

**Exploring Factors Impacting Retention of a Diverse, Skilled Early Intervention**

**Workforce: A Mixed Methods Study in Washington State**

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**Abstract**

Exploring Factors Impacting Retention of a Diverse, Skilled Early Intervention Workforce: A  
Mixed Methods Study in Washington State

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This mixed methods study investigates the factors influencing job satisfaction and retention among early intervention (EI) providers in Washington State. The research aims to provide insights into the challenges faced by EI providers and identify strategies to improve workforce stability within the state's EI system. The quantitative phase of the study included a state-wide online survey to assess the levels of job satisfaction among EI providers and collect demographic characteristics and organizational factors associated with job satisfaction and retention. Next, the qualitative phase used semi-structured interviews to explore the lived experiences of EI providers, capturing their perspectives on the factors influencing job satisfaction and retention, including financial compensation, workload, support systems, and professional development opportunities. Survey results were used to select interview participants and shape interview

question. Findings indicate a complex interplay of factors contributing to EI provider job satisfaction and retention, encompassing organizational support, professional growth opportunities, workload management, financial compensation and the impact of work-life balance. The findings from this study have implications for state leaders, policymakers, EI agencies, and EI providers and outline the urgent need to address workforce development and retention efforts. By addressing the multifaceted needs of EI providers, including equitable compensation, enhancing support systems, promoting work-life balance, and fostering professional growth, stakeholders can work towards ensuring a stable EI workforce of diverse and skilled providers, ultimately benefiting the children and families receiving early intervention services in Washington.

*Keywords:* Early Intervention, Part C, job satisfaction, retention, workforce stability, state systems.

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## **Chapter I: Introduction**

The Education for All Handicapped Children Act (EHA) was established by Congress in 1975 to safeguard the rights of children with disabilities and ensure their educational needs were met (Office of Special Education and Rehabilitative Services, 2007). The 1986 reauthorization (Public Law 99-457) expanded the scope of EHA to include Early Intervention (EI) services. Then called Part H, EI services were established with the primary goal of providing comprehensive supports to infants and toddlers with disabilities and their families, beginning from birth, instead of waiting until the child reached age three. This initiative acknowledged that intervention at the earliest possible moment was not just beneficial but imperative to each child's individualized participation in their natural environment. EHA was renamed the Individuals with Disabilities Education Act (IDEA) in the 1990 reauthorization and Part H became Part C in the 1997 reauthorization of IDEA.

Part C EI programs are a vital support for infants and toddlers with developmental delays or disabilities and their families. Since the inception of Part H of the Individuals with Disabilities Education Act (IDEA) in 1986, EI services have been delivered by a multidisciplinary group of providers who work collaboratively to offer a range of services to eligible children. These comprehensive and individualized services are designed to prioritize the impact of early supports on child development, while recognizing the vital role of caregivers in the lives of infants and toddlers.

### **Complexities of EI Systems**

The field of EI is inherently complex and dynamic. State EI systems are subject to a web of federal regulations and compliance requirements. Additionally, each state has pre-existing systems related to healthcare, education, and social services that have distinct policies, priorities,

and available resources. This complexity is further amplified by variations in state lead agencies which house EI programs. For example, Washington State's lead agency is the Department of Children Youth and Families (DCYF), whereas Georgia's lead agency is Public Health (ECTA, 2022). These lead agencies oversee the allocation of federal and state funding, as well as the development and execution of EI policies. Differences in lead agency structures and decision-making processes can introduce complexity and barriers to system-wide change efforts. Therefore, states have unique approaches to program administration, funding allocation, and service delivery models.

In addition to structural complexities, EI programs serve a diverse group of infants and toddlers with varying disabilities, developmental delays, and cultural backgrounds. Tailoring services to meet the needs of this heterogeneous population requires flexibility and adaptability within the EI system, adding complexity to program design and implementation. To meet a variety of needs, EI services are delivered by multidisciplinary teams that encompass a range of providers, including occupational therapists, physical therapists, speech-language pathologists, early childhood special educators, and family resources coordinators. Providers are required to meet the minimum licensing standards applicable to their respective disciplines, ensuring that they possess a foundational level of competence. Professional organizations across disciplines have outlined competencies and standards for service delivery in EI, with an increasing emphasis on family-centered practices.

At their core, EI services are highly relational and rely on providers building and maintaining strong relationships with children and families. Families have continued to enroll in EI services at increasing rates (ECTA, 2023). However, critical shortages of EI providers have persisted on a national scale for decades (Bruder et al., 2000; Council for Exceptional Children, 2020; Guralnick & Bruder, 2019; Hebbeler, 1994; Vail et al., 2018; Winton et al., 1997; Wise et

al., 2010). Shortages reflect not only a lack of personnel; they also reflect issues sustaining current EI providers. A 2023 survey of EI providers found that 37% of respondents were likely or highly likely to leave their jobs in the next five years (Friedman-Krauss et al., 2023). This turnover of EI providers disrupts the establishment of trusting relationships with families and impacts the effectiveness of multidisciplinary team collaboration (Palsha et al., 1990).

Addressing turnover within EI organizations is crucial for sustaining quality service delivery and achieving positive outcomes for children and families. Confronting the long-standing issue of critical shortages of EI providers nationwide requires incorporating the unique factors and complexities experienced in each state (Winton et al., 1997). Further, it highlights the importance of research and data-driven decision-making to inform system change efforts and improve outcomes for infants, toddlers, and their families.

### **Comprehensive System of Personnel Development**

Part C legislation offers an important tool for strengthening state systems and addressing personnel shortages: the Comprehensive System of Personnel Development (CSPD). The CSPD framework directly addresses the complex challenges faced by the EI workforce. With the creation of Part C early intervention, CSPD became a mandatory requirement for each participating state. Part C mandates that states attend to six subcomponents within their CSPDs: Leadership, Coordination, and Sustainability; Personnel Standards; Recruitment and Retention; Pre-service Training; In-service Training; and Evaluation. These components are highly interdependent and work together to have a collective impact on the overall effectiveness of the EI system. For instance, the success of recruitment and retention strategies cannot be evaluated in isolation but should be seen as integral parts of broader efforts in leadership and coordination, pre-service and in-service training. While CSPD has been a requirement since the beginning of Part C, many states do not have all of the required components clearly defined or actively

implemented (ECPC, 2020). The implementation of the CSPD within state Part C systems is intended to ensure that the system remains effective and responsive to the ever-evolving needs of infants, toddlers, and their families.

### **Washington State Context**

In the context of Washington State, EI services are delivered through the Early Supports for Infants and Toddlers (ESIT) program, which is housed within the Department of Children, Youth, and Families (DCYF). Washington is actively engaged in refining the state CSPD. These most recent CSPD efforts began in 2022 with the formation of a core planning team, tasked with guiding the development of a comprehensive plan for personnel development within the ESIT program. To maximize alignment with the state's unique context and values, the core planning team sought input from various stakeholders, including providers, families, and experts in the field.

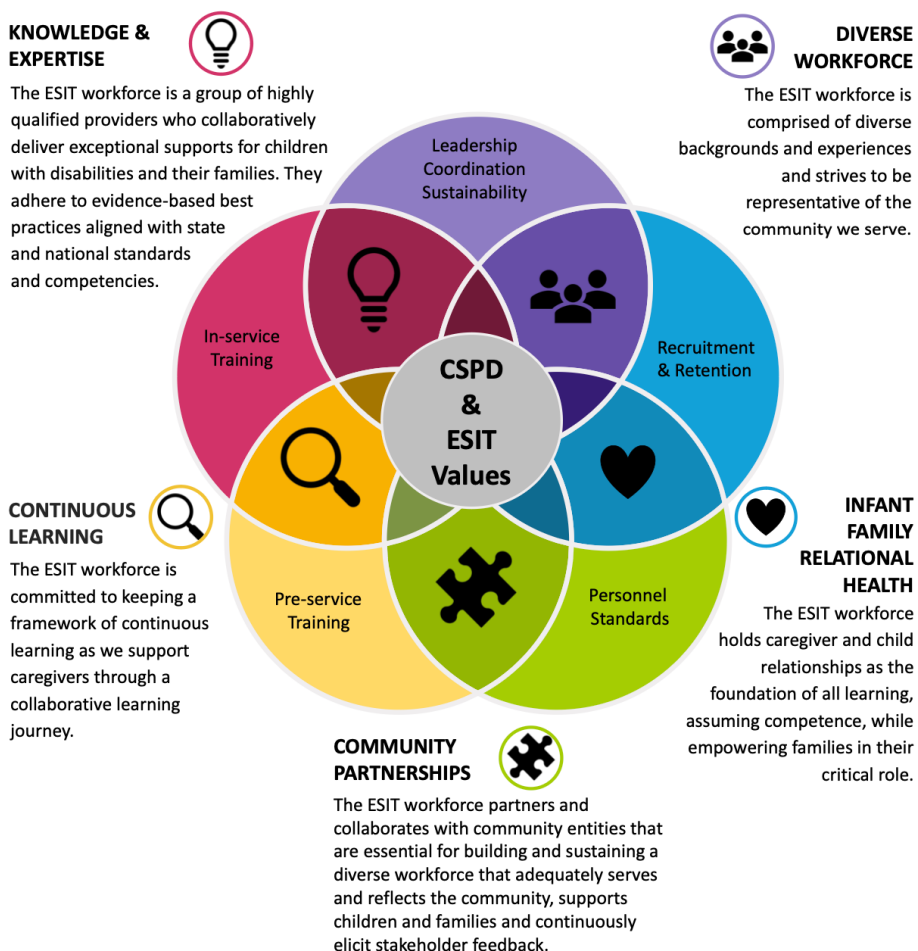
One significant aspect of Washington's CSPD process is the establishment of shared values that underpin the ESIT program's vision and principles (Figure 1). These five core ESIT values were co-created with stakeholders and serve as guiding principles for the CSPD process. They were derived from insights gathered during state provider meetings and were refined with input from the State Interagency Coordinating Council (SICC) Personnel and Training Committee, ensuring that the statements accurately represent the ESIT program's commitment to providing early support for infants and toddlers. It is important to note that these value statements are not rigid or final; they remain adaptable and subject to modification as the CSPD process progresses through its early phases. This flexibility allows the state to refine and fine-tune its approach to personnel development based on emerging insights and evolving needs within the EI workforce.

**Figure 1**

*ESIT Values Statements*

*Note. From “Poole, M. & Snyder, D. (2023, July). An effective and culturally affirming*

**Early Supports for Infants and Toddlers (ESIT) Vision Statement**  
 ESIT is comprised of a high-quality workforce that upholds the unique value and dignity of each child and family through trusting relationships as we provide strengths-based, family-centered, and culturally and linguistically responsive services using self-reflection, cultural humility, and evidence based best practices.



*workforce: creation of Washington State’s CSPD. Poster symposium at Office of Special Education Programs Leadership and Project Directors’ Conference. Washington, D.C.*

Washington State's approach to CSPD is characterized by a commitment to collaboration, stakeholder engagement, and the establishment of shared values. This approach reflects the state's dedication to providing high-quality early support for infants and toddlers and its

recognition of the importance of a well-prepared and supported EI workforce. As the CSPD process unfolds, these shared values will continue to guide the state's efforts to enhance EI services within its unique context. While Washington State has made significant progress in addressing the development and sustainment of the EI workforce, including retention of EI providers, some knowledge gaps still exist. These include knowledge of the workforce, professional satisfaction, professional experiences, and alignment with other initiatives in the state. Below I outline each of these factors:

- **Demographic Understanding:** Washington's CSPD process highlighted the need for deep knowledge of the EI workforce. This includes workforce demographics, education backgrounds, and other relevant characteristics. However, state leaders have indicated that there are still gaps in the state's understanding of the composition of its EI providers.
- **Job Satisfaction Factors:** While the CSPD process aims to outline specific support plans for EI provider recruitment and retention, the factors contributing to EI provider job satisfaction and retention have not been explored. Specifically, understanding which job satisfaction factors have the most significant impact in Washington's unique context can guide more effective retention strategies.
- **Experiences of Providers:** Gaining insights into the personal experiences, challenges, and motivations of EI providers in Washington is essential. While existing strategies and frameworks are valuable, a deeper understanding of providers' day-to-day experiences, their interactions with families, and their views on their roles can help fine-tune retention efforts.
- **Alignment with Washington Workforce Efforts:** Assessing how the identified job satisfaction factors align with Washington's current workforce development initiatives is

crucial. This alignment can reveal areas where the state's strategies are already effective and areas where adjustments or enhancements are needed.

Washington State's engagement in the refinement of the CSPD provides an opportunity to explore the system's vital role in shaping the workforce and strategies for addressing shortages and provider retention. The CSPD emphasizes personnel and workforce support, making it an essential framework for Washington to retain skilled EI providers. However, Washington, like many states, faces the challenge of limited research on the unique context of its EI workforce. This absence of research regarding the demographics, experiences, and job satisfaction of EI providers in the state prevents Washington from making well-informed decisions regarding workforce development. In a field as critical as early intervention, the lack of state-specific research limits the state's ability to select and implement the most effective strategies to address these challenges.

### **Effective Research in Early Intervention**

Most research regarding EI and EI providers is situated at the federal level. This section justifies the importance of conducting EI research at the state level. This approach is necessary due to the heterogeneous nature of EI services across states, influenced by a variety of factors including state demographics and resources, lead agency placement, and local policy. Additionally, while EI providers come from a variety of disciplines and backgrounds, this study advocates for an interdisciplinary view of the EI workforce, as opposed to discipline specific research. By exploring EI systems within the context of specific states as a unified group of providers, researchers and policy makers can glean nuanced insights that yield actionable recommendations.

### *A Rationale for State-level Research*

EI research should be situated within states for several reasons. Each state has its own approach to implementing and delivering EI services. This includes differences in program structures, eligibility criteria, funding mechanisms, service providers, and service delivery models. Research that is specific to a particular state takes into account these variations, providing a more accurate and contextually relevant picture of how EI operates within that state. The legal and regulatory framework within each state can have a profound impact on how EI services are delivered and how providers operate.

States vary in terms of their population demographics, including cultural, ethnic, and socioeconomic diversity. Researchers can involve local stakeholders, including families, service providers, and advocacy groups, in the research process. Conducting research within a state allows researchers to explore how these demographic factors influence the provision of EI services and the experiences of families. State-specific research can also explore the collaborations and partnerships between EI programs and local agencies, organizations, and institutions. These partnerships can significantly affect the reach and effectiveness of EI services. EI research conducted within a state is more likely to produce findings that can be directly applied to improve services for the children and families living in that state. Solutions and recommendations arising from state-specific research are more likely to be contextually relevant and actionable. They can address the specific challenges and opportunities faced by EI programs within that state. Situating EI research within states allows for a deep exploration of the local nuances, policy implications, and demographic diversity that influence the delivery of early intervention services. This state-specific approach can lead to more targeted, relevant, and actionable findings that benefit children, families, and service providers within that specific context.

### *Interdisciplinary Exploration of State EI Systems*

Research addressing EI as a whole field, rather than focusing on discipline-specific aspects, plays a critical role in advancing the understanding of the complexities and nuances associated with EI services. While the field of EI encompasses various disciplines and service providers, conducting research that examines the broader system-level challenges and opportunities offers several benefits. Research that takes a holistic view of the EI field can provide comprehensive insights into the common challenges and opportunities faced by all disciplines and providers. It allows for a more extensive exploration of the structural, policy, and systemic issues that impact the entire EI system. By examining the EI field through an interdisciplinary lens, research can highlight the importance of collaboration and teamwork, across disciplines, in delivering effective services. This research can emphasize the interdependence of different professionals and the need for them to work together seamlessly. Further, findings from system-level research can inform policy changes and system improvements that benefit all EI providers and the infants and toddlers receiving services. Systems can use system-level findings to advocate for policy changes, increased funding, and workforce development initiatives that benefit all EI providers. These efforts can help address workforce shortages, retention challenges, and quality improvements.

### **Purpose**

This study is rooted in the need for research that delves into the specific context of Washington State's EI workforce. Retention among EI providers is a significant problem that threatens the stability of the workforce and the delivery of services to infants, toddlers, and their families. The primary aim of this research is to address this critical issue by providing an understanding of Washington State's EI workforce contexts and factors related to the retention of EI providers.

To tackle the retention problem effectively, Washington must know who is present in the workforce. This encompasses demographics of the workforce, including provider disciplines, educational backgrounds, employment status and hiring structures. To develop effective strategies for retention, it is equally important to explore the factors that contribute to job satisfaction among EI providers in the state. The present research aims to identify what keeps EI providers engaged in their roles by identifying relevant job satisfaction factors and understanding their interactions within the state's specific context. The overall purpose of this study is driven by the essential need for Washington State to address retention of EI providers effectively. By understanding the demographics, job satisfaction factors, and provider experiences within the state, this research paves the way for the development of tailored, context-specific retention strategies. Given the complex nature of EI services, it is essential to have a unified understanding of the vocabulary for this research. Key terms as they have been applied in this research are detailed in Appendix A.

### **Research Questions**

This study investigated one key question: What are the characteristics, experiences, and perceptions of the Early Intervention workforce in Washington State, and how do these factors interact to impact job satisfaction and retention? Three additional subcomponents were further explored:

- a. Who comprises the Washington State EI workforce?
- b. How do job satisfaction factors predict WA EI providers' intention to stay in their role (retention)?
- c. What are the perceptions and experiences of Washington State EI providers regarding the factors that influence their job satisfaction and retention?

### **Significance of Study**

This study holds significance not only for Washington State but also for EI programs nationwide. By exploring Washington's EI workforce and understanding the complex factors influencing job satisfaction, this research equips the state with valuable insights for tailored retention strategies. This approach deviates from one-size-fits-all solutions, allowing the state to address retention issues specific to its unique workforce context. The results are crucial for keeping a stable and skilled EI workforce in Washington. This, in turn, benefits infants, toddlers, and their families by ensuring effective supports within EI services. Furthermore, Washington's experience can serve as a model for other states facing similar retention challenges within their EI workforce. By sharing these insights, the study lays the initial groundwork for exploration of the EI provider shortage issues across the United States.

In conclusion, this chapter sets the stage for the subsequent chapters that will discuss additional retention context and literature, research methodology, data analysis, and findings, aimed at addressing the issue of retention of EI providers in the state of Washington. It is evident that the retention of EI providers is a key contributor to provider shortages, creating instability within the workforce. As states struggle with the implications of shortages on early intervention services, the lack of comprehensive research impacts their ability to select and implement effective strategies tailored to the unique context of their EI workforce. This research is driven by the need for Washington State to explore the unique characteristics of its EI workforce. To effectively support the retention of EI providers in the state, the state must gain an understanding of the workforce's demographics and the factors influencing job satisfaction. This understanding serves as a foundation for the tailored selection of retention strategies specific to the state's unique context. The ultimate goal is the maintenance of a stable and highly skilled EI workforce, benefiting infants, toddlers, and their families in Washington State.

## **Chapter II: Retention Challenges and Strategies in Early Intervention**

Early Intervention (EI) services for infants and toddlers with disabilities are crucial for fostering positive developmental outcomes. A skilled and supported workforce is vital to provide comprehensive supports to infants and toddlers and their families. This chapter delves into the challenges and strategies related to retaining EI providers, focusing on Washington State. It begins with a historical background of EI services, explores factors contributing to critical staffing shortages, reviews literature on retention challenges, and discusses federal and state recruitment and retention initiatives. This chapter highlights significant knowledge gaps in the EI field, drawing on retention literature from the adjacent field of special education and outlining current federal and state workforce initiatives.

### **Critical Shortages of EI Providers**

Critical shortages of EI providers have been a reported concern for decades (Bruder et al., 1995; Council for Exceptional Children, 2020; Vail et al., 2018). These shortages impact states' abilities to meet the needs of eligible children and their families effectively. As of 2022, 45 states reported critical shortages of EI providers across disciplines (IDEA Infant & Toddler Coordinators Association, 2022). In Washington State, 46% of EI agencies reported provider shortages as of November 2021 (ESIT, 2021). While national and state level reports of EI provider shortages are available, there is an absence of peer reviewed literature exploring perspectives on the retention of EI providers.

### ***Factors Contributing to Critical Shortages***

Critical shortages of EI providers are impacted by the absence of specialized interdisciplinary preservice programs (Mellon & Winton, 2003; Stayton & Bruder, 1999; Smith, 2010). While the demand for EI services increases, the educational infrastructure fails to prepare

providers adequately. Limited availability of tailored pre-service programs inherently impacts the supply of practitioners with the breadth of skill necessary for practice in EI. The EI training literature suggests that providers ought to be trained and proficient in the areas of family collaboration (coaching, culturally responsive practices, priorities and service participation), teaming practices, interventions informed by evidence and professionalism, all with the underlying knowledge of the unique needs of infant and toddler learning and development (McWilliam, 2000; Campbell & Halbert, 2002; Childress, 2004; Bruder & Dunst, 2005). Entry-level preparation programs for related fields aim to prepare graduates to have knowledge of disorders and interventions that span from birth to late adulthood, resulting in providers without knowledge specific to a particular age group, disability or collaboration (Campbell et al., 2009). As EI inherently involves an interdisciplinary approach, the lack of pre-service preparation programs that robustly incorporate EI content (i.e. Division for Early Childhood Recommended Practices, National Association for the Education of Young Children standards, and Early Childhood Personnel Center Cross-Discipline Competencies) can produce providers underprepared to work collaboratively in diverse teams to provide holistic support to infants and toddlers with disabilities and their families. The current structure of many pre-service programs, across disciplines, produces professionals who are highly knowledgeable in their own discipline but lack a broader developmental perspective that allows them to work seamlessly with colleagues from other disciplines.

Over the past decade, there has been increasing enrollment in EI services, indicating a growing recognition of the importance of early childhood development and intervention. According to United States Department of Education's Part C Child Count Data reported in 2023 (ECTA, 2023) the number of children receiving EI services in the United States has steadily increased, apart from 2020-2021 during the COVID-19 pandemic. Specifically, the enrollment

figures have risen from 342,544 children in 2010 to approximately 441,515 children in 2022.

The rise in enrollment underscores the necessity for an increase in providers to accommodate the growing number of families seeking services.

Further, persistent staff turnover has been hypothesized as a significant barrier to robust early childhood systems (Grant, 2017; Kaniuka, 2020; Sutchter et al., 2016). High turnover rates among EI providers can have profound implications, magnifying shortages and limiting the capacity of EI programs to meet the growing demand for services. Palsha et al. (1990) emphasized the costly consequences of turnover in terms of financial resources and service continuity. The departure of experienced EI providers disrupts established relationships with children and families, creating stress and potentially impacting progress. This "revolving door" of personnel not only compromises service quality but also erodes institutional knowledge within agencies, impacting the ability to provide timely and effective services. Addressing high turnover rates among EI providers is imperative for ensuring the stability and effectiveness of EI services in meeting the needs of children and families.

### **Factors Influencing Retention of EI Providers**

To effectively address retention challenges, states must have a comprehensive understanding of factors related to EI provider retention. A literature review was conducted to identify factors associated with EI provider retention. This section describes search procedures and findings. It concludes with a synthesis underscoring the need for further studies aimed at exploring factors influencing job satisfaction and retention among EI providers.

### ***Literature Review Procedures***

The literature review for this study on EI workforce job satisfaction and retention employed various strategies. First, targeted search terms were used, including phrases such as

"Early Intervention shortages," "Provider retention in Early Intervention," "Factors influencing Early Intervention workforce shortages," "Recruitment and Retention of Early Intervention Providers". Multiple databases were searched, including PubMed, ERIC, PsycINFO, and Google Scholar. These searches produced five peer-reviewed articles. However, four of these articles focused on reviewing strategies from the field of K-12 special education rather than specifically addressing early intervention (EI). To broaden the scope, backward chaining was used, resulting in four adjacent articles from 1997 to 2021. These four articles discussed shortages and the Comprehensive System of Personnel Development (CSPD) model, rather than retention and retention factors. Forward chaining, which involved examining articles that cited the initial five articles, revealed one additional study exploring the impact of state funding on shortages (Vail et al., 2018). In addition, key leaders and researchers in the field of EI were consulted for additional references, confirming the lack of literature specific to retention. Only one study (Yeager et al., 2023) specifically delved into the nature of the retention issue. As a result, only two studies were identified in this review and are described below: Vail et al. (2018), Yeager et al. (2023). The section follows with a review of the broader educational retention literature.

### ***Literature Review: Retention in EI***

Vail et al. (2018) conducted a survey involving 32 state Part C coordinators, revealing significant provider shortages across 28 states. Their findings underscored a prevalent concern among Part C Coordinators regarding the lack of competitive salaries and benefits for EI providers, potentially contributing to retention challenges. The other study by Yeager et al. (2023) delves deeper into this issue by focusing on interviews with Part C program directors in Texas. Their research identified four key categories relevant to retention efforts: compensation and financial incentives, program management and organization, climate and culture, and

training and mentoring. These findings not only shed light on the challenges associated with retaining EI professionals but also provide a framework for further investigation and potential solutions in this critical area.

