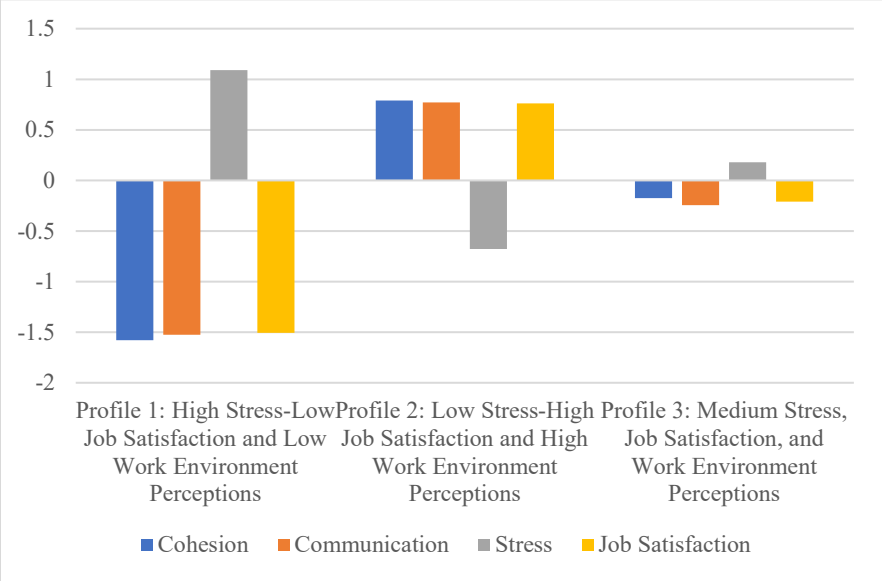


Table 15

Phase II Means and Comparisons for Profiles of Work Environment, Stress, and Job Satisfaction (Leadership Removed) for the Second Profile Analysis

	Overall Sample		*High Stress-Low Job Satisfaction and Low Work Environment Perceptions* (Profile 1: 10%)		*Low Stress-High Job Satisfaction and High Work Environment Perceptions* (Profile 2: 42%)		*Medium Stress, Job Satisfaction, and Work Environment Perceptions* (Profile 3: 48%)	
	M	SE	*M*	SE	*M*	SE	*M*	SE
Cohesion	0.07	0.92	-1.58	0.20	0.79	0.05	-0.18	0.09
Communication	0.04	0.97	-1.53	0.14	0.77	0.07	-0.25	0.10
Stress	-0.08	0.95	1.09	0.11	-0.68	0.08	0.18	0.09
Job Satisfaction	0.05	0.90	-1.51	0.29	0.76	0.04	-0.21	0.08

The largest profile group was the Profile 3, *Medium Stress, Job Satisfaction, and Work Environment Perceptions* (48%) group whose scores situated closest to the *z*-score created mean with cohesion, communication, and job satisfaction as resting just above the zero-line while stress was just below. The second largest profile group was Profile 2, named *Low Stress-High Job Satisfaction and High Work Environment Perceptions* (42%) which carried a comparatively low mean for stress but had high means for other perceptions job satisfaction and work environment perceptions of cohesion and communication. Finally, the smallest group, Profile 1, *High Stress-Low Job Satisfaction and Low Work Environment Perceptions* (10%) shows a level of stress above the average while job satisfaction and work environment perceptions of cohesion and communication are below average. The means across each of the three profiles were all significantly different.

Profile Predictors for the Work Environment Job Satisfaction Profile

In order to answer Research Question 2b) *Does retention predict profile membership in profiles of job satisfaction, perceptions of work environment, and stress?* an MLR model was created utilizing Steps 2 and 3 of MPlus' R3STEP procedure. The retention model analyzed for differences across profiles of the job satisfaction, stress, and work environment profiles that were a result of RQ)2a. The retention model contained the following variables: difficulty of hiring highly qualified home visitors (from 1=Very Difficult to 4= Not at All Difficult), difficulty retaining highly qualified home visitors (from 1=Very Difficult to 4= Not at All Difficult), director estimated average years home visitors stay in their role, the number of home visitors who had left the role since September 2017, and the number of home visitors who were new since September 2017. Multinomial logistic regression (MLR) was then conducted to identify which variables predicted profile membership.

The results of the MLR (Table 16) showed that the only retention variable that was found to be both significant and have a meaningful odds ratio was the number of home visitors that had left the program since September 2017. As vacancies increased, home visitors were more likely to be in Profile 1, *High Stress-Low Job Satisfaction and Low Work Environment Perceptions* than Profile 3, named *Medium Stress, Job Satisfaction, and Work Environment Perceptions* (OR = 15.75, p = 0.00, 95% CI [7.02, 35.33]). Home visitors were also 5.84 times more likely to be in Profile 2, *Low Stress-High Job Satisfaction and High Work Environment Perceptions* than in Profile 3 (OR = 5.84, p = 0.00, 95% CI [2.83, 12.08]. Home visitors were also 2.70 times more likely to be in Profile 1 than Profile 2 (OR = 2.70, p = 0.00, 95% CI [1.50, 4.84]).

Table 16

Effects of Retention Covariates on Profile Membership for profiles of Work Environment, Stress, and Job Satisfaction (Leadership Removed)

Profile	Covariate	Estimate	S.E.	Est./S.E.	P-Value	OR (1/OR)	95% C.I.	
Profile 1: High Stress-Low Job Satisfaction and Low Work Environment vs. Profile 3: Medium Stress, Job Satisfaction, and Work Environment	Difficulty hiring qualified home visitors	-0.18	0.26	-0.68	0.50	0.84	0.51	1.39
	Difficulty retaining qualified home visitors	0.09	0.07	1.34	0.18	1.09	0.96	1.24
	Average length of time a home visitor stays in your program	-0.11	0.16	-0.70	0.49	0.9	0.66	1.22
	Number of new home visitors	0.23	0.15	1.52	0.13	1.26	0.94	1.69
	Number of home visitors who left	2.76	0.41	6.69	0.00	15.75	7.02	35.33
Profile 3: Medium Stress, Job Satisfaction, and Work Environment vs. Profile 1: High Stress-Low Job Satisfaction and Low Work Environment	Difficulty hiring qualified home visitors	0.18	0.26	0.68	0.50	1.19	0.72	1.97
	Difficulty retaining qualified home visitors	-0.09	0.07	-1.34	0.18	0.92	0.81	1.04
	Average length of time a home visitor stays in your program	0.11	0.16	0.70	0.49	1.12	0.82	1.51
	Number of new home visitors	-0.23	0.15	-1.52	0.13	0.8	0.59	1.07
	Number of home visitors who left	-2.76	0.41	-6.69	0.00	0.06	0.03	0.14
Profile 2: Low Stress-High Job Satisfaction and High Work Environment vs. Profile 3: Medium Stress, Job	Difficulty hiring qualified home visitors	-0.10	0.22	-0.46	0.64	0.90	0.59	1.39
	Difficulty retaining qualified home visitors	0.03	0.05	0.49	0.62	1.03	0.93	1.13
	Average length of time a home visitor stays in your program	-0.09	0.13	-0.69	0.49	0.91	0.71	1.18
	Number of new home visitors	-0.04	0.15	-0.25	0.80	0.96	0.73	1.28

Profile	Covariate	Estimate	S.E.	Est./S.E.	P-Value	OR (1/OR)	95% C.I.	
Satisfaction, and Work Environment	Number of home visitors who left	1.77	0.37	4.77	0.00	5.84	2.83	12.08
Profile 3: Medium Stress, Job Satisfaction, and Work Environment vs. Profile 2: Low Stress-High Job Satisfaction and High Work Environment	Difficulty hiring qualified home visitors	0.1	0.22	0.46	0.64	1.11	0.72	1.71
	Difficulty retaining qualified home visitors	-0.03	0.05	-0.49	0.62	0.98	0.88	1.08
	Average length of time a home visitor stays in your program	0.09	0.13	0.69	0.49	1.09	0.85	1.41
	Number of new home visitors	0.04	0.15	0.25	0.8	1.04	0.78	1.38
	Number of home visitors who left	-1.77	0.37	-4.77	0.00	0.17	0.08	0.35
Profile 2: Low Stress-High Job Satisfaction and High Work Environment vs. Profile 1: High Stress-Low Job Satisfaction and Low Work Environment	Difficulty hiring qualified home visitors	0.07	0.25	0.29	0.77	1.08	0.66	1.76
	Difficulty retaining qualified home visitors	-0.06	0.06	-1.06	0.29	0.94	0.84	1.06
	Average length of time a home visitor stays in your program	0.02	0.16	0.12	0.90	1.02	0.75	1.38
	Number of new home visitors	-0.27	0.14	-1.86	0.06	0.77	0.58	1.01
	Number of home visitors who left	-0.99	0.30	-3.32	0.00	0.37	0.21	0.67
Profile 1: High Stress-Low Job Satisfaction and Low Work Environment vs. Profile 2: Low Stress-High Job Satisfaction and High Work Environment	Difficulty hiring qualified home visitors	-0.07	0.25	-0.29	0.77	0.93	0.57	1.52
	Difficulty retaining qualified home visitors	0.06	0.06	1.06	0.29	1.07	0.95	1.20
	Average length of time a home visitor stays in your program	-0.02	0.16	-0.12	0.90	0.98	0.72	1.33
	Number of new home visitors	0.27	0.14	1.86	0.06	1.31	0.99	1.73
	Number of home visitors who left	0.99	0.30	3.32	0.00	2.70	1.5	4.84

Training and Education Covariates Revisited in the Three-Profile Solution

During Phase I, the covariates of perceptions of the usefulness of home visitor training and home visitor education level were both found to be significant predictors of the three-profile solution of work environment and program. These covariates were revisited in Phase II to further examine them in the profile that isolated job satisfaction with stress, and work environment perceptions of cohesion and communication (Table 17). Only education had significant results.

All profile comparisons identified significant results for an associate degree. Home visitors with an associate degree were more likely to be in Profile 3, named *Medium Stress, Job Satisfaction, and Work Environment Perceptions* than in Profile 1, *High Stress-Low Job Satisfaction and Low Work Environment Perceptions* (OR = 2.81, p = 0.00, 95% CI [2.25,3.51]). Home visitors with an associate degree were even more likely to be in Profile 2, *Low Stress-High Job Satisfaction and High Work Environment Perceptions* than Profile 1 (OR = 4.34, p = 0.00, 95% CI [3.64, 5.17]). When comparing Profiles 2 and 3, home visitors with an associate degree were 1.54 times more likely to be in Profile 2 (OR = 1.54, p = 0.00, 95% CI [1.27, 1.88]).

For home visitors with some college education, they were more likely to be in Profile 2, *Low Stress-High Job Satisfaction and High Environment* than Profile 1, *High Stress-Low Job Satisfaction and Low Work Environment* (OR = 3.20, p = 0.01, 95% CI [1.28, 8.00]). Home visitors with some college education were even more likely to be in Profile 3, *Slightly High Stress-Slightly Low Job Satisfaction and Slightly Low Work Environment* than Profile 1 (OR = 4.40, p = 0.00, 95% CI [1.87, 10.35]). Comparisons between Profiles 2 and 3 for home visitors with some college were not significant. As for

a high school diploma or equivalent or less, home visitors were more likely to be in Profile 3 than in Profile 1 (OR = 2.50, $p = 0.05$, 95% CI [1.01, 6.17]). All other comparisons between profiles were not statistically significant.

Table 17

Effects of Education and Training Covariates on Profile Membership for profiles of Work Environment, Stress, and Job Satisfaction (Leadership Removed)

Profile	Covariate	Estimate	S.E.	P-Value	OR (1/OR)	95% C.I.	
Profile 1: High Stress-Low Job Satisfaction and Low Work Environment vs. Profile 3: Medium Stress, Job Satisfaction, and Work Environment	Perceptions of training effectiveness	0.21	0.71	0.77	1.24	0.31	4.99
	High school diploma or equivalent or less	-0.91	0.46	0.05	0.4	0.16	0.99
	Some college	-1.48	0.44	0.00	0.23	0.1	0.54
	Associate degree or Technical Certificate	-1.03	0.11	0.00	0.36	0.29	0.44
	Bachelor's degree or higher	-0.09	0.49	0.85	0.91	0.35	2.38
Profile 3: Medium Stress, Job Satisfaction, and Work Environment vs. Profile 1: High Stress-Low Job Satisfaction and Low Work Environment	Perceptions of training effectiveness	-0.21	0.71	0.77	0.81	0.2	3.26
	High school diploma or equivalent or less	0.91	0.46	0.05	2.5	1.01	6.17
	Some college	1.48	0.44	0.00	4.4	1.87	10.35
	Associate degree or Technical Certificate	1.03	0.11	0.00	2.81	2.25	3.51
	Bachelor's degree or higher	0.09	0.49	0.85	1.1	0.42	2.85
Profile 2: Low Stress-High Job Satisfaction and High Work Environment vs. Profile 3: Medium Stress, Job Satisfaction, and Work Environment	Perceptions of training effectiveness	0.32	0.78	0.69	1.37	0.3	6.34
	High school diploma or equivalent or less	0.02	0.41	0.95	1.02	0.46	2.29
	Some college	-0.32	0.33	0.34	0.73	0.38	1.39
	Associate degree or Technical Certificate	0.43	0.10	0.00	1.54	1.27	1.88
	Bachelor's degree or higher	-0.24	0.42	0.57	0.79	0.35	1.79

Profile	Covariate	Estimate	S.E.	P-Value	OR (1/OR)	95% C.I.	
Profile 3: Medium Stress, Job Satisfaction, and Work Environment vs. Profile 2: Low Stress-High Job Satisfaction and High Work Environment	Perceptions of training effectiveness	-0.32	0.78	0.69	0.73	0.16	3.37
	High school diploma or equivalent or less	-0.02	0.41	0.95	0.98	0.44	2.18
	Some college	0.32	0.33	0.34	1.37	0.72	2.61
	Associate degree or Technical Certificate	-0.43	0.10	0.00	0.65	0.53	0.79
	Bachelor's degree or higher	0.24	0.42	0.57	1.27	0.56	2.9
Profile 2: Low Stress-High Job Satisfaction and High Work Environment vs. Profile 1: High Stress-Low Job Satisfaction and Low Work Environment	Perceptions of training effectiveness	0.10	0.77	0.89	1.11	0.24	5.06
	High school diploma or equivalent or less	0.94	0.51	0.06	2.56	0.95	6.9
	Some college	1.16	0.47	0.01	3.2	1.28	8
	Associate degree or Technical Certificate	1.47	0.09	0.00	4.34	3.64	5.17
	Bachelor's degree or higher	-0.15	0.52	0.78	0.86	0.31	2.4
Profile 1: High Stress-Low Job Satisfaction and Low Work Environment vs. Profile 2: Low Stress-High Job Satisfaction and High Work Environment	Perceptions of training effectiveness	-0.1	0.77	0.89	0.9	0.2	4.11
	High school diploma or equivalent or less	-0.94	0.51	0.06	0.39	0.15	1.06
	Some college	-1.16	0.47	0.01	0.31	0.13	0.78
	Associate degree or Technical Certificate	-1.47	0.09	0.00	0.23	0.19	0.28
	Bachelor's degree or higher	0.15	0.52	0.78	1.16	0.42	3.24

Profile Analysis on Job Satisfaction, Stress, and Program Leadership

This third LPA answers Research Question 2c) *How do job satisfaction, perceptions of program leadership, and stress group together?* This analysis isolated perceptions of home visitor job satisfaction and stress with perceptions of supportive leadership while excluding the work environment perceptions on cohesion and communication. Profiles were developed and analyzed as a part of the first step of a 3STEP LPA process with two through seven classes in order to detect patterns in home visitor perceptions. Since the variables were from different measures, job satisfaction and stress were from the TCU SOF (Institute for Behavioral Research 2005) and supportive leadership from the OCDQ-RE (Hoy et al., 1991) the *z*-score variables were used.

The results of the profile analysis are depicted in Table 18. The analysis did not present a clear solution. The AIC and the adjusted BIC (SSBIC) were further examined by plotting them into a scree-type test (Haughton et al., 2009) in order to identify where plotted fit statistic by latent class level off in the curve of the line. The analysis of the AIC (Figure 9) suggested a four-profile or five-profile solution. The analysis of the SSBIC (Figure 10) similarly suggested a four-profile or five-profile solution.

Table 18

Fit Statistics for Phase II Home Visitor Data for Job Satisfaction, Stress, and Leadership (Cohesion and Communication Removed) for the Third Profile Analysis

Model and Profile		Count	Proportion	Mean AIC	Mean BIC	SSBIC	Entropy	LMR test (*p*)
Two-Profile				4170.08	4213.21	4181.47	0.71	0.00
	1	364	0.66					
	2	188	0.34					
Three-Profile				4090.91	4151.30	4106.86	0.74	0.31
	1	49	0.09					
	2	280	0.51					
	3	224	0.41					
Four-Profile				4024.87	4102.51	4045.37	0.79	0.23
	1	148	0.27					
	2	96	0.17					
	3	54	0.10					
	4	254	0.46					
Five-Profile				3991.10	4085.99	4016.16	0.83	0.60
	1	5	0.01					
	2	57	0.10					
	3	244	0.44					
	4	89	0.16					
	5	156	0.28					
Six-Profile				3972.21	4084.37	4001.83	0.85	0.66
	1	9	0.02					
	2	0	0.00					
	3	80	0.15					
	4	238	0.43					
	5	164	0.30					
	6	60	0.11					
Seven-Profile				3958.63	4088.04	3992.80	0.84	0.22
	1	0	0.00					
	2	9	0.02					
	3	57	0.10					
	4	154	0.28					
	5	32	0.06					
	6	70	0.13					
	7	230	0.42					

Figure 9

Phase II Mean AIC Scree Test by Number of Profiles for Leadership and Job Satisfaction for the Third Profile Analysis

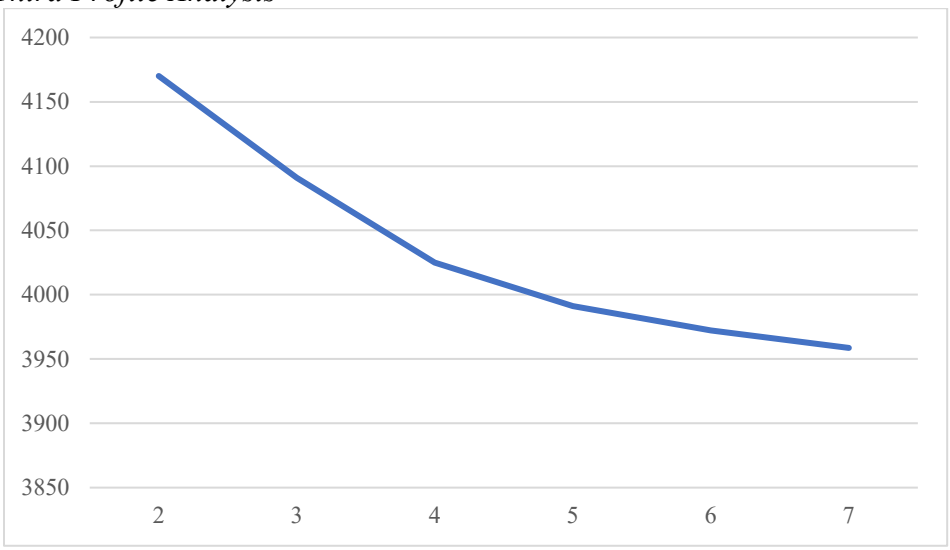
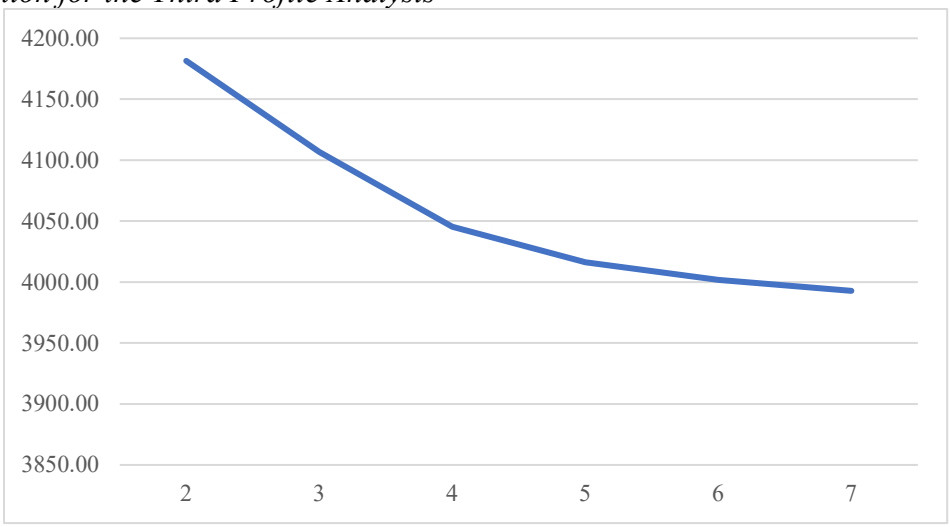


Figure 10

Phase II Mean SSBIC Scree Test by Number of Profiles for Leadership and Job Satisfaction for the Third Profile Analysis



An examination of the entropy statistic indicated that a six-profile solution would be the best fit (0.85), with the five-profile and seven-profile solutions also above Geiser's (2013) recommended minimum cut value of > .80. The only profile solution with a significant *p*-value for the Lo-Mendell-Rubin test (LMR; Lo, Mendell, & Rubin, 2001) was the two-profile solution. In addition to the results of the fit statistics, the percentage of home visitors within each profile solution was also considered. The four-profile solution had the highest number of profiles at or above 10%, lending itself to greater interpretability, while the five-profile solution remains statistically acceptable with profiles ≥ 1% (Jung & Wickrama, 2008). However, two groups in the five-profile solution were not meaningfully different (Ram & Grimm, 2009) while each profile in the four-profile solution was meaningfully different resulting in stronger interpretability in addition to good fit.

