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“How Do Early Interventionists Adapt Instruction When Delivering Services in Natural  
Environments?”

A thesis submitted in partial fulfillment of the requirements for the degree of Master of  
Education at Virginia Commonwealth University

by

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B.I.S. Virginia Commonwealth University -December 2018

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## Abstract

Early Interventionists (EIs) play a pivotal role in supporting development for young children with disabilities. It is vital that they are able to support child and family outcomes through building strong partnerships with families, utilizing best practices, and individualizing services to children and families. The purpose of this study was to explore early interventionists' perceptions regarding how they adapted instruction when delivering services in natural environments. Specifically, this study aimed to understand how changes in the child's skill level, interests, and level of engagement affected early interventionists' decision-making process during service delivery. A qualitative research design was employed, utilizing semi-structured interviews with early interventionists who provide services within natural environments across the state of Virginia. Thematic analysis was used to identify patterns and themes within the data. The data from the analysis revealed that early interventionists employed various strategies to adapt their instruction during service delivery in response to the children's and families' skill level, interests, and level of engagement. These strategies included child-led interactions, individualizing, coaching, and building rapport with guardians. The findings also shared there were environmental factors and barriers discussed that EIs perceived impacted their service delivery provision. The findings highlight the importance of EIs utilizing an individualized, flexible, and responsive practice that takes into consideration and responds to children and families' individual interests, levels of engagement, skill, and priorities. Further research is recommended to explore the impact EIs decision making has on child and family outcomes.

## Introduction

Early Intervention (EI) services are essential to improving the outcomes of infants and toddlers with disabilities and/or at risk of developmental delays. In Virginia, The Infant and Toddler Connection of Virginia (ITCVA) provides “supports and services for infants and toddlers from birth through age two who are not developing as expected or who have a medical condition that can delay normal development, and their families.” (ITCVA, n.d). After a referral has been made to ITCVA, either by the family or by a third party, families of eligible children may schedule an intake appointment at either their home or a place of their choosing. During this appointment a service coordinator will conduct an “Assessment for Service Planning” (ASP) in order to determine how the child is functioning in key areas of development. The information gathered will inform the professionals and the caregivers in order to determine the child’s goals and needs and becomes a legal document that is referred to as an Individualized Family Service Plan (IFSP). An IFSP is required to be reviewed at least every 6 months, as well as when a child has reached a goal or as the child’s needs change. This determines the frequency of services and who will provide those services. Developmental Services Providers (DSPs), Occupational Therapists (OTs), Speech Language Pathologists (SLPs), Physical Therapists (PTs), Audiologists (AUDs), and other professionals may provide services as determined by each IFSP (ITCVA, n.d). The Virginia Early Professional Development Center provides the *Infant & Toddler Connection of Virginia Comprehensive System of Personnel Development CORE COMPETENCIES* as a discipline specific outline for Virginia Early Interventionists to follow when providing services under Part C of IDEA. The Core Competencies share that, “Guided by each family’s concerns, priorities, and resources, Virginia early intervention personnel provide supports and services that are integrated into daily routines and activities within natural



environments where children and families live, learn and play” (Infant & Toddler Connection of Virginia, n.d.). Natural environments are defined by IDEA’s Section 303.26 as “settings that are natural or typical for a same-aged infant or toddler without a disability, may include the home or community settings, and must be consistent with the provisions of §303.126.” Families have an important say in determining where the services delivered will be provided.

From session to session there are many changing variables and barriers that demand an Early Interventionist to evaluate and reevaluate their service delivery in response. It is important to focus on the functional goals determined by the IFSP team when delivering early intervention services; however, it is equally important to take into account the present level of engagement, interests, and skills of the children and families receiving services as these fluctuate and change in a way that necessitates a flexible and responsive practice. Dunst et al. (p.90, 2021) found that “Learning opportunities that were interesting and engaging and that provided children contexts for exploring, practicing, and perfecting competence proved to be characteristics that were most development-instigating”. This is important to consider as early interventionists when providing services to children and their families as without engagement there is a possibility of the family discontinuing needed services. Keilty states that “Without the strategies to promote child engagement, caregiver disengagement in future home visits might result” (p.32, 2008). This indicates a need for early interventionists to be able to identify and utilize appropriate interventions that focus on maximizing child engagement when delivering services.

Johnson et al. (2015) shared that child-directed activities by their nature are relevant, meaningful and reinforcing to the child in a way that does not require external motivators and that this makes child-directed activities authentic. Families are the most valuable source of information when it comes to determining functional goals and building rapport with the

individuals that support the child is vital to supporting positive outcomes. One way to ensure service delivery quality is to ensure interventions are well monitored and adjusted if and when appropriate. Odom and Wolery (2003) discussed that it is important to carefully monitor and frequently adjust interventions when needed based on the child's interests and child- initiated interactions because young children are most active in their learning when they are doing activities and using materials that hold their interest. Given the short amount of time that is spent between early interventionists and the clients it is important to monitor progress and/or identify barriers that occur in relation to functional goals identified in the IFSP during each session.