While the studies by Vail et al. (2018) and Yeager et al. (2023) offer valuable insights into retention issues within EI services, it is important to note that they rely on information provided by Part C coordinators and program directors. These perspectives are crucial for understanding systemic challenges and efforts to address retention, but they do not fully capture the experiences and viewpoints of EI providers themselves. Providers' perspectives are essential for gaining a comprehensive understanding of retention factors in EI.

### ***Literature Review: Connections Between Job Satisfaction Factors and Retention***

Examining job satisfaction among EI providers offers valuable insights into the challenges affecting workforce retention. According to Locke (1969), job satisfaction is rooted in the alignment between an employee's values and their job tasks, indicating that satisfaction hinges on the extent to which individuals feel positively about their work. Spector (1997) echoed that job satisfaction is the extent to which an individual has positive feelings towards their job. Extending beyond the realm of early intervention, numerous studies in fields such as education and public administration have highlighted the correlation between job satisfaction and employee retention (De Sousa Sabbagha et al., 2018; Hanson et al., 1990; Ouyang & Paprock, 2006). However, due to the scarcity of literature on EI provider job satisfaction and retention, insights must be drawn from related fields and exemplar state reports.

Arizona, Hawaii, and Minnesota have made their state-wide recruitment and retention survey findings publicly available through the Early Childhood Personnel Center's (ECPC) technical assistance process. These states were chosen by ECPC as exemplars of the CSPD technical assistance process, aimed at combating shortages and supporting robust, high-quality

Early Intervention systems. While specific information regarding the development and psychometric properties of these surveys is not available, overarching themes that resonate across these states provide a valuable foundation for exploration. Additionally, a substantial body of research has examined the factors affecting the retention of special educators in K-12 settings, providing further insights.

**Supportive Work Environment and Organizational Culture.** Creating a supportive work environment is critical for retaining EI providers, as evidenced by insights from state-wide surveys conducted in Arizona, Hawaii, and Minnesota. These surveys displayed the critical role of organizational culture in retention. In Arizona, concerns regarding poor leadership and a lack of feeling valued were prevalent among participants, indicating the need for supportive leadership structures (Arizona Recruitment & Retention Workgroup, 2021). Similarly, in Hawaii, participants emphasized the importance of positive work environments and effective communication within their organizations (Hawaii CSPD, 2022). The presence of supportive administration emerged as a key factor for retaining EI providers in Minnesota, emphasizing the need for leadership that prioritizes the well-being and professional growth of its staff (Hayden et al., 2022). These findings echoed priorities of K-12 special education professionals, detailing the importance of professional support and development on retention, emphasizing access to appropriate resources and mentoring (Bettini et al., 2017; Player et al., 2017). Additionally, they signal the importance of cultivating an organizational culture that embraces individual identity, autonomy, and continuous learning opportunities (Carver-Thomas, 2018; Dixon et al., 2019).

**Compensation and Financial Supports.** Competitive compensation and comprehensive financial supports are essential for retaining EI providers and mitigating turnover. Insights from state-wide surveys highlighted the significant impact of financial factors on professionals' decisions to remain in or leave the field. In Arizona, a substantial portion of participants cited

low compensation as a factor influencing their decision to leave EI, indicating the need for more competitive salary structures (Arizona Recruitment & Retention Workgroup, 2021). Similarly, in Hawaii, salary was identified as a critical factor for remaining in the role (Hawaii CSPD, 2022). Additionally, in Minnesota, concerns regarding low wages and the financial strain of working in EI were prevalent among both current and former professionals (Hayden et al., 2022). These financial concerns resonate with findings from the broader literature on educator retention, which emphasizes the importance of adequate compensation and financial stability in promoting job satisfaction and retention (Olsen & Rose, 2019).

**Workload and Caseload Management.** Effective workload and caseload management is essential for preventing burnout and retaining EI providers. State surveys revealed the impacts of high caseloads and workload demands on professionals' well-being and job satisfaction. In Arizona, a significant proportion of participants reported feeling overworked and experiencing burnout (Arizona Recruitment & Retention Workgroup, 2021). Similarly, in Minnesota, providers did not feel prepared to complete the levels of documentation required or to manage their caseloads and expressed concerns about the high levels of documentation required (Hayden et al., 2022). Poor working conditions, characterized by factors such as excessive workload and inadequate support, significantly contribute to the attrition of special educators (Billingsley et al., 2020; Mastropieri, 2001). Managing workload-related stress is essential for maintaining a healthy work-life balance and promoting long-term retention of professionals (Herman et al., 2017).

### **Initiatives and Strategies for Addressing Retention Challenges**

Various initiatives and strategies exist that address the pressing challenge of retention within EI services. Drawing insights from both federal and state-level efforts, several innovative approaches exist. These approaches were designed to attract, prepare, and retain providers in the

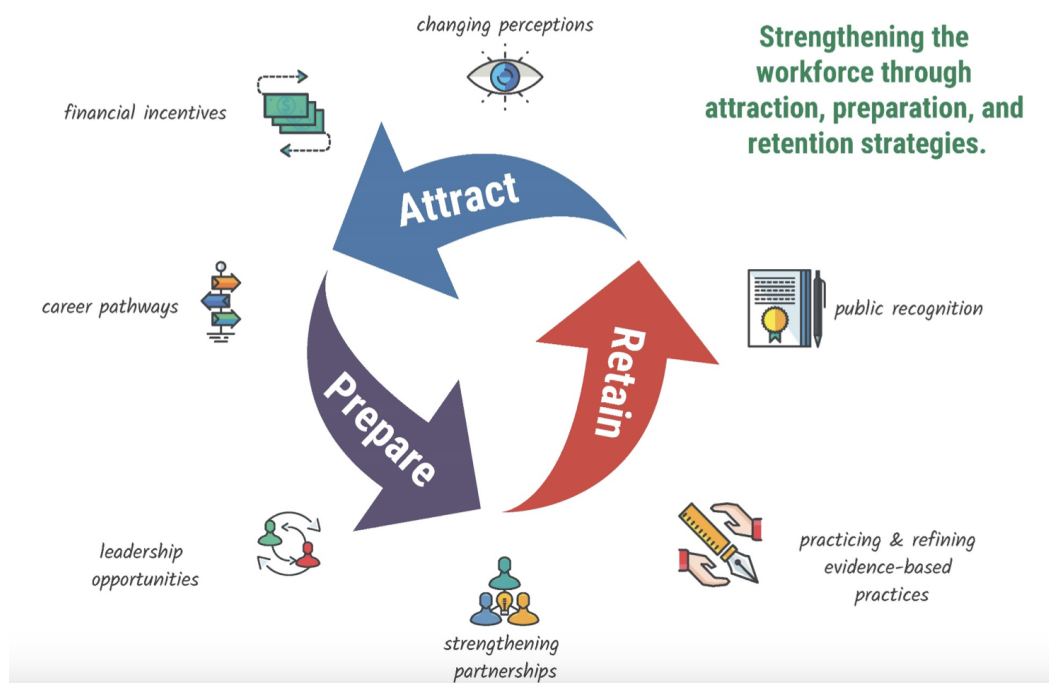
workforce. These initiatives highlight the importance of comprehensive solutions to combat workforce shortages and ensure the delivery of high-quality EI services to children and families.

***Federal Workforce Initiatives***

In response to the pressing need for solutions to EI provider retention, the Early Childhood Technical Assistance (ECTA) Center initiated a technical workgroup in 2023. This group's objective is to compile a national synthesis of best practices in the recruitment and retention of EI providers, drawing insights from successful strategies implemented by states and local programs. Once completed, this synthesis will serve as a resource, offering strategies to combat the shortage in EI by incorporating key elements from the OSEP Attract, Prepare, Retain framework (Figure 2).

**Figure 2**

*OSEP Attract, Prepare, Retain Framework*



*Note.* From OSEP Attract, Prepare, Retain: Personnel Development to Improve Services and Results for Children with Disabilities.

The OSEP Attract, Prepare, Retain Initiative, initially launched to address personnel concerns in special education, emphasizes the importance of various strategies across three categories: Attract, Prepare, and Retain. In the *Attract* category, alternative routes to certification and Grow Your Own (GYO) programs have emerged as effective solutions to workforce shortages, promoting diversity in the teaching and service sectors. Financial incentives and public perception also play vital roles in recruitment and retention. Positive perceptions of education careers are essential for attracting and retaining educators and specialists. In the *Prepare* category, innovations in educator preparation, such as simulations, micro-credentials, residencies, and practice-based opportunities, bridge the gap between theoretical knowledge and practical application, addressing workforce shortages and enhancing service quality. Finally, in the *Retain* category, enhancing professional leadership, induction, mentorship, ongoing professional learning, educator empowerment, and supportive workplace environments are essential for retaining personnel. Teacher leadership initiatives and specialized professional development tailored to the needs of early childhood personnel are crucial. Effective mentorship and a supportive work environment, marked by administrative support, clear roles, and collaborative leadership, significantly reduce turnover rates, especially for related service providers. Teacher empowerment, fostered by a culture of collective responsibility and autonomy, is closely tied to retention.

### ***Washington State Workforce Efforts***

Current workforce development initiatives in Washington State are linked to addressing the pressing issue of retention within the ESIT program. These initiatives, guided by the State Systemic Improvement Plan (SSIP), ESIT values, and stakeholder feedback, are aimed at enhancing infant early childhood mental health, infant family relational health, and nurturing resilience within families (Poole & Snyder, 2023). This involves equipping the ESIT program's

workforce with the skills and knowledge to foster positive social-emotional development in children with disabilities. ESIT has established the ESIT Competencies for personnel within EI in Washington (WA DEL, 2018). The goal is to observe improved growth in positive social-emotional skills among infants and toddlers who receive ESIT services, promoting a sense of competence and confidence in Washington families and caregivers.

The state recognizes the importance of maintaining a diverse workforce within the ESIT program, which is crucial for ensuring inclusivity and cultural humility. Activities led by the State Interagency Coordinating Council (SICC) Personnel and Training Committee aim to develop recruitment and retention strategies that engage local communities. Specialized training programs like the Parent Institute for Engagement (PIE) target parents and caregivers, potentially inspiring them to join the early intervention field. Professional development and training requirements underscore the importance of family-centered practices and cultural humility, in alignment with broader Racial Equity and Social Justice (RESJ) initiatives. Scholarships and a Language Access Plan are also in place to enhance accessibility and inclusivity within the ESIT program, supporting the retention of a diverse workforce.

Washington is developing an ESIT credential for all providers that actively incorporates competencies aligned with the Washington Association for Infant Mental Health (WA-AIMH) and national standards and offers multiple pathways into the EI workforce. This proposed credential comprises five levels encompassing all disciplines and services. The pathways include two associate levels, which require either an AA degree or equivalent lived experience, supplemented by endorsement from WA-AIMH. Additionally, there are three specialist levels available, necessitating either a BA/BS, MA/MS, or higher degree, alongside WA-AIMH endorsement. The renewal process for the credential emphasizes ongoing professional development and reflective practice, ensuring that professionals continually enhance their

expertise in supporting the social-emotional development of infants and toddlers (WA DCYF, 2022).

### **Proposed Conceptual Framework**

As seen in the related literature, certain characteristics consistently emerge influencing job satisfaction and providers' likelihood to explore careers outside the EI field. These characteristics align with the conceptual framework proposed for this study, which integrates Maslow's Hierarchy of Needs and Bronfenbrenner's Ecological Systems Theory. This combined framework aims to offer a holistic view of the dynamics influencing the EI workforce.

Maslow's Hierarchy of Needs organizes human needs into a hierarchical structure, from basic physiological requirements to higher-level needs related to self-actualization (Maslow, 1943). According to this theory, individuals must satisfy lower-level needs before moving up the hierarchy to address higher-level needs. It provides insight into how people are motivated by different needs and helps explain their behavior and priorities.

Bronfenbrenner's Ecological Systems Theory emphasizes the interconnectedness of various environments in influencing human development and behavior (Bronfenbrenner, 1974). It consists of concentric levels, including the microsystem (immediate environment), mesosystem (interactions between microsystems), exosystem (external settings), macrosystem (cultural/societal values), and chronosystem (temporal changes). This theory highlights the importance of considering the various environments in which an individual is embedded when analyzing their development and behavior.

In the context of EI provider retention, integrating Maslow's Hierarchy of Needs and Bronfenbrenner's Ecological Systems Theory offers a comprehensive understanding of the factors affecting job satisfaction and retention decisions. Maslow's hierarchy accounts for individual needs, ranging from basic physiological and safety needs to higher-level needs for

belongingness, esteem, and self-actualization. Meanwhile, Bronfenbrenner's theory considers environmental influences, encompassing immediate interactions, collaborative networks, external factors, societal perceptions, and temporal changes. This integrated framework will guide the analysis and interpretation of how these factors interact and impact EI providers' experiences in the workforce.

### **Purpose of Research and Restatement of Research Questions**

While Washington has made significant progress in implementing the CSPD, several knowledge gaps persist. The state should focus on conducting research into understanding the demographics of the current workforce and the underlying needs and challenges impacting EI provider retention in Washington. These gaps must be addressed in order to refine retention efforts, helping to fine-tune these strategies to better align with the realities faced by early intervention professionals in the state.

The challenges of recruiting and retaining EI providers are significant and multifaceted. These challenges not only impact the ability of states like Washington to meet the needs of infants, toddlers, and their families but also present a broader concern for the overall quality of early intervention services. The pivotal role of EI providers in supporting the positive development of infants and toddlers with disabilities demonstrates the urgency of addressing these retention challenges. Key factors from exemplar states and the related field of special education set the foundation for necessary state-level exploration of the unique complexities of each state's system. While the groundwork for retention strategies has been laid with federal and state initiatives, further research is imperative to identify efficient, effective, and individualized state strategies. These state efforts are essential for retaining skilled professionals who play a critical role in the EI system. This chapter summarized the research literature and state efforts to define retention factors in EI. In the next chapter, I will describe the Methods used to explore the

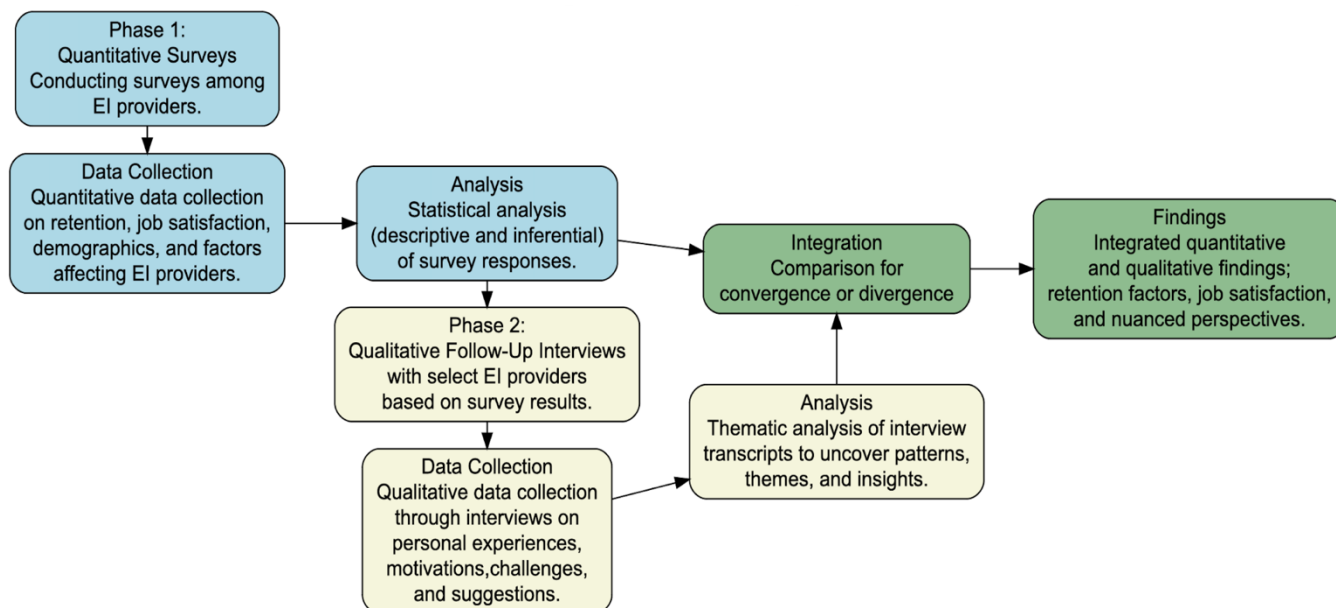
current study's research question: What are the characteristics, experiences, and perceptions of the Early Intervention workforce in Washington State, and how do these factors interact to impact job satisfaction and retention?

### **Chapter III: Method**

This chapter describes how the complexities surrounding early intervention (EI) provider retention within Washington State were explored and analyzed. It lays the groundwork for design choices that exposed the intricacies of factors influencing job satisfaction and retention among EI professionals. This investigation required a systematic and comprehensive approach to capture the nuances and challenges faced by these providers in the EI field.

#### **Research Design**

This study adopted an explanatory sequential mixed-methods design (Creswell and Plano Clark, 2018) blending quantitative and qualitative research approaches (Figure 3). It aimed to gain a nuanced understanding of factors influencing the retention of EI providers based on their job satisfaction within the context of Washington State. To capture a comprehensive view, this study integrated the use of both a validated tool and researcher-developed content tailored to the EI workforce. The quantitative phase involved using the established Job Satisfaction Survey (Spector, 1985) followed by targeted questions crafted by the researcher to probe into the aspects of job satisfaction unique to EI providers in Washington State (Appendix B). Following the survey administration, the qualitative phase involved conducting semi-structured interviews, designed based on the insights from the survey findings. This qualitative approach, stemming from quantitative data (QUANT-qual), ensured that interview questions were informed and refined by the initial survey outcomes, allowing for further exploration of emergent themes and providing further context to findings within Washington.

**Figure 3***Sequential Mixed Methods Design*

*Note:* Adapted from Creswell, J. W., & Plano Clark, V. L. (2018). *Designing and conducting mixed methods research*. Sage Publications.

## Participants

The study sample encompassed personnel working in EI in Washington State (table 1). Eligible participants include providers from a range of roles in the EI workforce, including certificated educators, non-certified educators, para-educators or education assistants, teachers of the deaf, teachers of the visually impaired, family resources coordinators, mental health specialists, occupational therapists, occupational therapy assistants, physical therapists, physical therapy assistants, speech language pathologists, speech language pathology assistants, nutritionists and nurses. This maximized the likelihood of incorporating viewpoints from various dimensions of the field. To aid in analysis, participants were categorized into five professional groups. “Educators” (EDU) included certificated educators, non-certified educators, para-educators or education assistants, teachers of the deaf and teachers of the visually impaired.

“OT/PT” included occupational therapists (OT), occupational therapy assistants, physical therapists (PT), and physical therapy assistants. “Speech Therapists” included speech language pathologists (SLP) and speech language pathology assistants. “Other” included mental health specialists (infant mental health and social workers), nutritionists, nurses, intake coordinators, and music therapists. “Family Resources Coordinators” (FRC) included only family resources coordinators. The survey was completed by  $n=287$  providers across disciplines (Educators:  $n=55$  (19%), Family Resources Coordinators:  $n=78$  (27%), OT/PT:  $n=58$  (20%), Speech Therapist:  $n=74$  (26%), Other:  $n=22$  (8%)). The providers work within all three service regions in Washington: Northwest  $n=75$  (25%), Southwest  $n=122$  (42%), Eastern  $n=90$  (31%). More detailed information about EI provider demographics, aligned to the study’s research questions, are provided in Chapter 4.

**Table 1***Survey Participant Demographics*

	<i>n</i>	%
<b>Discipline Group</b>		
Educator	55	19.16
OT/PT	58	20.21
Speech Therapist	74	25.78
Family Resources Coordinator	78	27.18
Other	22	7.67
<b>Service Regions</b>		
Northwest	75	26.13
Southwest	121	42.16
East	91	31.71

*Note.*  $N = 287$ .

## **Recruitment and Survey Distribution**

The survey was administered using Qualtrics software. This offered a user friendly interface and secure data collection. The survey was provided in both English and Spanish, and options for additional languages were made available upon request to increase inclusivity and accessibility. The survey was distributed via an online link that was made available through email, digital newsletters, printed flyers, site visits, and a “peer referral” process. The survey was scheduled to remain open for 6 weeks (January 2, 2024- February 14, 2024) to provide an adequate window for participation among EI providers across Washington State. Several proactive steps were taken to protect against the risk of non-human responders (i.e., "bots"). This included manually distributed incentives and “bot identifying questions”, CAPTCHA (Completely Automated Public Turing test to tell Computers and Humans Apart). However, the survey received an unusually high number of responses on January 28, 2024 and January 29, 2024 (>700 responses). Due to the detection of suspected inauthentic "bot" responses, the Institutional Review Board was contacted and the survey was closed after four weeks (January 30, 2024) to screen for authenticity. All responses were screened to identify suspicious response patterns and illogical responses. These included groups of 5-7 responses within 10-minute windows with identical responses, quick response time (under 5 minutes), education level not matching requirements for identified role and illogical working county pairings. Bot responses were easily identifiable. Four authentic responses were identified among the batch submitted during the two-day period. These four responses were included in the final data set.

To recruit participants, the researcher engaged agency leaders through a state-compiled agency contact list, requesting their support in disseminating the survey among their departments. Additionally, the researcher utilized established relationships within the ESIT workforce development and technical assistance teams and the SICCC personnel and training

committee to discuss the survey's importance and establish connections with agency leaders and providers. Simultaneously, collaboration with the Department of Children, Youth, and Families (DCYF) facilitated the survey's distribution through the weekly ESIT newsletter, promoting visibility and accessibility for ESIT staff. Further, five on-site visits were conducted in the eastern service region. On-site visits to EI agencies were conducted during department meetings and all staff gathering provided an opportunity for EI providers to complete the survey. The survey link was shareable via email and QR code. Upon completing the survey, participants were directed to a Google Form link to claim compensation. Each participant who completed the survey received a \$10 Tango e-gift card. Additionally, survey participants were automatically entered into a drawing for one of two \$150 Visa gift cards. Participants were encouraged to share the survey, earning additional drawing entries for each referral that mentioned their name. Selected participants for follow-up interviews were provided with a \$30 Tango e-gift card upon interview completion. Interview participants received an additional entry into the drawing for the Visa gift cards. Participants who engaged in member checking received an additional \$10 as compensation.

### **Quantitative Phase: Survey Instrument**

#### ***The Job Satisfaction Survey***

The Job Satisfaction Survey (JSS), developed by Paul E. Spector (1985), is a validated instrument used to assess job satisfaction across various professional contexts. It provides a structured approach to measure individuals' satisfaction with their jobs, encompassing various facets of the work environment, relationships, and personal experiences. For the context of this study, the Job Satisfaction Survey was used to assess the job satisfaction levels of EI providers in Washington State. The JSS is comprised of 36 items organized into nine facets aimed at evaluating employee satisfaction across many aspects of the job. The nine facets are Pay,

Promotion, Supervision, Fringe Benefits, Contingent Rewards (based on performance), Operating Procedures (required rules and procedures), Coworkers, Nature of Work, and Communication. Each facet has four corresponding items. The survey offers six response options per item; "strongly disagree" to "strongly agree." 19 of the 36 questions are reversely worded in order to increase the authenticity of responses. Subscale and total scores are calculated to determine overall job satisfaction (satisfied, ambivalent, dissatisfied).

The nine facets explored with the JSS align with retention factors identified in the special education literature (i.e., professional support and development, administrator support and resource provision, working conditions and compensation) and findings from EI exemplar states (i.e., Supportive work environment, compensation and financial supports, and workload and caseload management) making this scale a relevant tool to assess job satisfaction among Washington EI providers (Bettini et al., 2015; Bettini et al., 2017; Cancio et al., 2013; Miller et al., 1999; Player et al., 2017; Wong et al., 2017). The scale has been tested and refined over time, demonstrating consistency in measuring job satisfaction across various fields. Below in table 2 are internal consistency reliabilities (coefficient alpha) as provided by the developer based on a sample of 2,870.

**Table 2**

*Job Satisfaction Survey Internal Consistency Reliabilities.*

Scale	Alpha	Description
Pay	.75	Pay and compensation
Promotion	.73	Promotion opportunities
Supervision	.82	Immediate supervisor

Fringe Benefits	.73	Monetary and nonmonetary fringe benefits
Contingent Rewards	.76	Appreciation, recognition, and rewards for good work
Operating Procedures	.62	Operating policies and procedures
Coworkers	.60	People you work with
Nature of Work	.78	Job tasks themselves
Communication	.71	Communication within the organization
Total	.91	Total of all facets

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*Note:* From Spector, P. E. (1985). Measurement of human service staff satisfaction:

Development of the Job Satisfaction Survey. *American Journal of Community Psychology*.