The Four-Profile Solution

In the four-profile solution (Figure 11) Profile 1 was named *Medium Stress and Leadership Perceptions-Low Job Satisfaction* (27%); Profile 2 was named *Medium-High Stress, Medium Job Satisfaction, and Low Leadership Perceptions* (18%); Profile 3 was named *Low Stress-High Job Satisfaction and Leadership Perceptions* (45%); and Profile 4 was named *Slightly High Stress-Slightly High Job Satisfaction and Low Leadership Perceptions* (45%). The specific *z*-scores and for each profile and their comparison with the overall *z*-scores are depicted in Table 19.

Figure 11

Phase II Latent Profiles of EHS Home Visitor Perceptions of Supportive Leadership, Stress, and Job Satisfaction (Cohesion and Communication Removed) for the Third Profile Analysis

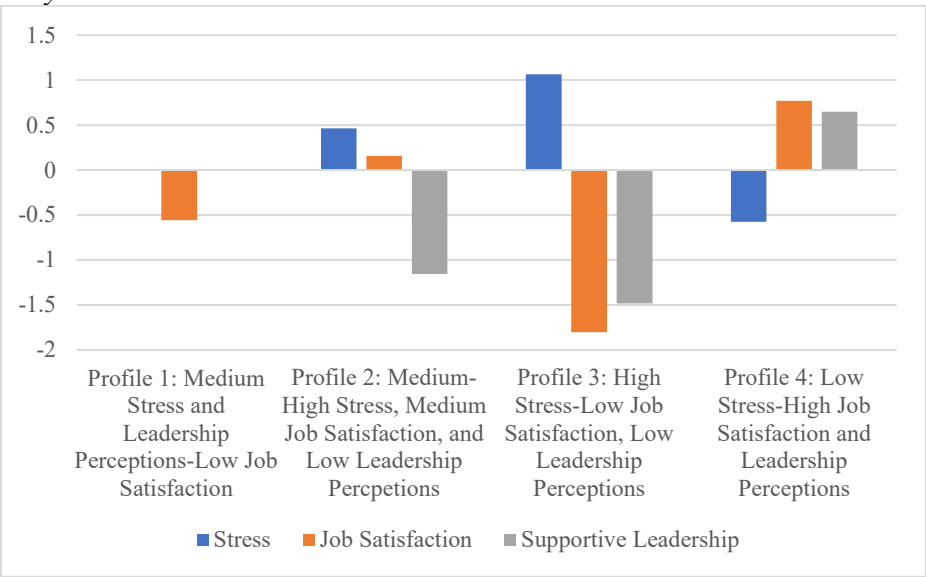


Table 19

Phase II Means and Comparisons for Profiles of Supportive Leadership, Stress, and Job Satisfaction (Cohesion and Communication Removed) for the Third Profile Analysis

	Overall Sample		*Medium Stress and Leadership Perceptions-Low Job Satisfaction* (Profile 1: 27%)		*Medium-High Stress, Medium Job Satisfaction, and Low Leadership Perceptions* (Profile 2: 18%)		*High Stress-Low Job Satisfaction, Low Leadership Perceptions* (Profile 3: 10%)		*Low Stress-High Job Satisfaction and Leadership Perceptions* (Profile 4: 45%)	
	M	SD	M	SD	M	SD	M	SD	M	SD
Stress	-0.08	0.95	-0.01	0.10	0.46	0.20	1.06	0.09	-0.58	0.06
Job Satisfaction	0.05	0.90	-0.56	0.06	0.16	0.11	-1.81	0.13	0.77	0.04
Supportive Leadership	-0.04	0.96	0.00	0.10	-1.15	0.11	-1.48	0.11	0.65	0.06

The largest profile group at 45% of the sample was in Profile 4, *Low Stress-High Job Satisfaction and Leadership Perceptions*, whose scores of stress situated below *z*-score zero line and perceptions of job satisfaction and leadership are above. The second largest profile group at 27% was Profile 1, *Medium Stress and Leadership Perceptions-Low Job Satisfaction* with job satisfaction below the *z*-score 0-line, stress right at 0, and supportive leadership barely above. The means for stress and leadership were not significantly different from other profiles. This is followed at 18% by Profile 2, *Medium-High Stress, Medium Job Satisfaction, and Low Leadership Perceptions* (18%) in which supportive leadership was low and stress medium-high, but job satisfaction was just above zero. The mean for job satisfaction was not significantly different from other profiles. Finally, the smallest profile at 10% was Profile 3, *High Stress-Low Job Satisfaction, Low Leadership Perceptions* which had both the highest mean for stress and the lowest means for both job satisfaction and perceptions of leadership.

Profile Predictors for the Program Leadership and Job Satisfaction Profile

In order to answer Research Question 2d) *Does retention predict profile membership in profiles of job satisfaction, perceptions of work environment, and stress?* An MLR model was created utilizing Steps 2 and 3 of MPlus' R3STEP procedure. The retention model analyzed for differences across profiles of the job satisfaction, stress, and work environment profiles that were a result of RQ)2a. The retention model contained the following variables: difficulty of hiring highly qualified home visitors (from 1=Very Difficult to 4= Not at All Difficult), difficulty retaining highly qualified home visitors (from 1=Very Difficult to 4= Not at All Difficult), director estimated average years home visitors stay in their role, how many home visitors had left the role since September 2017,

and how many home visitors were new since September 2017. Multinomial logistic regression (MLR) was then conducted to identify which variables predicted profile membership.

The results of the MLR (Table 20) show that two retention variables were found to be both significant and have a meaningful odds ratio: The number of home visitors that had left the program since September 2017 and the number of new home visitors hired since September 2017. The number of home visitors that had left the program was the most commonly identified across class comparisons.

Table 20

Effects of Retention Covariates on Profile Membership for Supportive Leadership, Stress, and Job Satisfaction (Cohesion and Communication Removed)

Profile	Covariate	Estimate	S.E.	P-Value	OR (1/OR)	95% C.I.	
Profile 1: Medium Stress and Leadership Low Job Satisfaction vs. Profile 4: Low Stress-High Job Satisfaction and Leadership	Difficulty hiring qualified home visitors	-0.26	0.28	0.35	0.77	0.44	1.33
	Difficulty retaining qualified home visitors	-0.03	0.06	0.65	0.97	0.87	1.1
	Average length of time a home visitor stays in your program	0.19	0.16	0.24	1.21	0.88	1.66
	Number of new home visitors	0.08	0.19	0.67	1.08	0.74	1.58
	Number of home visitors who left	-1.94	0.38	0.00	0.14	0.07	0.3
Profile 4: Low Stress-High Job Satisfaction and Leadership vs. Profile 1:Medium Stress and Leadership Low Job Satisfaction	Difficulty hiring qualified home visitors	0.26	0.28	0.35	1.30	0.75	2.25
	Difficulty retaining qualified home visitors	0.03	0.06	0.65	1.03	0.91	1.16
	Average length of time a home visitor stays in your program	-0.19	0.16	0.24	0.83	0.6	1.13
	Number of new home visitors	-0.08	0.19	0.67	0.92	0.63	1.34
	Number of home visitors who left	1.94	0.38	0.00	6.95	3.33	14.49
Profile 2: Medium High Stress, Medium Job Satisfaction, Low Leadership vs. Profile 4: Low Stress-High Job Satisfaction and Leadership	Difficulty hiring qualified home visitors	-0.40	0.33	0.22	0.67	0.36	1.27
	Difficulty retaining qualified home visitors	0.05	0.07	0.48	1.05	0.91	1.22
	Average length of time a home visitor stays in your program	0.14	0.20	0.48	1.15	0.78	1.68
	Number of new home visitors	0.39	0.19	0.04	1.47	1.02	2.12
	Number of home visitors who left	1.16	0.39	0.00	3.18	1.5	6.77
Profile 4: Low Stress-High Job Satisfaction and Leadership vs. Profile 2: Medium High Stress, Medium Job Satisfaction, Low Leadership	Difficulty hiring qualified home visitors	0.40	0.33	0.22	1.49	0.79	2.82
	Difficulty retaining qualified home visitors	-0.05	0.07	0.48	0.95	0.82	1.1
	Average length of time a home visitor stays in your program	-0.14	0.20	0.48	0.87	0.59	1.28
	Number of new home visitors	-0.39	0.19	0.04	0.68	0.47	0.98
	Number of home visitors who left	-1.16	0.39	0.00	0.31	0.15	0.67

Profile	Covariate	Estimate	S.E.	P-Value	OR (1/OR)	95% C.I.	
Profile 3: High Stress-Low Job Satisfaction, Low Leadership vs. Profile 4: Low Stress-High Job Satisfaction and Leadership	Difficulty hiring qualified home visitors	-0.06	0.30	0.85	0.95	0.53	1.70
	Difficulty retaining qualified home visitors	-0.05	0.07	0.44	0.95	0.83	1.09
	Average length of time a home visitor stays in your program	0.10	0.17	0.57	1.11	0.79	1.55
	Number of new home visitors	0.14	0.19	0.46	1.15	0.8	1.66
	Number of home visitors who left	-0.69	0.36	0.05	0.5	0.25	1.01
Profile 4: Low Stress-High Job Satisfaction and Leadership vs. Profile 3: High Stress-Low Job Satisfaction, Low Leadership	Difficulty hiring qualified home visitors	0.06	0.30	0.85	1.06	0.59	1.90
	Difficulty retaining qualified home visitors	0.05	0.07	0.44	1.06	0.92	1.21
	Average length of time a home visitor stays in your program	-0.10	0.17	0.57	0.91	0.64	1.27
	Number of new home visitors	-0.14	0.19	0.46	0.87	0.60	1.26
	Number of home visitors who left	0.69	0.36	0.05	1.99	0.99	4.00
Profile 2: Medium High Stress, Medium Job Satisfaction, Low Leadership vs. Profile 1: Medium Stress and Leadership Low Job Satisfaction	Difficulty hiring qualified home visitors	-0.13	0.27	0.61	0.87	0.52	1.47
	Difficulty retaining qualified home visitors	0.08	0.08	0.31	1.08	0.93	1.26
	Average length of time a home visitor stays in your program	-0.05	0.18	0.77	0.95	0.67	1.34
	Number of new home visitors	0.31	0.15	0.04	1.36	1.01	1.82
	Number of home visitors who left	3.10	0.46	0.00	22.09	8.91	54.74
Profile 1: Medium Stress and Leadership Low Job Satisfaction vs. Profile 2: Medium High Stress, Medium Job Satisfaction, Low Leadership	Difficulty hiring qualified home visitors	0.13	0.27	0.61	1.14	0.68	1.93
	Difficulty retaining qualified home visitors	-0.08	0.08	0.31	0.92	0.79	1.08
	Average length of time a home visitor stays in your program	0.05	0.18	0.77	1.05	0.74	1.49
	Number of new home visitors	-0.31	0.15	0.04	0.74	0.55	0.99
	Number of home visitors who left	-3.10	0.46	0.00	0.05	0.02	0.11

Profile	Covariate	Estimate	S.E.	P-Value	OR (1/OR)	95% C.I.	
Profile 3: High Stress, Low Job Satisfaction, Low Leadership vs. Profile 1: Medium Stress and Leadership Low Job Satisfaction	Difficulty hiring qualified home visitors	0.21	0.21	0.32	1.23	0.82	1.86
	Difficulty retaining qualified home visitors	-0.03	0.06	0.67	0.97	0.86	1.10
	Average length of time a home visitor stays in your program	-0.09	0.14	0.53	0.91	0.69	1.21
	Number of new home visitors	0.06	0.15	0.69	1.06	0.80	1.41
	Number of home visitors who left	1.25	0.39	0.00	3.49	1.63	7.48
Profile 1: Medium Stress and Leadership Low Job Satisfaction vs. Profile 3: High Stress-Low Job Satisfaction, Low Leadership	Difficulty hiring qualified home visitors	-0.21	0.21	0.32	0.81	0.54	1.23
	Difficulty retaining qualified home visitors	0.03	0.06	0.67	1.03	0.91	1.16
	Average length of time a home visitor stays in your program	0.09	0.14	0.53	1.1	0.83	1.45
	Number of new home visitors	-0.06	0.15	0.69	0.94	0.71	1.25
	Number of home visitors who left	-1.25	0.39	0.00	0.29	0.13	0.62
Profile 3: High Stress, Low Job Satisfaction, Low Leadership vs. Profile 2: Medium High Stress, Medium Job Satisfaction, Low Leadership	Difficulty hiring qualified home visitors	0.34	0.28	0.22	1.41	0.82	2.43
	Difficulty retaining qualified home visitors	-0.11	0.09	0.22	0.9	0.76	1.06
	Average length of time a home visitor stays in your program	-0.04	0.2	0.84	0.96	0.65	1.41
	Number of new home visitors	-0.25	0.14	0.07	0.78	0.6	1.02
	Number of home visitors who left	-1.85	0.43	0.00	0.16	0.07	0.37
Profile 2: Medium High Stress, Medium Job Satisfaction, Low Leadership vs. Profile 3: High Stress-Low Job Satisfaction, Low Leadership	Difficulty hiring qualified home visitors	-0.34	0.28	0.22	0.71	0.41	1.22
	Difficulty retaining qualified home visitors	0.11	0.09	0.22	1.11	0.94	1.31
	Average length of time a home visitor stays in your program	0.04	0.20	0.84	1.04	0.71	1.53
	Number of new home visitors	0.25	0.14	0.07	1.28	0.98	1.68
	Number of home visitors who left	1.85	0.43	0.00	6.33	2.73	14.69

Home Visitor Vacancies

As the number of number of vacancies increased for home visitors, home visitor participants were more likely to be in Profiles 2, 3, and 4, than in Profile 1, *Medium Stress and Leadership Perceptions-Low Job Satisfaction*. Home visitors were 22.09 times more likely to be in Profile 2, *Medium-High Stress, Medium Job Satisfaction, and Low Leadership Perceptions* than in Profile 1, (OR = 22.09, p = 0.00, 95% CI [8.91,54.74Home visitors were 3.49 times more likely to be in Profile 3, *High Stress-Low Job Satisfaction, Low Leadership Perceptions*, than in Profile 1(OR = 3.49, p = 0.00, 95% CI [1.63, 7.48]). Home visitors were 6.96 times more likely to be in Profile 4, *Low Stress-High Job Satisfaction and Leadership Perceptions*, than in Profile 1 (OR = 6.95, p = 0.00, 95% CI [3.33, 4.49]).

Additionally, as home visitor vacancies increased, participating home visitors were 1.99 times more likely to be in Profile 4 than Profile 3 (OR = 1.99, p = 0.05, 95% CI [0.99, 4.00]). Home visitors were 3.18 times more likely to be in Profile 2 than Profile 4 (OR 3.18, p = 0.00, 95% CI [1.50, 6.77]). Additionally, home visitors were 84% less likely to be in Profile 3 than 2 (OR = 0.16, p = 0.00, 95% CI [0.07, 0.37]).

Number of New Home Visitors

The number of new home visitors across several profile comparisons was also found to have significant results with meaningful odds ratios. As the number of new home visitors increased, participating home visitors were 1.47 times more likely to be in Profile 2, *Medium-High Stress, Medium Job Satisfaction, and Low Leadership Perceptions* than in Profile 4 *Low Stress-High Job Satisfaction and Leadership Perceptions* (OR = 1.47, p = 0.04, 95% CI [1.02, 2.12]). Participating home visitors were

also 1.36 times more likely to be in Profile 2 than in Profile 1, *Medium Stress and Leadership Perceptions-Low Job Satisfaction* (OR = 1.36, $p = 0.04$, 95% CI [1.01, 1.82]).

Training and Education Covariates Revisited in the Four-Profile Solution

Just as in Phase I, the covariates of perceptions of the usefulness of home visitor training and home visitor education level were revisited for the three-profile solution in Phase II addressing job satisfaction, stress, and work environment factors, they were also revisited for the four-profile solution addressing job satisfaction, stress, and program leadership (Table 21). The results of the MLR found that only education was significant and had a meaningful odds ratio. An associate degree and some college were the only two education levels that had significant and meaningful odds ratios. Home visitor perceptions of the usefulness of training were not found to be significant.

Table 21

Profile Membership for profiles of Job Satisfaction, Stress, and Leadership (Cohesion and Communication Removed)

Profile	Covariate	Estimate	S.E.	P-Value	OR (1/OR)	95% C.I.	
Profile 1: Medium Stress and Leadership Low Job Satisfaction vs. Profile 4: Low Stress-High Job Satisfaction and Leadership	Perceptions of training effectiveness	-0.74	0.80	0.36	0.48	0.10	2.31
	High school diploma or equivalent or less	-0.17	0.51	0.74	0.85	0.31	2.29
	Some college	0.72	0.4	0.07	2.05	0.95	4.46
	Associate Degree or Technical Certificate	0.26	0.13	0.05	1.29	1.00	1.67
	Bachelor's degree or higher	0.53	0.47	0.26	1.70	0.68	4.25
Profile 4: Low Stress-High Job Satisfaction and Leadership vs. Profile 1: Medium Stress and Leadership Low Job Satisfaction	Perceptions of training effectiveness	0.74	0.80	0.36	2.09	0.43	10.1
	High school diploma or equivalent or less	0.17	0.51	0.74	1.18	0.44	3.20
	Some college	-0.72	0.4	0.07	0.49	0.22	1.06
	Associate Degree or Technical Certificate	-0.26	0.13	0.05	0.77	0.60	1.00
	Bachelor's degree or higher	-0.53	0.47	0.26	0.59	0.24	1.48
Profile 2: Medium High Stress, Medium Job Satisfaction, Low Leadership vs. Profile 4: Low Stress-High Job Satisfaction and Leadership	Perceptions of training effectiveness	-0.74	0.82	0.37	0.48	0.10	2.40
	High school diploma or equivalent or less	-1.09	0.63	0.09	0.34	0.10	1.17
	Some college	-1.30	0.61	0.03	0.27	0.08	0.9
	Associate Degree or Technical Certificate	-1.23	0.19	0.00	0.29	0.20	0.42
	Bachelor's degree or higher	0.57	0.67	0.39	1.78	0.48	6.61
Profile 4: Low Stress-High Job Satisfaction and Leadership vs. Profile 2: Medium High Stress, Medium Job Satisfaction, Low Leadership	Perceptions of training effectiveness	0.74	0.82	0.37	2.09	0.42	10.49
	High school diploma or equivalent or less	1.09	0.63	0.09	2.97	0.86	10.3
	Some college	1.30	0.61	0.03	3.65	1.11	12.0
	Associate Degree or Technical Certificate	1.23	0.19	0.00	3.43	2.37	4.97
	Bachelor's degree or higher	-0.57	0.67	0.39	0.56	0.15	2.10
Profile 3: High Stress-Low Job Satisfaction, Low Leadership vs.	Perceptions of training effectiveness	-2.10	2.34	0.37	0.12	0.00	12.1
	High school diploma or equivalent or less	-0.30	0.58	0.60	0.74	0.24	2.29
	Some college	-0.61	0.56	0.28	0.55	0.18	1.62

Profile	Covariate	Estimate	S.E.	P-Value	OR (1/OR)	95% C.I.	
Profile 4: Low Stress-High Job Satisfaction and Leadership	Associate Degree or Technical Certificate	-0.21	0.19	0.27	0.82	0.57	1.17
	Bachelor's degree or higher	0.49	0.65	0.44	1.64	0.46	5.80
Profile 4: Low Stress-High Job Satisfaction and Leadership vs. Profile 3: High Stress-Low Job Satisfaction, Low Leadership	Perceptions of training effectiveness	2.10	2.34	0.37	8.14	0.08	803.73
	High school diploma or equivalent or less	0.30	0.58	0.60	1.36	0.44	4.19
	Some college	0.61	0.56	0.28	1.83	0.62	5.46
	Associate Degree or Technical Certificate	0.21	0.19	0.27	1.23	0.85	1.76
	Bachelor's degree or higher	-0.49	0.65	0.44	0.61	0.17	2.16
Profile 2: Medium High Stress, Medium Job Satisfaction, Low Leadership vs. Profile 1: Medium Stress and Leadership Low Job Satisfaction	Perceptions of training effectiveness	0.00	0.80	1.00	1.00	0.21	4.80
	High school diploma or equivalent or less	-0.92	0.55	0.09	0.40	0.14	1.16
	Some college	-2.02	0.53	0.00	0.13	0.05	0.38
	Associate Degree or Technical Certificate	-1.49	0.19	0.00	0.23	0.16	0.32
	Bachelor's degree or higher	0.05	0.64	0.94	1.05	0.30	3.65
Profile 1: Medium Stress and Leadership Low Job Satisfaction vs. Profile 2: Medium High Stress, Medium Job Satisfaction, Low Leadership	Perceptions of training effectiveness	0.00	0.80	1.00	1.00	0.21	4.80
	High school diploma or equivalent or less	0.92	0.55	0.09	2.51	0.86	7.32
	Some college	2.02	0.53	0.00	7.50	2.67	21.1
	Associate Degree or Technical Certificate	1.49	0.19	0.00	4.44	3.09	6.38
	Bachelor's degree or higher	-0.05	0.64	0.94	0.96	0.27	3.33
Profile 3: High Stress-Low Job Satisfaction, Low Leadership vs. Profile 1: Medium Stress and Leadership Low Job Satisfaction	Perceptions of training effectiveness	-1.36	2.23	0.54	0.26	0.00	20.31
	High school diploma or equivalent or less	-0.14	0.48	0.78	0.87	0.34	2.24
	Some college	-1.33	0.45	0.00	0.27	0.11	0.64
	Associate Degree or Technical Certificate	-0.46	0.17	0.01	0.63	0.45	0.88
	Bachelor's degree or higher	-0.04	0.60	0.95	0.97	0.30	3.14
Profile 1: Medium Stress and Leadership Low Job Satisfaction vs.	Perceptions of training effectiveness	1.36	2.23	0.54	3.89	0.05	307.5
	High school diploma or equivalent or less	0.14	0.48	0.78	1.15	0.45	2.94