It is important for Developmental Services Providers to provide individualized intervention practices that work with children and families to identify the individual needs and priorities of the child and family. Keilty (2017) stated that individualization is “the essential ingredient of family- professional partnerships” (p.6). Individualizing to the child and family's unique interests, routines, strengths, and individual cultural context can encourage participation and lead to better child and family outcomes. (Keilty, 2017). Dunst and Trivette shared in their research on family-systems capacity-building that, “participatory help giving includes practices that are individualized, flexible, and responsive to families concerns and priorities, and which involve informed family choices and involvement in achieving desired goals and outcomes” (Dunst & Trivette, 2009, p.131). In order to provide meaningful and effective services, the individualities of the children and families must be considered and responded to.

### **Rationale**

Early interventionists provide services to children and their families from a variety of backgrounds with the goal of promoting the child's participation within the family's routine activities in the child's natural environment. EIs aim to work with families to identify goals that

are meaningful to the family and embed intervention strategies into the family's routine to help support the child's participation development. For services to be relevant and meaningful, early interventionists need to promote levels of engagement of the children and families they are serving (Keilty, 2008). There is a great diversity amongst the children and families who are receiving EI services. Families have their own differing structures, goals, preferences, hopes, experiences, supports, and personal histories that EIs must understand and take into account when they are making service delivery decisions (Odom and Wolery, 2003). This necessitates a service delivery that is respectful and responsive of children's and families' individualities. To do so EIs must develop a strong rapport with the children and families they serve to understand these differences. Positive child and family outcomes are contributed to through a family professional partnership that is engaging, culturally responsive, and empowering (Keilty, 2017). In order to promote children and families' engagement, services and interventions must be meaningful to the children and families receiving services through responding to their individual interests. Research shows that through incorporating and responding to children's interests within everyday activities their engagement is promoted, which in turn builds their competence, promoting their further exploration and eventually leading to mastery (Dunst and Raab, 2012). Understanding what factors affect EIs service delivery decisions when they are responding to these factors can help inform the field of early intervention as to what strategies are being currently utilized, what barriers EIs perceive they are facing, and where there are gaps between research and practice. This research aims to investigate how Early Interventionists are responding to children's ever-changing skill levels, interests, and level of engagement, as well as what factors they perceive influences their service delivery decision making.

## Literature Review

### Introduction

In the field of early intervention, best outcomes are achieved when developmental service providers and parents both engage in a responsive practice with their child. In order to best support children and families receiving early intervention services, children need to be in an environment that is as highly responsive as possible. It is important for the field to understand what practices are identified within the literature regarding responding to daily changes with the child's level of engagement, interest, and skills. In the *Agreed Upon Mission and Key Principles For Providing Early Intervention Services in Natural Environments*, developed by the OSEP TA Community of Practice, the fourth key principle states that "The early intervention process, from initial contacts through transition, must be dynamic and individualized to reflect the child's and family members' preferences, learning [preferences] and cultural beliefs." Early interventionists (EIs) must not lose sight of the individual needs of the child and family while still focusing on their primary role of supporting the family members and caregivers of the child receiving services.

An Individualized Family Service Plan (IFSP) is composed of both child-focused and family-focused outcomes. Family-focused outcomes focus on areas of need identified by caregivers that will help directly or indirectly help to meet the needs of the child. Child-focused participation-based IFSP outcome statements address caregiver priorities within existing or desired routines to promote the child's learning and development while incorporating the children's interests (Shelden and Rush, 2014). Responding to a child's interests can help further a child's development due to the fact that the child is intrinsically motivated. Infants as young as

2 or 3 months of age can express personal interests as well as show interest in their surroundings. Recognizing and responding to these personal and situational interests can improve the child's participation and increase the child's competence due to the fact that these interest-based activities are intrinsically motivating to the child (Dunst, 2012). To ensure that early interventionists are delivering services that are dynamic and individualized, literature was reviewed in order to understand what dynamic and individualized service delivery looks like.

### **Research Questions**

There are a multitude of factors early interventionists must consider when they are delivering services. This literature review intends to answer the question, "How do Early Interventionists adapt instruction when delivering services in natural environments?"