Free noncommercial use of the JSS for academic research and educational purposes, including student theses, dissertations, and research projects has been authorized by the developer. Reproduction of the scale in a thesis or dissertation is permitted with the inclusion of the copyright notice and the sharing of results with the developer. The shared results must include means per subscale and the overall score, sample size, a brief description of the sample (organizations and identifying information may be removed), the country of data collection, and optionally, standard deviations and coefficient alpha per subscale and total score.

### ***Additional Question Development***

Seven additional questions directly related to the EI workforce were added to the survey. The development of these questions drew on various sources to create a comprehensive and contextually relevant line of questioning. Beyond the initial review of Special Education literature, open-ended conversations with experienced EI providers played a crucial role in

identifying specific demographic and field-related factors impacting job satisfaction and retention, followed by cognitive interviews.

**Open-ended Conversations.** Two experienced EI providers, one special educator and the other a speech-language pathologist (SLP) with experience in an EI management role participated in open-ended conversations regarding EI provider retention in WA. The researcher described the purpose of the study and asked providers to discuss their experiences, challenges, and insights into the EI workforce. They highlighted several themes that were incorporated into additional questions. These included concerns about restrictive employment contracts impacting financial stability and career growth, unrealistic workloads leading to burnout, a lack of ongoing mentorship causing isolation, work-life balance difficulties, and collaboration hurdles hindering effective interdisciplinary teamwork. The additional questions inquired about the specifics of contractual limitations, workloads, emotional burdens, mentorship, work-life balance challenges, and collaboration obstacles within EI settings. These questions facilitated a more thorough exploration into the unique factors contributing to the retention of EI providers.

**Cognitive Interviews.** To enhance the survey's clarity, cognitive interviews were conducted with three EI providers. During these interviews, providers were asked to complete the survey while verbalizing their thought processes. This approach aimed to identify potential issues with question wording or any difficulties participants might come across. The providers were given the full survey, including the JSS, additional EI questions and demographics. Two of the three providers noted that the questions regarding employment contracts and workload felt biased towards a negative response. Additionally, all providers discussed a need for clarity within the question regarding mentoring and support. They specifically indicated a need for a list of examples of supports and if these were on-going supports or during the on-boarding process. In response to this feedback and continued discussion regarding supportive work environments,

adjustments were made to remove specific mention of mentoring and a general open ended question regarding feelings of support was included. This iterative process minimized potential response biases and errors to authentically capture the experiences and perceptions of EI providers. All providers found the JSS items relevant and clear. They noted that the reversely-worded questions required more thought, but all felt these items were helpful to interrogating their own responses and reactions to the statements. Regarding demographics, two providers felt the addition of questions regarding family structure (family size, number of dependents, household income) would be helpful to understanding the diversity of the workforce and noted these aspects as impacting retention within their coworkers.

### ***Pilot Testing***

After incorporating feedback from cognitive interviews, the final survey was pilot-tested with an additional group of three EI providers and three special education graduate students. This pilot phase assessed the practicality and usability of the survey, including the functionality of Qualtrics. The survey took pilot participants approximately 15-20 minutes to complete. The feedback collected during pilot testing indicated the survey was user-friendly and only minor refinements to grammar, spelling, and navigation were made before the final survey was distributed.

### **Qualitative Interviews**

The qualitative phase consisted of semi-structured interviews with a select group of survey respondents. The interviews provided an opportunity to delve deeper into the factors influencing job satisfaction and retention among EI providers. The interview questions were developed based on the survey results, enabling participants to share their personal experiences and perceptions regarding retention factors.

### *Interview Participants*

The process of selecting participants for follow-up interviews in this study was designed to solicit a comprehensive and diverse representation of perspectives within the EI workforce in Washington State. A purposeful sampling approach was used to choose participants across disciplines, regions, and job satisfaction levels. Upon completion of the survey, participants had the opportunity to leave their name and email address to be contacted for an interview. Survey responses were anonymous unless the participant gave initial consent to be contacted for an interview. The process for selecting interview participants began with an analysis of individual responses obtained from participants who expressed interest in interviews. First, the JSS was scored by converting reversely worded questions and calculating sub-scale and total job satisfaction scores. 125 survey participants expressed interest in participating in interviews. To increase the likelihood of a comprehensive and diverse representation of perspectives within the EI workforce in Washington State, a 4-step systematic approach was employed to filter and select interview candidates:

1. Participants were filtered by discipline, so the final sample would include a variety of roles within EI, such as educators, SLPs, OT/PTs and FRCs.
2. Participants were filtered by location, taking into account geographical diversity across different counties and service regions in Washington State. This step allowed for perspectives from EI providers working in urban, suburban, and rural settings that function within varied service district.
3. Participants were then filtered by job satisfaction level. They were categorized into groups of dissatisfied, ambivalent, and satisfied individuals, based on their responses in the survey. The purpose of these groupings was to gain perspectives across satisfaction levels and gather information about strengths and needs across providers.

4. Participants were filtered based on their intention to remain in EI, with a focus on including individuals who expressed both intentions to stay and intentions to leave the field. The goal of this last step was to capture insights on factors influencing retention within the EI workforce. A total of 8 interviews were completed with EI providers from varied disciplines, locations, job satisfaction levels, and intentions to remain in the field (table 3).

**Table 3***Interview Participant Characteristics*

<b>Pseudonym</b>	<b>Discipline</b>	<b>Years in EI</b>	<b>Service Region</b>	<b>Total Satisfaction</b>	<b>Intention to Stay</b>
Rachel	EDU	6-10	Northwest	Satisfied	Yes
Kelly	EDU	<1	Southwest	Ambivalent	Yes
Talia	FRC	1-5	Northwest	Dissatisfied	Yes
Mel	FRC	1-5	Southwest	Satisfied	No
Debora	OT	11-15	Northwest	Ambivalent	No
Kristen	PT	20+	East	Satisfied	Yes
Stephanie	SLP	6-10	Southwest	Dissatisfied	No
Lisa	SLP	6-10	East	Ambivalent	No

*Note.* Educator (EDU). Family resources coordinator (FRC). Occupational therapist (OT). Physical therapist (PT). Speech language pathologist (SLP). Total job satisfaction score range 36-216. Dissatisfied: 36-108. Ambivalent: 109-144. Satisfied: 145-216. Intention to stay: No= considering leaving, Yes= no intention of leaving.

***Qualitative Data Collection***

A recruitment email was sent to selected providers. The email reviewed the study's objectives and confidentiality measures and included an invitation to schedule a Zoom interview. This email included the informed consent form and discussed the voluntary nature of study

participation. At the beginning of each interview, the consent form was reviewed and participants gave verbal consent to participate and record the interview. The interviews were conducted and recorded using Zoom video conferencing with auto-generated transcripts. Interviews ranged between 55 and 100 minutes each. An interview protocol was created based on the quantitative findings to guide the conversation. This approach also allowed for open-ended discussions and specified probing questions to gather comprehensive and detailed responses from the participants. Interview questions were aligned with participants' sub-scale satisfaction levels and their intentions to remain in the EI field. See Appendix C for interview protocol. After the interviews, the recordings and transcripts were securely stored on Google cloud. The transcripts were cleaned and identifying information was replaced with participant ID numbers. The video and audio recordings were stored in a password protected folder separate from the participant IDs and key.

The researcher visited five sites for survey recruitment purposes. At two of those sites, program administrators and providers requested participating in in-person focus groups. The researcher agreed to this modification and held one focus group with program administrators and another with a group of 17 providers. Verbal consent was obtained to record these sessions, allowing for documentation of the conversations. The lead investigator manually transcribed the audio recordings. Both groups engaged in open dialogue regarding factors influencing job satisfaction and retention among EI providers. The group of providers, who had all completed the survey, provided additional insights into system-level factors impacting satisfaction beyond what was captured in the survey. These discussions offered valuable data for understanding of the complex dynamics at play within the WA EI workforce.

## Data Analysis

### *Quantitative Data Analysis*

The analysis plan involved several steps to examine the quantitative data obtained from the survey. Initially, the data underwent scoring according to the established guidelines of the Job Satisfaction Survey (JSS), allowing for standardized measurement across various facets of job satisfaction. Descriptive statistics were then computed to summarize and present the survey responses to provide an overview of job satisfaction levels across different facets as well as overall satisfaction. Following this, logistic regression analysis was used to understand factors influencing retention among participating EI providers in Washington. Logistic regression identified significant predictors associated with retention and explored potential interaction between factors, to understand key factors that impact retention intentions in this field.

### *Measures*

**Outcome.** The outcome for this study was **EI providers intention to stay (retention)**, defined as 1 = no plans to leave EI, and 0 = considering leaving EI or actively seeking alternative employment.

**Predictors.** Although the dataset contained a variety of job satisfaction factors, the present study focused on **pay** (score for pay subscale), **benefits** (satisfaction score for benefits subscale), **work-life balance satisfaction** and **supportive work environments**. Survey participants were asked to select their top satisfaction factors, when considering remaining in their role. In line with the goals of this study to impact systems change, factors that were inherent to the work of an EI provider and unchangeable (nature of work and coworkers) were removed and the remaining factors were explored. Control variables included **discipline groups** and **regions**. Disciplines were effect coded into a set of four predictors with 'family resources

coordinators' as the reference, as it was the largest category. Counties were collapsed into ESIT service regions and were effect coded into two predictors using Southwest as the reference.

Southwest service region includes King County, which is historically the most represented and largest group of EI providers in WA.

Data were analyzed using multiple logistic regression with sequential predictor entry in order to assess the significance of outcome prediction improvement when adding sets of predictors. Model 1 included just the demographic grouping predictors; Model 2 incorporated the four focal predictors (pay, benefits, work-life balance and supportive work environments) as well as discipline and regional status; and Model 3 included two-way interactions between pay and work-life balance, pay and supportive work environments, benefits and work-life balance, benefits and supportive work environments. Categorical predictors (i.e., discipline grouping and regions) were effect coded, and pay and benefits were standardized into z-scores. The final model (Model 3) was as follows.

$$\begin{aligned} \text{Logit}(\text{Retention})_i = & b_0 + b_1 * \text{rgn\_eff\_NW}_i + b_2 * \text{rgn\_eff\_E}_i + b_3 * \text{disc\_eff\_EDU}_i + b_4 * \\ & \text{disc\_eff\_MT}_i + b_5 * \text{disc\_eff\_SLP}_i + b_6 * \text{disc\_eff\_Other}_i + b_7 * Z_{\text{pay}}_i + b_8 * \\ & Z_{\text{benefits}}_i + b_9 * \text{wk\_envi\_sup\_eff}_i + b_{10} * \text{wl\_bal\_sat\_eff}_i + b_{11} * Z_{\text{pay}}_i * \\ & \text{wk\_envi\_sup\_eff}_i + b_{12} * Z_{\text{pay}}_i * \text{wl\_bal\_sat\_eff}_i + b_{13} * Z_{\text{pay}}_i * \\ & \text{wk\_envi\_sup\_eff}_i + b_{14} * Z_{\text{pay}}_i * \text{wl\_bal\_sat\_eff}_i \end{aligned}$$

In the model above,  $i^{\text{th}}$  provider's log-odds of retention is equal to the sum of the conditional likelihood of retention ( $b_0$ ), the unique effects of region ( $b_1 - b_2$ ), the unique effects of discipline ( $b_3 - b_6$ ), pay satisfaction, benefits satisfaction, and work-life balance, supportive work environments ( $b_7 - b_{10}$ ), and finally, the interactions between interactions between pay and work-life balance, pay and supportive work environments, benefits and work-life balance, benefits and supportive work environments ( $b_{11} - b_{14}$ ). The model was estimated using maximum likelihood

generalized linear regression (family = “binomial”) in base *R-4.2.2* (R Core Team, 2022).

Independence seems to be tenable since regions and discipline groupings were controlled for in the model. Other sources of dependencies may be present, specifically within EI agencies (not collected) and counties. Data were not presented at the county level in order to protect the anonymity of participants.

An alpha of .05, 2-tailed, was used for all statistical tests. To assess the practical value of the results, odds ratios (ORs) and their 95% confidence intervals are reported. Classification accuracy and Nagelkerke pseudo- $R^2$  are also reported (based on the ‘rcompanion’ package, Mangiafico (2023)). Last, data visualization of model-predicted values was implemented using the ‘ggplot2’ package (Wickham, 2016) (with interaction term predicted values extracted with the ‘effects’ package (Fox & Weisberg, 2019)).

### ***Qualitative Data Analysis***

Thematic analysis was conducted to identify and interpret patterns and themes in the interview and focus group transcripts (Braun & Clarke, 2012). The process of thematic analysis began with the training of a research assistant in the coding process. Both the lead investigator and the research assistant completed a first pass of all transcripts using an open-coding approach. Individual interview themes were identified, and these themes were compared across transcripts to create an initial codebook. Upon completion of the open-coding, codes were categorized in the code book to align with the levels of Maslow’s Hierarchy of Needs. The initial codebook included eight parent codes and 18 child codes. These codes were organized according to Maslow’s Hierarchy levels (e.g. physiological needs, safety needs, love and belongingness, esteem needs, and self-actualization). The second pass involved coding based on the initial codebook. The lead investigator and research assistant both coded one transcript, then discussed the clarity of the code book and alignment with one another. The codebook was adapted by

adding three parent codes and eight child codes to gain clarity. The definitions of each code were refined and moved to better align with the parent codes and Maslow's hierarchy levels. The lead investigator and research assistant each coded four additional transcripts leading to two transcripts that were double coded to assess alignment across the research team. Throughout the coding process the research team discussed the fit of codes and code groupings. The codebook was adjusted a final time, moving two parent codes and their associated child codes to better align with the associated level of Maslow's Hierarchy of Needs. Once the interview transcripts were coded, the administrator and provider focus group transcripts were coded by the lead investigator using the same codebook. The final code book can be seen in Appendix D.

To validate interpretations, member checks were conducted via email. Summaries of identified themes and interpretations were shared with all interview participants for feedback, ensuring the accuracy of the identified themes. Five of the eight interview participants responded to the requests for member checking. No discrepancies were found and the participants all indicated that the themes accurately represented their experience. The qualitative analysis plan aimed to not only expand but also provide nuanced insights into the factors influencing job satisfaction and retention among EI providers.

### ***Data Integration***

This study used a mixed-methods approach, combining quantitative survey data and qualitative insights from interviews and focus groups to form a comprehensive analysis of job satisfaction and retention factors among EI providers in Washington State. Employing a sequential approach, the findings from the quantitative phase informed the development of interview protocols for the qualitative phase. Insights gleaned from the surveys served as a guide for focus areas and probing questions during the interviews. Quantitative results were compared and contrasted with the qualitative narratives to identify areas of convergence or divergence

(Creswell & Plano Clark, 2018). This convergence linked together the identified themes to offer a detailed understanding of the complexities surrounding workforce stability in the EI field and built a more comprehensive understanding of job satisfaction and retention among Washington's EI workforce. Additionally, a joint display with three corresponding columns was developed to visually present integrated findings, allowing for a side-by-side comparison that demonstrated patterns and relationships between the two data sets.

### **Confidentiality and Data Protection**

Survey participants' responses were kept anonymous, ensuring that individual data could not be traced back to specific participants. However, participants had the option to volunteer for follow-up interviews to further discuss their perspectives on job satisfaction within EI. If participants opted for these interviews, their survey responses were linked to identifiable information such as their name, email address, region, and professional discipline. This linkage was used for the selection of interview candidates representing diverse disciplines, regions, and job satisfaction levels within the EI workforce. Once participants were chosen for interviews, their names were detached from the survey data to maintain confidentiality. Survey responses, interview recordings, and transcripts were securely stored, with access restricted to the research team. Only the lead researcher had access to identifiable information, which was kept separate from research data. Pseudonyms are used in any future publications or presentations arising from this research to protect participants' identities. Specific geographic locations will not be disclosed to ensure anonymity and confidentiality.

### **Researcher Positionality**

This study takes place within the EI system in which I, the investigator, was formerly employed as a special educator. I am currently a member of the State Interagency Coordinating

Council Personnel and Training Committee within Washington. This may result in participants with whom a relationship is already established. I did not have direct access to participant identifying information in connection to survey results but recognize the position of power I hold within the dynamic as a researcher affiliated with an institution of higher education.

Additionally, I am a single parent of a school-age child and identify as a queer, white female in a predominantly white female dominant field. The potential power dynamics at play within this work and research settings should be noted.

## **Chapter IV: Findings**

This chapter describes the factors shaping retention within the early intervention (EI) workforce in Washington, by integrating both qualitative and quantitative analyses. Through regression modeling and descriptive statistics, the quantitative component provides evidence of the relationships between factors predicting providers' intention to remain in their roles (retention). The qualitative component presents the lived experiences and perspectives of EI providers regarding the nuanced challenges and supports influencing their decision to remain in the field. By synthesizing both qualitative narratives and quantitative data, this mixed methods approach enhanced our understanding of the complex interplay between individual experiences, organizational factors, and systemic challenges influencing retention in the EI field.

### **Quantitative Results**

An important objective of this study was to gain deeper insights into the demographic composition of the EI workforce in Washington State. The quantitative data collected through online surveys enabled a comprehensive exploration of various demographic characteristics among EI providers. This section presents participant demographics, including discipline groups, service regions, employment status, educational attainment, years of experience in EI, age distribution, race/ethnicity, and the number of cohabiting dependents. In addition to exploring participant demographics, this section presents job satisfaction levels among EI providers, as assessed by the Job Satisfaction Survey (JSS). The analysis examined various facets of job satisfaction, including pay, promotion opportunities, supervision, fringe benefits, contingent rewards, operating conditions, coworker relationships, the nature of work, and communication within the organization. These facets were then analyzed using logistic regression to identify predictors of retention among EI providers in Washington State. The final model presented the

influence of factors such as pay, benefits, supportive work environment, and work-life balance satisfaction on retention intentions.

### ***Participant Demographics***

A total of 287 Early intervention (EI) providers participated in the survey. Among the participants surveyed, a variety of demographic characteristics were gathered to explore the composition of EI providers in Washington State. These demographics are displayed in Table 4.

**Table 4**

#### *Demographic Characteristics of Survey Participants*

	<i>n</i>	<i>%</i>
<b>Discipline Group</b>		
Educator	55	19.16
OT/PT	58	20.21
Speech Therapist	74	25.78
FRC	78	27.18
Other	22	7.67
<b>Service Regions</b>		
Northwest	75	26.13
Southwest	121	42.16
Eastern	91	31.71
<b>Employment Status</b>		
Full time (35-40 hours)	239	83.28
Part time (under 35 hours)	48	16.72
<b>Highest Education</b>		
High school diploma or GED	10	3.48
Certificate from a college or university	6	2.09
Associate's degree	13	4.53
Bachelor's degree	73	25.44

Master's degree	159	55.40
Doctoral degree	26	9.06
<b>Years Experience in EI</b>		
Less than 1 year	22	7.67
1 -5 years	107	37.28
6 -10 years	78	27.18
11-15 years	26	9.06
16-20 years	19	6.62
More than 20 years	35	12.20
<b>Age</b>		
18-24	7	2.44
25-34	100	34.84
35-44	92	32.06
45-54	54	18.82
55-64	28	9.76
65-74	6	2.09
<b>Race/Ethnicity</b>		
Asian	10	3.48
Black or African American	1	0.35
Hispanic or Latino	29	10.10
Multiracial or Multiethnic	8	2.79
Native Hawaiian or Pacific Islander	1	0.35
White	231	80.49
Prefer not to answer	13	4.53
<b>Number of Cohabiting Dependents</b>		
0	147	51.22
1	63	21.95
2	47	16.38
3	20	6.97

4

1

0.35

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*Note.* N = 287.

**Discipline Group.** While the exact number of providers employed within each discipline remains unknown, the distribution of survey participants presents a relatively balanced representation of disciplines in Washington State. Among the participants in this study, family resources coordinators (FRC) were the largest group at 27.18%, followed by speech therapists (SLP) comprising 25.78% of the sample. OT/PT represented the next highest at 20.21%, while educators (EDU) made up 19.16% of the participants. The remaining participants fell under the category "Other" (i.e. nurses, mental health providers, intake coordinators), representing 7.67% of the total sample.

**Service Regions.** Geographical distribution also showed a proportional representation of EI providers across the three service regions of the state. Among the surveyed participants, the majority were from the Southwest service region, comprising 46.34% of the total sample. This region includes the two largest counties in Washington State, which collectively house approximately 41% of the state's population (United States Census Bureau, 2022). Following closely behind was the Eastern service region, representing 31.01% of the respondents. The Northwest service region accounted for the remaining 22.65% of participants.

**Highest Education.** Educational attainment varied among participants and was aligned with the educational requirements of disciplines represented in the study. Those with a Master's degree represented 55.40% of the sample. Master's degrees are held by many educators in EI and required for Occupational and Speech therapists. Hence, master's degrees constituted the largest group of the participants. This was followed by individuals with a Bachelor's degree at 25.44%. Doctoral degrees, the standard educational track for physical therapists as of 2000 (American Physical Therapy Association, 2024) , make up 9.06% of participants. Participants with an

Associate's degree comprised 4.53% of the sample, while those with a high school diploma or GED represented 3.48%. The smallest proportion was individuals with a certificate from a college or university at 2.09%.

**Years Experience in EI.** The distribution of years of experience among EI providers ranges from less than 1 year to over 20 years, with the majority falling within the range of 1 to 10 years. The largest portion of providers (37.28%) had between 1 to 5 years of experience. Following this, providers with 6 to 10 years of experience represented 27.18% of the sample. Conversely, providers with 11 to 15 years of experience constituted a smaller proportion at 9.06%. Those with 16 to 20 years of experience represented 6.62% of the sample and over 20 years of experience represented 12.2% of the sample.

**Age.** The age distribution varied from 18-74 years, with the highest percentage falling within the 25-34 age bracket at 34.84%. The next largest group was aged 35-44, comprising 32.06% of the sample. Participants aged 45-54 accounted for 18.82%, followed by those aged 55-64 at 9.76%. The smallest proportions were observed in the 65-74 age group, representing only 2.09% of the respondents, while the youngest age group of 18-24 had a slightly higher representation at 2.44%.

**Race/Ethnicity.** Expanding the diversity of providers in EI has been a priority of Washington State. The majority of participants identified as White, making up 80.49% of the sample. The Hispanic or Latino group was the next largest proportion at 10.10%. Asian participants represented 3.48%, while Multiracial or Multiethnic individuals made up 2.79% of the sample. The Black or African American group and Native Hawaiian or Pacific Islander group had the lowest representation, each accounting for only 0.35% of the respondents. The remaining participants (4.53%) preferred to not answer.

**Number of Cohabiting Dependents.** The majority of participants (51.22%) reported having no cohabitating dependents. Following this, 21.95% reported having one cohabitating dependent. The percentage gradually decreased as the number of cohabitating dependents increased, with 16.38% reporting two dependents, 6.97% reporting three, and only 0.35% reporting four or more cohabitating dependents.

### ***Job Satisfaction Levels among EI Providers***

The Job Satisfaction Survey (JSS) evaluated nine different facets of job satisfaction across participants. Each facet subscale and the total job satisfaction score are calculated based on responses ranging from 1 to 6. Sub-scale satisfaction scores range from 4 to 24. A score of 4 to 11 indicates dissatisfaction, 12 to 16 indicates ambivalence, and 17 to 24 indicates satisfaction. Total Satisfaction scores range from 36 to 216. A score of 36 to 108 indicates dissatisfaction, 109 to 144 indicates ambivalence, and 145 to 216 indicates satisfaction. Higher scores indicate greater job satisfaction across the various facets.

The JSS results by discipline, including Educators, OT/PT, Speech Language Pathologists (SLPs), Family Resources Coordinators (FRCs), and Others are presented in Table 5. The means from each discipline were similar across various factors of job satisfaction. These similarities in mean scores across disciplines reinforced the decision to conduct research across the provider population as a whole, rather than focusing solely on individual disciplines.