Profile	Covariate	Estimate	S.E.	P-Value	OR (1/OR)	95% C.I.	
Profile 3: High Stress-Low Job Satisfaction, Low Leadership	Some college	1.33	0.45	0.00	3.77	1.56	9.08
	Associate Degree or Technical Certificate	0.46	0.17	0.01	1.59	1.14	2.22
	Bachelor's degree or higher	0.04	0.60	0.95	1.04	0.32	3.37
Profile 3: High Stress-Low Job Satisfaction, Low Leadership vs. Profile 2: Medium High Stress, Medium Job Satisfaction, Low Leadership	Perceptions of training effectiveness	-1.36	2.28	0.55	0.26	0.00	22.38
	High school diploma or equivalent or less	0.79	0.64	0.22	2.19	0.62	7.71
	Some college	0.69	0.69	0.32	1.99	0.51	7.70
	Associate Degree or Technical Certificate	1.03	0.31	0.00	2.80	1.51	5.18
	Bachelor's degree or higher	-0.08	0.84	0.92	0.92	0.18	4.74
Profile 2: Medium High Stress, Medium Job Satisfaction, Low Leadership vs. Profile 3: High Stress-Low Job Satisfaction, Low Leadership	Perceptions of training effectiveness	1.36	2.28	0.55	3.89	0.05	338.7
	High school diploma or equivalent or less	-0.79	0.64	0.22	0.46	0.13	1.68
	Some college	-0.69	0.69	0.32	0.50	0.13	1.95
	Associate Degree or Technical Certificate	-1.03	0.31	0.00	0.36	0.19	0.66
	Bachelor's degree or higher	0.08	0.84	0.92	1.08	0.21	5.57

Home visitors with an associate degree or technical certificate were more likely to be in Profiles 1, 3, and 4, than in Profile 2, *Medium-High Stress, Medium Job Satisfaction, and Low Leadership Perceptions*. Home visitors with an associate degree were 4.44 times more likely to be in profile 1, *Medium Stress and Leadership Perceptions-Low Job Satisfaction* (OR = 4.44, , p = 0.00, 95% CI [3.09, 6.38]) than Profile 2. Home visitors with an associate degree were also 2.80 times more likely to be in Profile 3, *High Stress-Low Job Satisfaction, Low Leadership Perceptions* than Profile 2 (OR = 2.80, p = 0.00, 95% CI [1.51, 5.18]). Home visitors were also 3.43 times more likely to be in Profile 4, *Low Stress-High Job Satisfaction and Leadership Perceptions* than in Profile 2 (OR = 3.43, p = 0.01, 95% CI [1.14, 2.22]).

Additionally, home visitors with an associate degree or technical certificate were 1.29 times more likely to be in Profile 1, *Medium Stress and Leadership Perceptions-Low Job Satisfaction* than in Profile 4, *Low Stress-High Job Satisfaction and Leadership Perceptions*(OR = 1.29, p = 0.05, 95% CI [1.00, 1.67. Home visitors with an associate degree were also 1.59 times more likely to be in Profile 1 than in Profile 3, *High Stress-Low Job Satisfaction, Low Leadership Perceptions* (OR = 1.59, p = 0.01, 95% CI [1.14, 2.22]). Comparisons between Profiles 4 and 3 for home visitors were not significant.

As for home visitors who had completed some college, they were 7.50 times more likely to be in Profile 1, *Medium Stress and Leadership Low Job Satisfaction* than Profile 2, *Medium-High Stress, Medium Job Satisfaction, and Low Leadership Perceptions* (OR = 7.50, p = 0.00, 95% CI [2.67, 21.10]). Home visitors with some college were also 3.77 times more likely to be in Profile 1 than in Profile 3, *High Stress-Low Job Satisfaction, Low Leadership Perceptions* (OR = 3.77, p = 0.00, 95% CI [1.56, 9.08]). Home visitors

with some college are also 3.65 times more likely to be in Profile 4, *Low Stress-High Job Satisfaction and Leadership Perceptions* than in Profile 2 (OR = 3.65, $p = 0.03$, 95% CI[1.56, 9.08)] . All other comparisons with home visitors with some college were not significant.

Chapter 7

PHASE III: RESULTS

Introduction

Phase III seeks to explain the results of Phases I and II. The results of Phase III presented in this chapter address the following research questions: *RQ3) What experiences explain local-level EHS home visitor perceptions of program supports and job satisfaction?; 3a) What experiences explain local-level EHS home visitor perceptions of program supports (work environment and programmatic leadership)?; 3b) How are local-level home visitor experiences of program supports related to job satisfaction?*

This chapter also contains a brief summary of Phase III-specific methods that were fully described in Chapter 4: Research Design and Methodology. Results are then presented. An integration of Phase III quantitative and qualitative results is presented in Chapter 8: Discussion.

Summary of Methods

As further detailed in Chapter 4. Research Design and Methodology, Phase III of this study utilizes a mixed-methods explanatory sequential design. Based on the questions

from the data used for Phase I and II in the 2018 EHS Baby FACES (Cannon et al, 2020) and the results of the data analysis, a survey was developed and sent to home visitors (N = 14) across the two partner programs that had been involved in the development of research questions for this project and the interpretation of results. There was a 64% response rate to the survey (n = 9). The survey responses were analyzed and used, in conjunction with Phase I and II results, to develop a semi-structured interview protocol. All nine home visitors who participated in the survey were interviewed. Interviews were conducted and recorded via Zoom which generated recordings and initial transcripts. As a part of the interview protocol participants were sent a "thank you" email to include links to human resource and mental health supports. Transcripts were reviewed and cleaned for analysis in NVivo 14. Memos were created after each interview and transcript cleaning.

Coding was developed through a "hybrid approach" of inductive and deductive codes (Fereday & Muir-Cochrane, 2006; Quinn et al. 2016). The initial codebook was from an a priori framework that reflected the constructs and results of Phases I and II as well as the results of the local home visitor survey. Additional deductive sub-codes were added during the memo-writing and coding process. The researcher and two research assistants coded the transcripts and three interviews were double coded. The percent agreement was, 95.66% and 98.09% agreement, respectively with the researcher and 97.44% with each other.

Sample

The sample of participants for Phase III was drawn from two local EHS-home based program partners in the Mid-Atlantic region of the United States. Combined the two programs serve over 150 children across 14 home visitors, of which 64% participated

(n = 9). Home visitors from both programs have staff with home visiting experience ranging from 0 to 17 years. The largest racial group of home visitors was White non-Hispanic at 55.6%, home visitors were all female (100%), and most spoke English as a first language (77.8%). The majority of home visitors had a bachelor's degree or higher (77.8%) and an early childhood certification (54.5%). Phase III home visitor demographic data is detailed in Chapter 4. Research Design and Methodology.

Local Home Visitor Survey Results

Professional Development

As for program and professional development characteristics (Table 22), the majority of home visitors served in a mix of urban, suburban, and rural settings (88.9%). As for professional development provided, the majority indicated that training provided by the program was "very useful" (66.7%). The types of trainings perceived as the most useful varied widely from pre-service training to father involvement, to curriculum and lesson planning, and motivational interviewing.

Most participants also received coaching (77.8%). Respondents who received coaching identified that a coach may be a supervisor, more experienced peer, or another staff member. Coaching was an as-requested support and as a result varied in format to include group, one-on-one, or a mix of both with frequency ranging from once a month to a few times per year. Among home visitors who indicated that they received coaching in the survey 75% indicated that coaching helped their effectiveness "a great deal" and 75% also indicated that coaching provided "a lot of support" for their relationships with families and their ability to support parent-child interactions.

As for reflective supervision, the majority of home visitors received this as well (88.9%). All but one home visitor who received reflective supervision indicated that the supervisor provided this support. However, during semi-structured interviews half of participants who received reflective supervision indicated it was from a supervisor but that they also had group sessions with a mental health consultant (with the option of one-on-one meetings as well). The other half of home visitors who indicated that they had reflective supervision stated that it came from a mental health consultant (also with group meetings and optional one-on-one sessions). Among home visitors who participated in the survey 87.5% indicated that reflective supervision supported their effectiveness as a home visitor "a great deal" while 75% responded that reflective supervision provided "a lot of support" for their relationships with families and their ability to support parent-child interactions.

Table 22

Home Visitor Program and Professional Development Characteristics

Variable	%	N
Program location		
Rural	11.1%	1
Urban or suburban	-	-
Mixed (urban, suburban, and rural)	88.9%	8
Usefulness of training		
Very useful	66.7%	6
Somewhat useful	22.2%	2
Not too useful	11.1%	1
Not at all useful	-	-
Home visitors receive any coaching		
Yes	77.8%	7
No	11.1%	1
Missing	11.1%	1
Home-visitors receive reflective supervision		
Yes	88.9%	8
No		-
Missing	11.1%	1

Perceptions of Program Environment and Leadership

Survey results addressing local home visitor perceptions of their program environment as a work environment and program leadership are depicted in Table 23. Overall, results across the TCU SOF subscale means for cohesion (M = 44.1 of 50 points), communication (M = 41.3 of 50 points) and job satisfaction (M = 41.9 of 50 points) were scored highly indicating positive perceptions while stress (M = 24.7 of 50 points) was comparatively moderate. As for perceptions of leadership (M = 29.8 of 36 points), they were relatively high. Comparing this group to the profiles created in Phase I, this was closest to Profile 3, *Low Stress-Positive Perceptions*. As for Phase II, in the profile of work environment and job satisfaction the sample was closest to Profile 2, *Low Stress, High Job Satisfaction and High Work Environment Perceptions* and for the leadership and job satisfaction profiles Profile 4, *Low Stress-High Job Satisfaction and Leadership Perceptions.*

Table 23

Home Visitor Scale Results

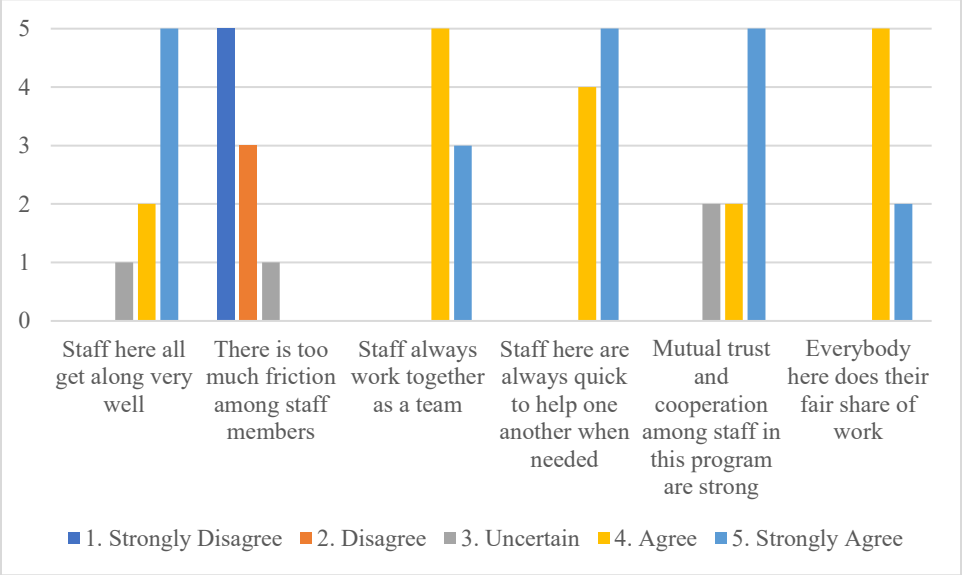
Variable	Mean	SD	Min	Max	Range
TCU SOF *(out of 50)*					
Cohesion subscale	44.1	5.08	35	50	15
Communication subscale	41.3	4.90	32	48	16
Stress subscale	24.7	8.88	12.5	42.5	30
Job satisfaction subscale	41.9	3.77	35	48.3	13.3
OCDQ-RE					
Support subscale *(out of 36)*	29.8	5.12	29	34	5

An examination of the item levels further illustrates this point. In the cohesion (Figure 12) subscale, responses are highly positive. This indicates that participants see themselves and co-workers overall working together as a team, are quick to help each

other, and that co-workers do their fair share of work. As a result, items were scored entirely above "disagree" and "strongly disagree," and "uncertain." When it came to staff getting along, friction, and mutual trust and cooperation, there was some uncertainty as one of the nine respondents indicated "uncertain to "Staff here all get along very well"; one uncertain response to "there is too much friction among staff members" and two "uncertain" respondents to "Mutual trust and cooperation among staff in this program are strong."

Figure 12

Home Visitor Item-Level Cohesion

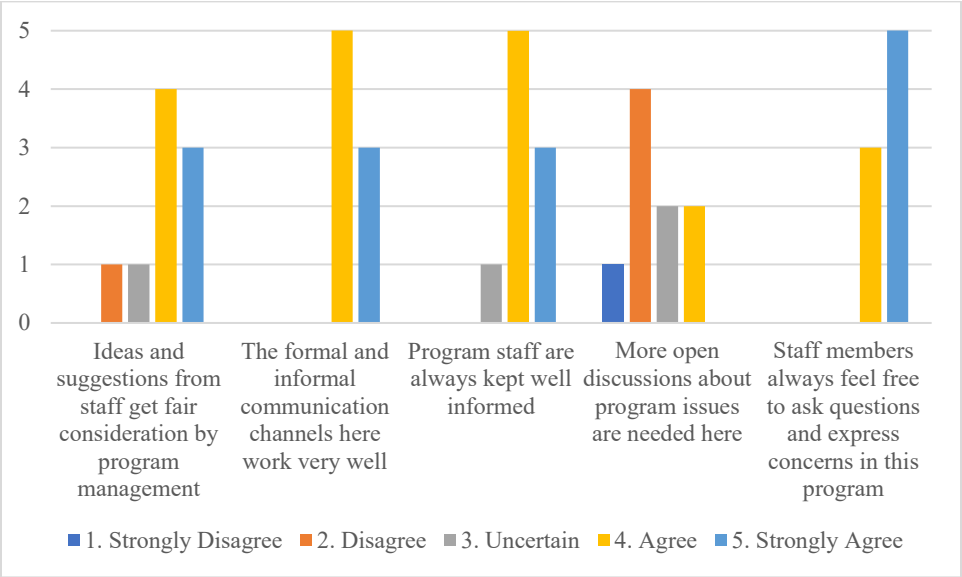


Similarly for communication (Figure 13), formal and informal communication channels, program staff kept well informed, and staff feeling free to bring up questions or issues were very positive with scores appearing above "disagree" and "strongly disagree." Items for ideas and suggestions and open discussion, however, were more

mixed with responses ranging from four responses between “strongly agree” and “agree”, four “uncertain” responses and one “strongly disagree” response.

Figure 13

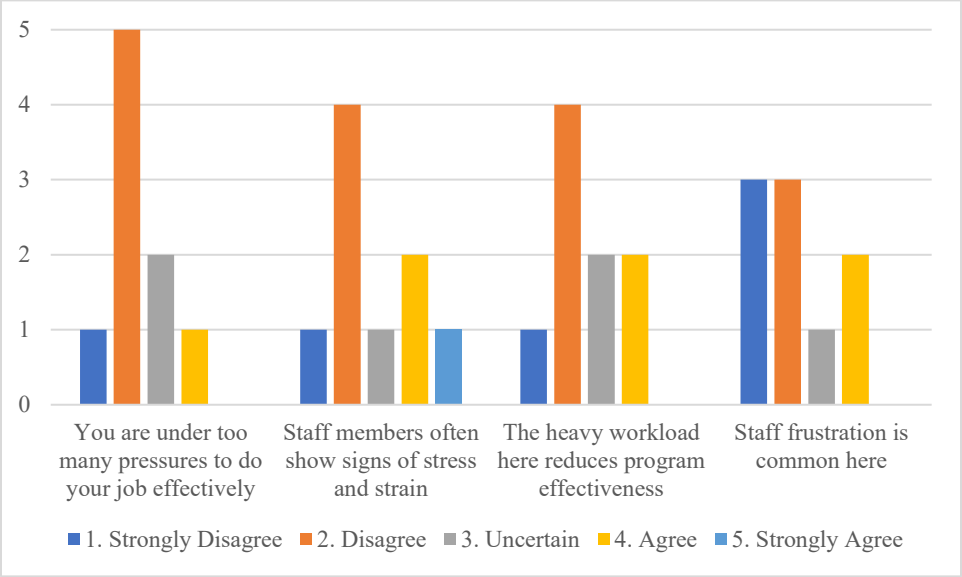
Home Visitor Item-Level Communication



The subscale of stress (Figure 14) was more mixed overall. While the most common response across items was disagreement about feelings of stress, all items had responses from either “strongly agree” or “agree” to “strongly disagree” reflecting a range of experiences related to work stress. Most respondents “strongly disagreed” or “disagreed” with the stress items but across each item there were respondents who responded that they were “uncertain” and “agreed” or “strongly agreed.”

Figure 14

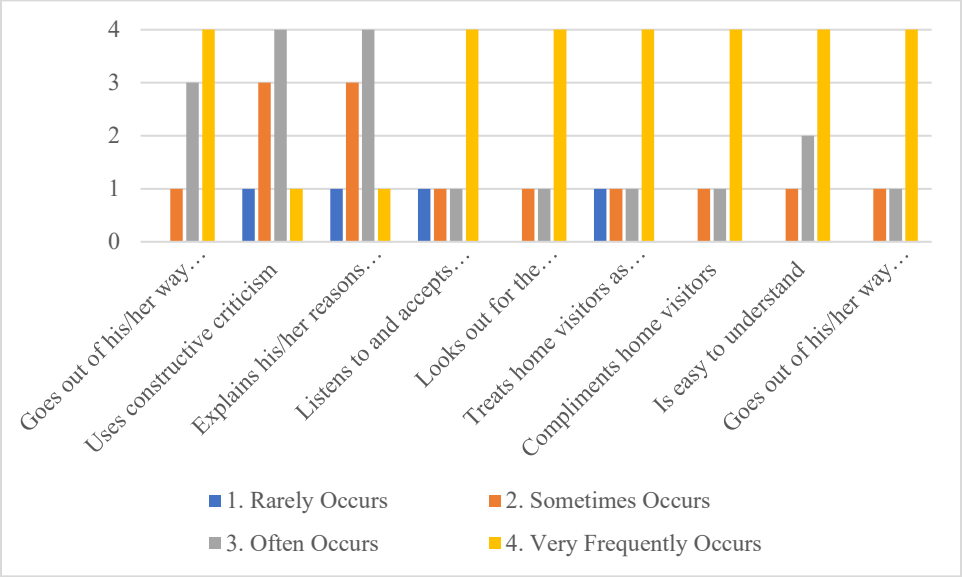
Home Visitor Item-Level Stress



As for supportive leadership (Figure 15), results were overall very positive with seven of nine items receiving the majority of responses as "very frequently occurs". Only use of constructive criticism and the director explaining reasons for constructive criticism had majority of response as the slightly lower "often occurs" (with four responses each) followed in both items by three "sometimes occurs" responses. However, it should be emphasized that responses were from two EHS programs across three locations. As a result, it is to be expected that results are relatively homogenous.