### **Search Procedures**

A search was made through the VCU library databases Academic Search Complete, JSTOR, Special Ed Connection, and Google Scholar. Exclusion criteria consisted of articles that were published before the year 2003. While I wanted the literature to be as current as possible, I found that there was not as much literature surrounding my searches and expanded my criteria to be within the last twenty years. Other exclusion criteria were articles that were not peer reviewed. Articles were searched for using the phrases "Early Intervention", "responsiveness", "service delivery" or "service delivery models" or "service delivery process", "decision-making" or "decision-making process", and "infants or toddlers" or "early childhood", "parent-professional relationship", and "child-led". I then searched for articles that utilized interviews, focus groups, or literature review research methods to gain personal perspectives from early intervention professionals who are delivering Early Intervention Services. The five selected

studies utilized different types of qualitative or mixed methods research including interviews, focus groups, and surveys.

### ***Inclusion Criteria***

In order to reflect current research, the researcher only included articles in the literature review that were written prior to 2002. Criteria for inclusion also consisted of articles that engaged in qualitative research in order to gain perspectives of early interventionists. In order to investigate research that explored perspectives of early interventionists, studies in the review of the literature were only included if they engaged in interview and/or focus groups. Although this was not a systematic review of the literature, the researcher gained insight into perspectives of early interventionists regarding various factors surrounding service delivery.

### **Participants**

Five studies were reviewed with a total of 149 participants. Across all five studies 93.3% participants identified as women (n=139) and 6.7% of the participants identified as men (n=10), with 2 studies reporting all participants as women [Raab and Dunst, 2004; Weglarz-Ward et al., 2020]. While this is a disproportionately large difference in genders that are involved in the studies, this is reflective of the providers that make up the EI workforce in the United States of America (Hebbeler et al., 2007). Three articles reported on participants' race [Salisbury et al, 2010; Spence et al, 2023; Weglarz-Ward et al., 2020], 88.7% were white. For more on participants' demographic information see Table 1.

All studies provided information on providers' roles; the largest population of participants were service coordinators (n = 49). The second and third largest groups represented

were SLPs (n =20) and educators (n=36) (e.g. early childhood special educators, early childhood educators, special educators, teachers). The educational backgrounds of the participants varied across the five studies, with the majority of participants holding a master's (n= 73, 50.3%) or a bachelor's degree (n= 64, 44.1%). The three studies that reported the length of time participants had providing services to children with disabilities and/or developmental delays and their families [Raab and Dunst, 2004; Weglarz-Ward et al., 2020; Wright et al., 2010] ranged from less than a year (4 months) to 30+ years.

## **Methodologies**

Two studies utilized a qualitative focus group (Spence et al., 2023; Weglarz-Ward et al., 2020) in order to gather information from developmental service providers. Spence et al. (2023) engaged 67 early interventionists in one of 9 statewide focus groups in order to investigate to understand which family centered practices (FCPs) they used when delivering services to individuals experiencing vulnerable circumstances, as well as how they defined vulnerable circumstances in regards to the families that they delivered services to. Weglarz-Ward (2020) engaged 24 childcare and EI providers in 8 focus groups across one state to discuss their experiences with EI services in childcare settings. Four of the focus groups consisted of the child-care providers, and four of the groups consisted of the EI providers.

Two studies utilized focus groups and interviews (Salisbury et al., 2010; Wright et al., 2010) to gather information from developmental service providers about their perceptions and experiences working in early intervention. Salisbury et al. utilized focus groups and interviews, as well as the *Stages of Concern Questionnaire* (SoCQ; Hall and Hord, 2001) to collect data on the participants' perceptions as they adopted a family-focused collaborative consultation

approach. Wright et al. (2010) investigated early interventionists' perceptions about organizational factors that supported or hindered their implementation of Family Centered Practices (FCP).

Raab and Dunst (2004) utilized a face-to-face semi-structured interview protocol with 16 professionals working in early intervention in an attempt to determine how practitioners from different experience levels conceptualized and used natural environments in their work with young children with or at risk for disabilities.

## **Results**

Across the five articles reviewed from the literature, researchers investigated early interventionists' perceptions regarding several factors that influence their adaptation of instruction when working with children and families in natural environments. Raab and Dunst (2004) investigated how early intervention providers' experience level impacted how they conceptualized and used natural environments in their work with young children. Salisbury et al. (2020) examined the perspectives of six early interventionists over a 2-year period as they adopted and implemented a collaborative consultation approach to home visiting in urban neighborhoods. Spence et al. (2022) engaged in focus groups to gain information on early interventionist professionals' use of family centered strategies when delivering services to families experiencing vulnerable circumstances (e.g., homelessness, disability, poverty, foster care). Weglarz-Ward et. al (2020) engaged in 8 focus groups with 24 childcare providers and Early Intervention providers to discuss their experiences with EI service delivery within childcare settings. Wright et al. (2010) completed a qualitative, descriptive, and exploratory study engaging in semi-structured individual interviews with 24 service coordinators, senior



supervisors, and program managers to explore their understanding of organizational factors that either support or hinder their implementation of Family Centered Practices (FCPs) when delivering services to families. Across the studies reviewed, researchers found that early interventionists perceived there was a combination of both internal and external factors that affected their decision making when delivering services in natural environments.