**Table 5***Job satisfaction survey results by discipline*

Discipline Groups	All Providers			Educator			OT/PT			Speech Language Pathologist			Family Resources Coordinator			Other		
	mean	n	%	mean	n	%	mean	n	%	mean	n	%	mean	n	%	mean	n	%
<b>Pay</b>	<b>14</b>			<b>13</b>			<b>15</b>			<b>14</b>			<b>13</b>			<b>14</b>		
Dissatisfied		104	36.2		25	45.5		13	22.4		26	35.1		31	39.7		8	36.4
Ambivalent		80	27.9		11	20		17	29.3		21	28.4		24	30.8		6	27.3
Satisfied		103	35.9		19	34.5		28	48.3		27	36.5		23	29.5		8	36.4
<b>Promotion</b>	<b>12</b>			<b>13</b>			<b>12</b>			<b>12</b>			<b>12</b>			<b>13</b>		
Dissatisfied		123	42.9		22	40		28	48.3		32	43.2		33	42.3		8	36.4
Ambivalent		114	39.7		22	40		20	34.5		32	43.2		30	38.5		10	45.5
Satisfied		50	17.4		11	20		10	17.2		10	13.5		15	19.2		4	18.2
<b>Supervision</b>	<b>21</b>			<b>22</b>			<b>22</b>			<b>21</b>			<b>21</b>			<b>21</b>		
Dissatisfied		8	2.8		1	1.8		0	0		4	5.4		1	1.3		2	9.1
Ambivalent		20	7.0		2	3.6		5	8.6		4	5.4		8	10.3		1	4.6
Satisfied		259	90.2		52	94.6		53	91.4		66	89.2		69	88.5		19	86.4
<b>Fringe Benefits</b>	<b>16</b>			<b>15</b>			<b>17</b>			<b>16</b>			<b>16</b>			<b>16</b>		
Dissatisfied		52	18.1		13	23.6		6	10.3		15	20.3		14	18		4	18.2
Ambivalent		100	34.8		20	36.4		20	34.4		28	37.8		23	29.5		8	36.4
Satisfied		135	47.0		22	40		32	55.2		31	41.9		41	52.6		10	45.5
<b>Contingent Rewards</b>	<b>17</b>			<b>17</b>			<b>17</b>			<b>17</b>			<b>16</b>			<b>17</b>		
Dissatisfied		38	13.2		4	7.3		4	6.9		11	14.9		16	20.5		3	13.6
Ambivalent		101	35.2		22	40.0		19	32.8		25	33.8		23	29.5		10	45.5
Satisfied		148	51.6		29	52.7		35	60.3		38	51.4		39	50.0		9	40.9
<b>Operating Conditions</b>	<b>13</b>			<b>14</b>			<b>14</b>			<b>13</b>			<b>13</b>			<b>15</b>		
Dissatisfied		92	32.1		13	23.6		18	31		26	35.1		29	37.2		6	27.3
Ambivalent		133	46.3		29	52.7		24	41.4		33	44.6		36	46.2		10	45.5
Satisfied		62	21.6		13	23.6		16	27.6		15	20.3		13	16.7		6	27.3
<b>Coworkers</b>	<b>21</b>			<b>21</b>			<b>21</b>			<b>21</b>			<b>21</b>			<b>21</b>		
Dissatisfied		5	1.7		0	0		1	1.7		2	2.7		0	0		2	9.1
Ambivalent		18	6.3		5	9.1		2	3.4		3	4.1		8	10.3		0	0
Satisfied		264	92		50	90.9		55	94.8		69	93.2		70	89.7		20	90.9
<b>Nature of Work</b>	<b>21</b>			<b>22</b>			<b>22</b>			<b>21</b>			<b>21</b>			<b>21</b>		
Dissatisfied		1	0.3		0	0		0	0		0	0		0	0		1	4.5
Ambivalent		19	6.6		2	3.6		2	3.4		6	8.1		8	10.3		1	4.5
Satisfied		267	93		53	96.4		56	96.6		68	91.9		70	89.7		20	90.9
<b>Communication</b>	<b>18</b>			<b>18</b>			<b>19</b>			<b>18</b>			<b>19</b>			<b>18</b>		
Dissatisfied		20	7		6	10.9		2	3.4		5	6.8		4	5.1		3	13.6
Ambivalent		62	21.6		7	12.7		11	19		22	29.7		16	20.5		5	22.7
Satisfied		205	71.4		42	76.4		45	77.6		47	63.5		58	74.4		14	63.6
<b>Total Job Satisfaction</b>	<b>155</b>			<b>156</b>			<b>160</b>			<b>152</b>			<b>153</b>			<b>154</b>		
Dissatisfied		9	3.1		0	0		1	1.7		4	5.4		3	3.8		1	4.5
Ambivalent		96	33.4		19	34.5		15	25.9		25	33.8		29	37.2		8	36.4
Satisfied		182	63.4		36	65.5		42	72.4		45	60.8		46	59		13	59.1

*Note.* Educator (n=55), OT/PT (n=58), Speech Therapists(n=74), Family Resources Coordinator (n=78), Other (n=22). Subscale range 4-24. Dissatisfied: 4-11. Ambivalent: 12-16. Satisfied: 17-24. Total job satisfaction score range 36-216. Dissatisfied: 36-108. Ambivalent: 109-144. Satisfied: 145-216.

**Pay.** This item assesses satisfaction with pay and compensation. The mean score for pay satisfaction was 14, indicating a moderate level of satisfaction. While a considerable portion of respondents (36.2%) expressed dissatisfaction with their pay, a similar percentage (35.9%) reported being satisfied, suggesting mixed feelings regarding compensation.

**Promotion.** This item evaluates satisfaction with promotion opportunities within the organization. With a mean score of 12, satisfaction with promotion opportunities was relatively low among early intervention providers. A noteworthy proportion (42.9%) expressed dissatisfaction with promotion prospects.

**Supervision.** This item assesses satisfaction with immediate supervisor interactions. Supervision received a mean score of 21, indicating a high level of satisfaction among providers. With only 2.8% of respondents expressing dissatisfaction, and a vast majority (90.2%) reporting satisfaction, effective supervision appears to be a strength within EI.

**Fringe Benefits.** This item measures satisfaction with both monetary and non-monetary fringe benefits. The mean score for fringe benefits satisfaction was 16, suggesting a moderate level of satisfaction. While nearly half of the respondents (47.0%) reported satisfaction with fringe benefits, a sizeable portion (18.1%) expressed dissatisfaction.

**Contingent Rewards.** This item assesses satisfaction with appreciation, recognition, and rewards for good work. Contingent rewards received a moderate mean score of 17, indicating mixed sentiments among providers. While over half of the respondents (51.6%) reported satisfaction with contingent rewards, a notable proportion (13.2%) expressed dissatisfaction.

**Operating Conditions.** This item evaluates satisfaction with operating policies and procedures. The mean score for operating conditions satisfaction was 13, indicating a moderate level of satisfaction. However, a large portion of respondents (32.1%) expressed dissatisfaction with operating conditions.

**Coworkers.** This item measures satisfaction with the people one works with. The coworkers facet had a mean score of 21. Satisfaction with coworkers was notably high among EI providers. The overwhelming majority (92%) reported satisfaction in this area, reflecting positive interpersonal relationships within the workplace.

**Nature of Work.** This item assesses satisfaction with job tasks themselves. The mean score for satisfaction with the nature of work was 21, indicating a high level of satisfaction among providers. With only a minimal percentage (0.3%) expressing dissatisfaction, the meaningfulness and fulfillment from the work itself appear to be major factors contributing to overall job satisfaction.

**Communication.** This item measures satisfaction with communication within the organization. Communication within the workplace received a moderate mean score of 18, indicating mixed perceptions among providers. While a majority (71.4%) reported satisfaction with communication, a portion (7%) expressed dissatisfaction.

**Total Job Satisfaction.** Total job satisfaction is the sum of all facets. Total job satisfaction had a mean score of 155. The majority of participants (63.4%) reported feeling satisfied with their job. This suggests a generally positive sentiment among employees regarding their work. However, a noteworthy portion (33.4%) expressed ambivalence, indicating a degree of uncertainty or mixed feelings about their job. Only a small group (3.1%) reported being dissatisfied. These findings highlight the importance of considering both the overall satisfaction levels and the facets to understand the nuances of ambivalence in job satisfaction within EI.

### *Additional Questions*

**Work-life Balance.** This item addressed participants satisfaction with their work-life balance. The majority of participants (72.47%) reported being satisfied with their work-life

balance, while a smaller portion expressed dissatisfaction (13.59%) ambivalence (7.67%), and the least percentage reported ambivalence (7.67%).

**Supportive Work Environment.** This item explores the extent to which participants feel supported in their work environment. Most participants (77.35%) indicated satisfaction with the support within their work environment. A smaller group (13.24%) reported dissatisfaction, while the remaining (7.67%) reported ambivalence about the supportiveness of their work environment.

**Retention.** In this study, retention refers to participants' intentions to remain in their role in EI within the next 12 months. Among participants, 69.34% expressed having no plans to leave their current position. Conversely, 30.66% reported considering leaving their role, suggesting a sizeable portion of providers may be leaving EI or exploring other opportunities within the next 12 months.

Across all disciplines, the majority of EI providers expressed satisfaction with their coworkers, supervisors and the general nature of working in EI. Most providers reported satisfaction with factors such as fringe benefits, contingent rewards, operating conditions, and communication. The overall job satisfaction across disciplines shows that most providers are satisfied with their roles (63.4%) or ambivalent (33.4%). Yet nearly 31% of providers report considering leaving their current roles, indicating further exploration is needed to understand how job satisfaction factors are contributing to EI providers' willingness to remain in the field.

### ***Descriptive Statistics***

After removing missing data, 269 survey responses were included in the statistical analysis. Prior to conducting logistic regression modeling, correlations were reviewed to explore the relationships between predictor variables and the outcome variable, retention. Retention in this study is defined as the EI providers' intention to remain in their role within the next 12

months. The correlations and associated p-values were reviewed to understand the strength and significance of these relationships. Means, standard deviations, and zero-order correlations among all variables are given in Table 6.

**Table 6**

*Means, Standard Deviations, and Zero-Order Correlations*

Variable	<i>M</i>	<i>(SD)</i>	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.
<i>Outcome</i>													
1. Retention	0.69	(0.46)	--										
<i>Predictors</i>													
2. Region NW (1=yes)	0.22	(0.42)	<b>.25</b>	--									
3. Region E (1=yes)	0.30	(0.50)	<b>.24</b>	<b>.63</b>	--								
4. Discipline EDU (1=yes)	0.19	(0.39)	.03	-.17	-.07	--							
5. Discipline OT/PT (1=yes)	0.13	(0.33)	.06	-.12	.00	<b>.58</b>	--						
6. Discipline SLP (1=yes)	0.27	(0.44)	-.01	.00	.00	<b>.55</b>	<b>.54</b>	--					
7. Discipline Other (1=yes)	0.08	(0.27)	.07	-.05	.01	<b>.68</b>	<b>.68</b>	<b>.66</b>	--				
8. Pay (Points)	13.88	(5.64)	<b>.41</b>	.10	<b>.19</b>	.06	.15	.07	.08	--			
9. Benefits (Points)	16.00	(4.99)	<b>.25</b>	.11	<b>.30</b>	-.01	.08	-.03	-.01	<b>.53</b>	--		
10. Work-life Balance (1=satisfied)	0.77	(0.42)	<b>.34</b>	.01	-.04	-.12	.12	.02	.11	<b>.25</b>	.10	--	
11. Supportive Envi. (1=satisfied)	0.73	(0.45)	<b>.45</b>	<b>.17</b>	<b>.20</b>	-.05	.06	.00	.04	<b>.39</b>	<b>.28</b>	<b>.29</b>	--

*Note.* N = 269 EI providers in WA. Pay and benefits in points. Work-life balance and supportive work environments dummy coded where extremely satisfied and satisfied=1, all else=0. Pearson's r reported. Boldfaced correlations are those that are significantly different from zero (alpha = .05, 2-tailed).

Correlations showed significant positive relationships between some predictor variables and retention, including NW region, E region, pay, benefits, work-life balance, and supportive work environment. Regions showed some positive correlation with retention (NW:  $r=0.25$ , E:  $r=0.24$ ,  $p < 0.05$ ). Pay exhibited a strong positive correlation with retention ( $r = 0.41$ ,  $p < 0.05$ ) and benefits were also positively correlated with retention ( $r= 0.25$ ,  $p < 0.05$ ). Work-life balance satisfaction also demonstrated a positive correlation with retention ( $r = 0.34$ ,  $p < 0.05$ ). Similarly, supportive work environments showed a positive correlation with retention ( $r = 0.45$ ,  $p < 0.05$ ). These correlations indicated that factors such as being located in specific regions, higher satisfaction with compensation, and experiencing satisfaction with work-life balance and a supportive work environment were associated with increased employee retention among EI

providers. Additionally, correlations among predictor variables were reviewed to identify possible multicollinearity. As can be seen, there were correlations within discipline groupings indicating that there may be similarities between them. Discipline groups, however, were not seen to be correlated to the outcome variable, retention. There does not appear to be significant multicollinearity among the predictor variables.

**Regression Results**

Logistic regression analysis was conducted to understand the predictors of retention among EI providers. This provided information into the factors that contribute to workforce stability within the field. The results of multiple logistic regression models predicting retention among EI providers in Washington State are presented in table 7.

**Table 7**

*Multiple Logistic Regression Model Results for Retention*

Coefficient	Model 1					Model 2					Model 3				
	<i>Est</i>	<i>(SE)</i>	<i>p</i>	<i>OR</i>	95% CI [LB, UB]	<i>Est</i>	<i>(SE)</i>	<i>p</i>	<i>OR</i>	95% CI [LB, UB]	<i>Est</i>	<i>(SE)</i>	<i>p</i>	<i>OR</i>	95% CI [LB, UB]
Intercept (Mean)	<b>1.19</b>	<b>(0.18)</b>	<b>&lt;.001</b>	<b>3.29</b>	<b>[ 2.33 , 4.82 ]</b>	<b>0.72</b>	<b>(0.24)</b>	<b>&lt;.001</b>	<b>2.04</b>	<b>[ 1.29 , 3.31 ]</b>	<b>0.66</b>	<b>(0.25)</b>	<b>.009</b>	<b>1.93</b>	<b>[ 1.18 , 3.19 ]</b>
Region NW (1=yes)	0.56	(0.26)	.030	1.74	[ 1.07 , 4.03 ]	0.58	(0.30)	.005	1.79	[ 1.00 , 3.35 ]	0.65	(0.31)	.037	1.92	[ 1.06 , 3.67 ]
Region E (1=yes)	0.33	(0.23)	.149	1.39	[ 0.90 , 3.74 ]	0.19	(0.28)	.504	1.20	[ 0.70 , 2.10 ]	0.14	(0.28)	.615	1.15	[ 0.66 , 2.02 ]
Discipline EDU (1=yes)	0.16	(0.30)	.584	1.17	[ 0.66 , 2.27 ]	0.05	(0.36)	.884	1.05	[ 0.53 , 2.13 ]	0.08	(0.36)	.824	1.08	[ 0.54 , 2.21 ]
Discipline OT/PT (1=yes)	0.19	(0.47)	.572	1.21	[ 0.68 , 3.19 ]	-0.10	(0.35)	.773	0.90	[ 0.45 , 1.84 ]	-0.13	(0.36)	.706	0.87	[ 0.44 , 1.79 ]
Discipline SLP (1=yes)	-0.46	(0.26)	.081	0.63	[ 0.38 , 1.06 ]	-0.36	(0.30)	.236	0.70	[ 0.38 , 1.27 ]	-0.36	(0.31)	.250	0.70	[ 0.38 , 1.29 ]
Discipline Other (1=yes)	0.45	(0.47)	.339	1.57	[ 0.66 , 4.46 ]	0.50	(0.53)	.347	1.65	[ 0.62 , 5.17 ]	0.48	(0.53)	.375	1.61	[ 0.60 , 5.01 ]
Pay (Z)						<b>0.69</b>	<b>(0.21)</b>	<b>&lt;.001</b>	<b>2.00</b>	<b>[ 1.35 , 3.03 ]</b>	<b>0.64</b>	<b>(0.24)</b>	<b>.007</b>	<b>1.89</b>	<b>[ 1.19 , 3.07 ]</b>
Benefits (Z)						0.00	(0.20)	.985	1.00	[ 0.68 , 1.47 ]	0.05	(0.24)	.842	1.05	[ 0.65 , 1.70 ]
Work-life Bal (1=sat)						<b>0.69</b>	<b>(0.18)</b>	<b>&lt;.001</b>	<b>1.89</b>	<b>[ 1.30 , 2.76 ]</b>	<b>0.79</b>	<b>(0.21)</b>	<b>&lt;.001</b>	<b>1.82</b>	<b>[ 1.18 , 2.76 ]</b>
Supportive Envi (1=sat)						<b>0.64</b>	<b>(0.19)</b>	<b>&lt;.001</b>	<b>2.00</b>	<b>[ 1.42 , 2.84 ]</b>	<b>0.60</b>	<b>(0.21)</b>	<b>.005</b>	<b>2.20</b>	<b>[ 1.47 , 3.32 ]</b>
Pay*Work-life Bal											0.09	(0.19)	.671	0.98	[ 0.59 , 1.56 ]
Pay*Sup Envi											-0.03	(0.24)	.918	1.10	[ 0.71 , 1.70 ]
Benefits*Work-life Bal											0.19	(0.20)	.362	0.82	[ 0.51 , 1.30 ]
Benefits*Sup Envi											-0.20	(0.24)	.400	1.20	[ 0.81 , 1.82 ]

*Note.* n = 269 EI providers in WA. Work-life balance and supportive work environments effect coded (extremely satisfied & satisfied=1, all else=-1). Results in logits. Maximum likelihood logistic regression in base R to model results with alpha = .05, 2-tailed. Categorical predictors effect-coded. Continuous predictors standardized as z-scores. OR = Odds Ratio (with 95% confidence intervals).

Model 1 includes regional and discipline group effects, controlling for differences in these variables when predicting retention among EI providers. By including these variables in the regression model, the potential impact of regional differences and disciplinary backgrounds on retention rates was accounted for. This allowed for isolation of the effects of the other predictor variables in order to observe the individual contributions to retention. Controlling for regional and disciplinary effects was necessary to avoid any clustering within the data based on region or discipline group. Model 1 was an improvement from the null model ( $\chi^2(df = 6, n = 269) = 25.622, p < .001$ , Nagelkerke pseudo-R<sup>2</sup> = .128), with sensitivity, specificity, and the overall hit rate showing some improvements.

Building upon Model 1, Model 2 kept regions and discipline groups and added the predictors pay, benefits, supportive work environment, and work-life balance satisfaction. The coefficients in this model demonstrated significant effects for pay (Coeff = 0.693,  $p < 0.001$ ), supportive work environment (Coeff = 0.693,  $p < 0.001$ ), work-life balance satisfaction (Coeff = 0.636,  $p < 0.001$ ). This model exhibited a noteworthy improvement in fit ( $\chi^2(df = 10, n = 269) = 100.17, p < .001$ , Nagelkerke pseudo-R<sup>2</sup> = .437), with classification accuracy witnessing enhancement.

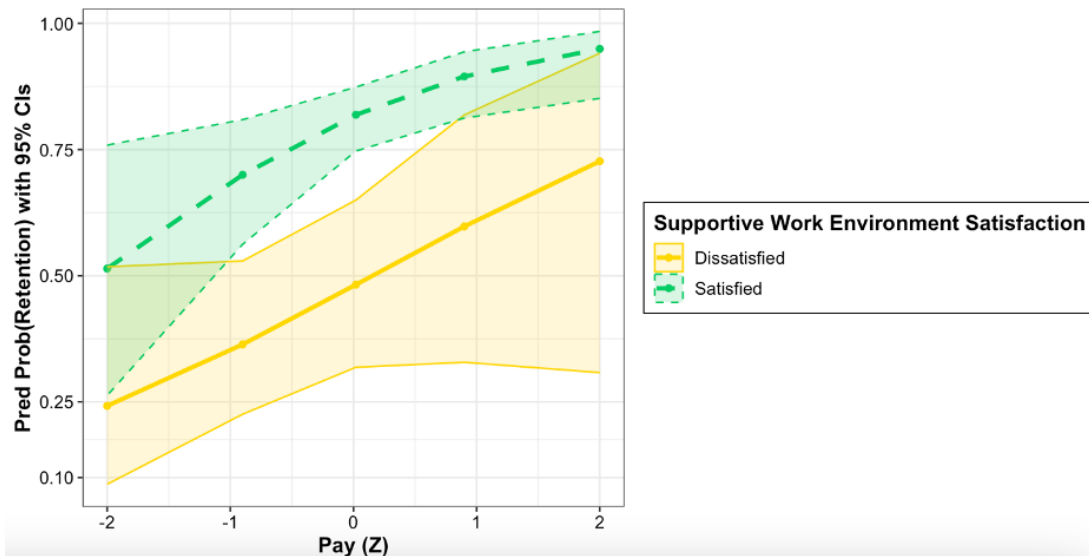
Further, Model 3 introduced the addition of interaction terms between pay and supportive work environment, pay and work-life balance, benefits and supportive work environment, and benefits and work-life balance. While an improvement over Model 2 was observed ( $\chi^2(df = 14, n = 269) = 102.07, p < 0.001$ , Nagelkerke pseudo-R<sup>2</sup> = 0.444), classification accuracy remained comparable. None of the interaction terms between these factors were statistically significant, indicating that the effects of pay, benefits, supportive work environment and work-life balance satisfaction on retention were not significantly influenced by each other. This implied that factors

like pay and benefits did not act as moderators for low satisfaction with work-life balance and supportive work environments.

The model suggested that the impact of work environment satisfaction on retention was not significantly influenced by pay satisfaction (Figure 4). For example, if work environment satisfaction is low but pay satisfaction is high, the dissatisfaction with the work environment may still negatively affect retention. Alternatively, if work environment satisfaction is high but pay satisfaction is low, the high satisfaction with the work environment may partially compensate for the low pay satisfaction, potentially leading to a higher likelihood of retention compared to the scenario with low work environment satisfaction and low pay.

**Figure 4**

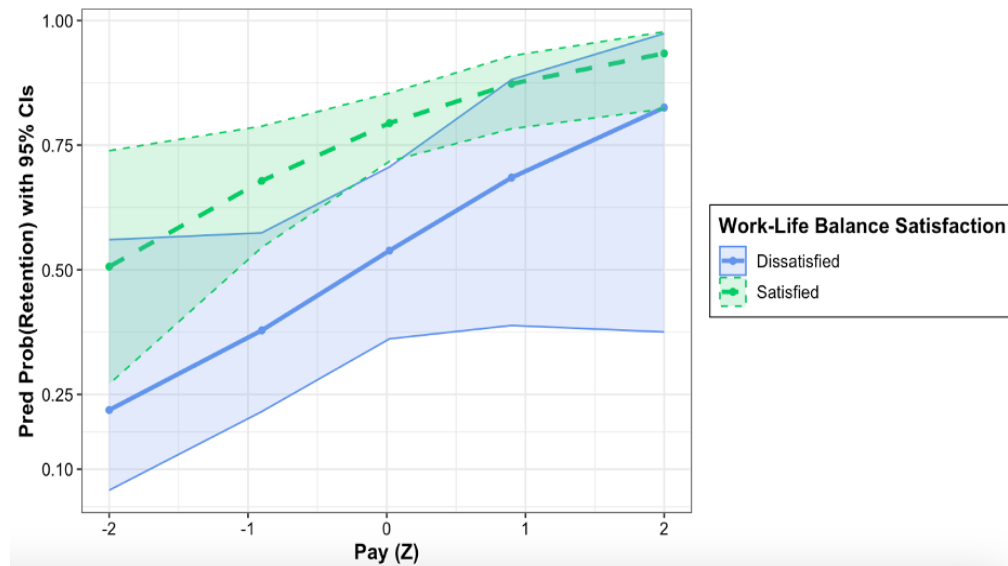
*Interaction between Pay and Supportive Work Environment Satisfaction on Predicted Probability of Retention*



Additionally, the model suggested that the impact of work-life balance satisfaction on retention was also not significantly influenced by pay (Figure 5). If work-life balance satisfaction is low but pay satisfaction is high, the dissatisfaction with work-life balance may still negatively affect retention. Alternatively, the high satisfaction with work-life balance may partially compensate for the low pay, though not statistically significantly.

**Figure 5**

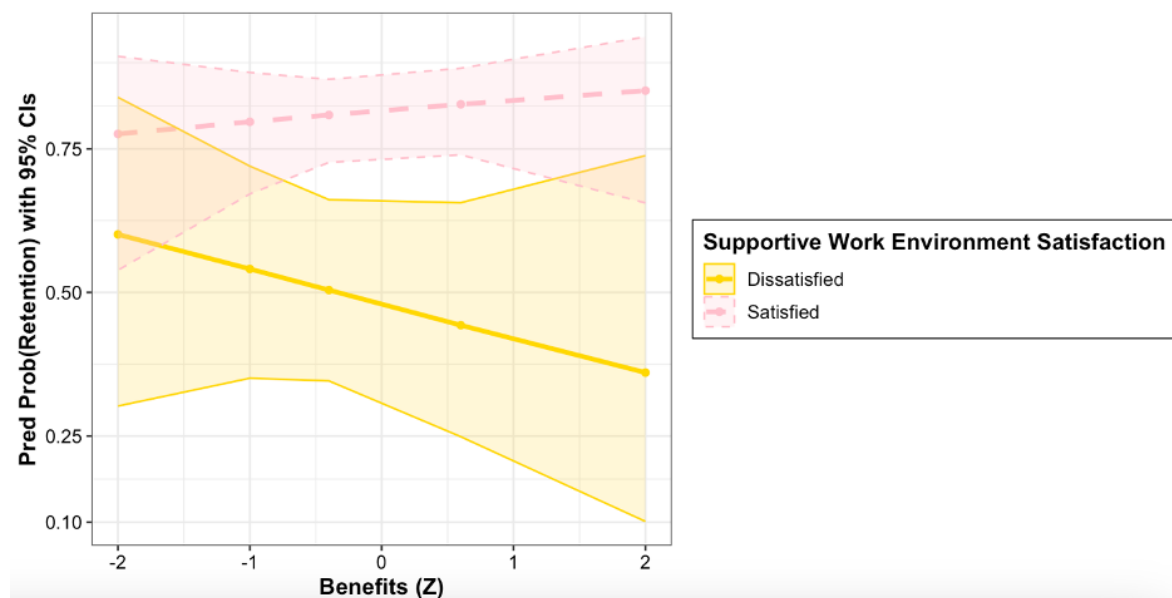
*Interaction between Pay and Work-Life Balance Satisfaction on Predicted Probability of Retention*



Similar relations were seen between work-life balance and work environment satisfaction with benefits satisfaction, indicating that with high benefits satisfaction, dissatisfaction with work-life balance or work environment may still negatively affect retention (Figure 6 and 7).