Figure 15

Home Visitor Item Level Supportive Leadership

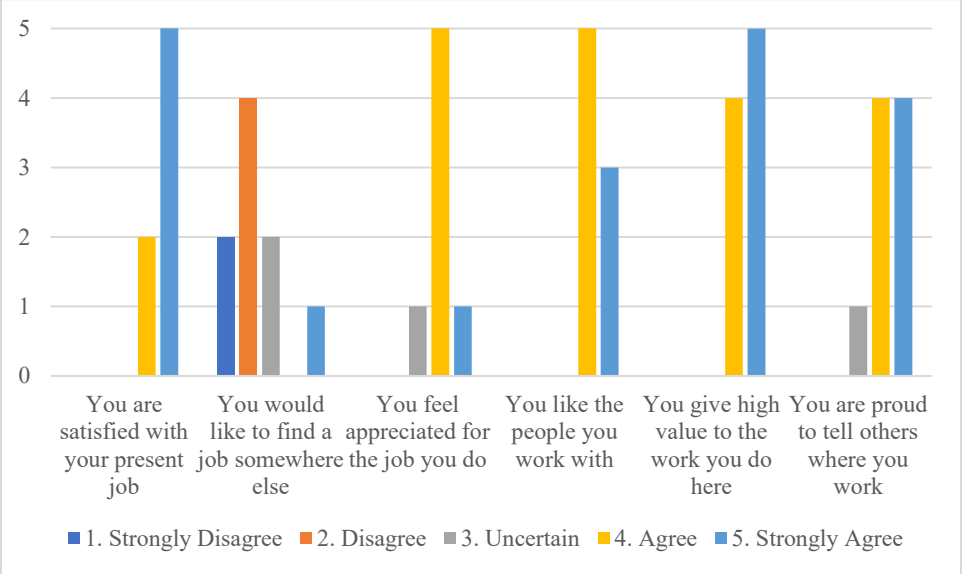


Perceptions of Job Satisfaction

As for home visitor job satisfaction (Figure 16), responses were overall highly positive. All nine survey participants either "strongly agreed" or "agreed" that they were satisfied with their job. Similarly, all respondents either "strongly agreed" or "agreed" that they liked their co-workers and that they gave high value to their work. As for feeling appreciated and feeling proud of their organization, eight out of nine participating home visitors "strongly agreed" or "agreed" with only one "uncertain" response. Despite these positive results, the responses to the question "Would you like to find a job somewhere else?" were far more mixed. Of the participating home visitors, six respondents selected "disagree" or "strongly disagree" but three indicated "uncertain" while one indicated "strongly agree."

Figure 16

Home visitor Item Level Job Satisfaction



Semi-Structured Interview Findings

Pre and Post Covid-19 Differences

Only three of the interview participants had worked in home visiting, all with their current programs, prior to the Covid-19 pandemic. The primary differences noted were the well-being of families, and the connection and communication with peers and program leaders. Two of the three home visitors noted that during the pandemic families were more isolated, losing out on personal contact and socializations. Home visitors noted that the pandemic had resulted in families having become more withdrawn and having more needs, such as housing. One of these respondents indicated that their program was now more acutely aware of the health of families served than before the pandemic.

In order to keep families connected, two of the three home visitors discussed how they relied on video calling in order to conduct virtual home visits and socializations.

I wasn't very good with technology, and I think I still have to learn a lot. ... I was very scared. To be honest, I thought I was gonna lose my job, and then we start doing it. And I start seeing the response of the families. I think everybody wanted to be connected [in] some way.

An additional home visitor who began at the start of the pandemic also discussed using technology to connect with families as well. These home visitors identified that they discovered that most, but not all, families on their caseloads wanting to stay connected and discussed having to learn to use new technology and then teach it to parents. While home visitors used their laptops, families often used their smartphones to connect. Home visitors were able to conduct visits, story time, and socializations virtually. Home visitors who discussed this indicated that the response was overall positive. One home visitor noted that she continues to use zoom for some home visits if a household member of a family on her caseload may be ill.

Two of the three home visitors who had worked in home visiting pre-pandemic noted that connection and communication had been enhanced by technology since the pandemic, to include ongoing group texts that home visitors could use at any time. Supervisors and other program directors reached out via email and text more frequently to check in with home visitors. Two of the three home visitors also noted faster response times from program leaders that they emailed.

Before the pandemic. It wasn't as much checking in and making sure that you're okay, not saying that they didn't do that. But now it's for me. It's consistently like I'm always getting, you know, my supervisor or somebody will reach out to see how I'm doing. And then we have like, I said before, we have our group on the

[group text]. … So, it's really nice. I like it. So, I feel like there's more communication now than ever.

Technology has since been used to make home visiting as a job more flexible with work from home and hybrid schedules of in person and virtual meetings and working from home rather than in the office. (Across interviews seven of nine home visitors described hybrid work). Additionally, all three home visitors noticed that their program leaders have become much more focused on staff wellness and mental health over the past few years since the pandemic, offering activities and trainings to support staff wellness.

Home Visitor Background and Education

Prepared for the Role of Home Visitor

Among participating home visitors, seven of nine stated that they felt prepared for the role. They discussed how their educational and professional background helped to prepare them for their role as a home visitor. As indicated in the demographic data, all had at least an associate degree, but most had a bachelor's degree or higher. Understanding child development, family needs, as well as experience maintaining professionalism in customer service roles were viewed as helpful to the role of home visiting.

I think that it prepared me well in the sense of you know, understanding that families are different, you know. No family is the same. They have different needs; they have different experiences. The parents in the family have, you know, have their own parenting experiences that you know from their upbringing. And there's

just a lot of dynamics that are involved. And I think that my education has helped me to understand that. And so that way, it makes my job easier.

The two home visitors who stated that they did not feel prepared for the role had early childhood backgrounds but were not expecting the level of family support work, especially with complex family challenges and trauma.

Home Visitor Experiences With Program Environment and Leadership

Local-level home visitors were interviewed about their experiences with their program environment (to include cohesion, communication, and stress) as well as their perceptions of programmatic leadership in order to answer Research Question 3a) *What experiences explain local-level EHS home visitor perceptions of program supports (work environment and programmatic leadership)?* Several themes emerged related to each category.

Co-Worker Friction is a Professional Issue

All home visitors who participated in the semi-structured interviews expressed a dislike of dealing with friction and a preference for just having a good relationship with one another. Among home visitors seven of the nine framed addressing friction as separating the personal from the professional. Honesty and common interest in serving families was emphasized in addressing issues that could affect a home visitor's own work.

I feel like we could all talk about it if something was bothering us.

Home Visitor Teamwork and Trust are Central to Co-Worker Relationships

For eight of the nine participants, teamwork and trust were central to home visitor work relationships with one another. Teamwork and trust were framed within the context

of ensuring that it was done so while maintaining the confidentiality of the families served and a sense of program goals. Within these parameters were found a robust sense of teamwork, trust, and mutual support expressed across home visitors who participated in the semi-structured interviews. Home visitors expressed that they proactively shared new ideas for activities and resources (e.g., a tool for family goal setting), as well as responding to requests for ideas, and feeling that all they themselves needed to do was ask if they needed help.

Home visitors further expressed that they did not feel like they "have to beg" for help, but rather their co-workers took the time to help them solve any problems that they had with their work. Not only did home visitors express a sense of helping and being helped but as a team they shared their successes as well. This sense of teamwork and trust was also identified by home visitors as a support to help them cope with stress.

> *But I really feel like it's really a supportive team that gets along. I mean, we have to partner with each other in a lot of situations. You know, we just put out there, 'Hey, I need a partner for this day'. You're never begging someone to come, you know. Whoever has the time will step up and say, 'Hey, yeah, I can do that with you.'*

All nine home visitors indicated that they had been asked for help with work by a colleague and had themselves responded to provide support.

Formal and Informal Channels of Communication Work Well

Among participating home visitors seven out of nine indicated that formal and informal channels of communication worked well in their programs. Modes of effective communication identified were via regularly scheduled meetings as well as regular and ongoing email and text communication with supervisors, program leadership, and peers.

Effective formal communication was identified as meetings as well as emailed reminders of up-and-coming events, tasks to be completed for monitoring, and deadlines. Email was also a mode of communication for program leaders to share community events, ideas, and resources with program staff.

I think we are kept in the loop. Now, I know it is on different levels, like the leadership team will discuss things, and then home visitors will know when the time is appropriate.

As for informal communication, this was in the form of text messages and time together with the opportunity to talk. Text messages were a major component for home visitors to reach out to ask questions and seek help as well as for home visiting supervisors to check in with their team. Participants indicated that this had allowed for immediate help or feedback. Among the other two home visitors who did not indicate that formal and informal communication worked well for them one indicated that this was due to major decisions only being communicated via email and another that misunderstandings occur due to an overwhelming amount of work.

Home Visitor Issues and Suggestions are Taken Seriously

Among home visitors seven out of the nine expressed that they felt that their supervisors and leaders listened to them when they gave suggestions or brought up issues within the program and overall felt included in the decision-making process. Home visitors expressed an understanding that suggestions and issues could be brought by their supervisor to program leaders for consideration and further that they felt that if their program could address or fix an issue they would when possible.

But usually if there is an issue, we bring it up, they'll try, and if there's a way around fixing it, the superiors try their best on how to address it. If it's something that we absolutely cannot change …I think they are pretty open to feedback.

Among the two who did not indicate that issues and suggestions are taken seriously one commented, "I feel it goes in one ear and out the other" and the other expressed that program leaders had "too much on their plate" already.

Challenges to Time Management Due to High Volumes of Data Entry and Documentation

All nine participating home visitors expressed that data collection and documentation were a major source of stress. For this theme, it is important to clarify that home visitors did not express a dislike of data entry or documentation, nor did they dismiss its value. In fact, one home visitor indicated that she frequently refers to her documentation to keep on track with meeting EHS program requirements with families. Rather, home visitors identified that much of their time was taken up by entering the same information into multiple data platforms. Additionally, a well-known labor intensive and elaborate online platform used for ongoing assessment was specifically named by nearly every home visitor as a source of stress. This was viewed as a challenge to the need to maintain a flexible schedule to ensure visit completion with families.

"It's like you're drilled in your head, 'Visit, visit, visit', but at the same time you gotta put in the 'Paperwork, paperwork, paperwork', but, like you're only allowed to work 7 hours in a day, and then, if families want you on the weekend, you're supposed to be available for that, too."

Completing visits with families was also connected with collecting data and documentation from families. Home visitors expressed challenges in collecting forms, such as child visits, and conducting screenings and assessments with families. (This means within 45 days of enrollment for developmental screenings and assessments, 90 days for health screenings, and then following state Early, Periodic, Screening, Diagnostic, and Treatment guidelines thereafter. As EHS home visiting has rolling enrollment each child on a caseload is at a different place in this schedule). Challenges to completing documentation on time for screenings and assessments were identified due to missed home visits and families not cooperating or following through with providing information.

Families Experiencing High Levels of Need as a Stressor

Eight of nine participating home visitors expressed that the families on their caseloads encounter a variety of unique and difficult situations to include intimate partner violence, substance abuse, housing instability, involvement with child protective services, deep poverty, and immigration. Home visitors expressed that it was stressful to try and help families identify resources and many experienced a level of rumination, worrying about the situations of families while away from work, although some were able to cope with this better than others.

> *Depending on what the family needs, because each family is different, you know. Sometimes we have homeless families. Sometimes we have families with children, have special needs. We have families who are unemployed. We have families who are immigrants. We have families who are single parent ... There's a lot of different scenarios. So, you have to address those things as they come up,"*

Concerns For Personal Safety

Related to the difficult situations of families served by home visitors was the theme of personal safety. All nine home visitors in the interviews all shared that they have had visits that felt unsafe due to a situation in the home or due to the safety of the neighborhood. However, all home visitors also discussed personal and program strategies to mitigate risk, to include conducting initial visits in pairs, checking in and out via text message with their supervisor, and strategic scheduling to avoid times when they may be less safe visiting a home or neighborhood. One home visitor also indicated that her supervisor texts her a zoom link that she can click on to reach out in an emergency. Rapport building was another strategy that was discussed by two home visitors as an important aspect of safety.

> *You're thinking about what's gonna happen when that door closes. … Until you really build the relationship with the people. You don't know what's going to happen.*

Setting Mental and Emotional Boundaries With Work

All participating home visitors expressed ways in which they set mental and emotional boundaries. Among home visitors six shared that they coped with stress at a personal level by setting emotional boundaries with their work with families, especially when they worked with families that had complex needs or challenges. Home visitors discussed the importance of mentally and emotionally separating their work and personal lives. Strategies included letting go of the impulse to try and "hold hands" with a family by addressing every need perceived by the home visitor. Rather, home visitors expressed letting go to accept families where they are at and their decisions and to "plant seeds" of

education, information, and resources that the family could choose to use or not as well as realizing that families may not perceive their needs in the same way as the home visitor.

> *I wanted to save the world. I didn't understand why people live this way or why this is this way. Why wouldn't you just get off your couch and go do something with it? Like I had that hard block there in the beginning. But now, let's look at the picture. Is there mental health? Is [it that] they just can't see past that couch at that moment. And I take in my standard of living … Not everybody lives the way or thinks the way I do. We have to be more accepting of others, right? So, I think that also helps.*

An overlapping strategy expressed by five home visitors were self-care actions that created a sense of space between their personal and professional lives. This included strategies such as turning off their work phones in the evening, using music or other ways to wind down and distract themselves from their workday. However, three home visitors expressed that despite these strategies they still continued to experience rumination about the situations of the families on their caseloads.

Appreciation is Expressed in Intangible and Tangible Ways

Among participants, seven out of nine identified intangible forms of appreciation as helpful and supportive. This included supports that were identified as helping home visitors feel appreciated through day-to-day recognition of what they were doing well. This included finding ways to acknowledge home visitor work such as passing on appreciation from families and interns who worked with the program. Home visitors also felt appreciated when they were told “thank you” or were given specific examples related to the good quality of work that they had accomplished.

She's good, she'll call me and tell me you did really good at this and this and this, and she'll open up, you know, the computer and show me. She just told me that you know I've done a good job, and that she appreciates my hard work.

Overlapping with intangible forms of appreciation from program leaders were tangible forms of appreciation. This included a variety of actions such receiving a jacket with the program logo, a gift bag with self-care items, lunch at a meeting, or items that helped home visitors with their job such as a car safety kit.

Leaders Making Time for Home Visitors

Time was an important aspect of support that home visitors also identified as an important support. There were seven of the nine home visitors who described how they received this support while two with higher stress levels did not have this support but recognized its absence. Interestingly, variation existed within the program and site levels. Taking time for home visitors includes both structured formal points of contact and during unstructured points of contact. During unstructured points of contact, time is taken to ensure that home visitors can have their questions answered or are able to talk through or express their concerns about issues, especially when they involve confidentiality, in structured and unstructured timeframes and home visitors feel both emotionally safe and like they are not intruding on the time of their supervisor and director.

Not only did home visitors feel that they could approach their supervisors, or other program leaders (perceiving an open-door policy), but those program leaders also were described as being aware of home visitor stressors and proactively reached out to home visitors to check in with them and their work or ensure that they had what they needed. In

addition to problem solving, this enabled the program leader to encourage home visitors to have work-life boundaries.

> *I don't know if I would be where I'm at today without her. She really took me and found my strengths and molded me not mold like help me become the person I am today. … She has built so much in me and given me so much strength and build off of who I was that I didn't know was there and really help me meet the potential. And she knows me way too well.*

As for the two home visitors who expressed that time from their leaders was missing, they perceived their program supervisors and directors to be overbooked or overwhelmed with their own work to really have time. This included unavailability due to a high volume of meetings and commitments and being too busy to keep track of individual family issues on home visitor caseloads. These home visitors reported having to recap family issues in discussions or receiving inconsistent answers to their questions or felt that communication was easily misunderstood due to the high volume of work. These home visitors perceived their program leadership to be under a lot of pressure and demands but unable to refuse or redelegate the responsibility.

> *It's not that she doesn't wanna help and try to help. She has a hard time keeping track of the families and situations that I've spoken to her about before. … So any meeting we have I have to review from the very beginning, and like, you know, it takes longer, and she just doesn't have the time for that, honestly. And it's not like, I said. It's not anything against her. It's about her workload…. I feel like they feel like they can't speak up about their workload.*

Home Visitor Experiences With Job Satisfaction

In order to answer Research question 3b) *How are local-level home visitor experiences of program supports related to job satisfaction?* Home visitors were asked about the most and least satisfying aspects of their experiences as home visitors. Several themes emerged.

Job Satisfaction Through Helping Children and Families

Home visitors who participated in the semi-structured interview all identified helping children and families as the most satisfying part of their job. Home visitors discussed the satisfaction that they received in building up the capacity of the parents that they worked with. This included helping families meet their goals and assisting families with navigating social service systems to access resources, providing parenting education, and resources.

> *When I see [a] family meeting their goals. That is amazing to see them and their excitement, you know. That's how you know. That's one of my favorite things.*

This was often connected to success stories of families who had had experienced complex high-needs situations to include child protection cases and intimate partner violence. Additionally, home visitors identified that spending time in positive interactions with children and families that they visited this included helping parents know that they are not alone in their challenges, children happy to see them when they arrive, and the overall positive growth and development of children and families.

Job Dissatisfaction and Family Disengagement

Among six of the nine home visitors, family disengagement was identified as one of the least satisfying aspects of home visiting. Family disengagement included families

that frequently missed home visits and the home visitor perceived as either not caring enough to keep them or being too immature to understand the importance of the program. This was especially disheartening when the family had high needs or may lose the child due to lack of participation. This could also include families that kept visits but expected the home visitor to work with their child without the parent getting involved or parents who automatically dismissed resources information the home visitor had worked to compile.

> *When you know that [child protection] is involved and there's goals for these families. And they just don't care. And then they lose their kids, yeah. That is heartbreaking.*

Family disengagement was also seen as compounding other stressors, especially as it related to missed home visits as it could worsen the urgency of completing assessments or collecting documentation on a deadline or could amount to time lost to driving to a home visit where no one answered the door.

Both the quantitative and qualitative results are further presented in Table 24 below a pillar integration table (Johnson et al., 2017). A summary of quantitative data is presented in the far-left column while qualitative data is summarized in the far-right column. Quantitative categories are presented in the middle-left column and qualitative categories are presented in the middle-right column. The middle column integrates the results of both quantitative and qualitative findings with further discussion of Phase III integration in Chapter 8: Discussion.

Table 24

Phase III Quantitative and Qualitative Pillar Integration

Quantitative Data →	Quantitative Categories→	→ Integration ←	← Qualitative Categories	← Qualitative Data
Bachelor's or higher 78% Early Childhood Certification 55%	Education	Formal education and certification prepares home visitors for their work with children and families in EHS-home based	Felt prepared for role as a home visitor.	*I think that it prepared me well in the sense of you know, understanding that families are different, you know. No family is the same.*
Mean cohesion 44.1 out of 50 Mean communication 41.3 out of 50	Cohesion Perceptions Communication Perceptions	Home Visitors support each other through peer support, collaboration, and mutual self-help. A sense of trust links cohesion to communication between home visitors. A sense of home visitor trustworthiness and transparency between each other and with their program leaders. Communication technology has facilitated stronger communication and as a result cohesion and perceptions of supportive leadership.	Co-worker friction is a professional issue. Home Visitor teamwork and trust are central to co-worker relationships. Formal and informal channels of communication work well. Home visitor issues and suggestions are taken seriously. Covid-19 advanced technology use among home visitors to improve cohesion, communication, and leadership.	*I feel like we could all talk about it if something was bothering us.* *But I really feel like it's really a supportive team that gets along.* *I think we are kept in the loop.* *But usually if there is an issue, we bring it up, they'll try …* *It's consistently like I'm always getting, you know, my supervisor or somebody will reach out to see how I'm doing.*
Mean stress 24.7 out of 50	Stress	The issues of duplicate data entry and paperwork are a source of frustration. Families with high levels of need can challenge a sense of effectiveness.	Data entry and documentation challenge time management. Families experiencing high levels of need is a stressor.	*It's like you're drilled in your head, 'Visit, visit, visit', but at the same time you gotta put in the 'Paperwork, paperwork, paperwork'…* *… There's a lot of different scenarios. So, you have to*

		Concerns for safety can create a sense of disempowerment. Creating mental and emotional distance from stress can reduce strain and empower.	Concerns for personal safety. Coping through setting mental and emotional boundaries with work.	*address those things as they come up.* *Until you really build the relationship with the people. You don't know what's going to happen.* *Not everybody lives the way or thinks the way I do. We have to be more accepting of others, right?*
Mean leadership 29.8 out of 36 Training very useful 67% Receive Coaching 78% Receive Reflective Supervision 89%	Program Leadership Perceptions Training Perceptions Coaching Perceptions Reflective Supervision Perceptions	Leaders empower home visitors through non-tangible as well as tangible forms of support. Home Visitors look to their supervisors for support creating a sense of safety and trustworthiness. Leaders listening to home visitor creates a sense of control, voice, and choice.	Intangible and tangible forms of appreciation. Leaders making time for home visitors.	*She's good, she'll call me and tell me you did really good.* *She really took me and found my strengths and molded me not mold like help me become the person I am today.* *She has a hard time keeping track of the families and situations that I've spoken to her about before.*
Mean job satisfaction 41.9 out of 50	Job Satisfaction	While working with families who experience high needs is stressful for home visitors, helping families overcome those challenges is empowering to the home visitor and boosts their morale. When families disengage this lowers the morale and is disempowering for home visitors.	Job satisfaction through helping children and families. Covid-19 made families more disconnected and increase needs Job dissatisfaction and family disengagement.	*I think everybody wanted to be connected [in] some way.* *When I see [a] family meeting their goals. That is amazing to see them and their excitement, you know. That's how you know. That's one of my favorite things.* *When you know that [child protection] is involved and there's goals for these families. And they just don't care.*

Chapter 8

DISCUSSION

The previous chapters presented the results for Phases I, II, and III examining home visitor perceptions of the work environment and programmatic leadership and how they related to professional development (Chapter 5. Phase I: Results); how job retention profiled with perceptions of the work environment and leadership and how each profile related to retention (Chapter 6. Phase II: Results); and finally, the experiences of local home visitors related to work environment, programmatic leadership, and job satisfaction (Chapter 7. Phase III: Results). This section will now discuss the major findings of each phase followed by an integrated discussion of results, and finally implications. After the findings of each of the three phases are presented, implications will be discussed followed by strengths, limitations, and future directions.