## **Internal Factors**

### ***Children and Families' Unique Needs***

Across the literature reviewed researchers identified various internal factors that had a direct impact on service delivery provision from the perspectives of developmental service providers. Of these internal factors are the unique needs and interests of the children and families who are receiving services. Findings from Spence et al. (2023) showed that strategies used for individualizing services were discussed frequently from participants during focus groups in regard to children and their caregivers. Participants shared examples of strategies used to support the children based on their individual needs and circumstances, such as children who have been exposed to substances or who have had foster placements. Individualized family-specific strategies were also discussed such as empowering a parent/s who had a disability(ies) by using strategies that took into consideration their individual needs and learning preferences in order to create a coaching approach that would best support them and by result the child. It was expressed by multiple participants that each family required individualized supports. Salisbury et al. (2010) found that participants were initially concerned in adopting a family-focused routines-based intervention approach; all but one provider felt positive about adopting it by the end of the two-year study.

### ***Providers' Knowledge/ Beliefs/ Perceptions***

Results from three studies looking at provider's perceptions surrounding their own service delivery provision (Raab and Dunst, 2004; Spence et al. 2023, Weglarz-Ward, 2020) documented that a provider's own knowledge and experience level was also a factor that influenced their service delivery provision and instructional adaptation within natural environments. Practitioners that were less experienced tended to describe natural learning environments as a more adult-directed learning opportunity where they themselves were focused on eliciting adult-desired behavior. Conversely, the practitioners who were more experienced were more likely to view natural environments as more child-directed where the practitioners were mediating the parent's abilities to provide their children with everyday learning opportunities (Raab and Dunst, 2004, pg.22). Spence et al. (2023) findings share that some of the participant's perspectives that were shared in regard to working with children and families experiencing vulnerable circumstances were deficit-based and demonstrated a power differential between EI providers and the children and families served. Researchers perceived this to be rooted in the fact that the field of early intervention is a predominately monocultural (i.e., white female) field.

### ***Interdisciplinary Model of Collaboration***

In regard to the interdisciplinary model of collaboration in Early Intervention, Weglarz-Ward (2020) found that early interventionists in their study struggled to implement strategies in learning environments across the child receiving services routine when they were in a setting where there were large groups of children. While many of the EI providers described successful instances of collaboration with providers in child-care settings, some early intervention providers

felt the child-care providers often did not follow through with intervention strategies between their visits. Results from Wright et al. (2010) showed that although providers felt collaboration between service providers was a necessary component of providing Family Centered Practices (FCP), most of the providers reported problems with collaboration “on an intraorganizational level, particularly interdisciplinary, as well as on an interorganizational level.” (Wright et. al, 2010, p.126).

## **External Factors**

### ***Policies***

Across three studies (Salisbury et al, 2020; Spence et al, 2023; Wright et al, 2010) policy was shared by participants as negatively impacting effective service delivery in various ways. Participants from Wright et al. (2010) shared that they felt the issues regarding staff turnover and high front-line vacancy rates were due to a lack of effective recruitment and retention policies and procedures. One of the implications of this research is that “policies require further attention to ensure cross-jurisdictional, interdisciplinary, and intraorganizational consistency and clarity” (Wright et al., 2010, p.127).

Spence et al. (2023) shared participants expressed that system policies affected their ability to provide effective services to children and families receiving services. Salisbury et al. (2020) found that Early Interventionists who participated in their study perceived that their ability to provide collaborative consultative services was limited due to the Part C policies and structure of the state system they were working within. Further, organizational policy was changed over the course of the study in order to help participants successfully implement service delivery.

## *Professional Development*

Across three studies (Salisbury, 2010; Spence, 2023; Wright, 2010) findings showed that professional development was an important factor in regards to their ability to deliver effective services to children and families. Wright et al. (2020) found that a participants' level of education and their professional development were key contributors to their ability to implement family centered practices successfully. They also found that all participants, regardless of their educational background, benefited from ongoing professional development in order to successfully implement services that were family centered. Salisbury et al. (2010) looked at how a family centered found that professional development in combination with administrative support helped in positive changes at an individual, team, and organizational level. The study showed that the field of Early Intervention is in search of efficient and effective training and support for professional's in the field to develop relevant skills. Participants from the Spence et al. (2023) study showed that participants felt their daily work was impacted by a need for relevant professional development.