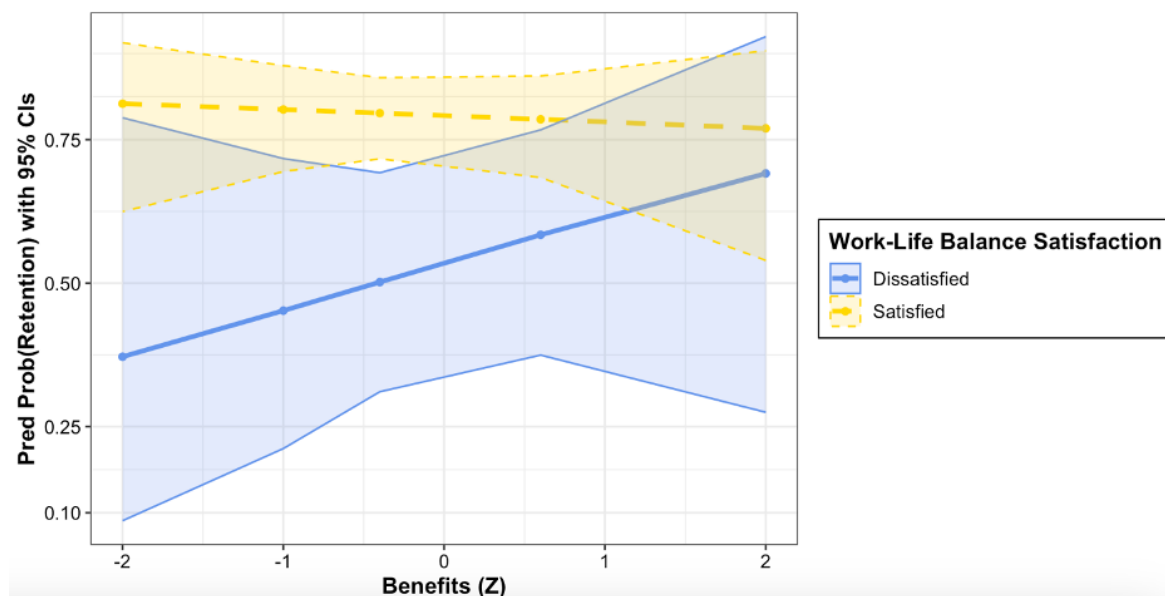
**Figure 6**

*Interaction between Benefits and Supportive Work Environment Satisfaction on Predicted Probability of Retention*



**Figure 7**

*Interaction between Benefits and Work-Life Balance Satisfaction on Predicted Probability of Retention*



The quantitative analysis of job satisfaction and retention among EI providers in Washington State provided valuable insights into the multifaceted nature of workforce stability within the field. Regional differences, pay, benefits, work-life balance, and supportive work environments emerged as significant predictors of retention, highlighting the importance of addressing these factors to promote higher retention rates among EI providers. Individual provider perspectives gathered from follow up interviews provide additional insights to the complex dynamics between these significant factors.

### Qualitative Findings

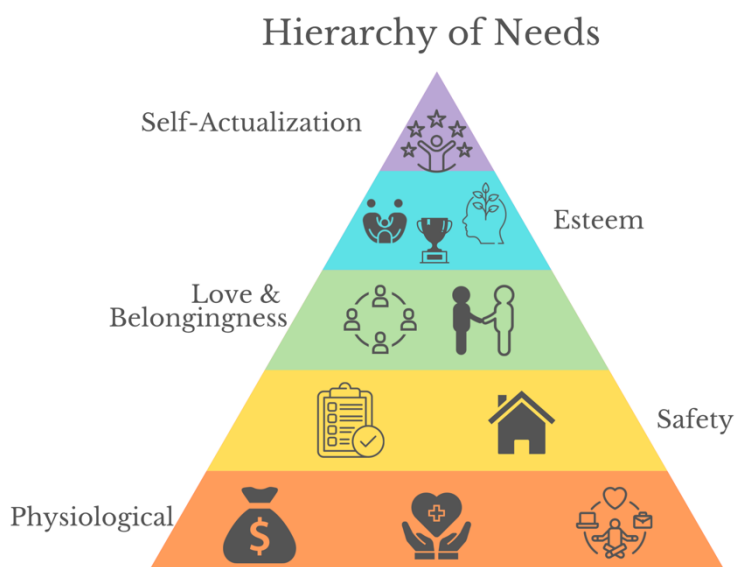
In addition to quantitative surveys, this study included interviews with eight Early Intervention (EI) providers from across the state of Washington. Interview participants consisted of Educators ( $n=2$ ), Family Resources Coordinators ( $n=2$ ), OT/PT (Occupational Therapy  $n=1$ , Physical Therapy  $n=1$ ) and Speech Language Pathologists ( $n=2$ ). Further demographics about interview participants can be seen in table 3. The qualitative findings also included perspectives from a group of three administrators from the Eastern service region, who expressed interest in

sharing their thoughts. Additionally, a multidisciplinary group of providers from the Eastern service region reached out to offer their unique perspectives and experiences related to their roles within EI. Together, these voices offer a nuanced understanding of the interplay between job satisfaction and retention within the context of EI in Washington.

Maslow's Hierarchy of Needs served as a framework to understanding the nuanced dynamics of job satisfaction and retention among EI providers. Maslow's Hierarchy includes five hierarchical levels of human need, ranging from physiological needs at the base to self-actualization at the top (Figure 8). EI providers' needs and motivations evolve across these hierarchical levels, shaping their perceptions, experiences, and ultimately, their job satisfaction and retention within the field. Through this lens, factors such as compensation, work-life balance, onboarding support, ongoing learning, supportive supervision, and team collaboration interact with ethical practice and prioritization of family centered services to influence EI providers' job satisfaction and retention.

### Figure 8

*EI Provider Hierarchy of Needs*



*Note:* Developed based on Maslow (1943). A theory of human motivation. Psychological Review.

### *Physiological Needs*

Physiological needs sit at the foundation of Maslow's hierarchy and include basic needs for human survival and well-being. In the context of job satisfaction, this tier would include factors like compensation, benefits, and work-life balance. For EI providers in this study, meeting these physiological needs was not just about ensuring job satisfaction but also about maintaining balance in their personal lives, thereby influencing their retention within the workforce. However, these needs were not consistently met, as many providers expressed concerns about inadequate compensation, benefits, and challenges in achieving a satisfactory work-life balance.

**Compensation and Benefits.** Compensation and benefits were central concerns for EI providers in this study. Many participants expressed a desire for structured pay scales with clear criteria and predictable movement. Debora proposed a similar compensation model to school districts;

They have union programs. Right? So they have the state pension... They have a step salary. But one year we'll get costs of living of 2% or 3%. And then we'll go 3 years without a raise, we don't even have cost of living every year... there is no structure or clear salary scale. At one point I realized our new hires are coming in at what I was making. But yeah (pause) the new people coming in making more than I'm making, being here for years.

Talia added a similar sentiment, "our [pay] bracket moved last year. I'm now at the lower part of the bracket, but none of us received raises. We're kind of stuck where we were. New people coming in are making more than us, with less experience." Providers with extensive experience, like Lisa, Talia, and Debora did not receive increased financial compensation with longevity at an agency or additional certifications. Lisa shared,

I'm a National Provider. I have a few different certifications. But it's not like I get paid more because of that. You just get your 3% raise every year. I wish there was more vertical movement abilities, promotions or some kind of tiered pay system that's very clearly outlined.

Additionally, they noted that salaries often fall short in comparison to school districts and outpatient programs outside of pediatrics. Stephanie discussed, "one of my largest dissatisfactions is salary. Especially when I compare it to what I could be making in the school system, the discrepancy doesn't make sense to me." Kristen added, "if you go into pediatrics, you're not motivated by pay. The pay scale for a pediatric physical therapist is absolutely lower than everywhere else."

Despite this dedication, the increasing cost of living and medical expenses rendered these salaries unsustainable for many providers, especially single-income households or new graduates repaying student loans. Debora shared,

[Agency] has decent health coverage for the employee but they pay 0% towards family members. And so because the coverage is pretty good, [agency] pays like, I think, 80% for employee on the premium. It's a very, very expensive package. So then more half my paycheck would go to insuring my family...it's unaffordable. And I've had this conversation with other employees who have kids.

Lisa discussed her pay meeting the bare minimum of her expenses,

Getting my master's degree and...having to take on student loans, even working my way through school. You come out of school with some pretty hefty graduate student loans, I really only afford to pay for my living in groceries and stuff like that.

Kristen echoed,

Yes, I have a house payment, but it's relatively low. I'm not having to pay back student loans, and I don't have any other debt. But, if I was just getting out of school now, and I was trying to pay off student loans and trying to buy a house, my answer would be radically different.

Further, some providers felt that their pay did not adequately reflect the value or impact of their work. This misalignment between compensation and job significance added to heightened stress and emotional impact, prompting some providers to consider leaving EI. Stephanie shared,

When is that straw gonna break for us? When are we gonna wise up and realize that [EI] is helpful? How much research do we need? How much more can we prove that B-3 saves millions for the school district and helps families? I feel like what we do is so much more forward, facing and directly supportive than 3 to 21. I'm not bashing 3 to 21, but how is that not seen?...I don't understand what more needs to be proven to fund b-3. And you're losing good providers. You're losing very good providers daily because it's underfunded. Which just means that those kids are even less supported than they are now.

**Work-life Balance.** Achieving a healthy work-life balance was essential for meeting the physiological needs of EI providers. Flexibility was highly valued among participants, with benefits such as unlimited sick and mental health days allowing for essential self-care. Lisa explained, “If you have a dentist appointment you just reschedule into another day.. We're just like, work hard and it all comes out in the wash.” Some agencies have adopted unlimited time off benefits;

We don't have accrued hours of paid or sick vacation time. You just take self care days. You have to get your job done, but you can use your hours how you want. It really

doesn't matter when you take your time off. I think that that really supports my lifestyle and family (Debora).

Additionally, the flexibility in scheduling accommodated various commitments, including doctors' appointments and managing children's schedules. Debora commented, "the flexibility and work life balance is one of the reasons why I stick with it. I have kids of my own, and I want to be present for them and I feel like [agency] really supports us on that." Similarly, Talia echoed, "I appreciate the flexibility, and I think that's the reason why I haven't left. My kiddo just started school, and I'm working from home." Moreover, providers emphasized the importance of autonomy in schedule and caseload management, enabling them to tailor their work hours to their individual needs and preferences. One agency administrator indicated that they were exploring options to provide subsidized childcare and summer camp options to providers. They explained that providing affordable and accessible childcare options in-house would likely improve retention at the agency, supporting staff in their ability to balance their work and personal lives more seamlessly.

Participants also acknowledged the inherent variability in caseloads, with workload fluctuations occurring from week to week. For example, Stephanie shared:

When I started, I had a lot less experience. I didn't think there was a more manageable job in the world. I was super satisfied. Didn't think there was a better place to work. As my skill set has grown, I am one of very few in my department who can take the kids that I take, which means that every child of that complexity comes to me, or one of the other few. So I would say the vast majority of the time, 80% of the time. I feel totally over what I can manage. In the times that I am low that doesn't really even feel like a downswing, because I've been treading water for so long that I can finally catch a breath.

This variability presented both benefits and challenges for providers and uncovered the dynamic nature of their work environment and the need for adaptability.

### *Safety Needs*

Addressing safety needs is vital for ensuring job stability and security, in line with Maslow's hierarchy. These needs include both physical and emotional safety, providing a sense of predictability and control over one's environment. In this study, participants highlighted the importance of supports for physical and emotional safety, although some expressed challenges related to safety during sessions. Additionally, they emphasized the necessity of robust onboarding support for new staff, encompassing structured skill plans and high-quality mentoring to address knowledge gaps. These gaps posed a threat to new providers' sense of stability and security in their roles. These safety needs were often inconsistently addressed, leading to feelings of uncertainty and insecurity among some providers.

**Home Visit Safety Supports.** In meeting the safety needs of EI providers, participants identified supportive agency practices that mitigated potential risks and enhanced their sense of safety. Debora emphasized the importance of team collaboration in addressing safety concerns during home visits, stating, "we could say 'this happened I wanna debrief this' or 'I have concerns about this, and I don't feel comfortable going into this home.' Then we would talk about ways that we could make it feel more comfortable." Further, the use of joint visits for families showed proactive measures taken to prioritize provider safety. Debora elaborated, "we've had families on our team that have been joint visit only families. Where there will be two providers at any time. We will not have a provider there alone." Similarly, Kristen shared the role of supervisors in addressing safety issues, commenting,

If I ever have an issue where I don't feel safe...And I've had issues. If that's a problem [supervisor] will move me or change therapists...she's made phone calls to families to

say, "Hey, listen! Your behavior isn't appropriate. We cannot put my therapists in a place where they or their families are at risk. That's not an option."

Proactive engagement from supervisors demonstrated the agency's commitment to staff safety and well-being, building a sense of trust and security among providers.

**Onboarding Support for New Staff.** Ensuring adequate onboarding support for new staff was integral to meeting the emotional safety needs of EI providers. Participants highlighted significant gaps in the skills of new providers upon entering the field and stressed the importance of comprehensive supports to prepare them effectively for working with families. "As a new grad therapist, there is not a program in the country that prepares you for pediatrics," remarked Kristen, underscoring the challenge faced by most new providers transitioning into EI. This was echoed by Kelly, who expressed feeling overwhelmed and underprepared upon entering EI; "I kind of felt like I was dropped into the ocean and expected to swim."

To address these challenges, participants emphasized the importance of mentorship and competency-driven onboarding programs. Stephanie highlighted the effectiveness of mentorship in facilitating the transition for new staff, stating, "New staff get a mentor for 90 days... every person I've mentored still comes to me first for questions." Despite the lack of official time allocated for mentoring, the willingness of colleagues to provide support demonstrated a supportive workplace culture that fostered a sense of safety and security for new providers. However, challenges with mentorship were also acknowledged. Kelly expressed feeling disconnected from her mentor, emphasizing the importance of alignment between mentors and new providers' needs. "I had a mentor, but she primarily served Spanish speaking families, and I don't speak any Spanish... It was hard to really get much out of sessions," she explained. There is a need for tailored mentorship to ensure effective support for new providers, solidifying their sense of security and emotional safety in their roles.

### *Love and Belongingness*

Love and belongingness, the third tier in Maslow's hierarchy, highlights the human need for social connections, support, and a sense of belonging. In the context of EI, fostering a supportive and collaborative work environment was identified as essential for promoting job satisfaction and retention among providers. Participants overwhelmingly expressed positive regard toward the connections and sense of belonging they experienced in their workplaces, identifying this as a strength within the study. Their comments showed the importance of supportive team dynamics and collaborative supervision in fostering a sense of belongingness and job satisfaction essential to retention among EI providers.

**Supportive and Intentional Supervision.** Within the realm of love and belongingness, EI providers highlighted the significance of supportive and intentional supervision as a fundamental aspect of their job satisfaction and sense of belonging within their organizations. Participants emphasized the importance of having personable supervisors who fostered a supportive and trusting relationship. Mel discussed “my supervisor is a pretty casual person. She's really able to just show up and connect with you as a human and in this kind of work, I feel like that's necessary.” She continued by explaining,

I have had my own challenges with mental health and some health things that have come up recently...there was never there was never any fear about having the conversation...There's just understanding that I care about my work. I care about what I do and while this may affect some things, there wasn't any worry or hesitation.

This trust and autonomy from supervisors contributed to a positive work environment. Rachel shared how different the level of autonomy is from working in a school district setting. She said,

here it's all about focusing on the child and the family, and when I am passionate about one of my families. I hear, “Oh, I hear you're really passionate about that. Let's see what

we could do to make it work for all of us” instead of, “too bad. It's more important that we do this.”

Specifically, participants valued consistent one-on-one check-ins, which afforded them opportunities for giving and receiving feedback, engaging in clinical problem-solving, and addressing personal support needs. Talia discussed how this type of supervision is missing from her work;

It's really detrimental, because we really need that, you know, even like monthly check-ins not like, hey? How are you doing when they're walking by? But like, let's sit down. Talk about your caseload. Talk about these kids. What's hard? You know? More personal check-ins would be beneficial, and that's more of what I'm used to from my previous positions. But that's not something that we get here.

**Team Collaboration.** In addition to supportive supervision, team collaboration emerged as a crucial element fostering a sense of belonging among EI providers. Participants highlighted strong teaming dynamics within their organizations, emphasizing the importance of collaborative problem-solving and mutual support among team members. Stephanie commented,

I think it's everything that we can connect with other therapists. As with anything, some are more communicative than others but...I just think having multiple angles with everyone on the same page, and kind of tweaking it to their perspective, is really helpful for families to see how they all intersect.

This was echoed by Rachel, who stated, "You always have somebody to talk to, and if you don't have anybody on the team I could go to anybody in any of the other disciplines and ask them." Collaborative approaches fostered a sense of unity and resourcefulness within the team, seen by Kristen's statement, "I do not know what the anatomy of a swallow is to the point that I could clinically make that determination... That's why I call [SLP]." These interactions not only

enhanced the quality of services provided to families but also strengthened the sense of community and shared purpose among EI providers.

Even when working remotely, providers emphasized that strong collaboration helped them not feel isolated in their roles, highlighting the ongoing connectivity and support within their teams. Collaboration within teams,

...helps keep me grounded in the work that I'm doing, because I'm not alone. I'm not isolated and I think this work can be really isolating at times. But, I don't feel isolated in my work. Even though I work remote most days of the week, and I just feel like that's pretty impressive (Mel).

Further, camaraderie among colleagues during challenging times was noted as a significant source of support and belongingness, fostering a sense of unity and solidarity among team members as they navigated the complexities of their work in EI. Mel shared, “in terms of my team, people I work with, I feel appreciated. I feel celebrated and like that's the general overall culture...it's a really easy group of people to connect with and talk about challenges with, in all areas.” When engaging in taxing emotional work such as EI, Lisa shared, “we make jokes like, ‘well, this sucks, but we're in it together’. You know everyone has empathy for each other, that this is hard, and we love the together goal of helping these kids”. Additionally, Stephanie discussed the benefits of their “Reflective Consultation” group and expressed the significance of frequent interactions among colleagues, stating,

Everyone in that group is very tight knit at this point. And so I wish that it could be more frequent than once a month. But even just to hear other providers say like “I had this experience”. And you're like, “Oh, so that's not just me. Oh, it's not me that's the problem. That's just how this works like it's par for the course.” it's just nice to have that like camaraderie, I guess. I just wish we were given more than 1 hour a month to do it.

These shared experiences and mutual support fostered a sense of belonging and reassurance among EI providers, reinforcing their commitment to their shared goals and values.

### *Esteem Needs*

Esteem needs, the fourth level in Maslow's hierarchy, encompass the desire for recognition, respect, and a sense of accomplishment. This tier represents the need for individuals to feel valued and respected in their roles. Within this study, participants indicated that agencies often encouraged ongoing learning, however, achieving additional expertise was not always recognized or valued. Additionally, participants' esteem needs were threatened by a lack of respect for their expertise when policies were in conflict with providers' ethical principles. Similarly, the inability to honor parent choice in service location created conflict and inadequately supported family priorities and preferences, ultimately leading to dissatisfied families and impacting providers' sense of value. Further, when alternative service locations were a clinical necessity, policies restricting these signaled to providers a lack of recognition of their clinical judgment and expertise.

**Recognition of Expertise and Value.** EI providers in this study discussed pride and fulfillment in their roles when their expertise was acknowledged and valued. Kristen expressed, "I have a lot of experience, and having worked with kids for this long, I've learned a lot of different things. I feel very confident and proud of what I do, how I do it and the results. And that is extremely satisfying." The sense of confidence and pride demonstrated the intrinsic value they yield from their work and its impacts. Alternatively, as Stephanie articulated, there was a sense of frustration when this expertise was not fully understood or appreciated by leadership. She discussed,

I sometimes feel like it's not fully understood what we do and what goes into helping these families? You know, our whole thing is that we're helping children of all these

diverse backgrounds and abilities. And which is fantastic. I totally agree with all of that. I just don't think that people making decisions understand what goes into being able to support all of those needs and all of those backgrounds. And so sometimes I feel like we're just kind of told what to do without any consideration for our skills and knowledge that we need to provide the services that we so proudly boast.

Despite the intentions of supporting all families, a disconnect between provider expertise and the decision-making processes was seen. This lack of understanding can lead to feelings of being overlooked or undervalued, "...because that says this is how you're valued...I mean, they do understand. Because that's why we have EI teams. But it's almost like, yeah, you're important. But like, we're not actually gonna value your knowledge" (Lisa).

**Ongoing Learning and Professional Development.** Participants highlighted the value of learning from colleagues across disciplines, emphasizing the impact of collaboration on their professional growth. Lisa explained that the most impactful learning has come from,

...collaborating with OT, learning about looking at the child as a whole and not just speech. Especially with EI I think it's so important, because, like you have to look at everything to see the big picture of the child, and what's going on in the environment they're in. There's just so many ways that collaboration has helped me grow the most, and I think it'll continue as I work in this collaborative environment.

Debora also shared,

We learn from each other. I'm not a speech therapist but I feel really confident in my skills supporting foundational communication and embedding that in what we're doing for motor support. And I know where that line is of saying, "Okay, I need to bring a speech therapist."

Participants expressed appreciation for the encouragement and support they received from agencies to pursue professional development opportunities. This investment in their growth not only reinforced their sense of value but also equipped them with the necessary skills and knowledge to deliver high-quality services. For instance, Kelly discussed the significance of structured professional development, facilitated by receiving dedicated caseload time to complete. Kelly shared,

I am in [program] that kind of breaks it all down more, how to check in with the families, how to teach the scope and sequence of skills, and that's been really helpful to have a baseline of like how to structure sessions...My manager was very flexible..and gave me caseload time for the [program].

However, participants also highlighted the challenges associated with specialization and increased workload demands. Children and families with more complex needs require more time from providers. These needs were often not reflected in caseload calculations, leaving some providers with high workloads. Despite the benefits of acquiring additional certifications or specializations, participants grappled with the lack of acknowledgment or compensation for the added responsibilities. Mel articulated concerns about taking on additional roles without recognition or compensation, reflecting a disparity between professional growth and tangible rewards. Mel commented,

Additional certifications and taking courses and certain things that's always encouraged. But that doesn't necessarily mean that something's going to change in our title or position. It just means we're gonna wear an additional hat onto the one I'm wearing. Which, it feels great to learn new things but sometimes I actually choose not to...I could take on certain responsibilities. But then I'm just doing more work than I'm already doing, that doesn't get compensated for.

Similarly, Stephanie identified the disproportionate burden held by experienced providers, who often bear the brunt of complex cases. This disparity not only diminishes their sense of accomplishment and value but also acts as a deterrent to further career advancement and skill development. Stephanie explained,

It's also the structure of how experience and caseloads intersect. So currently the more experience, the more complexity of cases we are able to take. The more that grows, the harder the cases we get assigned which comes with more paperwork, more communication with outside medical professionals. A lot more, just stress. And really, all I can show for that is a harder caseload. I don't get paid anymore. I don't get extra time. It's just a lot of invisible work, and I think it kind of discourages progressing your career and your clinical skill set.

**Ethical Practices.** Providers expressed a sense of conflict from agency policy changes that seemed to push providers into ethically ambiguous territory, particularly in response to issues of noncompliance with state or local requirements or financial challenges within agencies. These challenges were linked to feeling a lack of recognition and disrespect for their expertise. For instance, one participant mentioned concerns regarding evaluations for children already diagnosed, which did not receive the same thorough assessment as those undergoing initial eligibility evaluations. Debora shared,

The way it was trickled down to us was, “no, you're not doing an evaluation. You're just collecting present levels for an IFSP”...And then I'm gonna have these goals on the IFSP. And we are gonna be carrying them out, I don't feel okay about that...the people who were on the ground doing the work didn't get the respect of giving input into what the process would look like.

Similarly, Stephanie discussed being told to evaluate siblings within one evaluation slot. She explained,

...the initial response was, "Get it done. You know, we just have to see if they qualify, and you don't have to do it so in-depth"...that's my name on that report, and that's my name that supposedly evaluated these 2 kids. That's my reputation and there is no recognition of what actually goes into evaluating skills at this level. But there's no way I could have done it in the way that they deserve to be evaluated.