In Phase I, the most salient results in the first profile analysis of the study were that perceptions of the work environment (cohesion and communication) along with perceptions of leadership and job satisfaction grouped closely together with similar means within each profile. Stress was consistently inverse to these other measure scores within profiles. In other words, within the profiles when scores of work perceptions, leadership, and job satisfaction were elevated, stress scores were low and when these perceptions were low stress scores were elevated. These results suggest that positive

perceptions of cohesion, communication, leadership, within an EHS home visiting program and job satisfaction may be protective factors against work-related stress. Additionally, the variable that was consistently predictive of group membership across comparisons of profiles was education, specifically an associate degree or technical certificate especially in predicting neutral levels of stress and perceptions of work environment and leadership as well as low levels of stress and perceptions of the work environment.

Phase II both confirmed and added further insight to Phase I results. Further, Phase II identified that job higher numbers of job vacancies were predictive of profiles with more negative or low perceptions and higher stress.

In Phase III, surveys and interviews of nine home visitors at two local programs revealed overall positive relationships with peers and leadership, especially supervisors. Home visitors described how they could rely on their peers for support with resources and their supervisors for addressing the complexities of home visiting. However, the perception of their supervisor having or making time for them was important. Home visitors' stressors were most clearly identified in working with complex families, yet spending time with and helping families address their needs and challenges was seen one of the most satisfying parts of the job. All home visitors were also able to identify how their prior roles prepared them for work as home visitors.

An integration of these results identified that cohesion and communication are interdependent with one another while leadership decisions set the stage for their effectiveness. Further, home visitors may have a level of stress tolerance as working with families, especially with high needs, is both a source of stress and satisfaction. In addition

to these factors, home visitor education also ensures a level preparedness to work with children and their families and the types of issues that they may face. Implications of these results suggest that home visitor perceptions of the work environment and leadership can most actionably be addressed through education. Findings are discussed in more detail below.

Major Findings

Phase I

Phase I of this project answered Research Question 1) *How are home visitor perceptions of program supports (professional development, work environment, and programmatic leadership) similar and different across home visitors?* Through the analysis of home visitor data from the 2018 Baby FACES data (Cannon et al., 2020) using a R3STEP LPA protocol (Asparouhv & Muthén, 2014; Vermunt, 2010). Research Question *1a) Do home visitors group into profiles based on perceptions of program supports? (work environment and programmatic leadership)* was addressed through a latent profile analysis. Results of the profile analysis indicated a three-profile solution from *z*-scored measures (See Figure 5 and Table 10).

From these profiles the first, Profile 1 was the smallest at 14% of the sample. In this profile the work environment measures of cohesion and communication were the lowest of all profiles while stress was the highest. As for supportive leadership, this profile also had the lowest scores of all profiles. Job satisfaction was also the lowest in this profile. As a result, this smallest group was both the most stressed and the most negative resulting in the Profile 1 name *High Stress-Negative Perceptions*. Profile 2 was the largest profile at 46%. This group in the sample had profile results with the work

environment measures of cohesion and communication slightly below the z-score line of zero, while stress was slightly above. Supportive leadership was slightly below the z-score line of zero, and the lowest score in the profile, while job satisfaction was also slightly below zero. This largest and most neutral group of Profile 2 was *Medium Stress-Neutral Perceptions* group. Profile 3 was the second largest group at 40% and was closer in size to Profile 2 than Profile 1. This group had the highest scores for the work environment constructs of communication and cohesion and the lowest for stress. Both supportive leadership and job satisfaction had the highest scores in this group. As a result, this large group of home visitors with relatively low stress and positive perceptions was named *Low Stress-Positive Perceptions*. Across groups in the profile solution, perceptions of cohesion, communication, and job satisfaction, and supportive leadership moved in a direct relationship with each other. However, all four of these perceptions moved inverse to stress across the profiles. In other words when cohesion, communication, job satisfaction, and supportive leadership perceptions were high, stress was low and when these four perceptions were low stress was high. These results confirmed Hypothesis 1a) *That home visitors' profiles of work environment, program leadership, and job satisfaction will increase or decrease together, while stress will increase or decrease inverse to the other variables of cohesion, communication, and leadership*.

Supporting literature indicates that home visitor stress deriving from working with families with complex challenges and trauma is a clear and consistent theme across the literature and can result in secondary stress, trauma, and burnout (Begic et al., 2019; Gill et al., 2007; Lou et al., 2021; Sandstrom et al., 2020). However, the work environment

can be either a risk or a protective factor to include the promoting self-care and as well a trauma-informed culture through education and awareness (Bloom, 2007). The implementation of these protective factors requires both understanding of the needs and experiences of home visitors by program leaders as well as buy-in to implementing the system-wide policies and practices that support them (Frosch et al., 2019; Gilkerson & Kopel, 2005) to include clear and positive communication (Douglass, 2014), strong collaboration that promotes trust and mutual respect (Williams et al., 2022).

In order to answer, RQ1b) *What home visitor characteristics predict profile membership (personal characteristics, program characteristics, and professional development)?* an MLR was conducted. Results did not fully support Hypothesis 1b) *It is hypothesized that home visitors in different profiles will have different characteristics across personal characteristics, program characteristics, and professional development experiences of home visitors*. Only education and training were found to have significant and meaningful odds ratios.

Specifically, an associate degree or technical certificate were more likely to be in Profile 2: *Medium Stress-Neutral Perceptions* or Profile 3: *Low Stress-Positive Perceptions* as compared to the high stress-low perceptions Profile 1: *High Stress-Negative Perceptions*. Training was also found to have a significant and meaningful odds ratio, predicting membership in Profile 3 over Profile 1.

These results aligned with Head Start Performance Standards (Office of Head Start, 2016) for home visitors to have at minimum an associate's degree in child development or a comparable field condition of employment. These results are supported by findings from Elicker and colleagues (2013) that found that an EHS home visitor or

caregiver had more positive relationships with parents when the home visitor or caregiver had Child Development Associate credential or an associate degree but not a bachelor's degree. The researchers suggest that the participants in their study with a bachelor's degree may have had less in common or fewer of the same experiences as the families enrolled in EHS. Further, Abbot-Shim and associates (2000) also found that education levels in Head Start classroom teachers with higher education were less likely to have inappropriate beliefs about children and more likely to have positive attitudes towards families, both of which could likely improve stress levels and view of work.

In contrast, Dennis and O'Connor (2013) found that preschool teachers with more education are less susceptible to organizational climate. However, it may be that higher education is a protective factor as the researchers also found that preschool teachers with more experience and less education were more susceptible to organizational climate good or bad. While the findings of this study confirm the importance of education for EHS home visitors, and is supported by existing literature, challenges remain in preparing a home visiting workforce serving pregnant people and families of infants and toddlers as most early childhood programs in higher education focus less on infants and toddlers and more on preschool aged children (Chazan-Cohen et al., 2017; Mortensen et al., 2019) and only about half of programs include home visiting field experiences (Hallam et al., 2003).

Phase II

Phase II sought to more closely examine how home visitor job satisfaction related to perceptions of the work environment and perceptions of program leadership to answer Research Question 2) *How does home visitor job satisfaction relate to perceptions of work environment, programmatic leadership, and retention?* The R3STEP

Latent Profile Analysis process was again used, in order to answer Research Question 2a) *How do job satisfaction, perceptions of the work environment, and stress group together?* A three-profile solution identified (See Figure 8 and Table 15). The results were similar to the Phase I profile solution suggesting that removing leadership had little influence on the results. Profile 1 contained the smallest portion of the sample at 10% had the lowest perceptions of the work environment measures of cohesion and communication while stress was the highest in this profile. This group also had the lowest job satisfaction of any profile. As a result, this profile was named Profile 1: *High Stress-Low Job Satisfaction and Low Work Environment Perceptions*. For Profile II, this was the second largest group at 42% of the sample. Perceptions of the work environment were the highest in this group while stress was at its lowest. Job satisfaction was also highest in this group. As a result, the name of this profile was Profile 2: *Low Stress-High Job Satisfaction and High Work Environment Perceptions*. As for Profile 3, perceptions of work environment through communication and cohesion were slightly below the *z*-score zero line while stress was slightly above. Job satisfaction was also slightly below the *z*-score zero line as well. As a result, the name of this profile was Profile 3: *Medium Stress, Job Satisfaction, and Work Environment Perceptions*.

Similar to the profile solution in Phase I, job satisfaction and the work environment perceptions cohesion and communication moved in direct relationship to one another but were inverse to stress. The results supported Hypothesis 2a) *It is hypothesized that in this isolated model perceptions of work environment and job satisfaction will increase together across profiles while stress will move inversely across profiles to the other variables.*

These findings reinforce Phase I results, and the existing literature indicating that work environment factors of cohesion and communication are interrelated (Douglass, 2014; Fitzgerald & Theilheimer, 2013; Williams et al., 2022). The results also identify that these processes are facilitated by programmatic leadership (Lou et al., 2021). Further, the quality of the interactions between leaders and staff must extend beyond the transactional to the supportive, or as Failla and Stichler (2008) recommend, the transformational.

Second, Research Question *2b) Does retention predict profile membership in profiles of job satisfaction, perceptions of work environment, and stress?* was answered through MLR using retention variables from the 2018 Baby FACES Director Survey. The results indicated that Hypothesis 2b) *It is hypothesized prior program retention will predict profile membership of work environment and job satisfaction profiles* was only partially supported. Only one retention variable was significant.

When the profiles were analyzed with predictor variables related to retention, only the number of home visitors who had left since September 2017 was found to have significant and meaningful odds ratios. As the number of vacancies increased the likelihood increased that home visitors would be in Profile 1, *High Stress-Low Job Satisfaction and Low Work Environment*, compared to Profile 3, *Slightly High Stress-Slightly Low Job Satisfaction and Slightly Low Work Environment*, with the most moderate stress and perceptions or compared to Profile 2, *Low Stress-High Job Satisfaction and High Work Environment Perceptions.* However, there was some nuance to this. When comparing Profiles 2 and 3, home visitors were more likely to have had more co-workers who had left in the profile with the most positive perceptions and lowest

stress, Profile 2, *Low Stress-High Job Satisfaction and High Environment*, compared to Profile 3, *Slightly High Stress-Slightly Low Job Satisfaction and Slightly Low Work Environment*.

These findings suggest that home visitor vacancies may predict profiles that perceive the work environment and job satisfaction more negatively and are more stressed (Sandstrom et al., 2020) in order to ensure that coverage is provided to children and families when a co-worker has left the program (Kaye et al., 2024). However, the results also suggest that turnover, at times, may predict higher perceptions of the work environment and job satisfaction with lower stress. In other words, the findings indicate that workforce stability is predictive of membership in a profile with a moderate level of perceptions of the work environment, job satisfaction, and moderate levels of stress, but not one extreme or the other.

Turnover in home visiting programs had high odds ratios for increasing negative perceptions, job dissatisfaction, and stress among remaining home visitors. However, these results suggest that turnover may also present the opportunity for improvement of perceptions of the program environment, job satisfaction, and stress for home visitors as well. Gill and colleagues (2007) identified that job satisfaction among home visitors in EHS is related to interpersonal climate but that emotional exhaustion among home visitors increases over time. These findings may suggest that lower turnover requires both a positive interpersonal climate but also a level of tolerance for the stress and exhaustion that home visitors may face due to their work. The results also suggest that there may be times that turnover may benefit the emotional climate of the program if the home visitor who leaves was not or is no longer able to contribute to a positive emotional climate. This

further reinforces the need for a trauma-informed organizational approach that mitigates stress and prevents burnout and secondary stress and trauma.

Significant results from the Phase I MLR, education and perceptions of the usefulness of training provided to home visitors, were also revisited. Overall, results indicated that an associate degree was a consistent predictor of more positive perceptions of the work environment, job satisfaction, and lower levels of stress. Some college coursework was also predictive of more positive perceptions, higher job satisfaction, and lower stress, compared to high stress and low job satisfaction and work perceptions. However, medium perceptions of stress, job satisfaction and work environment were more likely than low stress and positive perceptions. Training perceptions were not significant.

Third, another set of profiles was created to answer *Research Question 2c) How do job satisfaction, perceptions of program leadership, and stress group together (excluding work environment)?* in which leadership perceptions were isolated along with job satisfaction and stress. In contrast to prior results, a four-profile solution was selected as the best result (See Figure 11 and Table 19). Profile 1 was comprised of 27% of the sample and was the second largest profile. Profile 1 was found to have perceptions of stress barely below the z-score line of zero (at -0.01) while perceptions of leadership were right on this line. Job satisfaction, however, was low and compared to other groups, second lowest of the four profiles. As a result, Profile 1 was named *Medium Stress and Leadership Perceptions-Low Job Satisfaction*. Profile 2 was comprised of 17% of the sample and was the third largest profile. This profile had medium-high level of stress, and the second highest of all profiles while perceptions of leadership were low (the second

lowest of the four profiles). However, job satisfaction was just above the *z*-score zero line. As a result, Profile 2 was named *Medium-High Stress, Medium Job Satisfaction, and Low Leadership Perceptions*. Profile 3 was the smallest group at 10% of the sample. This group had the highest levels of stress and both the lowest perceptions of leadership and job satisfaction. As a result, Profile 3, was named *High Stress-Low Job Satisfaction, Low Leadership Perceptions*. Finally, Profile 4 was comprised of 45% of the sample and was the largest group. This group had the lowest levels of stress as well as the highest levels of perceptions of leadership and job satisfaction. As a result, Profile 4 was *named Low Stress-High Job Satisfaction and Leadership Perceptions*.

Profiles 3 and 4 were similar to results found in previous profiles in this study. However, Profiles 1 and 2 were different in how job satisfaction related to supportive leadership and stress. While, similar to previous profile results, there was a general directionality of low, medium, and high stress with leadership perceptions as an inverse (Profile 4, 1, and 3 respectively in Figure 11). However, job satisfaction in relationship to stress and supportive leadership was medium-low when stress and supportive leadership were at a medium or neutral level (Profile 1). Further, Profile 2 indicated that for 17% of home visitors in the sample job satisfaction could still be at a medium level while stress was medium-high, and perceptions of supportive leadership were low.

Hypothesis 2c) *It is hypothesized that in this isolated model perceptions of program leadership and job satisfaction will increase together across profiles while stress will move inversely across profiles to the other variables* was only partially supported.

These findings contribute to the existing literature. First, the findings are consistent with the current literature that suggests that home visitor stress and program leadership are related to job satisfaction (Begic et al., 2019; Gill et al., 2007; Lou et al., 2021) as it relates to the findings where stress is either clearly high (Profile 3) or clearly low (Profile 4). However, prior literature does not address the relationship between job satisfaction and leadership when stress is more moderate. This suggests that some home visitors may be more tolerant of moderate levels of stress even when leadership perceptions are low (in this medium-high in Profile 2) while others are not tolerant of moderate levels of stress or leadership (Profile 1) as it relates to job satisfaction. This may also be related to home visitors' individual attitudes towards leadership and authority, which requires further investigation.

Finally, to answer *RQ.2d) Does retention predict profile membership in profiles of job satisfaction, perceptions of program leadership, and stress?* Again, MLR was used to identify how retention predicted profile membership. Hypothesis 2d*) It is hypothesized that program retention will predict profile membership for job satisfaction, stress, and leadership profiles* was only partially supported as only two retention variables were significant. As in the first round of MLR in Phase II home visitor vacancies were once again identified as having significant and meaningful odds ratios in the results. As vacancies increased, any profile was more likely than Profile 1, *Medium Stress and Leadership Perceptions-Low Job Satisfaction* suggesting that this profile is reflective of home visitors in programs with the least number of vacancies and the most staff stability. The profile with the largest odds ratio compared to Profile 1 was Profile 2, *Medium-High Stress, Medium Job Satisfaction, and Low Leadership Perceptions*. This result further

suggested that staff turnover is most likely to result in slightly elevated levels of stress and more negative perceptions of leadership. However, this did not result in lower job satisfaction but rather a medium level of job satisfaction. Further, membership was more likely in Profile 4, *Slightly High Stress-Slightly High Job Satisfaction and Low Leadership Perceptions* than in Profile 3, *Low Stress-High Job Satisfaction and Leadership Perceptions*. Profile 2 remained more likely than Profile 4.

The number of new home visitors was also predictive of membership in the four-profile solution. As the number of new home visitors increased, membership in Profile 2, *Medium-High Stress, Medium Job Satisfaction, and Low Leadership Perceptions* was more likely than Profile 1, *Medium Stress and Leadership Perceptions-Low Job Satisfaction* or Profile 4, *Slightly High Stress-Slightly High Job Satisfaction and Low Leadership Perceptions*. It is possible that while newly filled positions may relieve the stress covering for a vacancy, hiring, onboarding, and on the job training for new home visitors takes time and is its own source of strain (Kaye et al. 2024).

As for home visitor education and the perception of the usefulness of training, only home visitor education was found to be significant. Consistent with Phase I were findings that an associate degree/technical certificate or some college were found to have both statistical significance and meaningful odds ratios. Home visitors with an associate degree were more likely to be in Profiles 1, 3, and 4, rather than Profile 2, *Medium-High Stress, Medium Job Satisfaction, and Low Leadership Perceptions*. Amongst these profiles, Profile 1, *Medium Stress and Leadership Perceptions-Low Job Satisfaction* was the most likely. This further suggests a level of workplace stability for home visitors in Profile 2 and this degree level does align with Head Start performance requirements for

home visitors to have at least an associate degree in early childhood education or its equivalent (Office of Head Start, 2016). However, stability itself does not necessarily translate to high levels of job satisfaction nor highly positive perceptions of leadership.

Phase III

In order to answer *RQ3) What experiences explain local-level EHS home visitor perceptions of program supports and job satisfaction?* Local-level home visitor surveys and semi-structured interviews were conducted. The quantitative and qualitative data are integrated together, identifying areas of confirmation, expansion, and discordance (Bryman, 2009). Integration of results used a pillar joint display (Johnson et al. 2017; Chapter 7. Phase III: Results, Table 24) in which quantitative and qualitative data is represented on the outside pillars, quantitative and qualitative categories on the middle left and right of the display, and integration of results or meta-inferences are in the center pillar. Meta inferences apply the trauma-informed concepts underlying constructs identified at the end of Chapter 3: Literature Review.

In regard to educational background, all participating home visitors met or exceeded an associate degree and overall felt that their educational background as well as professional experience had prepared them for the role of home visitor. Interviews confirmed surveys that home visitors had mostly positive perceptions of their work environment, program leadership, and generally experienced high job satisfaction. These findings reflect that formal education, as well as the experiences of participating home visitors overall helped to prepare them to work with children. Those that also had backgrounds in working with families were also felt more prepared to handle the "social work" aspect of home visiting.

In order to answer Research Question *3a) What experiences explain local-level EHS home visitor perceptions of program supports (work environment and programmatic leadership)?* participating home visitors were surveyed and interviewed regarding their experiences with the work environment factors of cohesion and communication, stress, and experiences with how they were supported by their program's leadership.

Regarding cohesion, the interviews confirmed that staff get along well, especially a sense of teamwork and responsiveness to one another. Friction was consistently responded to as rare but not unheard-of occurrence. The interview results expanded on these findings to indicate that friction is often handled as a professional issue and the focus was on ensuring that everyone could accomplish their work. Further, home visitors feel that in order to resolve an issue or to receive help all they have to do is ask their colleagues. These qualitative findings are consistent with the high scores of cohesion in the survey and reflect a positive and emotionally safe environment that promotes satisfaction (Gill et al., 2007). This also indicates that home visitors as peers are a source of support to one another (Alitz, et al 2018), offer mutual self-help, such as sharing resources they personally find helpful, and collaborating on projects. Home visitor teamwork and mutual support was also linked to communication strategies (Fitzgerald & Theilheimer, 2013).

As far as communication, the interviews confirmed that formal and informal channels of communication worked well as they were portrayed as positive and creating a sense of trust and transparency relating to Douglass' (2014) findings that positive communication is related to a positive work climate fostering teamwork. The interview findings expanded on survey results by identifying that part of this was through a heavy emphasis on electronic communication especially, emails, calendar reminders, and text

messages. Much of the heavy reliance on electronic communication was a result of the Covid-19 pandemic and home visitors identified that they felt supported that their supervisor was just a call, text, or Zoom link away if needed. Informal communication between home visitors was also identified as a vehicle for home visitor cohesion especially in teamwork and mutual support. Similarly, Williams and colleagues (2022) identified the importance of interaction for positive work environments through communication in shared physical space. While many home visitors who participated worked from home, technology created a type of space to facilitate communication.