## *Caseload*

Early interventionists' typically work with a number of different families across the region they serve. Caseload size is determined by the number of families that are enrolled to receive services, the number of staff employed to deliver those services, and agency policies. Wright et al (2010) found that all but one participant found caseload size to be a major factor that negatively impacted their ability to implement a Family Centered (FC) model of service delivery. The participants in the study perceived this to be a result of their being a lack of organizational resources. One service coordinator from this study shared that, "The reality is that our caseloads

are very high...it's nice to say we'd all like to be family centered and make sure a family receives all this data and it's all written down nicely for them and we have quarterly contact with them or whatever but that is just not always the case...I think with the very nature of the numbers that we carry it's not always that easy to have that perfect little picture.” (Wright et al, 2010, p. 120).

### ***Cultural and Linguistic Factors of Families Served***

Early Intervention is a field in which culturally and linguistically responsive practice is paramount in order to provide services that are not only effective but ethical. The Division for Early Childhood's Position statement on *Responsiveness to ALL Children, Families, and Professionals: Integrating Cultural and Linguistic Diversity into Policy and Practice*, states that “Responsiveness grows from interpersonal relationships that reflect a mutual respect and appreciation for an individual's culture, values, and language. Responsiveness must be both personal and organizational for optimal outcomes of development and intervention services. Responsive early childhood programs and professionals honor the values and practices within the families being served as well as among people providing the services.” (Division for Early Childhood, 2010) Findings from two studies (Salisbury, 2010; Spence et al. 2023) shared that participants' perspectives surrounding supporting families from a wide diversity of cultural and linguistic backgrounds and the impact of those perceptions on their service delivery provision warranted further research. Spence et al. (2023) found that providers in their study often did not directly address positive strategies used for supporting families of diverse cultural and linguistic backgrounds and that the language they used was often deficit-based. Salisbury et al. (2010) found that providers perceived that the diversity among family's languages, customs, cultures, and structures affected their ability to provide effective family-centered service delivery, as well

as their ability to implement a collaborative consultation model. Participants from this study felt they needed more organizational support as well as reflective practice in order to provide quality service delivery.

### ***Community/Environment***

Early Intervention services are to be delivered to the child and family within the context of their everyday routines within their natural environments. Early Interventionists also must work with the family and child to identify accessible resources within the community that will help support the child's development. Therefore, it is imperative that early interventionists are able to utilize the community and environment confidently and knowledgeably. Four studies (Raab and Dunst, 2004; Salisbury et al. 2010; Spence et al, 2023; Weglarz-Ward et al., 2010) discussed various ways that the participants discussed their environment and its relationship to their service delivery provision. Raab and Dunst (2004) looked at the difference in perceptions between a group experienced and a group of novice practitioners regarding delivering services in natural environments. The results showed that the more experienced practitioners viewed natural learning environments as mainly community-based settings whereas the novice practitioners viewed natural learning environments as mainly early childhood program settings. Findings from Salisbury (2010) showed providers in their study felt that their service delivery provision was greatly impacted by working in urban neighborhoods. They felt that issues navigating the implicit and explicit rules surrounding the spaces where services were provided, the logistics of navigating transportation in urban neighborhoods, as well as safety issues, all impacted their ability to provide family centered services within the family's natural environments. Spence et al. (2023) showed providers perceived the environment they were working within to have a significant influence on their ability to provide Family Centered Practices to children and

families experiencing vulnerable circumstances. One provider shared how they built family capacity through helping families access community settings (Spence et al., 2023). Weglarz-Ward et al. (2020) looked at perception's early interventionists had about delivering services to children in childcare settings. The research showed that providers felt that while it can be successful it was difficult to successfully implement strategies working within child care environments, due to the fact that parents were mainly absent in these settings as well as that the child care providers did not consistently work on strategies discussed in between sessions.

## **Discussion**

All children deserve to be cared for and interacted with in an environment that is emotionally meaningful and validates their interests and individuality. This care must take into account the child's environments, as well as the varied relationships within those environments. Individualized Family Service Plans (IFSP) provide EIs with the opportunity to identify, with the family, who will be supporting the child and how they will be supporting the child. Kemp and Turnbull's (2014) own review of literature highlights that there is a lack of professional guidance in regard to individualizing services in response to the child or the specified child outcomes within the field of EI. It is important for the field to understand how early interventionists address and respond to the children's level of engagement, skills, or current interests. Of the eight studies that were reviewed by Kemp and Turnbull provided "little information on how to individualize given specific child and family outcomes" (Kemp and Turnbull, pg.305). To effectively support a child's development, EI's must take into consideration and respond to where a child is developmentally across all developmental domains during each session. Through this review of the literature it is apparent there is a need for identifying how to provide individualized service delivery and interventions that respond to children's changing skill levels,

interests, and level of engagement as most of the literature focuses on parent-professional interactions.