Additionally, with the necessity of service compliance and reimbursement to some agencies, the practice of scheduling sessions with substitute providers when the primary provider was unavailable raised concerns about maintaining service quality and consistency and support for families. Lisa explained,

If we are out sick they'll put those kids on other people's schedules. Which is an ethical-ick for me. I have kids where that's just gonna be a complete disaster. I don't feel ethical about it, because that's not gonna be a therapeutic session for that family...The whole point is, we build a relationship...The families value us and that makes us seem unimportant and replaceable.

**Commitment to Family-Centered Services.** Participants emphasized the importance of prioritizing family-centered services, recognizing the fundamental role of families in EI. Despite this commitment, they encountered significant challenges aligning services with families' preferences and priorities, which directly impacted their sense of value and recognition within their roles. Natural environment requirements often conflicted with families' desires, leading to frustrations and family dissatisfaction. Two participants noted disparities in service access, with private pay therapy often accessing highly equipped therapy spaces compared to Part C services which require sessions held in the natural environment. Kristen shared,

The challenges that I find the most offensive, personally, are the ones that limit the services to the kids. When the parents who have specifically requested for us not to join them in their home, that totally limits their ability to utilize supports besides the private therapy piece, which not everyone can access.

In addition to families expressing a preference for clinic-based services, participants acknowledged the challenges of conducting productive sessions in limiting settings. Kristen explained a variety of situations where families have declined home-based services including, large animals, mistrust of systems that they perceive to be associated with the government as well as,

Sometimes there's just not space. I can't tell you how many apartments I've been into that are one or 2 bedroom, and they have between 8 and 10 people living in the apartment...and wow, its a space issue. It is hard to navigate and put another body in there and then do anything physical.

While alternative options within the community are available, she discussed the challenges associated with these visits, "I went to the Park the other day with 14 month old, and his mother. It was pouring rain and there was no shelter or cover anywhere." Such limitations lead providers to feel restricted in their ability to deliver effective services.

In an administrative interview, a participant stressed the importance of empowering therapists to make decisions about therapy settings, advocating for flexibility to support families without burdensome documentation requirements. They emphasized,

I think letting the therapist decide where therapy should take place and why. [Therapists] are all qualified to make those calls. That needs to be honored. And we have really good reasons why we want to bring them here so they can be safe...So having more flexibility

to support families without it taking tons of time or documentation to justify it all to death.

This reflects a desire for providers to be respected as professionals capable of making informed decisions in collaboration with families. Providers from an informal focus group echoed,

Provider 1: You know, there are options, but it's hard when we're meeting what [families] want but that doesn't follow the rules, which puts an extra step on the FRCs to try and do a natural environment justification. It's a lot.

Provider 2: I think it goes right along with, like, they're worried about, following all the data of just dates and deadlines and all those things, versus what's best for the child.

Because parents and therapists all know what's best for our kids. There is no trust or respect of that. What is best for *our kids* versus what date anything happened or what? I don't know, research from the nineties.

Rachel discussed families' frustrations when their agency was required to discontinue services within playgroups because,

...it's not a natural environment. Part of having a playgroup is that socialization piece that so many of our children need...the parents talked about their children, shared and learned from each other. The parents loved it. That was what the families and children needed to learn. It's hard for them and they're frustrated at us.

These policy decisions were perceived to disregard the importance of socialization and shared learning experiences for children and families, ultimately invalidating the providers' efforts and leaving families feeling frustrated. Administrators emphasized the transformative impact of these interactions on both children and parents,

Administrator 1: So they've never had that interaction. Whereas you get a couple kids in a gym that are working with a therapist, and all of a sudden it's natural for a kid to start playing with another kid. They don't get that necessarily at home or even the park.

Administrator 3: And I would, I would piggyback that with the friendships that the moms, mostly moms, form in the waiting room. Like, 'oh, wait, your kid is also in a wheelchair and has to be fed but is interacting with my kid in a wheelchair'. Or 'my kid has never had a friend...they can't go to anybody else's house because it's not wheelchair friendly.'

Administrator 2: A lot of friendships have formed here with moms supporting each other and kids becoming friends. Autistic kids that have never had a friend. Now they have a friend that gets them.

Administrator 1: And then you get the parents getting together having play dates, which is natural. There's nothing unnatural about having kids with disabilities interacting with each other. It's great. But how do you get that? When they're afraid to go out, they're afraid their kids are going to be made fun of. They're afraid that they're going to get hurt on the playground. I mean, they have so many fears their kid's going to get bullied, we can help with that here and in groups.

### ***Self-Actualization***

Self-actualization represents the top of Maslow's hierarchy of needs, embodying the fulfillment of one's potential and pursuit of personal growth and fulfillment. In the context of EI, self-actualization encompassed both the satisfaction achieved from making a meaningful impact on the lives of children and families, as well as the challenges and complexities inherent in navigating the emotional demands of the job. When lower levels of the hierarchy were challenged, fulfillment and satisfaction in the workplace wavered causing providers to reconsider

remaining in their roles. The experiences and perceptions of participants regarding self-actualization support understanding of the intricacies involved in job satisfaction and retention within this field.

**Overall Satisfaction and Retention.** Participants expressed a deep sense of fulfillment and purpose in their work, citing their love for the work, the families they serve, and their colleagues. The opportunity to make a meaningful impact on the lives of children and their families was a driving force behind their commitment to early intervention. Stephanie reflected,

I have very little complaints about what I actually do, and that's why I have never left. I love birth to 3. I love the family interactions...I love watching kids progress. I love watching families see their child progress and know that they've contributed so much to that.

Alongside this sense of fulfillment, participants also acknowledged the significant stress and emotional toll inherent in the work. The demanding nature of providing EI services, coupled with the emotional investment required, often led to feelings of burnout and fatigue. Providers reported seeing anywhere from 4 to 10 children in a day and reported that it is “hard on you emotionally. End of the day, you’re pretty exhausted because you've had to regulate many different kids” (Lisa).

Despite their passion for the job, some participants expressed uncertainty about their long-term ability to sustain their current level of commitment and emotional investment. As a parent, Lisa explained the impact, “I do recognize it’s my own choice to be a mother and I'm choosing to be a working mom. So, coming in with an empty cup and leaving with an empty cup is really hard.” Some providers questioned whether the emotional toll was worth the personal sacrifice, highlighting the complex nature of self-actualization in EI practice. “I truly don't feel that I make anywhere what I deserve... So I have to make the decision: is salary more important

than truly enjoying what I'm doing?" expressed Stephanie. A dilemma faced by many providers Mel concluded,

This is like something that I love to do. I just really enjoy working with families... And it's really challenging to look at the other side of things. Which do I take? Do I take this thing that I absolutely love to do but it drains the shit out of me? Nonstop. Or do I do this thing that I don't love to do but it provides me a sense of security? Specifically, financial security.

**Patterns in Turnover.** Participants identified trends in turnover shed light on the factors influencing providers' decisions to leave their roles. Distinct groups emerged: new therapists or single income households struggling with financial constraints, those unable to manage the emotional work-life balance, and individuals facing significant life changes such as parenthood. "There's the new therapists who don't have another income at home and can't live on the salary," observed one participant. Others, "people who are like, I have all these other things in my life. I simply don't have time to be overworked" (Stephanie). Lisa explained,

It's the moms and dads. It's the people that have other things that are emotionally taxing outside of life outside of work, and they're being asked to do more and more and more outside of work, and so they come in half empty. And then in this job there is no emotional support for so you just have to show up, put a smile on your face, and then you leave gassed...I'm functioning at a baseline just down here. And I think that's how everyone is.

Concerns about the impact of turnover and the need to address these trends were shared by participants. "Relationships with coworkers are everything... it's like a domino effect," noted Lisa. She continued,

We're already short. What's going to happen when 20% of our providers are like, yeah, I can't do it anymore?...It seems like this is needed right now. It does feel like a call to action. It's just what action to take? So I think for me it's not about a little incentive, but like someone cares and is actually trying to make it better.

The qualitative findings from this study, framed within Maslow's Hierarchy of Needs, shed light on the factors influencing job satisfaction and retention among EI providers. From physiological needs surrounding compensation and work-life balance to safety needs detailing physical and emotional security, participants discussed complex dynamics that impact their overall satisfaction in EI. The sense of belongingness and camaraderie experienced by participants emerged as a strength within the study, emphasizing the importance of supportive team dynamics. As providers navigated the challenges of meeting esteem needs and strived for self-actualization through meaningful impact, their experiences and perceptions within the field were shaped by these highly connected factors.

### **Integrated Findings**

Using a mixed methods approach was instrumental in providing a comprehensive understanding of the survey findings among participants. While quantitative data offered insights into the predictors of participants' intentions to remain in their role (retention) and job satisfaction, qualitative data allowed for a deeper exploration of the complexities underlying these relationships. By integrating both quantitative and qualitative methods, the study was able to explore not only which factors were predictors of a provider's intention to remain in their role (retention) but also how they influenced providers' experiences within the field. The use of a mixed methods approach allowed for a more detailed interpretation of the survey results, enhancing the study's ability to provide insights specific to the EI workforce in Washington State. Integrated findings are summarized in table 8.

**Table 8**

*Integrated Findings for Factors Impacting WA EI Providers' Job Satisfaction and Retention.*

Quantitative results	Qualitative results	Illustrative quote
Supportive work environment emerged as a significant predictor of retention. Survey respondents reported high levels of satisfaction with the support they receive in their work environments.	Participants felt safe and highly supported in their roles by their coworkers and direct supervisors. However, challenges with adequate onboarding threatened provider security and emotional safety.	"I kind of felt like I was dropped into the ocean and expected to swim...I had a mentor, but she primarily served Spanish speaking families, and I don't speak any Spanish... It was hard to really get much out of sessions,"
Survey respondents reported high satisfaction with supervision, coworkers, and the nature of work.	Positive team dynamics and collaborative supervision contributed to a sense of belongingness, camaraderie and security among participants.	"[Collaboration] helps keep me grounded in the work that I'm doing, because I'm not alone. I'm not isolated and I think this work can be really isolating at times."
Majority of survey respondents reported low satisfaction with promotion opportunities. While about half of the respondents reported satisfaction with contingent rewards, a notable proportion expressed dissatisfaction.	Participants reported receiving support for professional development, yet this expertise was not acknowledged through compensation or caseload time. Policies and procedures fostering ethical ambiguity and questioning expertise contributed to feelings of disrespect and inadequate recognition.	"And so sometimes I feel like we're just kind of told what to do without any consideration for our skills and knowledge that we need to provide the services that we so proudly boast."
Work-life balance satisfaction emerged as a strong positive predictor of retention. Survey respondents reported high levels of satisfaction with their work-life balance.	Participants valued the flexibility and autonomy to manage their work-life balance. However, challenges with emotional load, caseload calculations accounting for complexities and high variability in workload threatened participants' work-life balance.	"...flexibility and work-life balance is one of the reasons why I stick with it." "...every child of that complexity comes to me, or one of the other few. So I would say the vast majority of the time, 80% of the time, I feel totally over what I can manage. In the times that I am low that doesn't really even feel like a downswing, because I've been treading water for so long that I can finally catch a breath"
Majority of survey respondents expressed overall job satisfaction, however a significant portion remains ambivalent. A significant portion of survey respondents reported considering leaving their role, indicating mixed perceptions of the impact of various factors on intention to remain in the role (retention).	Participants love their work. However, challenges with needs across levels created uncertainty for participants and led to contemplating leaving EI.	"I truly don't feel that I make anywhere what I deserve... So I have to make the decision: is salary more important than truly enjoying what I'm doing?"

*Note.* Quantitative data (survey results and regression results) and qualitative data (interviews and focus groups with providers and administrators) to provide a more comprehensive description of how various factors impact EI providers' experiences and perception related to their intention to remain in their role (retention).

The integrated findings from quantitative and qualitative data highlighted areas of convergence and divergence to understand the factors influencing job satisfaction and retention among EI providers. Converging findings emphasized the critical importance of factors such as pay and benefits, supportive work environments, and work-life balance in shaping providers' experiences within the field. Quantitative analysis identified pay and benefits as significant predictors of retention, reinforced by qualitative narratives that described the necessity of predictable compensation and benefits for providers' satisfaction and intentions to remain in their roles. Similarly, both sets of findings emphasized the role of a supportive work environment, with quantitative data highlighting its association with retention and qualitative data revealing the positive impact of supportive coworkers and supervisors on providers' sense of security and belongingness.

Both quantitative and qualitative findings converged on the significance of work-life balance for job satisfaction and retention among EI providers. While quantitative data demonstrated work-life balance satisfaction as a predictor of retention, qualitative narratives shed light on providers' appreciation for flexibility and autonomy in managing their work-life balance, alongside challenges related to workload complexities. These findings confirm the need for organizations to prioritize supportive work environments and work-life balance initiatives to promote higher retention rates and overall job satisfaction among EI providers.

A few areas of divergence emerged, particularly regarding job satisfaction levels and recognition of providers' esteem needs. While quantitative data suggested a majority of providers reporting overall job satisfaction, qualitative narratives provided a more nuanced perspective

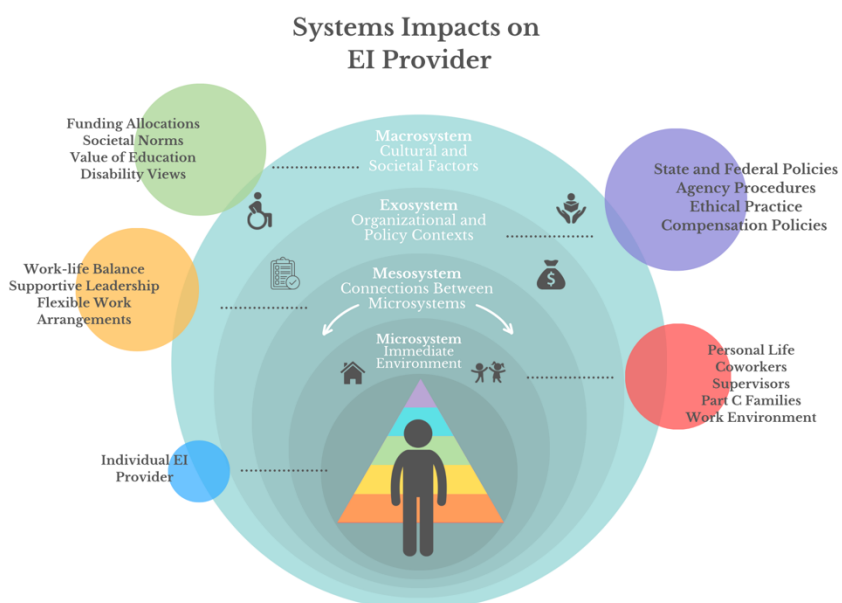
about the role overall job satisfaction played in participants' intentions to remain in their roles. The data suggested that while providers valued certain aspects of their work, they also faced challenges and uncertainties that impacted their intentions to remain in the field. Further, while both quantitative and qualitative findings touched upon the importance of recognition and respect for meeting the needs of participants, qualitative data provided insights into how the lack of financial or workload recognition for specialization and expertise could impact providers' sense of value and fulfillment in their roles. Similarly, policies and procedures that challenged providers' expertise and ethics led to feelings of disrespect and lack of recognition among participants. This highlighted the need for organizations to not only provide opportunities for growth but also recognize and appreciate providers' expertise and contributions appropriately.

### Chapter V: Discussion

While the analysis focused on individual provider-level findings using Maslow’s Hierarchy of Needs, Bronfenbrenner’s ecological systems theory (1974) serves as an organizational tool for discussing and synthesizing these findings within existing research. Bronfenbrenner's ecological systems theory offers a complementary lens through which to discuss the complex, nuanced, and interconnected nature of the job satisfaction and retention challenges in the EI field, contextualized within broader societal structures. The theory suggests that factors such as pay, work environment, team dynamics, and work-life balance operate within multiple ecological systems, ranging from the individual level to the broader societal level. This framework recognizes that every change within a system, like EI, will have ripple effects on other parts of the system. This chapter begins by summarizing Bronfenbrenner’s framework (Figure 9). Then the findings will be discussed with ecological systems as a unifying frame.

**Figure 9**

*Bronfenbrenner’s Ecological Systems Framework in EI*



*Note.* Developed based on Bronfenbrenner, U. (1974). Developmental research, public policy, and the ecology of childhood. *Child development*, 45 (1).

## **Overview of Bronfenbrenner's Ecological Systems Framework**

At the core of Bronfenbrenner's ecological systems framework is the individual EI provider, whose needs and aspirations are central to their experience within the workforce. Positioned at the center of this model, the provider holds their own needs which are influenced by the interconnected systemic elements surrounding the individual. The provider, navigating through various settings such as the workplace and home, plays an active role in shaping their environment and dynamic reciprocal relationships. This positioning emphasizes the agency of the individual, capable of impacting their environment as much as they are influenced by it (Bronfenbrenner, 1999). Next, the microsystem represents the immediate environment in which EI providers operate and encompasses the daily interactions and relationships that directly impact the experiences of EI providers. Moving beyond the microsystem, the mesosystem encompasses the interactions between various microsystems, such as interactions between work and personal life. The exosystem encompasses broader organizational and policy contexts that impact provider experiences. Finally, the macrosystem considers broader cultural and societal factors that shape the EI workforce. By considering the interactions between individual experiences, immediate work environments, organizational policies, and broader societal factors, stakeholders can develop more holistic strategies to support provider satisfaction and enhance retention efforts in the field of early intervention. In the sections that follow, each ecological system is discussed in relation to EI provider job satisfaction and retention.

### **Individual Level: The Provider**

At the individual level, the satisfaction and retention of EI providers are influenced by their personal experiences, needs, and aspirations. This study used Maslow's Hierarchy of Needs (1943) as a tool for explaining phenomena within the individual ecological system. Maslow's hierarchy situates seamlessly within Bronfenbrenner's individual level and demonstrates the

importance of security, recognition, and esteem in fostering provider satisfaction. At the individual level, professional identity plays a major role in how EI providers see themselves and their work. The EI workforce in Washington State comprises individuals from diverse disciplines, including educators, speech-language pathologists, occupational therapists, physical therapists, family resources coordinators, and more. However, this study revealed that professional identity was not the most salient feature for individuals. Rather, factors such as years of experience and access to professional development opportunities played pivotal roles in determining providers' sense of competence, autonomy, and fulfillment within and across professional roles. Providers who felt valued, supported, and recognized for their expertise were more likely to experience higher levels of job satisfaction and exhibit greater intention to remain in their positions. Cultivating a culture of continuous learning and growth is essential for promoting provider well-being and enhancing retention within the EI workforce.

At the individual level, providers sought recognition of their expertise, fair compensation for their workload, and opportunities for professional growth and advancement. Challenges in meeting these needs, such as inadequate pay or lack of promotion opportunities, could lead to dissatisfaction and hinder retention. Although these challenges may be conceptualized as individual factors, they are nonetheless influenced by interactions across micro-, meso-, exo-and macrosystems. Understanding the demographic characteristics and multifaceted needs of individual providers, and how these individual characteristics interact and intersect across systems, is crucial for contextualizing the factors that influence job satisfaction and retention within the EI workforce.

It is important to note that the national field of EI is primarily comprised of white women, a trend mirrored in this study (Friedman-Krauss et al., 2023). Insights from early childhood education highlight the significance of workforce diversity and equitable policies in

promoting job satisfaction and retention (Jean et al., 2022). This demographic composition has implications for workforce diversity and retention, reflecting broader systemic challenges within the field. Addressing these disparities is essential for promoting equity, inclusion, and belongingness within the EI workforce and enhancing provider satisfaction and retention. Furthermore, this study revealed insights into the personal lives of EI providers. Nearly half of EI providers reported having cohabitating dependents. However, multiple interview participants mentioned a trend in turnover when coworkers have children, citing challenges that force providers to choose between parenthood and a career in EI.

### **Microsystem: Immediate Environment**

Moving to the microsystem, which represents the immediate environment, the ecological systems theory highlights the role of supportive work environments in shaping provider experiences. In this study, positive interpersonal relationships, effective supervision, and a supportive organizational culture contributed to feelings of safety, belongingness, and satisfaction among providers. This study suggests that supportive work environments, positive interpersonal relationships, and effective supervision are crucial factors influencing job satisfaction and retention. Conversely, challenges such as inconsistent support or inadequate onboarding processes can undermine provider well-being and retention.

Research in related fields such as medicine and K-12 special education, highlight the significance of supportive relationships in fostering positive outcomes for professionals and the populations they serve. For instance, in medicine, studies have demonstrated the importance of supportive supervision and team collaboration in promoting job satisfaction and reducing burnout among healthcare providers (Martin et al., 2021). Similarly, in K-12 special education, research emphasizes the role of positive interpersonal relationships in creating inclusive and

supportive learning environments for both educators and students (Richards et al., 2018, Robinson et al., 2019).

This study revealed that a commitment to family-centered practices significantly influenced providers' sense of fulfillment and engagement in their roles. Providers expressed a deep sense of satisfaction derived from witnessing positive outcomes in the children they serve, highlighting the intrinsic rewards associated with their work. These findings are consistent with research in K-12 education, which emphasizes the importance of meaningful connections with children and families in promoting job satisfaction among educators (O'Shea, 2021).

This study identified specific strategies and practices that contributed to a positive work environment within the EI field. Providers valued supportive relationships with supervisors and colleagues, as well as opportunities for collaboration and professional development. This emphasis on interpersonal relationships and professional growth reflects broader trends in organizational psychology, which recognize the critical role of social support and career development in enhancing employee satisfaction and retention (Eisenberger et al., 2016).

### **Mesosystem: Connections Between Work and Personal Life**

Within the mesosystem are the interactions between various pieces of the providers' immediate work environment, including work-life balance. This study illuminated the interplay of microsystems experienced by EI providers, as participants described navigating numerous competing elements in their personal and professional lives. From managing caseloads to tending to personal responsibilities, providers must negotiate the tensions and demands arising from these various microsystems. Hence, work-life balance satisfaction is a critical factor influencing job satisfaction and retention among EI providers. Achieving a satisfactory balance between work and personal life demands is essential for EI providers to maintain their physical and emotional well-being. Providers who perceive their work-life balance positively are more likely

to experience higher levels of job satisfaction and exhibit greater intention to remain in their roles. This finding resonates with research in related fields where work-life balance has been identified as a crucial determinant of job satisfaction and retention (Rink et al., 2023; Capone et al., 2023). The demanding nature of providing early intervention services, coupled with the emotional investment required, can lead to feelings of stress, burnout, and dissatisfaction among providers. Balancing the intense emotional demands of the job with personal and family responsibilities can be particularly challenging for EI providers.

Further, research suggests that organizational culture and leadership play crucial roles in shaping work-life balance perceptions and experiences among employees (Kalliath & Brough, 2019). Supportive leadership, flexible work arrangements, and access to resources such as childcare assistance can significantly impact providers' ability to manage their work and personal life demands effectively. Organizational policies and practices that promote work-life balance can create a supportive environment where providers feel valued, respected, and motivated to stay in their roles. This aligns with best practices in K-12 special education, where supportive leadership and organizational culture have been linked to higher levels of job satisfaction and retention among teachers (Billingsley & Bettini, 2019).

### **Exosystem: Organizational and Policy Contexts**

Within the exosystem, state and federal policies, agency-level structures and procedures, and funding structures play a significant role in shaping the experiences of EI providers. These policies and procedures dictate the framework within which EI services are delivered and have direct implications for providers' work environments and job satisfaction. Policies related to compensation and reimbursement, promotion opportunities, workload management and service delivery directly influence providers' job satisfaction and retention. Inadequate recognition of achievements or limited opportunities for advancement can create barriers to satisfaction and

hinder retention efforts. Federal and state policies related to service delivery requirements and reimbursement rates can impact the quality of services provided, the resources available to providers, caseload sizes, and the overall functioning of EI agencies. Additionally, the coordination required between multiple systems, including medical and educational entities, adds layers of complexity to the EI landscape, significantly impacting both the agency and its individual providers.

The decisions made at the policy level, including funding allocations and regulatory changes, have a profound impact on EI providers' work environments and job satisfaction. The underfunded federal Part C EI program and the decrease of insurance reimbursement rates directly affect agency financial resources, impacting staffing levels, agency procedures, and service delivery models. This study underscores the systemic challenges faced by EI providers, such as inadequate compensation, and high workloads, which have been documented in the EI literature (Yeager et al., 2023; Vail et al., 2019). Inequitable compensation structures can contribute to feelings of discontent and insecurity among providers, ultimately impacting their intention to remain in their roles. This issue resonates with findings in the field of rehabilitation medicine, where inadequate compensation has been identified as a key contributor to workforce shortages and turnover (Tran et al., 2008). By advocating for fair and equitable compensation structures that adequately reflect the skills, expertise, and contributions of EI providers, organizations can support providers and enhance their overall job satisfaction and retention. Addressing these challenges requires a multifaceted approach that considers both organizational and individual-level factors to support EI providers.