The interviews also confirmed that staff suggestions were listened to and taken seriously, enabling a voice in issues and decisions for home visitors. There were, however, a few points of discordance. For discussing program issues, this was a far more mixed result in the survey, while interviews indicated that program leaders were open to these discussions. Further, while the survey indicated that all respondents felt that they could ask questions *and* express their concerns, two staff did not feel that they could ask questions. It is possible that pulling apart expressing concerns and asking questions uncovered these as two different experiences. Those staff who felt they could not ask questions were those who had more difficulty managing work stress related to the complex needs of families and who felt that their program leaders did not have enough time for them. The home visitors themselves felt overwhelmed with their workloads (Gill et al., 2007; Begic et al., 2019) and perceived the program as overwhelmed. Further, Boardman (2003) identifies the importance that early childhood educators have a sense of trust and support from leaders to include resources to do their job. In this case this includes answering questions that pertain to the complex work of home visiting.

When it came to home visitor stress, consistent with the survey results, about six of the nine home visitor respondents did not feel too much pressure, loss of program effectiveness, or frustration while three indicated that they either did or were uncertain. As an expansion on to these results, the semi-structured interviews identified all home visitors were able to able to identify very clear stressors. Duplication of data entry into multiple platforms and paperwork/data collection was perceived as a major source of frustration that detracted from working with children and families, a finding confirmed by Sandstrom, and colleagues (2020) as well as Alitz and colleagues (2018). Concerns for personal safety had the potential to create a sense of disempowerment, but most home visitors had strategies and supervisory support to feel safe and maintain a sense of control in their work. As for families experiencing high needs this was related to a sense of strain, rumination over difficult situations, and disempowerment when families were not actually receptive to help, a finding related to job dissatisfaction. This finding is confirmed by Begic and colleagues (2019) that home visitors serving complex families frequently experience rumination and Kisker and colleagues (2004) that higher numbers of risk factors are associated with program disengagement.

All participating home visitors were also able to identify personal coping mechanisms that allowed them to create mental and emotional boundaries. These included emotional boundaries related to differentiating themselves from families and trying to understand the family context as well as supporting but not “holding hands” with the family to address needs or meet goals. Other strategies included self-care in order to create mental distance from work. However, a third of home visitor participants indicated that

despite these strategies they still struggled to cope with the stress of the complex and high needs of families on their caseloads and experienced rumination.

This leads directly into the leadership results from the semi-structured interviews that again confirmed survey results and expanded on them to identify that home visitors valued the intangible aspects of the support that they received from their program leadership, especially in the forms of verbal encouragement, feedback, and showing general concern. This connected with communication as well as it involved leaders, especially supervisors knowing when each home visitor was on a visit and making sure they were available—a major personal safety strategy, in addition to responding promptly to questions. These actions by program leadership created a sense of safety and trust. A sense that program leaders were too busy or overwhelmed did not diminish the appreciation of program leaders' intentions but was related to stress and lower communication as previously discussed. This result, however, varied with home visitors who shared the same supervisors and leaders.

As far as existing literature related to leadership, time and staff support, research findings can be drawn from literature on nursing. Failla and Stichler (2008) identified that in order for nurse managers to successfully implement transformational leadership strategies, they needed time to interact directly with staff to be transformational rather than transactional. Also related to time and leadership, Meyer and associates (2011) identified that nurse manager satisfaction was significantly correlated with a larger span of time with more staff and promoted managerial capacity while a compressed schedule with fewer staff did not. Some home visitors may be more sensitive to identifying when managerial

capacity is strained than others and may hesitate to speak up. However, a sense of a lack of support can lead to home visitor stress and unhappiness (Alitz et al., 2018).

The role of the supervisor was also directly linked to training. Across surveys and interviews all home visitors identified their supervisor as in the role of either a coach, a provider of reflective supervision, or both. Further, while half of participants identified a mental health specialist as providing reflective supervision, none talked about support in terms of the mental health specialist but in terms of their supervisor. Program leaders were also the ones who reviewed home visitor requests for training or identified trainings that more broadly met the needs of program staff.

As for the Research Question *3b) How are local-level home visitor experiences of program supports related to job satisfaction?* Local-level home visitor experiences were also examined through the survey and semi-structured interview process. Results were overall consistent between survey and interview results with a slight discordance in that seven out of nine were truly satisfied when interviewed compared to nine out of nine satisfied in the survey.

The interview results expanded on what gave the most value and pride to home visitors in their work. A duality in work with families was identified. On one side, all home visitors expressed pride and satisfaction in the time that they spent with families and children, especially related to goal achievement by families in more vulnerable situations, consistent with findings from Alitz et al. (2018) that home visitors derive job satisfaction primarily from helping children and families. On the other side, it was when families, especially those most vulnerable, disengaged with the program. This may indicate that it is not simply the complexities and challenging situations of families that is a stressor commonly

identified in the literature (Begic et al., 2019; Gill et al., 2007; Lou et al., 2021) or family disengagement with high risk factors (Kisker et al., 2004) but that the two are related with dissatisfaction of families who are perceived to need help (or at times court mandated to receive help) but do not respond or reciprocate in kind to the home visitors' efforts, the very source of satisfaction and motivation to do the work of home visiting.

Integrated Discussion of Phases I, II, and III

Cohesion and Communication Work Together

Cohesion and communication were found to consistently pair together within similar scores within profiles and across profile solutions in Phases I and II findings. In Phase III, home visitors described how cohesion together with communication facilitated peer support or teamwork with co-workers and as well as trust and a sense of safety from program leadership. Communication was described as having improved with the increased use of technology since the COVID-19 pandemic.

The links between cohesion and communication are consistent with findings from Fitzgerald and Theilheimer (2013) that a sense of teamwork was fostered both by trust and shared organizational values in serving families, as well as positive and clear communication. Douglass (2014) suggests that positive communication also promotes cohesion. Phase III findings also reflected that communication is a medium for home visitors to provide input into the program, creating a sense of empowerment. This is consistent with Lou and colleagues' (2021) findings that home visitor job satisfaction is related to input into program decisions related to their work and work environment.

Effective Leadership to Reduce Home Visitor Stress

Across groups in the first profile analysis found in Phase I, perceptions of supportive leadership, cohesion, communication, and job satisfaction were in direct relationship to each other either with all having either positive or negative means together in the same group while stress was consistently inverse to the other measures. Very similar results were found in Phase II with cohesion, communication, stress, and job satisfaction while leadership was removed. However, in Phase II when leadership was profiled only with stress and job satisfaction leadership profiled inverse to stress opposite the z-score zero line, but medium-low job satisfaction also grouped into a profile with a medium or neutral perception of supportive leadership (Profile 1) and in another profile medium job satisfaction grouped with low job perceptions of leadership (Profile 2; See Chapter 6. Phase II: Results, Figure 11). This suggests that perceptions of supportive leadership may moderate stressors. Considering Phase III results, supportive leadership likely moderates stress *along with* cohesion and communication.

Phase III results also suggest that the intangible supports to home visitors by their supervisors may also buffer stress, through positive feedback, as a source of reflection and coaching, in essence taking time for home visitors to talk about concerns and answer questions also buffers stress. From the literature, leadership practices associated with home visitors reducing burnout and increasing retention include the provision of formal feedback and scheduled reflective supervision but also opportunities for informal feedback and unscheduled reflection as well as open and honest communication (Begic et al., 2019; Lou et al., 2021; Nathans et al., 2019). Assigning peer-mentors, a form of promoting cohesion, has also been found to increase retention (Lou et al., 2021).

Conversely, a sense that there is a lack of support can lead to home visitor stress and unhappiness (Alitz et al., 2018).

Job Satisfaction and Stress

Another way to consider the results of Phase II, in the profile that isolates supportive leadership, stress, and job satisfaction is that job satisfaction does not profile in the same way when cohesion and communication are included. While leadership and stress were consistently opposite the z-score line across the Phase II four-profile solution. However, job satisfaction did not maintain such a pattern in the profiles and could be elevated along with stress (See Chapter 6. Phase II: Results, Figure 11). When stress was closer to medium or medium-high levels, job satisfaction was at a low or at a medium level (Profiles 1 and 2).

Phase III uncovered a duality related to stress and job satisfaction. The major theme of job satisfaction was spending time with children and families and helping them achieve their goals, especially those that help families overcome complex life challenges. The theme that emerged related to dissatisfaction was family disengagement, especially if the family had high levels of need. This was related to the stressors home visitors expressed related to working with high needs families and either effective coping skills through emotional and mental boundaries or the potential for not successfully coping and experiencing rumination. Among semi-structured interview participants 6 of the 9 expressed that they understood the role of working with families before they began their job while 2 more who did not but now highly value serving families. This is further supported by qualitative findings from Alitz and colleagues (2018) that home visitors were highly satisfied with helping families but also stressed by caseload management and

facing a lack of resources needed by families. Helping families with very young children or who are expecting the birth of a child to overcome challenges or meet a goal is a clear highlight of home visiting. Inherent in this is that not all participants will choose to engage with the program.

Research findings from West and colleagues (2018) can shed light on these findings as they identified that home visitors with higher compassion satisfaction (satisfaction helping families) had higher empathetic perspective taking, but lower depression while home visitors with secondary traumatic stress had less than five years of experience, more depressive symptoms, greater empathic personal distress, and perception of higher job demands. The researchers also found that caseloads of families with higher numbers of risk factors were also found to be associated with secondary traumatic stress. However, home visitors with high and low secondary traumatic stress both describe job satisfaction in working with families through spending time in relationships with families and helping them achieve their goals.

Education and Professional Development

Results from analysis of predictor variables of the profiles created in Phases I and II consistently indicated the importance of education, especially a minimum of an associate degree or technical certificate. The 2018 Baby FACES (Cannon et al., 2020) data does not identify how many home visitors obtained academic preparation before or during their time on the job. However, the 2016 federal performance standards mandate that home visitors should receive at least an associate degree, a Child Development Associate certificate, or an academic equivalent as a qualification for the position (Office of Head Start, 2016). Previously, only a high school diploma or GED and relevant

experience were required for home visitors while an associate degree or Child Development Associate certificate was preferred, or completion encouraged as a part of professional development.

Further, the perception of the usefulness of training was found to be significant but to a lesser extent as it was only found in the MLR results of the Phase I profiles. Combined the two approaches could be used to build upon one another with higher education not only introducing general early childhood education competencies, but also home visitor specific coursework while training could be used to refresh and update best practices as well as be tailored to specific child and family issues encountered by home visitors at a particular program, an ongoing need in the professional preparation of home visitors (Hallam, et al, 2003).

Nathans and colleagues (2019) found that home visitor preparation through initial training of home visitors is critical to job satisfaction. However, initial training must include training on challenging issues that home visitors face to include substance use, intimate partner violence, and mental health. According to Nathans and colleagues (2019) home visiting models that incorporated these into initial training (such as the Healthy Families America model) had higher job satisfaction than home visiting models that do not.

Additionally, several organizations provide recommendations for home visitor competencies, including but not limited to the Relationship Based Competencies (National Center on Parent, Family, and Community Engagement, 2018), the National Family Support Competency Framework (Institute for the Advancement of Family Support Professionals, 2022), and the home visitor competencies from the Collaborative

for Understanding the Pedagogy of Infant/Toddler Development (CUPID; Vallotton et al., 2021) that can be drawn upon to develop curriculum and coursework for early childhood home visitors. Additionally, specific topics for which there has been large-scale and prolonged home visitor demand such as family issues related to substance use, intimate partner violence, and mental health may be important additions to their requirements either as a course addressing family issues or each as stand-alone courses.

Coursework specific to trauma informed care (TIC) may also be an effective strategy to address such issues. For example, the National Child Traumatic Stress Network developed a Core Curriculum on Childhood Trauma that includes 30 class hours of practice-based learning and instruction using case studies (Layne et al., 2011). A pilot study of 41 social work graduate students, was found to improve self-efficacy in perspective taking of children and families, clinical reasoning and judgment, readiness for trauma informed evidence-based practices, and the ability to systematically evaluate cases from multiple perspectives. Interestingly, these core principles are similar to those found across implementation models of reflective supervision (West et al., 2022).

This same curriculum was adapted to an intensive pre-service training for 100 social workers. Further these participants received reinforcement of TIC core principles in their case conferences and receipt of supervision after training on an ongoing basis. Post-training clinical practice remained at an improved level compared to baseline assessments at 6, 12, and 24 months later. A combination of coursework and pre-service training that address common home visitor issues and challenges *in combination* with systems and structures that promote cohesion, communication, supportive leadership may

be a strategy that is effective in preventing fade out of skills learned in training. In other words, a TIC approach.

Handling Turnover

Phase II results of both profiles indicate that staff vacancies and home visitor academic preparation remain significant and meaningful predictors. Turnover was not captured in Phase III results as easily as home visitors were split into sites with little turnover or mass turnover with further varied experiences. As for home visitor attrition, in a study of 26 MIECHV-funded local home visiting programs, Sandstrom and colleagues (2021) found that home visitors were more likely to view their caseload as too heavy to manage when there was at least one home visitor vacancy in their program. Kaye and colleagues (2024) further examine this issue to identify best practices through the lens of family retention during home visitor turnover.

The researchers found that families were most likely to continue program participation six months after their home visitor had left if the home visitor was able to provide them with a one month notice of their departure, and that during that time a new home visitor for the family was trained and provided a "warm handoff" in the form of joint home visits and contact with the new home visitor (Kaye, et al, 2024). In this case the family's new home visitor was an existing staff member rather than a new hire. In instances that a home visitor's departure from a program is within a shorter timeframe, a strong pre-existing relationship with their new home visitor was also predictive of retention at six months post home visitor departure. While these results are focused on family retention, this model could also reduce home visitor stress by mitigating family disengagement and promoting positive relationships with families.

Implications

The most consistent and actionable findings of this study addresses home visitor education. This adds to findings that formal education for home visitors and early care and education professionals is associated with better relationships with parents (Elicker et al, 2013) fewer inappropriate beliefs about children (Abbot-Shim et al., 2000), and that education may be protective of organizational climate (Dennis & O'Connor,2013) although this is certainly not condoning poor organizational culture.

Education for home visitors, especially if it is aligned with home visitor competencies such as CUPID Consortium's Competencies for Educators of Infants and Toddler Competencies (Vallotton et al, 2021) or the National Family Support Competency Framework (Institute for the Advancement of Family Support Professionals, 2022) can help prepare future early childhood home visitors to understand and have appropriate expectations of child development, communicating and working with families, understanding diversity in families and family systems, and working with families to navigate difficult situations. Difficult situations can be navigated with both knowledge of issues, understanding of how to identify resources, as well as reflective practice. All of which can support TIC practice and be integrated with a program like the Core Curriculum on Childhood Trauma (Layne et al., 2011).

While there are far fewer opportunities for professional preparation programs centered on infants and toddlers (Chazan-Cohen et al., 2017) and even fewer focused on early childhood home visiting (Hallam et al., 2003) funding for the promulgation of evidence-based home visiting programs continues to grow (Health Resources & Services Administration, 2024). This knowledge combined with the findings of this study and

prior research suggests that it is important that institutions of higher education, especially those with pre-existing early childhood education programs should invest in the development of home visitor tracks of education, especially associate-level programs that align with competency frameworks that address both infant and toddler development and education as well as the needs of families. With this there is also the opportunity for college programs supporting home visitor education and professional preparation to work with local EHS-home based programs in order to refine the coursework and experiences offered by collecting feedback from leaders, home visitors, parents, and conducting community strengths and needs assessments.

Finally, while higher priority should be placed on home visitor education and professional preparation, this is not to discount coaching and reflective supervision. While not significant in this study, this may be in part due to multiple factors. First, reflective supervision was overrepresented in the study with 82% of home visitors having had a supervisor who received reflective supervision training. Second, for both reflective supervision and coaching, while both are widely accepted and widely adopted practices in home visiting (Walsh et al., 2023; West et al., 2022) they both remain emerging practices in home visiting. Operationalization for both reflective supervision and coaching both vary widely in home visiting in terms of duration, intensity, and quality.

Strengths, Limitations, and Future Directions

Strengths

Phase I of the study contributes to the literature on home visitors by examining how home visitors perceive organizational support related to their work environment and their perceptions of their programmatic leadership. This phase of the study used a person-

centered approach. This phase further considers how home visitor perceptions of their program environment and leadership are related to professional development, personal, and program characteristics to expand upon the understanding of what contextual factors may influence these perceptions.

Phase II of this project contributes to the emerging quantitative literature on home visitor job satisfaction. This phase of the study also isolated stress and job satisfaction separately with work environment perceptions of communication and cohesion as well as isolating home visitor stress and job satisfaction with perceptions of program leadership in two separate profile analyses. Retention variables were analyzed in an MLR in order to determine which variables were predictive in each selected profile solution.

Phase III of this project contributes to the literature by applying both a applying a mixed methods explanatory sequential approach in identifying home visitor perceptions of their work environment, leadership, and levels of job satisfaction and expanding on these perceptions by examining the underlying experiences. The perceptions and experiences shared by home visitors in this study are highly positive and as a result offer a strengths-based approach focused on which programmatic strategies support home visitors in their work. There were also three of nine participants that expressed challenges in coping with stress, especially related to working with families with high needs. This identifies that even within a program in which most have positive views, some home visitors may need more individualized support.

Limitations

Phases I and II of the project use the 2018 Baby FACES data, a secondary data set that was part of a national study. While it is a robust dataset with a large sample, the data

comes “as is” and no further data can be collected from participants for further clarification or to improve the sampling for specific subgroups of home visitors. As a result, while there are relatively large samples for Black and Hispanic/Latino(a) home visitors the samples for other minority populations, as well as minority languages of home visitors is relatively small, likely resulting in non-significant odds ratios. As a result, while it may be designed to reflect the landscape of Early Head Start in general it may not reflect the experiences of home visitors who are in minority groups within the EHS landscape.

Further, some questions are left unasked that would have been relevant to this study, such as home visitor salaries, wages, or benefits, which have likely been found to be associated with job satisfaction (Sandstrom, 2020). The dataset also does not provide any direct data on home visitor intention to leave a position.

Phase III had its own limitations. These findings represent a small sample as only 14 home visitors were eligible and only 9 participated in this study. As a result, while many of the findings are consistent with existing research, it is not necessarily representative of home visitors across EHS-home based program or other home visiting models. Further, as findings were highly positive, this study does not detail the experiences of home visitors who have neutral or negative perceptions of their work environment, program leadership, or job satisfaction. Home visitors who have overall positive experiences may be more likely to self-select into a study that includes a qualitative component. A much larger sample may be needed to encourage home visitors with more negative experiences come forward to participate in qualitative research.

Future Directions

Findings from the present study suggest directions for future research. Home visitor education should be a major area of inquiry as currently there only a small body of visitor-specific literature directly addressing formal education (Chazan-Cohen et al., 2017; Dennis & O'Connor , 2013; Hallam et al., 2003; Mortensen et al., 2019) with opportunities to more deeply examine this topic. For example, while this study addresses the level of education, the types of degree or certificate program should also be investigated to include early childhood, maternal health, social or human services, and other fields of study. This inquiry could be further extended by examining transcripts for coursework and field education to assess commonalties, and if possible, connect common course work to home visitor perceptions of work environment, leadership, and job satisfaction. College-level preparation should also be compared against the Child Development Associate certificate.

Another major area of future research is leadership in home visiting is the relationship between home visitors and program leaders as they relate to home visitor work environment and job satisfaction as this specific body of literature is also relatively small (Alitz et al., 2018; Begic et al. 2019; Gil et al., 2007; Lou et al., 2021) lending itself to future opportunities for inquiry. Of particular focus should be the role of the home visiting supervisor and how they provide support to their teams of home visitors and successful strategies for providing or promoting communication, a sense of cohesion or teamwork, reflection and guidance, as well as other aspects of home visitor-supervisor relationships. As for home visiting leadership in general, leaderships styles and philosophies should be examined, e.g. the transformative, distributive, or servant styles.