Individualized Family Service Plans (IFSP) provide Early Interventionists with a framework of priorities that guide service delivery decisions and that influences the use of interventions and coaching in ways that will help a child and the child's caretakers continue to develop in their natural environment. However, from session to session there are many changing variables and barriers that demand an Early Interventionist to evaluate and reevaluate their service delivery in response. The early interventionist must respond to a child's ever-changing environment by accounting for a child's changing skills, interests, and their level of engagement that day. While a child's IFSP goals provides an outline of an early interventionists' service delivery, there is a greater impact on supporting a child's development in all domains through a responsive practice that takes into account the daily differences among each individual session. The purpose of this study is to understand how Early interventionists respond to an ever-changing environment during service delivery.

### **Limitations**

As this was not intended to be a systematic review of the literature, this may not be representative of the full body of literature on the subject. Another limitation was that across all of the research studies reviewed the researchers utilized self-reported means of data inquiry instead of utilizing observational methods. Additionally, due to the research question asked, there was a lack of information systematically reviewed on the subject. Two studies (Salisbury, 2010; Weglarz-Ward, 2020) reported that they had a smaller than expected sample size.

### **Next Steps**



While I have found the focus in the literature to focus primarily on professional-caregiver interactions, I want to investigate the child-professional factors that influence the service delivery plan for that day. I am interested in what barriers they may come across when changing their approach and how they encounter those barriers.

I want to explore what factors Early Interventionist's view that change their service delivery when providing services in a natural environment. I am interested in what barriers they may come across when changing their approach and how they encounter those barriers. While qualitative methods have primarily been used to explore this topic, I have found a lack of research regarding Early Interventionists' personal experiences surrounding their service delivery provision.

## **Methods**

### **Research Questions**

The research study investigates the following: Based on a child's written IFSP goals, how does an early interventionists' service delivery change in response to the children's and families' current skill levels, interests, and levels of engagement?

This study will specifically investigate:

1. How do Early Interventionists respond to children's changing skill levels?
2. How do Early interventionists respond to children's changing interests?
3. How do Early Interventionists respond to children's and families' changing levels of engagement?

### **Participants**

Five Early Interventionists (N=5) participated in this research study. To be included in the study, participants had to be Developmental Service Providers or educators in Virginia's Part C early intervention system. In order to ensure that they would have enough relevant experience, participants had to be registered within the state of Virginia's early intervention system and have worked at least 10 hours a week for the past two years. Participants also had to be 18 years of age or over. Criteria for exclusion included being an assistant level provider. For this exploratory pilot study, the investigator intended to interview six to eight early interventionists in order to gain an adequate range of perspectives and experiences. However, only five interviews were conducted due to scheduling and changing responsiveness of previously interested potential participants. The investigator sent the participants an optional demographics questionnaire, however only two participants responded. Both participants identified themselves as female. One participant had worked for 4 years as a developmental service provider and had an average

caseload of 40 children/families. She held a bachelor's degree in psychology and a master's degree in Special Education. The other participant who responded to the demographic's questionnaire had worked for two years as a developmental service provider with an average caseload of 25-30 children/families. She held a bachelor's in Interdisciplinary Studies and a master's in Early Childhood Special Education. All participants worked across different parts of the state, as demonstrated by their response to interview questions.

## **Procedures**

### ***Recruitment***

Initially the student researcher emailed eight local system managers of the Infant and Toddler Connection of Virginia (ITCVA), Virginia's Part C Provider, with a request to distribute a recruitment email to developmental specialists either employed or contracted through the office. After two weeks the target number of participants had not been reached so a follow up email was sent to the initial Virginia ITC local system managers requesting they send a follow up reminder to the developmental specialists. Two weeks later the target number of participants still had not been reached so recruitment was expanded to additional local system managers for the ITCVA. In total 74 emails were sent to 25 ITC offices, yielding nine potential participants.

### ***Screening***

In order to determine eligibility, the research team created a screening form. The screening form asked potential participants for their email and questions based on the inclusion criteria. Eight of the nine participants who responded met the eligibility requirements. The participant who was ineligible for the study was unable to participate due to their occupational title of assistant level provider. The individual who did not meet eligibility was sent an email thanking them for their interest but stating that they do not meet eligibility criteria. Three of the

potential participants that were contacted did not respond to the email requesting availability for an interview. A second and third follow up email were sent to those same participants requesting availability for an interview and were also not responded to.