Additionally, shifts in agency procedures, prompted by funding limitations, may introduce new challenges or barriers for providers, impacting their ability to deliver high-quality services. For instance, some agency-level policies and procedures may prioritize compliance

over best practices, to quickly address challenges. The present study illustrates that providers felt their professional ethics were compromised to support the "bottom line" and survival of the agency, leading to feelings of frustration and moral distress among providers. Stakeholders must understand the multifaceted impact of the trickle-down effect of policy decisions and funding allocations on EI providers and families.

### **Macrosystem: Cultural and Societal Factors**

Finally, the macrosystem perspective sheds light on the broader cultural and societal influences shaping the EI workforce. These influences extend beyond policy and funding, into deeply ingrained societal norms and expectations regarding gender roles and support for working parents. Illustrating the personal struggles faced within this societal framework, Lisa described the emotional toll of having to navigate parenthood and professional responsibilities, as her "cup always being empty".

The allocation of funds to early intervention programs is perceived as a reflection of societal values and priorities concerning disability, education, and child welfare, resonating with research in education (Peyton et al., 2020). As Stephanie noted, birth to three seemed undervalued compared to services for ages three to 21. This disparity in funding allocation per child further illuminates societal conceptions of what constitutes a worthy investment in education. Inadequate funding may signal a lack of societal commitment to supporting children and their families, hindering the recruitment and retention of qualified providers, as observed in studies across fields (Han et al., 2018; USA Today, 2019). Societal attitudes toward the value of early intervention services and the support of individuals with disabilities form the backdrop against which EI providers operate. The recognition and validation of their critical role within society are essential for fostering an environment that supports EI providers' professional fulfillment, job satisfaction, and retention.

Addressing systemic issues within the macrosystem necessitates collaborative efforts across various stakeholders, aligning with recommendations in special education and ECE research. Policymakers, advocacy groups, EI agencies, and community leaders must join forces to champion policies that prioritize early intervention services, foster inclusive practices, and safeguard the well-being of EI providers. By elevating awareness about the critical role of early intervention, challenging stigma, and advocating for equitable funding and resources, stakeholders can cultivate a more supportive and inclusive environment for EI providers, echoing strategies proposed in both fields (OSEP, 2020; PDK International, 2018; Shine, 2020). Additionally, initiatives aimed at promoting diversity, equity, and inclusion within the EI workforce are essential for mitigating disparities and creating pathways for underrepresented groups to flourish in their roles, aligning with efforts in special education (Carver-Thomas, 2018; Quigney, 2010; Rosenberg et al., 2007). Through concerted collaborative action to address systemic challenges, stakeholders can bolster support for EI providers and enhance outcomes for the children and families receiving EI services.

### **Implications and Recommendations**

This study's implications impact various stakeholders within Washington's EI system, including state leaders, institutions of higher education (IHEs), agency administrators, EI providers, and families. These implications stress the importance of collaborating as a unified system to address the critical shortages and retention challenges within EI in Washington. Together, the entire system must recognize and address the different perspectives of each stakeholder group, in order to sustain a system that can deliver high quality services to families and children in the state.

### ***State-level Implications***

This study identifies the urgent need for comprehensive policy reforms aimed at addressing systemic challenges within the EI system. These challenges include inadequate compensation for providers, unmanageable caseloads, and limited access to essential resources. To address these issues effectively, policymakers must prioritize investments in workforce development initiatives. These initiatives should encompass measures such as establishing competitive salary structures that recognize education levels, certifications, and years of experience. Additionally, providing professional development opportunities and comprehensive benefits packages is crucial for attracting and retaining qualified EI providers. Furthermore, policies should be designed to support the implementation of evidence-based practices and family-centered approaches, which are essential for enhancing the quality of EI services statewide.

**Unification of the WA EI Workforce.** Unification of the EI workforce in Washington can foster consistency and equity, enhancing the effectiveness and sustainability of the EI system. Currently, variations in workforce practices exist across different regions and agencies within the state. These discrepancies can hinder efforts to attract and retain skilled providers. Stakeholders must prioritize efforts to standardize workforce policies and practices by promoting uniformity and collaboration within the EI workforce. In doing so, stakeholders can address systemic challenges more effectively and optimize the delivery of services to children and families in Washington.

**Comprehensive System of Personnel Development.** Development and refinement of Washington state's Comprehensive System of Personnel Development is essential for workforce stability. It is imperative that Institutions of Higher Education, EI agencies, providers, and state leaders all participate in the development and implementation of WA's CSPD in order to fully

understand the necessary skills for effective services. The role of each stakeholder in this process must be clearly defined for effective collaboration and implementation of common standards and expectations.

Within the CSPD framework, establishing state-level mentoring and supervision programs could support consistent quality of professional development and provide ongoing mentoring opportunities that are accessible to all EI providers. This collaboration can also facilitate the creation of clear pathways for career advancement within the EI workforce. The limited resources with the EI system necessitate consolidated efforts for professional development, mentoring, and supervision across agency boundaries. This collaborative environment not only enriches the professional growth of individual providers but also enhances the overall quality and effectiveness of EI services with the state.

Washington should continue to explore and develop a tiered state-level credentialing structure. A tiered credentialing system allows for the differentiation of providers based on their lived experience, education, and specialized training. By establishing clear pathways for advancement and professional development, providers are incentivized to pursue ongoing education and training opportunities to progress through the tiers. This not only promotes continuous learning but also ensures that children and families receive services from providers with the appropriate expertise and qualifications for their specific needs. As a state-wide credential expands, it can serve as a powerful catalyst for incentivizing IHEs to develop more specialized and multidisciplinary EI programs tailored to meet the evolving needs of the workforce. A state credential creates a standardized set of expectations and requirements for EI providers, motivating IHEs to develop new courses or modifying existing curricula to ensure alignment with state-mandated competencies and standards. It is essential that IHEs collaborate with state and agency leaders and EI providers to design interdisciplinary programs that integrate

perspectives from diverse disciplines such as early childhood special education, speech-language pathology, occupational therapy, physical therapy, and social work.

Further, a tiered credentialing system promotes equity and inclusivity within the EI workforce by recognizing and valuing the diverse skills and experiences of providers from different backgrounds and disciplines. By offering multiple entry points into the profession and opportunities for advancement regardless of prior credentials or educational pathways, the system encourages greater diversity and representation within the workforce. This not only enriches the collective knowledge and perspective of providers but also ensures that EI services are culturally responsive to the unique needs of all children and families.

***Provider Compensation.*** Embedded within a state credentialing structure, the state may consider incorporating recommendations for tiered pay scales that reflect educational attainment, specialized certifications, and years of experience will incentivize providers to pursue continuous professional development. Currently, discrepancies in benefits packages, lack of structured pay scales, and variation in professional development support exist among different EI agencies and regions within the state. This lack of uniformity can lead to disparities in the quality of services provided and hinder efforts to attract and retain qualified providers. Additionally, exploring the feasibility of offering unified healthcare benefits across EI agencies can improve overall job satisfaction among providers. Unification ensures that all EI providers are fairly compensated for their expertise and workload.

***Service Delivery.*** Implementing a statewide service delivery model can promote consistency and equity in the provision of EI services across diverse communities. Clear and standardized expectations regarding service delivery can help reduce ambiguity and ensure that families receive the support they need in a timely manner. Additionally, exploring options for flexibility in meeting natural environment service requirements is essential for accommodating

the evolving needs and priorities of families. This may involve a thorough review of existing laws and regulations to align them with best practices and evolving societal dynamics.

### *Agency Implications*

Administrators within EI agencies play a pivotal role in creating and maintaining supportive work environments that foster job satisfaction and retention among providers; implementing supportive supervision practices and prioritizing a culture of respect and recognition is essential for promoting a positive work environment. Additionally, interdisciplinary collaboration must be supported at the agency level to strengthen the overall effectiveness and stability of the EI workforce.

**Work Environment and Support.** Enhanced structured onboarding processes, including comprehensive mentorship programs, can help new providers integrate into their roles more effectively. New providers should be paired with experienced mentors to offer personalized guidance to navigate the complexities of EI. It is imperative that mentors be trained to support new staff and are provided with adequate time to maximize a meaningful onboarding experience.

Additionally, creating supervision structures that prioritize individualized support and ongoing professional development can contribute to improved job satisfaction and retention. Managers and supervisors play an important role in supporting providers and fostering a culture of reciprocal feedback and open communication. Conducting regular one-on-one meetings with each team member to address concerns, provide personalized guidance and develop annual training plans tailored to unique learning needs and career goals create an environment where providers feel valued and supported.

Agencies should consider exploring strategies to address the emotional toll of providing EI services. This may involve facilitating access to affordable childcare and summer programs to support providers with caregiving responsibilities. In addition, offering flexible work schedules

and time-off allows providers to prioritize self-care and promotes a sustainable work-life balance. Agencies should also explore in-house mental health support or offer affordable health benefits that include access to external mental health resources to support providers.

**Service Delivery, Caseload Management, and Teaming.** Reviewing and revising caseload calculations to accurately reflect the complexity of cases can help ensure that providers are adequately resourced to meet the needs of the children and families they serve. Agencies and providers should collaborate to explore systems that incorporate the “invisible” work that exists within complex cases, enhancing the capacity of providers to support families effectively. Agencies may consider exploring alternative service delivery models, such as primary provider model or smaller team configurations that create consistent teams to facilitate more efficient and effective collaboration among providers. Finally, Washington state offers technical assistance to agencies that supports compliance as well as problem-solving challenges associated with service delivery. Agencies should take advantage of this resource and collaborate with the state to explore creative options for implementing best practices and ensuring compliance with state and federal requirements.

**Provider Compensation.** In addition to a potential state structure that makes recommendations for pay structure, it is essential that EI agencies prioritize consistent and predictable compensation packages for providers. With the rising cost of living, agencies must, at a minimum, prioritize annual cost of living raises for staff. Without this, retaining skilled and diverse providers will remain challenging. Further, while benefits packages for employees are essential, offering affordable benefits for dependents should also be prioritized.

### ***Provider Implications***

EI providers hold a valuable resource in this study's findings, enabling them to advocate effectively for their professional needs and prioritize self-care practices to address the demands

of their work. Providers can use the knowledge gained from this research to suggest evidence-based improvements to stakeholders, emphasizing the need for better support and resources. Advocating collectively for systemic changes, such as addressing workload issues and compensation inadequacies, providers can effect meaningful change in the EI workplace environment. Considering the potential benefits, exploring the possibility of unionizing may offer providers a stronger platform to negotiate for fair wages and better working conditions.

### **Directions for Future Research**

Future research in the field of early intervention should prioritize several key areas to enhance retention and job satisfaction among providers. First, conducting exit interviews and surveys with providers who leave early intervention settings can provide valuable insights into the reasons behind attrition. This research should focus on identifying relationships between providers' intentions and leaving the field. Exploring patterns in characteristics of providers who stay and those who leave could further inform strategies to improve retention and address underlying issues. Additionally, exploring gaps in provider knowledge upon entering the field can identify areas for targeted interventions to enhance job satisfaction. Analyzing spending and resource allocation at both state and agency levels is crucial to identify inefficiencies and opportunities for consolidation, which can directly impact provider workload. Understanding the impact of policy changes on early intervention systems is essential for ensuring responsive and adaptable policies that support provider retention. Finally, exploring the impact of interdisciplinary collaboration on service delivery and job satisfaction can inform strategies to optimize teamwork and support among providers, ultimately enhancing retention and job satisfaction within the early intervention workforce.

## **Limitations**

Several limitations should be noted. First, the reliance on self-reported data exposed the study to potential self-report bias, where participants might have provided responses that aligned with perceived societal expectations or desirability, rather than their experiences. This could influence the accuracy of the information, potentially affecting the validity of the findings. Efforts were made to minimize this bias by protecting the anonymity of participants. Additionally, while this study aimed to offer information specific to the job satisfaction and retention within the EI workforce in Washington state, the findings should not be interpreted as generalizable to other state contexts. The sample drawn from the state's EI professionals possessed unique characteristics and experiences that could differ from EI professionals in other states. Variations in state policies, demographics, and local factors may limit the extent to which these findings can be applied to other state systems. Consistent with the nature of a survey design, the study cannot determine causal relationships between specific factors on EI provider retention. This survey was able to capture the experience of this sample of Washington EI providers within a specific time point. Further, this study asked only about intention to leave the profession within the next year. No longitudinal or follow-up data were collected to measure participants' decisions to actually stay or leave their jobs. Lastly, the use of an online survey distribution method may have introduced some bias, as it limits participation to EI providers with an assumed level of access and proficiency with technology. This could impact the diversity of perspectives gathered in the study.

## **Conclusion**

In conclusion, this study emphasized the complex interplay of factors influencing job satisfaction and retention among EI providers in Washington State. Using Bronfenbrenner's

ecological systems theory and Maslow's Hierarchy of needs as a framework, this study explored how individual, organizational, policy and societal factors contribute to the experiences of EI providers. The findings highlight the complex nature of job satisfaction and retention within the EI workforce. Factors such as pay and benefits, supportive work environments, positive team dynamics, promotion opportunities, and work-life balance were identified as significant predictors of retention; challenges in these areas were also evident. For example, while participants valued supportive relationships and collaboration within their teams, they also faced obstacles such as inadequate compensation recognition for their expertise. Systemic issues within the EI field must be addressed to enhance provider satisfaction and retention. Strategies such as promoting supportive relationships, fostering collaboration, and investing in professional development emerged as key recommendations for creating a positive work environment within EI agencies. Additionally, advocating for policy changes at the state and federal levels to address funding disparities and improve compensation structures is crucial for supporting the retention of EI providers. Moving forward, it is essential for stakeholders to work collaboratively to implement these recommendations and create a more supportive and inclusive environment for EI providers in Washington. We must address systemic challenges and prioritize the needs of EI providers in Washington state to maximize the delivery of high-quality services to children and families and promote the long-term success and sustainability of the EI workforce.

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## Appendix A: Definition of Terms

***Part C EI Services:*** Refers to the early intervention services provided to eligible infants and toddlers with disabilities and their families under Part C of the Individuals with Disabilities Education Act (IDEA). These services encompass a range of supports aimed at enhancing the development and well-being of children with developmental delays or disabilities, beginning at birth and continuing through their third birthday.

***Comprehensive System of Personnel Development (CSPD):*** A coordinated framework designed to address the workforce-related needs within the field of early intervention. CSPD focuses on the recruitment, training, and retention of personnel involved in providing early intervention services. It is a multifaceted system that includes various interconnected subcomponents aimed at ensuring a well-prepared and highly skilled EI workforce.

***EI Workforce:*** This term refers to the professionals and individuals involved in the delivery of early intervention services to infants and toddlers with disabilities and developmental delays. The EI workforce comprises a diverse range of roles, including but not limited to administrators, therapists (occupational therapists, physical therapists, speech-language pathologists), early childhood special educators, and family resource coordinators.

***Administrators (Program Directors, Managers):*** Administrators in the context of early intervention are individuals who hold leadership positions within early intervention programs or agencies. This category includes program directors, managers, or those responsible for overseeing the operation, management, and strategic direction of early intervention services.

***Multidisciplinary EI Providers:*** A diverse group of professionals who work collaboratively within the early intervention system to provide comprehensive services to infants and toddlers with disabilities and their families. These providers come from various disciplines and bring their unique expertise to address the individualized needs of children and families in

early intervention. Multidisciplinary EI providers typically include therapists, early childhood special educators, and family resource coordinators.

*Therapists (OT, PT, SLP):* Therapists in early intervention encompass occupational therapists (OT), physical therapists (PT), and speech-language pathologists (SLP). These professionals are responsible for assessing and providing therapy services to infants and toddlers with disabilities who have specific needs related to motor skills, communication, and language development.

*Early Childhood/Special Educators:* Early childhood special educators are professionals with specialized training in working with young children and children who have developmental delays or disabilities. Sometimes referred to as developmental specialists, early childhood special educators often have broad developmental knowledge across domains and support specific needs regarding cognitive and social-emotional development.

*Family Resources Coordinators:* In Washington State, family resources coordinators (often nationally referred to as service coordinators) are professionals dedicated to providing information, guidance, and support to families of children with disabilities or developmental delays who are receiving early intervention services. They assist families in accessing resources, understanding the early intervention process, and connecting with community services.

***Retention:*** Refers to the act of maintaining early intervention providers within the field.

***Job Satisfaction:*** Job satisfaction is the extent to which early intervention providers find fulfillment, contentment, and gratification in their roles within the field.

## Appendix B: WA EI Job Satisfaction and Retention Survey

The main goal of this study is to enhance the Washington State Early Supports for Infants and Toddlers (ESIT) Early Intervention (EI) workforce by gaining insights from professionals like you. Your input is essential for exploring retention challenges through understanding job satisfaction and additional employment factors. This survey, conducted anonymously, aims to gather your candid feedback. Your insights will help tailor strategies specifically designed for Washington state's EI workforce. Ultimately, these efforts aim to positively impact both your professional journey and the outcomes for infants and toddlers receiving ESIT services.

### Informed Consent for Participation in Survey

#### Procedures:

If you choose to participate, you will be asked to complete the Job Satisfaction Scale and follow up questions. The survey will take approximately 20-30 minutes to complete and you will receive a \$10 gift card for participating. Additionally, you can enter a raffle for a chance to win one of two \$150 gift cards.

#### Risks and Benefits:

There are no anticipated risks associated with participating in this survey. Your involvement in this study significantly contributes to crafting strategies that support EI professionals in Washington state, creating a more fulfilling professional environment and benefiting the infants and toddlers served within ESIT.

#### Confidentiality:

All information collected during this survey will be kept confidential. Your responses will be anonymous and will only be reported in aggregate. No identifying information will be disclosed. Additionally, participants have the option to indicate their willingness to be contacted for follow-up interviews. If you opt-in to be contacted for interviews, your survey responses will be used to determine interview selection, and the information you provide will guide the questions asked in the interview. Participation in follow-up interviews is voluntary, and if chosen, you will be contacted separately to schedule the interview. Your confidentiality will be strictly maintained during the interview process, and any personal identifying information will be kept confidential.

#### Voluntary Participation:

Participation in this survey is voluntary. You are free to decline to answer any question or withdraw from the survey at any time without penalty.

#### Contact Information:

If you have any questions about this survey or your rights as a participant, please contact Molly Stryker (Poole), principal investigator at [mespoole@uw.edu](mailto:mespoole@uw.edu) or Kathleen Artman Meeker, academic advisor at [kameeker@uw.edu](mailto:kameeker@uw.edu)

#### Consent:

By clicking "Yes: I would like to participate in the survey " or continuing with the survey, you acknowledge that you have read the above information, understand the nature and purpose of the survey, and consent to participate voluntarily.

Please indicate below if you would like to participate.

- Yes: I would like to participate in the survey
- No: I would NOT like to participate in the survey

**Eligibility**

Are you currently working in Early Intervention in Washington state (Early Supports for Infants and Toddler- ESIT)?

- Yes
- No

Are you an administrator (i.e. Program Directors, Managers)?

For this study administrators are defined as individuals who hold leadership positions within early intervention programs or agencies, including program directors, managers, or those responsible for overseeing the operation, management, and strategic direction of early intervention services.

- No, my role provides direct services to families
- Yes, I *do not* provide direct services to families
- Yes and I *do* provide direct services to families

Please select the option that best describes your role in directly serving families?

- Certificated Educator (special educator or early childhood educator)
- Non-certified Educator (educator with ESIT exemption)
- Para-educator or education assistant (with or without certification)
- Teacher of the Deaf
- Teacher of the Visually Impaired
- Family Resources Coordinator
- Mental Health Specialist (Social Worker, Counselor, Psychologist, etc)
- Occupational Therapist
- Occupational Therapy Assistant
- Physical Therapist
- Physical Therapy Assistant
- Speech Language Pathologist
- Speech Language Pathology Assistant
- Nurse
- Dietitian or Nutritionist
- Other, please describe

**JOB SATISFACTION SURVEY (Spector, 1994)**

*Note: JSS questions have been removed for copyright purposes. JSS can be viewed at <https://paulspector.com/assessments/pauls-no-cost-assessments/job-satisfaction-survey-jss/>*

Do you have any intention or plans to leave your job in the next 6-12 months?

\*Please use the following definitions:

**Considering:** contemplating or entertaining the idea of leaving current job but have not actively pursued opportunities elsewhere

**Actively seeking:** proactively looking for new job opportunities, submitting applications, attending interviews, networking, or taking concrete steps to secure a different position

- *No plans* to leave current employment
- *Considering* leaving current agency; *not actively seeking* other employment
- *Considering* leaving EI; *not actively seeking* other employment
- *Actively seeking* different employment in EI
- *Actively seeking* employment outside of EI
- Planning to leave *without seeking* other employment
- Other (explain)

Select the top three factors impacting your decision.

- Work Itself:** The nature of the work and its challenges.
- Supervision:** Relationship with and quality of supervision received.
- Co-Workers:** Relationships and interactions with colleagues.
- Opportunities for Advancement:** Growth opportunities and career advancement prospects.
- Pay:** Compensation and fairness of pay.
- Benefits:** Non-monetary job benefits such as healthcare, leave, etc.
- Policies and Procedures:** Clarity and fairness of organizational policies.
- Communication:** Effectiveness of communication within the organization.
- Appreciation and Recognition:** Feeling valued and recognized for contributions.
- Work-Life Balance:** Ability to balance work and personal life.
- Workload:** Amount of work and tasks assigned.
- Work Environment:** Overall quality and suitability of the work environment.

Rate your level of satisfaction with balancing work and personal life while employed in EI:

- Extremely Satisfied
- Very Satisfied
- Moderately Satisfied
- Moderately Dissatisfied
- Very Dissatisfied
- Extremely Dissatisfied

Rate the extent to which your initial onboarding training prepared you for your current role and responsibilities:

- Extremely Well Prepared
- Very Well Prepared
- Adequately Prepared
- Not Well Prepared
- Not Prepared At All

Rate the level of support you feel within your work environment in the EI field:

- Extremely Supported
- Very Supported
- Adequately Supported
- Not Supported
- Not Supported At All

To what extent do individual providers and disciplines in your agency share a teaming approach?

- Highly Shared
- Moderately Shared
- Partially Shared
- Limited Sharing
- Not Shared

To what extent do variations in teaming approaches impact collaboration within services?

- Significantly Impact
- Moderately Impact
- Mildly Impact
- Minimal Impact
- No Impact

How many years of professional experience do you have in your role?

- Less than 1 year
- 1 -5 years
- 6 -10 years
- 11-15 years
- 16-20 years
- More than 20 years

What is your highest level of education?

- High school diploma or GED
- Associate's degree
- Bachelor's degree
- Certificate from a college or university
- Master's degree
- Doctoral degree

Do you currently hold a professional license (i.e. teaching certificate, department of health license, discipline specific licensure)?

- Yes, and using that license in my current role
- No, I do not have a current professional license or business license
- Yes, but not using that license in my current role
- No, but I am currently taking courses towards or applying for a license

Please select the option that best describes your employment status.

- A.
- I am an employee of an EI agency
  - I am a contracted worker
  - I am employed by a county or government agency

- B. - full time (36-40 hours per week)
- part time (Less than 36 hours per week)

Which county do you currently work in? (Check all that apply)

Adams County	Franklin County	Lewis County	Snohomish County
Asotin County	Garfield County	Lincoln County	Spokane County
Benton County	Grant County	Mason County	Stevens County
Chelan County	Grays Harbor County	Okanogan County	Thurston County
Clallam County	Island County	Pacific County	Wahkiakum County
Clark County	Jefferson County	Pend Oreille County	Walla Walla County
Columbia County	King County	Pierce County	Whatcom County
Cowlitz County	Kitsap County	San Juan County	Whitman County
Douglas County	Kittitas County	Skagit County	Yakima County
Ferry County	Klickitat County	Skamania County	

How many dependents under the age of 18, in your care, currently reside in your household?

- 0
- 1
- 2
- 3
- 4
- 5+

How would you describe yourself?

- Asian

- Black or African American
- Hispanic or Latino
- Middle Eastern or North African
- Multiracial or Multiethnic
- Native American or Alaska Native
- Native Hawaiian or other Pacific Islander
- White
- Other, please describe
- Prefer not to answer

Your participation is greatly appreciated.

Please complete the following [Google form](#) to receive your \$10 Tango e-gift card and to be entered into a drawing for one of two \$150 gift cards. You will receive an additional drawing entry for every participant who lists your name in the "Peer Referral" section.

After completing the Google form, please return to this survey to submit your responses!

## **Appendix C: Interview Protocol**

### **Introduction:**

**Thank you for agreeing to meet with me today to discuss your job satisfaction in EI and your intentions to remain in the field.**

**Today we are going to move through a series of questions that are based on your responses from the survey. You may decline to answer any questions you are not comfortable responding to. This interview is voluntary and you may ask to discontinue at any time.**

**I would like your permission to video and audio record this session. Recordings and transcripts will be kept separate from identifying information and will be discarded after the completion of the study. Do I have your consent to record?**

**YES \_\_\_\_\_ NO \_\_\_\_\_**

### **High Job Satisfaction:**

Regarding your high job satisfaction, what specific aspects of your role or the work environment contribute to this satisfaction?