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Appendix A

SECONDARY DATA QUESTIONS AND MEASURES

Secondary Data Questions and Measures from 2018 Baby FACES (Cannon et al., 2020)	
Source	**Questions/Measures**
Construct: Work Environment	
Texas Christian University Survey of Organizational Functioning (TCU-SOF; Institute of Behavioral research, 2005) *in* Staff Interview—Home Visitor Section C: Organizational Climate	"Scores for each scale are obtained by summing responses to its set of items (after reversing scores on reflected items by subtracting the item response from "6"), dividing the sum by number of items included (yielding an average) and multiplying by 10 in order to rescale final scores so they range from 10 to 50 (e.g., an average response of 2.6 for a scale becomes a score of "26")." **Cohesion** (α=0.88) (1=Strongly Disagree to 5=Strongly Agree) Score scale by summing each individual response score. Reverse coded items are scored a. Staff here all get along very well b. There is too much friction among staff members (Reverse Code) c. The staff here always work together as a team d. Staff here are always quick to help one another when needed e. Mutual trust and cooperation among staff in this program are strong f. Everybody here does their fair share of work **Communication** (α=0.84) (1=Strongly Disagree to 5=Strongly Agree) a. Ideas and suggestions from staff get fair consideration by program management b. The formal and informal communication channels here work very well

	c. Program staff are always kept well informed d. More open discussions about program issues are needed here (Reverse Code) e. Staff members always feel free to ask questions and express concerns in this program **Stress** (α=0.84) (1=Strongly Disagree to 5=Strongly Agree) a. You are under too many pressures to do your job effectively b. Staff members often show signs of stress and strain c. The heavy workload here reduces program effectiveness d. Staff frustration is common here
Construct: Job Satisfaction	
Texas Christian University Survey of Organizational Functioning (TCU-SOF; Institute of Behavioral research, 2005) *in* Staff Interview—Home Visitor Section C: Organizational Climate	"Scores for each scale are obtained by summing responses to its set of items (after reversing scores on reflected items by subtracting the item response from "6"), dividing the sum by number of items included (yielding an average) and multiplying by 10 in order to rescale final scores so they range from 10 to 50 (e.g., an average response of 2.6 for a scale becomes a score of "26")." (α=0.82) (1=Strongly Disagree to 5=Strongly Agree) a. You are satisfied with your present job b. You would like to find a job somewhere else (Reverse Code) c. You feel appreciated for the job you do d. You like the people you work with e. You give high value to the work you do here f. You are proud to tell others where you work
Construct: Programmatic Leadership	
The Organizational Climate Description for Elementary Schools (OCDQ-RE; Hoy, 1991) adapted for home visiting programs (Cannon, et	(α=0.96) (1=Rarely to 4=Very Frequently) a. The program director goes out of his/her way to help home visitors b. The program director uses constructive criticism

al., 2020) *in* Staff Interview—Home Visitor Section C: Organizational Climate	c. The program director explains his/her reasons for criticism to home visitors d. The program director listens to and accepts home visitors' suggestions e. The program director looks out for the personal welfare of home visitors f. The program director treats home visitors as equals g. The program director compliments home visitors h. The program director is easy to understand i. The program director goes out of his/her way to show appreciation to home visitors
Construct: Professional Development	
Staff Interview—Home Visitor Section B: Staff Development and Supervision	**Coaching** B10. Overall, how much do you feel the resources and feedback provided by your coach have contributed to your professional effectiveness? Would you say… (Code one only) • A great deal, ... 1 • Somewhat, ... 2 • A little, or ... 3 • Not at all? ... 4 • Don't know/Refused ... d B11. Thinking about parent-child relationships, how much support (such as information, feedback, and help in doing your job) do you feel you receive from your coach? Would you say… (Code one only) • A lot of support, ... 1 • Some support, ... 2 • A little support, or ... 3 • No support? ... 4 • Don't know/Refused ... d B12. Focusing on home visitor-family interactions, how much support (such as information, feedback, and help in doing your job) do you feel you receive from your coach? Would you say…(Code one only) • A lot of support, ... 1 • Some support, ... 2 • A little support, or ... 3 • No support? ... 4 • Don't know/Refused ... d

	Training B14. Thinking about all the training you received from this program since September, overall how useful was it? Would you say…(Code one only) • Very useful, ... 1 • Somewhat useful, ... 2 • Not too useful, or ... 3 • Not at all useful? ... 4 • Don't know/Refused ... d
Covariates	
Staff Interview—Home Visitor Section F: Demographics	**Demographics** F1. Are you of Hispanic, Latino/a, or Spanish origin? (Code all that apply) • No, not of Hispanic, Latina/o or Spanish origin … 1 • (Yes) Mexican, Mexican American, Chicano/a ... 2 • (Yes), Puerto Rican ... 3 • (Yes), Cuban .... 4 • (Yes), Another Hispanic, Latino/a, or Spanish origin .... 5 • Don't know/Refused ... d F2. What is your race? You may say yes to one or more. Is it… (Code all that apply)? • White ... 1 • Black or African American ... 2 • American Indian or Alaska Native ... 3 • Asian ... 4 • Native Hawaiian or Other Pacific Islander ... 5 • Don't' know/Refused ... d F3. What is the highest level of school you have completed? If you are still in school or no longer in school, please tell us about the last year of schooling you finished. (Code one only) • Less than a high school diploma ... 1 • High school diploma or equivalent ... 2 • Some vocational/technical school, but no diploma ... 3 • Vocational/technical diploma ... 4 • Some college courses, but no degree ... 5 • Associate degree ... 6 • Bachelor's degree ... 7 • Graduate or professional school, but no degree ... 8

	• Master's degree (M.A., M.S.) ... 9 • Doctorate degree (PH.D., ED.D.) ... 10 • Professional degree after bachelor's degree • (Medicine/MD; Dentistry/DDS; Law/JD/LLB; ETC.) ... 11 • Don't know/Refused ... d F4. Now I'm going to read a list of credentials, certifications, or degrees that you may have. If you do not yet have it, but are currently working toward it, please let me know. Do you have or are you currently working toward . . . (1=Yes, I have it; 2=No, I don't have it but am working toward it; 3=No, I do not have it; d=don't know/refused) a. An Infant/Toddler Child Development Associate (CDA) credential b. A Pre-K CDA credential c. Some other kind of CDA credential d. A state-awarded certification or license that meets or exceeds CDA requirements. This could be a preschool, infant/toddler, family child care or home-based certification or license e. An Associate degree in Early Childhood Education f. or a related field? g. A Bachelor's degree in Early Childhood Education h. or a related field, or i. A Graduate degree in Early Childhood Education or j. a related field? *Ask only for respondents who reported having an associate degree or higher in F3 and did not say yes to having an associate degree or bachelor's degree in F4.* F4a. Did your degree or graduate work include the study of or a focus on prenatal or infant/toddler development? (Code one only) • Yes, prenatal development … 1 • Yes, infant/toddler development ... 2 • Yes, both prenatal and infant/toddler/development ... 3 • Neither prenatal or infant/toddler development ... 4 • Don't know/Refused... d F5. How many years have you worked as a home visitor serving families with infants and toddlers? If less than one year, write 0. Round to whole numbers • ___ Number of years

	• Don't know/Refused ... d F6. In total, how many years have you been working in Early Head Start? If less than one year, write 0. Round to whole numbers • ___ Number of years • Don't know/Refused ... d F7. *Interviewer: Circle without asking:* *If not sure, ask*: I am required to ask if you are male or female. (Code one only) • Male ... 1 • Female ... 2 • Don't know/refused ... d
Staff Interview—Home Visitor Section D: Language	**Demographics (Language)** D1. What is your primary language? This is the language that you feel most comfortable communicating in. (Code one only) • English ... 1 • Spanish ... 2 • Other (Specify) ... 3_____ • Don't know/Refused ... d Do you speak any language other than *[Primary language from D1]*? • Yes … 1 • No ... 0 • Don't know/Refused ... d
Center for Epidemiologic Studies Depression Scale-Revised (CESD-R; Eaton, et al., 2004), Staff Interview—Home Visitor Section E: Health	(α=0.89) (0= not at all or less than 1 day to 4=nearly every day for 2 weeks). I am going to read a list of ways you may have felt or behaved. Please tell me how often you have felt this way in the past week or so. How often have you felt this way in the past week or so? What about… a. My appetite was poor b. I could not shake off the blues c. I had trouble keeping my mind on what I was doing d. I felt depressed

	e. My sleep was restless f. I felt sad g. I could not get going h. Nothing made me happy i. I felt like a bad person j. I lost interest in my usual activities k. I slept much more than usual l. I felt like I was moving too slowly m. I felt fidgety n. I wished I were dead* o. I wanted to hurt myself* p. I was tired all the time q. I did not like myself r. I lost a lot of weight without trying to s. I had a lot of trouble getting to sleep t. I could not focus on important things **If respondent said '1-2 days' to either or both sub-items (n. I wished I were dead) OR (o. I wanted to hurt myself), say: "Based on some of your responses, it sounds like you may be having a hard time. I'm sorry. At the end of the interview, I can give you a number to call if you feel you need some support."*
Program Director Survey Section C: Program Processes Supporting Responsive Relationships	C1. Does your program have a set of written goals and objectives? • Yes ... 1 • No .... 0 • Don't know/Refused ... d C3. Who is involved in developing these goals and objectives? *Read, record each yes*. (Code all that apply) • Director ... 1 • Manager or Supervisors ... 2 • Front line staff ... 3 • Policy Council ... 4 • Board of Directors ... 5 • Parents ... 6 • Advisory Committees ... 7 • Community Partners ... 8 • Other (Specify) ... 99 _____ • None of the above ... n • Don't know/Refused ... d

	C5. How frequently do you usually share information about progress toward your programs' goals with each of the following groups? First, what about (ITEM). b. Home visitors • Do not typically share with this group …1 • Once a year …2 • A few times a year …3 • At least monthly …4 • Don't know/Refused …d
Director Survey, Section D: Staff Development and Training	D1. Does your program do any of the following in supervising home visitors? Do you…. a. Provide training on reflective supervision to all supervisors? • Yes …1 • No … 0 • Don't know/Refused …d

Appendix B

HOME VISITOR SURVEY

Dear home visitor,

Thank you in advance for participating in this survey. This survey will assess your perceptions of your program's work environment, program leadership, and professional development. All of your responses are confidential and will only be reported in aggregate with all other answers. Your responses will help to inform EHS program policies and procedures as they relate to supporting home visitor work with enrolled children and their families. This survey should take about 45 minutes to complete. After completion of the survey, you will receive a $30 Amazon electronic gift card for your participation.

Additional information and consent are below. Important aspects of the study you should know about are:

- Purpose: The purpose of the study is to better understand home visitor experiences of work environment, leadership, and professional development.

- Procedures: If you choose to participate, you will be asked to complete this survey and demographic questionnaire.

- Duration: This survey should take approximately 45 minutes to complete.

- Risks: There are no known risks or discomforts to participants.

- Benefits: The main benefit to you from this research is that you will contribute to the understanding of Early Head Start home visitor work experiences and the development of recommendations for program policies and guidance to support home visitors in their work with children and families.

- Costs and Compensation: If you decide to participate there is no cost to you and you will receive a gift card in the amount of $30 for survey completion.

- Participation: Taking part in this research study is your decision. You can decide to participate and then change your mind at any time.

- Contact Information: If you have any questions about the purpose, procedures, or any

other issues related to this research study you may contact the Principal Investigator, Rena Hallam at rhallam@udel.edu or (302) 831-4224, the Co-Principle Investigator Deborah Drain at ddrain@udel.edu or (302) 831-6136, or Research Assistant Stephanie Kuntz at stkuntz@udel.edu.

CONSENT TO PARTICIPATE IN THE RESEARCH STUDY: I have read and understood the information in this form, and I agree to participate in the study. I am 18 years of age or older. I have been given the opportunity to ask any questions I had, and those questions have been answered to my satisfaction. I understand that I will be given a copy of this form for my records.

○ Yes (1)

○ No (2)

Skip To: End of Survey If Dear home visitor, Thank you in advance for participating in this survey. This survey will assess... = No

Are you of Hispanic, Latino/a, or of Spanish origin? (Select all that apply)

○ No, not of Hispanic, Latino/a or Spanish origin

○ Yes, Mexican, Mexican American, Chicano/a

○ Yes, Puerto Rican

○ Yes, Cuban

○ Yes, Another Hispanic, Latino/a, or Spanish origin

_____

What is your race? (Select all that apply)

- ○ Asian
- ○ Black or African American
- ○ Native American
- ○ Native Hawaiian or Other Pacific Islander
- ○ White
- ○ Other (specify) _____

What gender do you identify as?

- ○ Male
- ○ Female
- ○ Non-binary / third gender
- ○ Prefer not to say

What is your age?

_____

At what age did you become a Home Visitor?

_____

At what age did you begin working in early care and education?

_____

What is your primary language? This is the language that you feel most comfortable communicating in.

- ○ English
- ○ Spanish
- ○ Other (specify) _____

In addition to your primary language that you identified, do you speak any other language?

- ○ Yes (specify) _____
- ○ No

In what language(s) are you fluent enough to provide home visiting services? (Select all that apply)

- ☐ English
- ☐ Spanish
- ☐ Other (specify) _____

What is the highest level of school you have completed? If you are still in school or no longer in school, please select the last year of schooling you finished.

- ○ Less than a high school diploma (1)
- ○ High school diploma or equivalent (2)
- ○ Some vocational/technical school, but no diploma (3)
- ○ Vocational/technical diploma (4)
- ○ Some college courses, but no degree (5)
- ○ Associate's degree (6)
- ○ Bachelor's degree (7)
- ○ Graduate or professional school but no degree (8)
- ○ Master's Degree (M.A., M.S.) (9)
- ○ Doctorate (PH.D., ED.D.) (10)
- ○ Professional Degree after Bachelor's Degree (Medicine/MD; Dentistry/DDS; Law/JD/LLB; ETC.) (11)

Below is a list of credentials, certifications, or degrees that you may have, may not yet have but are currently working toward, or do not have. Do you have or are you currently working toward . . .

	Yes, I have it (1)	No, I don't have it but am working toward it (2)	No, I don't have it (3)
Infant/Toddler Child Development Associate (CDA) credential (1)	○	○	○
Pre-K CDA credential (2)	○	○	○
Some other kind of CDA credential (3)	○	○	○
A state-awarded certification that meets or exceeds CDA requirements (can include infant/toddler, preschool, family child care, or home-based certifications) (4)	○	○	○
An associate degree in early childhood education or a related field (5)	○	○	○
A bachelor's degree in early childhood education or a related field (6)	○	○	○
A graduate degree in early childhood education or a related field (7)	○	○	○

Did your degree or graduate work include the study of or a focus on prenatal or infant/toddler development?

- ○ Yes, prenatal development (1)
- ○ Yes, infant/toddler development (2)
- ○ Yes, both prenatal and infant/toddler/development (3)
- ○ Neither prenatal nor infant/toddler development (4)

How many years have you worked as a home visitor serving families with infants and toddlers? If less than one year round to zero.

- ○ 0 (1)
- ○ 1 (2)
- ○ 2 (3)
- ○ 3 (4)
- ○ 4 (5)
- ○ 5 (6)
- ○ 6 (7)
- ○ 7 (8)
- ○ 8 (9)
- ○ 9 (10)
- ○ 10+ (11) _____

In total, how many years have you been working in Early Head Start? If less than one year, round to 0.

- ○ 0 (1)
- ○ 1 (2)
- ○ 2 (3)
- ○ 3 (4)
- ○ 4 (5)
- ○ 5 (6)
- ○ 6 (7)
- ○ 7 (8)
- ○ 8 (9)
- ○ 9 (11)
- ○ 10+ (10) _____

What type of communities do you primarily conduct home visits in?

- ○ Urban (city)
- ○ Suburban (residential community, city outskirts)
- ○ Rural (town, village, county)
- ○ Mixed (urban, suburban, and rural)
- ○ Other (specify) _____

Now we will ask about your work environment.

How many families are currently on your home visiting caseload?

_____

How many hours do you work in a typical week as a home visitor?

_____

Approximately how many hours each week do you spend in direct contact with EHS families (face to face, on the phone, or by text or e-mail)?

_____

Approximately how many hours per week do you spend on administrative tasks (documentation, data entry, paperwork, etc)?

_____

Approximately how many hours per week do you spend on locating external community resources for families?

_____

Approximately how many hours per week do you spend on traveling to and from home visits with EHS families?

_____

You will now be asked about your work environment by rating statements. These statements will rate from 1. Strongly Disagree to 5. Strongly Agree.

Staff here all get along very well.

- 1. Strongly Disagree (1)
- 2. Disagree (2)
- 3. Uncertain (3)
- 4. Agree (4)
- 5. Strongly Agree (5)

There is too much friction among staff members.

- 1. Strongly Disagree (1)
- 2. Disagree (2)
- 3. Uncertain (3)
- 4. Agree (4)
- 5. Strongly Agree (5)

Staff always work together as a team.

- 1. Strongly Disagree (1)
- 2. Disagree (2)
- 3. Uncertain (3)
- 4. Agree (4)
- 5. Strongly Agree (5)

Staff here are always quick to help one another when needed.

- ○ 1. Strongly Disagree (1)
- ○ 2. Disagree (2)
- ○ 3. Uncertain (3)
- ○ 4. Agree (4)
- ○ 5. Strongly Agree (5)

Mutual trust and cooperation among staff in this program are strong.

- ○ 1. Strongly Disagree (1)
- ○ 2. Disagree (2)
- ○ 3. Uncertain (3)
- ○ 4. Agree (4)
- ○ 5. Strongly Agree (5)

Everybody here does their fair share of work.

- ○ 1. Strongly Disagree (1)
- ○ 2. Disagree (2)
- ○ 3. Uncertain (3)
- ○ 4. Agree (4)
- ○ 5. Strongly Agree (5)

Ideas and suggestions from staff get fair consideration by program management.

- 1. Strongly Disagree (1)
- 2. Disagree (2)
- 3. Uncertain (3)
- 4. Agree (4)
- 5. Strongly Agree (5)

The formal and informal communication channels here work very well.

- 1. Strongly Disagree (1)
- 2. Disagree (2)
- 3. Uncertain (3)
- 4. Agree (4)
- 5. Strongly Agree (5)

Program staff are always kept well informed.

- 1. Strongly Disagree (1)
- 2. Disagree (2)
- 3. Uncertain (3)
- 4. Agree (4)
- 5. Strongly Agree (5)

More open discussions about program issues are needed here.

- ○ 1. Strongly Disagree (1)
- ○ 2. Disagree (2)
- ○ 3. Uncertain (3)
- ○ 4. Agree (4)
- ○ 5. Strongly Agree (5)

Staff members always feel free to ask questions and express concerns in this program.

- ○ 1. Strongly Disagree (1)
- ○ 2. Disagree (2)
- ○ 3. Uncertain (3)
- ○ 4. Agree (4)
- ○ 5. Strongly Agree (5)

You are under too many pressures to do your job effectively.

- ○ 1. Strongly Disagree (1)
- ○ 2. Disagree (2)
- ○ 3. Uncertain (3)
- ○ 4. Agree (4)
- ○ 5. Strongly Agree (5)

Staff members often show signs of stress and strain.

- 1. Strongly Disagree (1)
- 2. Disagree (2)
- 3. Uncertain (3)
- 4. Agree (4)
- 5. Strongly Agree (5)

The heavy workload here reduces program effectiveness.

- 1. Strongly Disagree (1)
- 2. Disagree (2)
- 3. Uncertain (3)
- 4. Agree (4)
- 5. Strongly Agree (5)

Staff frustration is common here.

- 1. Strongly Disagree (1)
- 2. Disagree (2)
- 3. Uncertain (3)
- 4. Agree (4)
- 5. Strongly Agree (5)

Safety is another aspect of the work environment. The next questions are about how you perceive the safety of your work and the safety supports and strategies offered by your program.

Thinking about your safety when going into the homes of your clients, how often do you feel unsafe when conducting home visits?

- ○ All or almost all of the time (1)
- ○ Most of the time (2)
- ○ Some of the time (3)
- ○ Hardly ever (4)
- ○ Never (5)

Does your program provide any of the following supports or resources to help you feel safe during home visits?

	Yes	No	Don't know
Safety plan or guidelines?	○	○	○
Safety training opportunities?	○	○	○
Global Positioning System (GPS) system, cell phones, and/or car chargers?	○	○	○
Procedures to ensure supervisor or other staff know your home visit schedule and changes to your schedule?	○	○	○
Supervisor, mentor, or coach available to discuss your safety concerns?	○	○	○
Option for going on visits with another staff person or escort?	○	○	○
Help finding a safe place for home visits?	○	○	○

Now, you will be asked about how much home visitors are involved in several program decision-making activities.

Does your program have a set of written goals or objectives?

- ○ Yes (1)
- ○ No (2)
- ○ Don't know (3)

Are home visitors involved in developing these goals and objectives?

- ○ Yes (1)
- ○ No (2)
- ○ Don't know (3)

How frequently is information shared about progress towards goals with home visitors?

- ○ Goal progress not typically shared with home visitors (1)
- ○ Once a year (2)
- ○ A few times a year (3)
- ○ At least monthly (4)
- ○ Don't know (5)

Questions now turn to job satisfaction. You will be asked to rate several statements. These statements will rate from 1. Strongly Disagree to 5. Strongly Agree.

You are satisfied with your present job.

- 1. Strongly Disagree (1)
- 2. Disagree (2)
- 3. Uncertain (3)
- 4. Agree (4)
- 5. Strongly Agree (5)

You would like to find a job somewhere else.

- 1. Strongly Disagree (1)
- 2. Disagree (2)
- 3. Uncertain (3)
- 4. Agree (4)
- 5. Strongly Agree (5)

You feel appreciated for the job you do.

- 1. Strongly Disagree (1)
- 2. Disagree (2)
- 3. Uncertain (3)
- 4. Agree (4)
- 5. Strongly Agree (5)

You like the people you work with.

- 1. Strongly Disagree (1)
- 2. Disagree (2)
- 3. Uncertain (3)
- 4. Agree (4)
- 5. Strongly Agree (5)

You give high value to the work you do here.

- 1. Strongly Disagree (1)
- 2. Disagree (2)
- 3. Uncertain (3)
- 4. Agree (4)
- 5. Strongly Agree (5)

You are proud to tell others where you work

- 1. Strongly Disagree (1)
- 2. Disagree (2)
- 3. Uncertain (3)
- 4. Agree (4)
- 5. Strongly Agree (5)

How likely is it that you will resign within the next six months? Rate this statement from 1. Extremely Unlikely to 5. Extremely Likely

- ○ 1. Extremely Unlikely (1)
- ○ 2. Somewhat Unlikely (2)
- ○ 3. Neither Likely nor Unlikely (3)
- ○ 4. Somewhat Likely (4)
- ○ 5. Extremely Likely (5)

Please indicate your level of agreement with the following statements:

	Strongly disagree (1)	Somewhat disagree (2)	Neither agree nor disagree (3)	Somewhat agree (4)	Strongly agree (5)
I am satisfied with the salary I receive from my agency.	○	○	○	○	○
I am satisfied with the non-salary or fringe benefits I receive through my job.	○	○	○	○	○
I am satisfied with the physical work environment of this agency.	○	○	○	○	○
I have the opportunity for advancement in this agency.	○	○	○	○	○
I feel that my job is secure.	○	○	○	○	○

Your experiences with your program's leadership are also important. You will be asked to rate statements about your experiences with your EHS program director. These statements will rate from 1. Rarely Occurs to 4. Very Frequently Occurs.