### ***Measures***

A researcher-developed semi-structured interview protocol was created by the student researcher with feedback from the faculty researcher and a doctoral candidate in Special Education and Disability Policy at VCU. The interview was expected to take between 60 and 90 minutes. The interview protocol consisted of seven questions. The interview questions were designed by the student researcher, with feedback from the research team. Questions were designed to gain the perspectives of EI providers surrounding their service delivery decision making. See Appendix B for interview protocol. The interview questions asked participants about their decision-making process while they were providing services to children and families. The questions asked participants about what strategies, barriers, and variables they encountered during service delivery provision.

### ***Setting***

Participants who passed the screening criteria for eligibility were contacted via email with a consent form, demographic questionnaire, and a request for participants to provide availability for an interview via zoom. All five participants consented to audio/video recording and were interviewed by the student researcher via a recorded zoom meeting. The audio from the interviews was transcribed via zoom and checked for accuracy by the student researcher. The five interviews totaled 118 minutes, with the shortest interview being 15 minutes and the longest interview being 50 minutes.

### ***Analysis***

After completion the interviews were transcribed by zoom and checked for accuracy line by line by the student researcher. The student researcher, faculty member, and a doctoral candidate in Special Education and Disability Policy at VCU engaged in data driven open coding of three interviews in order to develop an initial codebook (Creswell, 2012). First, the three members of the research team independently read and coded an initial interview. The research team then met to code the second and third interviews through an iterative process. The codebook was discussed by the research team and edited into a second version. The student researcher then coded the two remaining interviews and established an interrater reliability of agreement of 75% for the fourth interview and fifth interview with the other research team members. The team then met to review and come to consensus through discussion for the codes that were not in agreement.

### ***Quality Indicators***

For this research study, several quality indicators were used to promote trustworthiness of data (Brantlinger et al., 2005). The student researcher made sure that appropriate participants were selected and effectively recruited to answer the research question. The interview protocol was clearly worded and not leading. In order to manage researcher bias, the student researcher read each interview question as it appeared and refrained from interpreting the questions for the interviewee. The student researcher also utilized adequate mechanisms, in this case zoom, to record the interviews and made sure that information from the recordings were anonymized and audio/video recordings were destroyed after transcription to ensure confidentiality. The student researcher engaged in collaborative work through ongoing communication with the research team. This allowed the student researcher the opportunity to review and reflect on the research process as it unfolded. Documents were stored in accordance with the IRB approvals terms.

### ***Reflexive Statement***

Knowledge gained from families is one of the most vital sources of information Early Interventionists can utilize in order to inform decisions on service delivery. As an early interventionist, it is important to provide culturally responsive, high quality, individualized interactions with the child and caregivers as these interactions directly impact a child's development, as well as the parent's ability to support their child. My most relevant work experience working with children in Early Intervention was in an early educational center that utilized an ABA approach. I worked with children and families in their homes and in the communities where they lived in in the context of their natural routines. This provided a wealth of information that I felt I had not been able to attain working with the child within a clinic-based setting. I felt that in the clinic-based setting, oftentimes the child's personal interests, requests, or attempts for self-advocacy were ignored. I feel that in any setting, a child's attempts to communicate through words or behaviors, especially if a child is an emerging speaker or non-verbal, should be acknowledged and responded to empathetically, even if the words or behaviors were deemed nonfunctional. Personally, I believe the most effective and meaningful approach in early intervention is one that is highly individualized, trauma informed, culturally and linguistically responsive, and one in which interventions are embedded within the child's natural environments and routines. A practice that is considerate and responsive of all of these factors will lead to better outcomes for the child and the family member's supporting that child. I believe that the social environment is incredibly influential to a child's development and that understanding each families' individual culture and interests can help Early Interventionists' ensure that the services they are individualizing are culturally responsive and meaningful. Because the social environment is so important to childhood development, I find myself heavily

influenced by the works of the developmental pediatrician Stanley Greenspan's Developmental, Individual-Difference, Relationship-Based (DIR) approach. I believe that Early Intervention service delivery must be responsive to the individual differences of the child while supporting secured attached relationships children have with their caregivers. I believe that through following a child's lead, positively incorporating the child's changing interests, and responding to a child's current level of engagement and skill, we can help support better child and family outcomes.

## Results

The data for the interview themes for this study came from 160 coded segments from five different interviews and resulted in three parent codes and 42 sub codes. See Table 2 for the codebook. The three parent codes reflect the three main themes that the Early Interventionists reported affected their service delivery provision. The strategies used by participants were discussed for all research questions. When discussing responding to children and families' changing levels of engagement, participants also mentioned barriers and environmental factors they felt influenced their service delivery decision making. Early interventionists also discussed the impact a child's IFSP goals had on their service delivery decision making day to day.