### **Low Job Satisfaction:**

Regarding your lower job satisfaction, are there specific aspects of your role or the work environment contributing to this dissatisfaction?

### **Nine Facets of Job Satisfaction in EI**

\*ask questions based on highest and lowest two subcomponent scores from survey

#### **Pay:**

High Rating - High Pay Satisfaction: What specific aspects of your compensation or salary structure contribute most to your satisfaction in the Early Intervention field?

Probes:

- Can you share specific instances or experiences that contributed to your satisfaction with your compensation in the EI field?
- How does the adequacy of your salary in this field influence your overall job satisfaction?

#### **Pay:**

Low Rating - Low Pay Satisfaction: Could you highlight the aspects of your compensation or salary structure that contribute to your dissatisfaction in the Early Intervention field?

Probes:

- Could you provide examples of how the compensation structure within the EI field has fallen short of meeting your expectations or needs?
- In what ways would you suggest improving the compensation structure in the EI field to address dissatisfaction?

### **Promotion Opportunities:**

High Rating - Positive Promotion Opportunities: How do the available career growth opportunities within the EI domain positively impact your professional goals and aspirations?

Probes:

- Can you describe an instance where opportunities for advancement or growth within the EI domain positively impacted your career?
- How do you perceive the organization's approach to promoting career growth in the EI domain?

**Promotion Opportunities:**

Low Rating - Limited Promotion Opportunities: What limitations or obstacles have you encountered in pursuing career advancement within the EI domain?

Probes:

- Are there specific barriers or challenges you've faced when attempting to advance your career within the EI domain?
- What changes or enhancements could improve opportunities for career advancement in the EI field?

**Supervision Practices:**

High Rating - Effective Supervision: Could you elaborate on how effective supervision practices have positively influenced your work performance in the Early Intervention system?

Probes:

- Can you highlight specific instances where the supervision practices positively impacted your work performance in the EI field?
- What aspects of the supervision process do you find most supportive or beneficial?

Low Rating - Ineffective Supervision: How have ineffective supervision practices impacted your ability to perform optimally in the Early Intervention system?

Probes:

- Could you describe any situations where supervision practices in the EI field negatively affected your work performance?
- Are there improvements or changes you believe could enhance the effectiveness of supervision practices in EI?

**Fringe Benefits:** monetary rewards i.e cash offered to individuals based on assessments of their performance, or non-monetary rewards such as offering flexible working hours, paid leaves, health insurance etc.

High Rating - Satisfaction with Fringe Benefits: What specific fringe benefits provided within the EI field meet or exceed your expectations, contributing to your satisfaction?

Probes:

- Can you provide examples of how the additional benefits, apart from salary, have positively impacted your experience in the EI field?
- What particular fringe benefits do you value most within your role?

Low Rating - Dissatisfaction with Fringe Benefits: Could you identify the areas where the fringe benefits provided within the EI field fall short or fail to meet your expectations?

Probes:

- Are there areas where the non-monetary benefits provided in the EI field have fallen short of your expectations or needs?
- In what ways could the fringe benefits be improved to better support EI professionals?

**Contingent Rewards: Appreciation, recognition, and rewards for good work**

High Rating - Satisfaction with Performance-based Rewards: How do the recognition or rewards linked to performance positively impact your motivation and accomplishments within the Early Intervention framework?

Probes:

- Can you share examples of instances where performance-based rewards or recognitions positively impacted your motivation or work outcomes in the EI field?
- How does receiving recognition for accomplishments, especially linked to performance, influence your engagement at work?

Low Rating - Unsatisfactory Performance-based Rewards: Can you highlight instances where you feel your achievements or performance were not adequately acknowledged or rewarded within the EI framework?

Probes:

- Could you discuss any situations where the rewards or recognitions linked to achievements in the EI field were inadequate or inconsistent?
- What changes or approaches do you believe could enhance the fairness or effectiveness of performance-based rewards?

**Operating Procedures:**

High Rating - Positive Impact of Operating Procedures: How do the existing rules and procedures positively contribute to the effectiveness of service delivery within the Early Intervention system?

Probes:

- Can you describe how the required rules and procedures in the EI field positively influence the delivery of services or your work efficiency?
- What specific aspects of the operating procedures do you find most supportive in your role?

Low Rating - Negative Impact of Operating Procedures: Can you provide examples where the existing rules and procedures hinder or negatively impact service delivery effectiveness within the EI system?

Probes:

- Are there instances where the required rules and procedures in the EI field hinder or create challenges in service delivery or your work performance?
- How would you suggest improving or modifying these procedures to better facilitate the work of EI professionals?

**Coworkers:**

High Rating - Positive Coworker Relationships: How have positive relationships and collaboration among coworkers positively influenced your work environment within the Early Intervention domain?

Probes:

- Can you describe how positive relationships and collaboration with coworkers contribute to a supportive work environment in the EI field?
- What specific aspects of collaboration among coworkers do you find most beneficial in achieving your professional goals?

Low Rating - Challenges with Coworker Relationships: What challenges or obstacles have you encountered regarding collaboration or relationships with coworkers within the EI domain?

Probes:

- Could you share experiences where challenges in relationships or collaboration with coworkers have affected your work environment or performance?
- In what ways could the collaboration or relationships among coworkers be improved to foster a more conducive work environment?

### **Nature of Work:**

High Rating - Satisfaction with Work Aspects: Which aspects of your work within Early Intervention do you find most rewarding, contributing significantly to your job satisfaction?

Probes:

- Can you highlight the aspects of your work in the EI field that you find most rewarding or fulfilling?
- How do these rewarding aspects influence your overall job satisfaction?

Low Rating - Challenges in Work Aspects: Could you elaborate on the aspects of your work within Early Intervention that you find challenging or dissatisfying?

Probes:

- Could you discuss specific challenges or difficulties you encounter in your work within the EI domain?
- What strategies or changes would you suggest to address or mitigate these challenges?

### **Communication:**

High Rating - Positive Communication Dynamics: How do effective communication dynamics positively impact service delivery or team interactions within the EI system?

Probes:

- Can you elaborate on how effective communication within the EI system contributes to better service delivery or team interactions?
- What communication practices do you find most beneficial in your role?

Low Rating - Challenges in Communication: What challenges or issues arise due to ineffective communication dynamics impacting service delivery or team interactions within the EI system?

Probes:

- Are there instances where ineffective communication has led to challenges or misunderstandings in service delivery or team interactions in the EI field?
- In what ways could communication within the EI system be improved to enhance effectiveness?

### **Considering Leaving or Staying:**

**Considering Leaving Current Job:**

You mentioned contemplating leaving your current position. What changes or improvements within your role or the organization would potentially encourage you to reconsider staying?

**Probes:**

- Can you specify any particular changes or improvements within your role or the organization that, if implemented, would make you reconsider leaving your current position?
- Are there any aspects of your current role or workplace environment that, if improved, could potentially convince you to stay?

**Not Considering Leaving Current Job:**

Noting that you're not considering leaving your current position, what aspects of your role or the organization contribute to your contentment and desire to stay?

**Probes:**

- What specific elements of your role or the organization contribute significantly to your contentment and make you desire to remain in your current position?
- Can you elaborate on the factors that make you feel content and satisfied with your role or workplace environment, preventing you from considering leaving?

**Workplace Support:****Feeling Supported in the Workplace:**

You mentioned feeling supported in your work environment. What specific support structures or initiatives have positively impacted your experience?

**Probes:**

- Could you provide examples of support structures or initiatives within your work environment that have positively impacted your experience as an EI provider?
- How have these specific support structures or initiatives contributed to creating a supportive and encouraging work environment for you?

**Feeling Unsupported in the Workplace:**

Considering feeling unsupported in your work environment, what support structures or initiatives do you believe could positively impact your experience and contribute to a more supportive environment?

**Probes:**

- What particular support structures or initiatives do you believe are lacking or insufficient in your work environment that could enhance your experience as an EI provider?
- Are there any specific changes or new initiatives you think would significantly contribute to creating a more supportive environment in your workplace?

**Work/Life Balance:**

Can you discuss your work/life balance? You mentioned in your survey that you are \_\_\_\_\_ with your current work/life balance.

**Probes:****High satisfaction**

- What supports are currently in place that support your work/life balance?

**Low satisfaction**

- What particular challenges do you find managing your work and home life?

- Are there supports you believe could enhance your work/life balance?

### **Onboarding- Well prepared**

You mentioned feeling well prepared by your onboarding experiences. What specific experiences or structures positively impacted your feeling prepared?

Probes:

- How have these specific experiences or structures contributed to preparing you for your role in EI?

### **Onboarding- Unprepared**

Considering feeling underprepared for your role, what supports do you believe could positively impact your feeling prepared after onboarding? Were any experiences particularly unhelpful?

Probes:

- Are there any specific changes or new initiatives you think would significantly contribute to being more adequately prepared?

### **Approach Collaboration Impact:**

High Sharing of Approaches:

Regarding high levels of shared approaches among disciplines, how does this unified approach positively influence collaborative efforts within your team?

Probes:

- Can you describe instances where the unified approach among disciplines positively influenced collaborative efforts or teamwork within your EI team?
- How does the high level of shared approaches facilitate effective communication and teamwork among team members?

Limited Sharing of Approaches:

When noting limited shared approaches among disciplines, how do these differences in approaches affect collaboration among team members in delivering Early Intervention services?

Probes:

- Could you provide examples or situations where differences in approaches among disciplines affected collaboration or teamwork negatively within your EI team?
- How do these differences hinder effective communication or cooperative efforts among team members in delivering Early Intervention services?

### **Systems level impacts:**

Are there any State or local EI systems-wide structures that impact your job satisfaction?

Probes:

- Can you expand on how these impact your daily work and job satisfaction?
- Are there specific changes you would make to improve the impact or enhance your job satisfaction and interest in staying in the field?

### **Conclusion:**

**Is there anything else you would like to add?**

**Those are all of my questions! Thank you so much for your time. For your time I am offering a \$30 e-gift card. May I send this to the email I have on file?**

**Yes \_\_\_ NO: \_\_\_ Alternate email:**

**Additionally, I will be following up with you twice in the next couple of months, during data analysis, to do a “member check” of the main details of our meeting and the initial findings as a whole. Participant input in the analysis process is vital to ensuring accurate interpretation and representation of perspectives provided. For your participation in member checking I can offer an additional \$10 for responding to one or both emails.**

**Is the email I have on file the best way to contact you for member checking?**

**Thank you again for your participation!**

**Appendix D: Codebook**

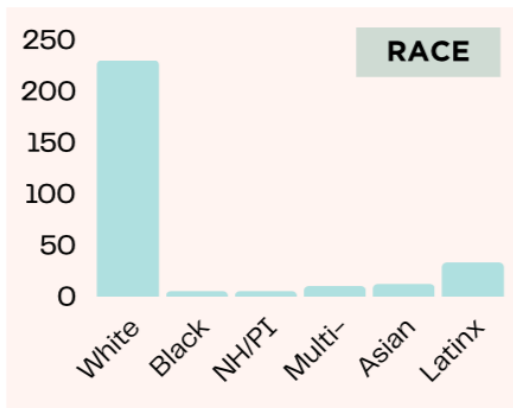
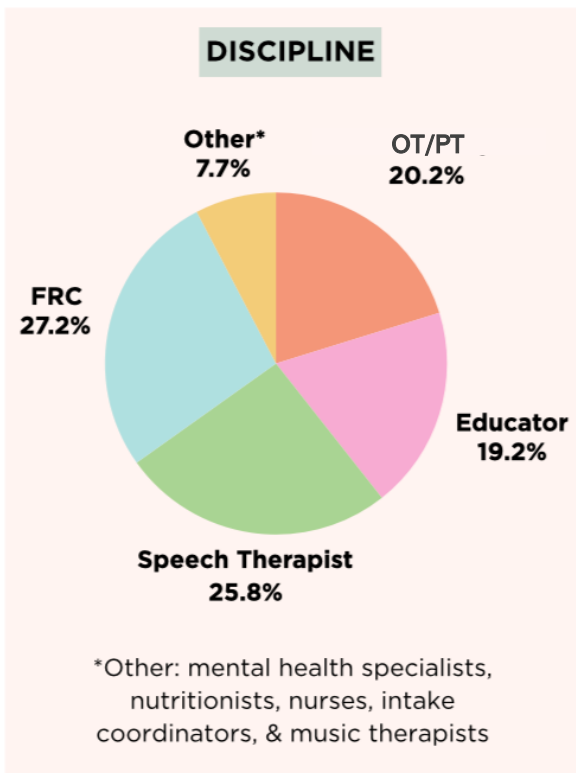
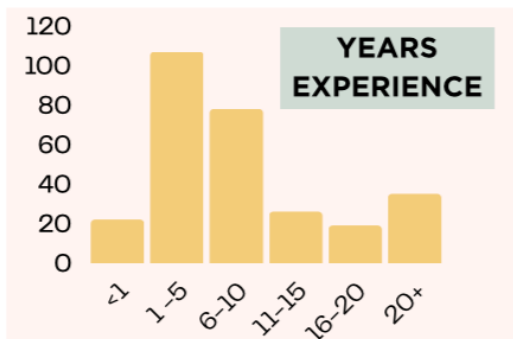
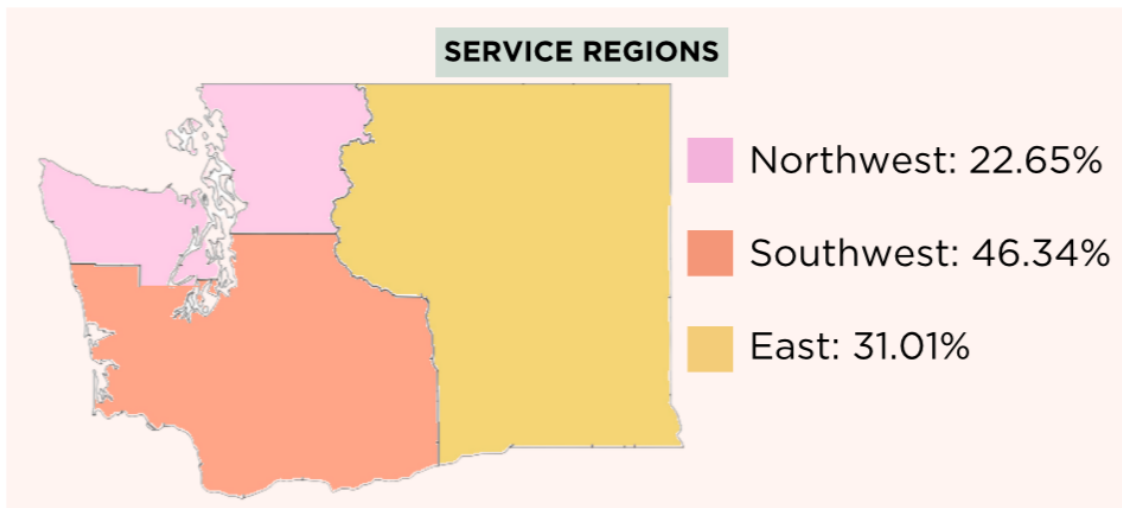
Code Title	Description
<b>1.0 Physiological Needs</b>	
1.1 Work-Life Balance	Strategies for maintaining a balance between work and personal life.
1.1.1 Time Management	Strategies for managing time effectively within work and personal responsibilities.
1.1.2 Flexibility	Autonomy to adapt work schedules to accommodate personal needs.
1.2.3 Self-Care	Ability to prioritize well-being and mental health.
1.2.4 Stress Management	Stress management strategies.
1.2 Basic Needs Fulfillment	Ability to meet basic needs.
1.2.1 Employment Benefits	Benefits provided by the employer.
1.2.2 Financial Compensation	Salary and monetary factors.
<b>2.0 Safety Needs</b>	
2.1 Job Security and Stability	Factors related to job stability.
2.1.1 Career Advancement	Opportunities for advancement within the agency.
2.1.2 Professional Development	Opportunities for professional growth.
2.1.3 Onboarding	Factors/activities related to agency training processes.
2.2 Work Environment	Aspects of the physical and cultural workplace.
2.2.1 Physical Workspace	Conditions and facilities within the workplace.
2.2.2 Organizational Culture	Cultural norms and values within the agency.
2.2.3 Systemic Barriers	Workplace characteristics determined by legal and other systems-level factors beyond agency control.
<b>3.0 Love and Belongingness</b>	
3.1 Collaboration	Collaboration and recognition among colleagues.
3.1.1 Interdisciplinary Team Dynamics	Dynamics and teamwork among colleagues from different disciplines.
3.1.2 Discipline Dynamics	Dynamics and teamwork among colleagues with the same discipline.
3.1.3 Recognition of Expertise	Acknowledgment of the expertise and contributions of professionals.
3.2 Organizational Support	Ongoing support provided by the organization to its employees.
3.2.1 Administrative Assistance	Assistance and support from administrative staff.
3.2.2 Supervisory Support	Support and guidance from supervisors.

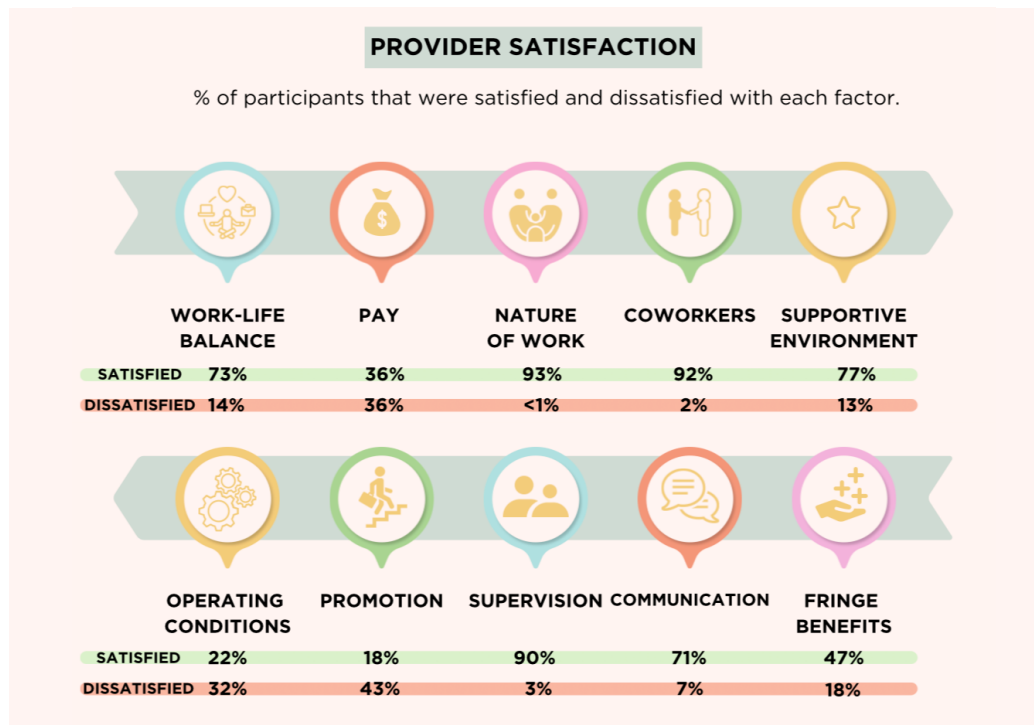
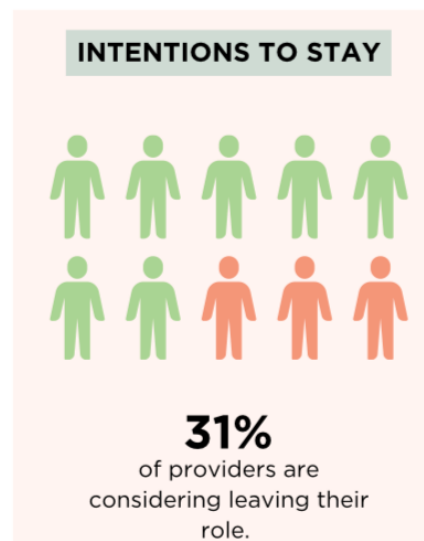
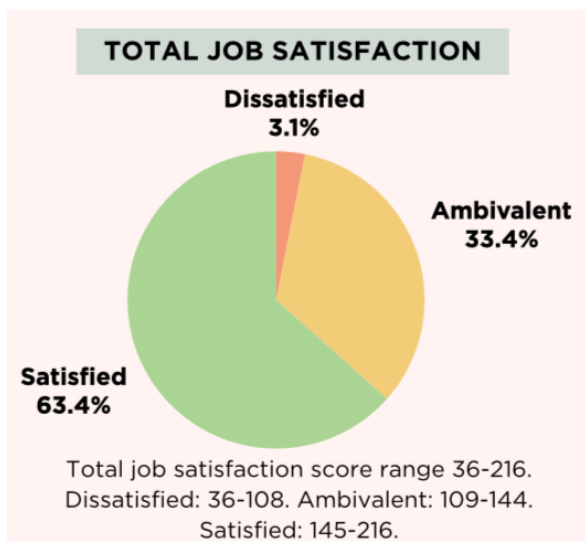
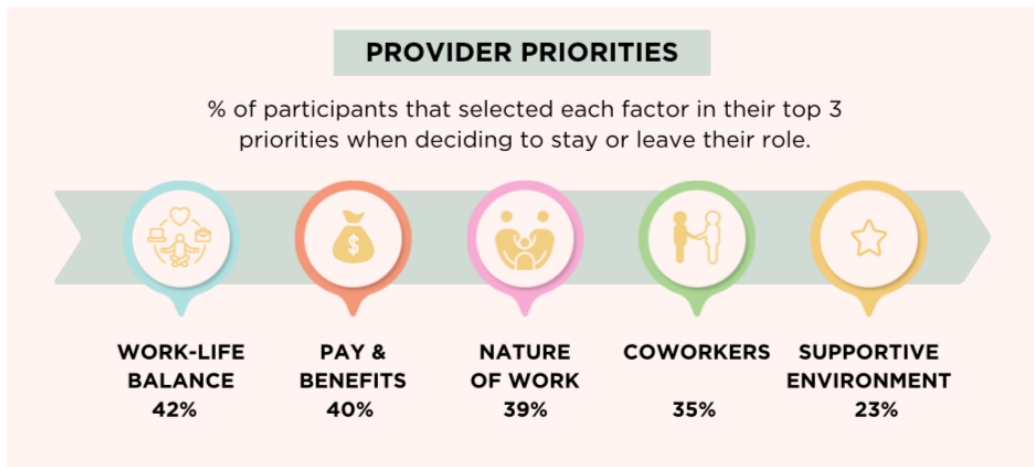
<b>4.0 Esteem Needs</b>	
4.1 Job Fulfillment	Satisfaction from the fulfillment of job duties.
4.1.1 Family Impact	Positive impact on kids and their families.
4.1.2 Personal Growth	Opportunities for personal growth and development within the role.
4.2 Service Delivery	Effectiveness and engagement in service delivery.
4.2.1 Family Engagement	Level of engagement and participation from families.
4.2.2 Service Effectiveness	Effectiveness of services provided to families.
4.2.3 Professional Autonomy	Provider discusses extent of independent decision making in service delivery.
4.2.4 Ethics	Provider discusses use of ethical clinical practice.
4.3 Perceived Value	Providers' perception of value in their role.
4.3.1 Positive Perception	Provider discusses their positive sense of value.
4.3.2 Negative Perception	Provider discusses their negative sense of value.
<b>5.0 Self-Actualization</b>	
5.1 Self-Reflection	Practices for self-reflection.
5.2 Overall Job Satisfaction	Overall satisfaction from work in EI.
5.2.1 Retention	Provider discusses decision to stay in role or leave agency.
<b>6.0 Miscellaneous</b>	
6.1 Additional Comments	Important comments or insights.
6.2 Notable Quotes	Memorable quotes.

Appendix E: Executive Summary

WASHINGTON STATE  
**EARLY INTERVENTION**  
 JOB SATISFACTION & RETENTION  
 2024

287 Early Intervention (EI) providers across Washington State were surveyed about their job satisfaction and intentions to remain in their role in EI.





## RECOMENDATIONS



### WASHINGTON STATE

- Unification of the EI workforce in Washington to standardize policies and practices.
- Continued development of a Comprehensive System of Personnel Development (CSPD) for workforce stability, including state-wide mentoring and professional development.
- Establish a tiered state-level credentialing structure to promote professional development and equitable compensation.



### AGENCIES

- Implement structured supervision, mentoring, and onboarding processes.
- Address the emotional toll on providers through flexible work schedules and mental health support.
- Revise caseload calculations to reflect complexities and explore unified service delivery models.
- Prioritize consistent and predictable compensation packages, including annual cost-of-living raises.

### PROVIDERS



- Use study findings to advocate for professional needs.
- Collective advocacy for systemic changes.
- Explore the possibility of unionizing to strengthen negotiating power.

Compiled from the Washington State  
Early Intervention Job Satisfaction and  
Retention Study  
2024  
Molly Stryker