The program director goes out of his/her way to help home visitors.

- ○ 1. Rarely Occurs (1)
- ○ 2. Sometimes Occurs (2)
- ○ 3. Often Occurs (3)
- ○ 4. Very Frequently Occurs (4)

The program director uses constructive criticism.

- ○ 1. Rarely Occurs (1)
- ○ 2. Sometimes Occurs (2)
- ○ 3. Often Occurs (3)
- ○ 4. Very Frequently Occurs (4)

The program director explains his/her reasons for criticism to home visitors.

- ○ 1. Rarely Occurs (1)
- ○ 2. Sometimes Occurs (2)
- ○ 3. Often Occurs (3)
- ○ 4. Very Frequently Occurs (4)

The program director listens to and accepts home visitors' suggestions.

- ○ 1. Rarely Occurs (1)
- ○ 2. Sometimes Occurs (2)
- ○ 3. Often Occurs (3)
- ○ 4. Very Frequently Occurs (4)

The program director looks out for the personal welfare of home visitors.

- ○ 1. Rarely Occurs (1)
- ○ 2. Sometimes Occurs (2)
- ○ 3. Often Occurs (3)
- ○ 4. Very Frequently Occurs (4)

The program director treats home visitors as equals.

- ○ 1. Rarely Occurs (1)
- ○ 2. Sometimes Occurs (2)
- ○ 3. Often Occurs (3)
- ○ 4. Very Frequently Occurs (4)

The program director compliments home visitors.

- 1. Rarely Occurs (1)
- 2. Sometimes Occurs (2)
- 3. Often Occurs (3)
- 4. Very Frequently Occurs (4)

The program director is easy to understand.

- 1. Rarely Occurs (1)
- 2. Sometimes Occurs (2)
- 3. Often Occurs (3)
- 4. Very Frequently Occurs (4)

The program director goes out of his/her way to show appreciation to home visitors.

- 1. Rarely Occurs (1)
- 2. Sometimes Occurs (2)
- 3. Often Occurs (3)
- 4. Very Frequently Occurs (4)

You will now be asked about professional development activities including coaching, reflective supervision, and training.

You will also be asked to rate the usefulness of professional development activities. Rating scales vary in this section so please be sure to check your answers.

Do you have an individual career or professional development plan?

- ○ Yes
- ○ No
- ○ Don't Know

Do you feel your program director or supervisor uses the plan to provide you with professional development and training?

- ○ Yes
- ○ No
- ○ Don't Know

Now, we will ask about coaching. Some people may think of this as mentoring. A coach is a person who has expertise in specific areas and who models practices, provides professional development, and works with staff to improve their performance.

Do you currently have a coach assigned to you by your program?

- ○ Yes
- ○ No
- ○ Don't Know

Who provides coaching to you? (Select all that apply)

- [ ] A supervisor
- [ ] A program coordinator
- [ ] A more experienced peer (related to the topic of coaching)
- [ ] An expert from outside the program
- [ ] Other (specify) _____

Do you have one-on-one coaching meetings, group coaching meetings, or both?

- ○ One-on-one meetings
- ○ Group meetings
- ○ Both
- ○ None
- ○ Don't know

How frequently do you typically have one-on-one coaching meetings?

- ○ Once a week or more often
- ○ A few times a month
- ○ Once a month
- ○ A few times a year
- ○ Once a year
- ○ Never
- ○ Don't know

How frequently do you typically have group coaching meetings?

- ○ Once a week or more often
- ○ A few times a month
- ○ Once a month
- ○ A few times a year
- ○ Once a year
- ○ Never
- ○ Don't know

Overall, how much do you feel the resources and feedback provided by your coach have contributed to your professional effectiveness?

- 1. A great deal (1)
- 2. Somewhat (2)
- 3. A little (3)
- 4. Not at all (4)

Thinking about parent-child relationships, how much support (such as information, feedback, and help in doing your job) do you feel you receive from your coach?

- 1. A lot of support (1)
- 2. Some support (2)
- 3. A little support (3)
- 4. No support (4)

Focusing on home visitor-family interactions, how much support (such as information, feedback, and help in doing your job) do you feel you receive from your coach?

- 1. A lot of support (1)
- 2. Some support (2)
- 3. A little support (3)
- 4. No support (4)

Next, we will talk about reflective supervision (also known as reflective supervision). Reflective supervision is generally a relationship-based collaborative or mutual process of reflecting on the challenges and/or strong emotional reactions you may have in serving children and

families. These reflections are often intended to address your work-related stress but may also aid in problem solving, decision making, and your own ability to be reflective with families.

Does your program provide you with reflective supervision?

- ○ Yes
- ○ No
- ○ Don't Know

Who provides reflective supervision to you? (Select all that apply)

- ☐ A supervisor
- ☐ A program coordinator
- ☐ A more experienced peer (related to the topic of reflective supervision)
- ☐ An expert from outside the program
- ☐ Other (specify) _____

Do you have one-on-one reflective supervision meetings, group reflective supervision meetings, or both?

- ○ One-on-one meetings
- ○ Group meetings
- ○ Both
- ○ None
- ○ Don't know

How frequently do you typically have one-on-one reflective supervision meetings?

- ○ Once a week or more often
- ○ A few times a month
- ○ Once a month
- ○ A few times a year
- ○ Once a year
- ○ Never
- ○ Don't know

How frequently do you typically have group reflective supervision meetings?

- ○ Once a week or more often (9)
- ○ A few times a month (10)
- ○ Once a month (11)
- ○ A few times a year (12)
- ○ Once a year (13)
- ○ Never (14)
- ○ Don't know (15)

Overall, how much do you feel the resources and feedback provided through reflective supervision have contributed to your professional effectiveness?

- ○ 1. A great deal (1)
- ○ 2. Somewhat (2)
- ○ 3. A little (3)
- ○ 4. Not at all (4)

Thinking about parent-child relationships, how much support (such as information, feedback, and help in doing your job) do you feel you receive from reflective supervision?

- ○ 1. A lot of support (1)
- ○ 2. Some support (2)
- ○ 3. A little support (3)
- ○ 4. No support (4)

Focusing on home visitor-family interactions, how much support (such as information, feedback, and help in doing your job) do you feel you receive from reflective supervision?

- ○ 1. A lot of support (1)
- ○ 2. Some support (2)
- ○ 3. A little support (3)
- ○ 4. No support (4)

Now, think about all the training you have received over the past 12 months. First, we will ask you about your overall perception of training. Then we will ask you to list specific trainings that you have received by rank of: very useful, somewhat useful, not too useful, and not at all useful.

Thinking about all the training you received from this program in the past 12 months, overall how useful was it?

○ 1. Very useful (1)

○ 2. Somewhat useful (2)

○ 3. Not too useful (3)

○ 4. Not at all useful (4)

What trainings were very useful?

_____

What trainings were somewhat useful?

_____

What trainings were not too useful?

_____

What trainings were not at all useful?

_____

Below is a list of the ways you might have felt or behaved. Please select how often you have felt this way during the past week for each item. Ratings range from "rarely or none of the time" to "most or all of the time."	Rarely or none of the time (less than 1 day) (1)	Some or a little of the time (1-2 days) (2)	Occasionally or a moderate amount of time (3-4 days) (3)	Most or all of the time (5-7 days) (4)
I was bothered by things that usually don't bother me.	○	○	○	○
I did not feel like eating; My appetite was poor.	○	○	○	○
I felt that I could not shake off the blues even with help from my family or friends.	○	○	○	○
I felt I was just as good as other people.	○	○	○	○
I had trouble keeping my mind on what I was doing.	○	○	○	○
I felt depressed.	○	○	○	○
I felt that everything I did was an effort.	○	○	○	○
I felt hopeful about the future.	○	○	○	○
I thought my life had been a failure.	○	○	○	○
I felt fearful.	○	○	○	○
My sleep was restless.	○	○	○	○

I was happy.	○	○	○	○
I talked less than usual.	○	○	○	○
I felt lonely.	○	○	○	○
People were unfriendly.	○	○	○	○
I enjoyed life.	○	○	○	○
I had crying spells.	○	○	○	○
I felt sad.	○	○	○	○
I felt that people dislike me.	○	○	○	○
I could not get "going".	○	○	○	○

Rank the following types of stressors from not at all stressful to very stressful:	Not at all stressful (1)	Not very stressful (2)	Somewhat stressful (3)	Very stressful (4)
Administrative burden (documentation requirements, data entry, paperwork, deadlines, scheduling with families, technology)	○	○	○	○
Job content (long hours, traveling, lack of resources for families, work environment including neighborhood and home conditions, exposure to families' trauma, large caseload, lack of training/ support on relevant topics or needs)	○	○	○	○
Personal (family responsibilities, relationships, health concerns, work responsibilities interfering with personal time i.e. thinking about work outside of work hours)	○	○	○	○
Financial (difficulty paying bills, low wages, lack of benefits)	○	○	○	○

How do you cope with stress?

_____

How do your supervisors help you cope with stress?

_____

How do your coworkers help you cope with stress?

_____

How helpful are the following supports in helping you cope with stress?

	Not at all helpful (1)	Slightly helpful (2)	Moderately helpful (3)	Very helpful (4)	Extremely helpful (5)
Supports I provide for myself	○	○	○	○	○
Supports my supervisors provide for me	○	○	○	○	○
Supports my coworkers provide for me	○	○	○	○	○

Appendix C

HOME VISITOR INTERVIEW PROTOCOL

PRE- AND POST- INTERVIEW PROTOCOL

Scheduling the Interview:

1. Start by reaching out using the email template to schedule. It is ok to personalize this.
2. After waiting 3 days to hear back from the participant, follow up with a phone call and use the phone script. Again this can be personalized and is a guide to introduce yourself and explain the study.
3. About two rounds of attempted contact and then we would discuss as a group to troubleshoot contacting the participant.
4. Document attempted contact in the Scheduling Attempts column of the scheduling spreadsheet.
5.

Before the interview:

1. Depending on the participant's preferred contact method, send a reminder email or phone call about 24 hours in advance.
2. Review the participants survey responses and the semi-structured interview protocol. Make a copy of the semi-structured interview protocol for your notes from the survey to help tailor the interview.
3. At the interview, remember to remind the participant that you will be recording them. Record the interview to the cloud.
4. Document that the interview was scheduled and the date in the scheduling spreadsheet.
5. Be sure to add the scheduled interview to your calendar.

Post Interview:

1. Be sure to provide the participant with EAP/mental health resources. Drop in chat and send with "Thank you" email.

    a. For participants who are also UD employees also remind them that that you will be sending them a Prize Data Collection Form as well.
2. Be sure to allow the interview to process.
3. While the interview is processing send the "Thank you" email with resources and Prize Data Collection form (when applicable).
4. Download the interview from the cloud. This should include the video, recording and transcript.
5. Save these materials to the HV Project folder on the H drive.
6. Write up the memo within 24 hours but no later than 48 hours after the interview. The template can be found here.
7. For each step be sure to document in the scheduling spreadsheet
8. Email the team member who is designated to complete the transcription review for your interview
    a. Rosa's interview transcripts will be checked by Stephanie
    b. Stephanie's interview transcripts will be check by Deborah
    c. Deborah's interview transcript will checked by Rosa
9. For transcription review: Once the review is complete another memo on the interview within 24 hours but no later than 48 hours after transcription checking
10. Transcription should also be documented in the tracking spreadsheet.

TELEPHONE RECRUITMENT SCRIPT

Hi, my name is_____. Thank you for participating in the home visitor survey for the research study on examining Early Head Start Home visitors' perceptions of the program environment as a work environment, programmatic leadership, and the effectiveness of professional development. The next step in this study is an interview with you. Results of this study may be used to improve programmatic supports for staff in Early Head Start working directly with families. This study is a dissertation research project for doctoral student Deborah Drain in the Department of Human Development & Family Science at the University of Delaware.

Participation in the next step in this project includes:

- An audio-recorded interview on Zoom outside of work hours. (A private location and/or an in-person interview can be arranged if requested)-for home visitors and program leaders

You will receive a a $30 gift card for participation in the interview.

If you would like more information, or to participate I can collect your email and send you a consent form or you can contact Rena Hallam at (302) 831-6563 or rhallam@udel.edu or Deborah Drain at (302) 831-0602 or ddrain@udel.edu .

EMAIL RECRUITMENT SCRIPT

Hi [Name]

I hope this email finds you well!

First I wanted to say thank you for participating in a survey last fall on Early Head Start Home Visitor Perceptions of their Program Environment and Leadership. Your input has been valuable in helping us understand how home visitors perceive their program environment as a work environment, programmatic leadership, the effectiveness of professional development as well as job satisfaction.

As a next step in this research study, I am inviting you to participate in a Zoom interview about your experiences as a home visitor. Interviews will be conducted and recorded via Zoom and should take about 45 minutes to complete. (An in-person interview may be conducted upon request as can a private location for the interview). At the end of this project we hope to create recommendations to strengthen programmatic supports to Early Head Start-home visiting staff who work directly with families.

Would you be willing to schedule an interview in the next couple of weeks? Compensation for completion of the interview is a $30 Amazon gift card.

This project is being conducted as a part of my dissertation to complete my doctoral degree through the University Delaware's Department of Human Development & Family Sciences. If you have any questions about this project, please contact me by responding to this email or at 302-831-6136 or Rena Hallam at 302-831-4224.

Thank you,

HOME VISITOR INTERVIEW PROTOCOL

Introduction

Thank you for agreeing to participate in this study and taking time to talk with me today. The purpose of this interview is to learn more about the experiences of Early Head Start (EHS) home visitors related to work environment, programmatic leadership, and professional development. Another purpose of this study is to understand how these experiences relate to home visitor job satisfaction. Since we are conducting these interviews via Zoom I want to confirm with you that you are in a private location to talk about these topics? I also want to confirm with you that you are ok with this interview being recorded.

If yes to both continue below…if no reschedule and assess the need to make arrangements for a private space and/or in person interview.

I have a series of questions written down but please feel free to bring up anything you think is relevant. For example, if I ask you a question and it makes you remember something you want to say about a previous question, feel free to bring it up. Also, as a reminder that your answers are confidential and will not be shared with your employer. You do not have to answer any questions that you feel uncomfortable answering. I would really like to learn from you, so it is okay to be honest. If you need a break at any point in the interview it is okay to let me know. This interview should take about 45 minutes.

-Do you have any questions before we begin? *[Begin Recording-Remember to record to the cloud]*

1. Can you tell me a little bit about yourself as a home visitor?
    a. Years of experience-home visiting and early childhood
    b. Educational background
    c. Years of experience in EHS
    d. How you became a home visitor

If the home visitor began their role before the pandemic: The Covid-19 pandemic has impacted some of the things I am going to be asking you about today. Since you started your career before the pandemic, we will be talking about your experiences and perceptions *both before the pandemic* and *after the pandemic* to better understand your experiences and how they may have changed.

2. Tell me about why you joined [name of organization] Early Head Start
    a. What did you know about [name of organization] before you signed up?
    b. How did you hear about it?
    c. What made you want to apply?
3. *[This can be tailored depending on survey responses]* Most of the home visitors we surveyed began their careers in early childhood in their 30's and home visiting in their 40's, a mid-career shift. Was this a career shift for you? Tell me about why you made the career shift (or if not stayed in early childhood and home visiting).
    a. What did you think the job would be like/what kind of experience did you expect?

b. Why did you think you would be a good fit for [name of organization]?

c. EHS home visiting programs have many moving parts and many expectations for home visitors. Tell me about what a typical week looks like doing your job as a home visitor? *Caseload size, time spent on home visits, in communication with families, coordinating community resources, paperwork.*

d. *What about other aspects of expectations that may be less frequent such as monthly, quarterly, or annually?*

e. What aspects of your role as a home visitor with [organization name] EHS met and/or did not meet your expectations after you joined?

4. Next, we are going to talk about your relationship experiences with your co-workers as well as the relationships between other co-workers that you have observed. *Before Covid …and now? (Prompt settings and who is involved or responsible if not mentioned)*

    a. Did it meet the expectations you had when you joined?

    b. Experiences getting along with other staff *if friction ask how managed*

    c. Teamwork and giving and receiving help with co-workers

    d. Trust and cooperation with co-workers. What does it look like?

    e. Distribution of the workload. Does everyone do their fair share? What does that mean to you others doing the minimum required, above and beyond or something else?

5. Now we will talk to your experiences related to communication at [organization name] EHS. How would you describe the quality and emotional safety of

communication and how information is delivered? Before Covid …and now? *(Prompt settings and who is involved or responsible if not mentioned)*

a. Formal communication
b. Informal communication
c. What about staff suggestions do you feel that these are handled well? Are there ways that they could be handled better?
d. What about discussion about program issues or challenges? Do you think that these are handled well? Are there ways that they could be handled better?
e. Inclusion in program goal setting and decision making

6. We are turning to talking about how work-related stress impacts your ability to do your job. Before Covid …and now? *(Prompt settings and who is involved or responsible if not mentioned)*
    a. How effective do you feel as a home visitor?
    b. What goes into the workload?
    c. Job pressures from that workload
    d. What have you observed with your fellow home visitors?
    e. With the program?
    f. Sense of safety-emotional
    g. Sense of safety-physical
7. Now let's talk about the ways that you mitigate your work-related stress.

a. Tell me about how you personally deal with stress. Are these strategies effective and if you could, what would you do differently? What would help you to do that?
b. Tell me about how your co-workers help you deal with stress. Are these strategies effective and if you could ask them to do something differently what would it be?
c. Tell me about how your supervisor or others in program leadership help you deal with stress. Are these strategies effective and if you could ask them to do something differently what would it be?

8. What does it mean to you to feel satisfied about your job?
    a. What parts are the most satisfying?
    b. What parts are the least satisfying … frustrating … stressful
    c. Do the satisfying aspects of your job as a home visitor outweigh the less satisfying/frustrating/stressful aspects? How so?
9. Let's talk about the professional development that you have received at [program name]. How would you describe it? Before Covid …and now? *(Prompt settings and who is involved or responsible if not mentioned)*
    a. How do you feel that your education prepared you for your work as a home visitor? *If needed ask for clarification about their educational background, e.g. CDA, Bachelor's, Masters.*
    b. *…Other prior work experience*
    c. …Training
        i. Which trainings are most helpful and what makes them helpful?

d. …Coaching

    i. What does this look like, scheduling, frequency, format?

e. …Reflective supervision/supervision

    i. What does this look like, scheduling, frequency, format?

f. From these experiences, what was most and least effective for professional effectiveness

g. …supporting parent child relationships

h. …your relationships with families

i. What could have been improved? How?

10. Let's talk about your experiences with your program director. Before Covid…and now?

    a. Their help toward you other home visitors

    b. Their concern toward you and other home visitors

    c. Feedback on job performance if they provide this feedback, if not who does?

    d. Feeling appreciated

    e. Feeling treated as an equal

    f. Who else provides this types of support to you, (e.g. a program supervisor, mentor, coordinator, peer or someone else?)

11. We are going to talk about thinking about the strengths and areas of opportunity for home visitor experiences in EHS. This includes settings and who is or should be involved. Before Covid …and now? *(Allow the home visitor to identify*

strengths and areas of opportunity for themselves. If they are not sure then use the prompts below (b-g). If not mentioned, prompt settings and who is involved for strengths, and for areas of opportunity what settings and who ought to be involved)

a. What are the benefits that you have gained as a professional from your time in EHS home visiting?
b. What aspects of cohesion with co-workers supported this?
c. What aspects of [program name]'s communication strategies
d. What aspects of mitigating stress?
e. What aspects of the work expectations?
f. What aspects of program leadership?
g. Areas of opportunity to improve

Thank the home visitor for their time. Provide follow up resources to include state and EAP resources. Drop them in the chat and send them with a "Thank you" email.

POST-INTERVIEW THANK YOU EMAIL

Dear [Name],

Thank you again for taking time out of your busy schedule to be interviewed for the Early Head Start Home Visitor Perceptions of their Program Environment and Leadership project. Your experiences will add depth and insight into our research.

It is anticipated that you will receive your $30 Amazon gift card in about a month, after we have completed interviews. If you are a UD employee, please be sure to complete and return the attached Prize Data Collection form so that we may submit the request for your gift card.

Additionally, we are sharing some resources (also attached) to support the mental health of all of our participants. We understand that our interviews cover a wide range of topics and this can bring up a lot of memories, both positive and negative. In the event that some of those experiences remain difficult to emotionally process we want to ensure that you have access to the help that you need.

If you have any follow up questions about the interview or the project itself, please do not hesitate to contact Deborah Drain at ddrain@udel.edu or 302-831-6136 or Rena Hallam at rhallam@udel.edu or 302-831-4224.

Thank you,