### **Research Question #1: EIs' Response to Child's Skill Levels**

#### *Strategies*

Participants shared multiple strategies that they utilized when responding to the child's skill levels. The top three strategies participants mentioned when discussing responding to a child's skill level were relying on their own knowledge of development, scaffolding, and celebrating success / ongoing progress. These strategies were all mentioned by two participants. Two participants described utilizing their knowledge of development as a strategy. One participant described the importance of referring to the CDC's information regarding developmental milestones in order to inform their service delivery provision in response to a child's changes in skill level.

It can be helpful kind of coming back to that, you know, good old-fashioned CDC

Milestones. You know, what are we expecting at this month, this month, this month?

Because even if a child is delayed because of some sort of diagnosis, you can still kind of



follow that plan and sort of it helps me as a professional sort of know what might be coming next. (Participant #3)

Two participants described their understanding of scaffolding as a strategy when responding to children's changing skill levels. One participant described their use of scaffolding to inform their decisions through paying attention to where the child is developmentally.

We're not going to jump. We're not going to try to reach the top of the building before we get from the basement to the first floor. So, I just yeah, you just keep going. You know that's where the kid is, all right. What's the next step that you can get to next? And how can we do that? (Participant #4)

Another participant described their responsiveness to the child and family was informed in part by utilizing scaffolding as a strategy they utilized when responding to a child's changing skill levels.

So, I try to adapt as quickly as a child learns. It's not perfect, obviously. But there's all these tiny steps when you're working on a skill with a child, and so if they've met the first 3 tiny steps, then you don't want to keep working on this down here. You want to kind of push them to the next thing. So, I think it's really about taking the larger skill that the family wants the child to learn, and then breaking that down into those stair steps and helping them just kind of go up until they've mastered that larger skill. (Participant #2)

Other notable strategies used by participants in order to respond to the child's changing skill level were progress monitoring and teaming. One participant described using progress monitoring as a strategy in order to inform their decision making in relation to a child's changing skills levels.

But I do keep my eyes on the goals when there's bounces in development, because I'm tracking for my documentation we have to track when that goal has been met and it also again informs your 6-month reviews or your annual, your exit indicators. If a child's language development starts to really explode where the joint attention piece is there, but perhaps they're not using their language to, in a more sophisticated way in between 2 and 3 years old. Sometimes it can be appropriate for a transfer of type of services, but it just kind of depends on where they are on the transition process and it's not often done that often. I think it's done more with the motor that the family of kids, O.T. 's, P.T.s, where they gain those motor skills. They've met their goals, and they transfer it to a language or a DS person. (Participant #5)

When asked how they responded to a child's changing skill, one participant described utilizing teaming in order to make sure the child and family are receiving the most appropriate services and service providers that they can.

So, in our practice we use teaming the primary provider model. So oh, if there are things that are outside my scope that I'm not sure of, maybe have a trick or 2, but you know, not sure of exactly what I can do. I will. I'll go to my team first and get some ideas, and then, if it's something that I'm not comfortable with, or I just don't have the skills for then we'll have a review, and we'll switch up the providers that are the most appropriate. (Participant #4)

## **Research Question #2: EIs' Response to Child's Changing Interests**

### ***Strategies***

Participants from the study described multiple strategies they utilized when responding to children's changing interests. Four of the five participants described using the strategy of

engaging in child-led interactions in order to capitalize on the children's interests to create an environment where the child is intrinsically motivated.

So, if they all of a sudden don't like cars anymore, and I've got this whole idea of my head of how we're going to play with the car in a new way... We're not doing that, you know. I'm not going to force the child to do something that they're not interested in, because then they're not learning. Because it's all about play and interest at this age. (Participant #2)

Another participant described how their graduate experience delivering services in early childhood education settings that used a child-led (Reggio Emilia) philosophy translated into their professional roles through their understanding of how to use child-led interactions when delivering responsive services in the child's natural environment.

Our units and our activities and all of that were based around, you know, what the child, what the child was interested in whether it was something that they could, you know express to us, or something just that we notice, based on observation like in their pattern of play, that sort of thing. And as far as in early intervention it's huge because you are going into the child's environment, and we're not, you have to follow their lead, and you have to watch what they're interested in, because it's not like in the school system, where you can have all of your, you know, beautifully organized materials, and you can, you know hand, select certain things, you know, when you're out in the field in a house you've got to follow what the child is doing. (Participant #3)

The same participant, in addition to one other, also discussed the use of parent education as a strategy when responding to children's interests in order to support family members to work on the child's skills while taking the lead from the child.

I find that it's actually probably one of the best parts of my job is explaining to families why what he's doing is important. So even just this morning I was explaining to the mom, you know, when he is, when you see him doing this or playing in this certain way, you know, this is where, what, what, how it's benefiting him. Here is what he's working on cognitively. Here are some concepts that he is kind of tinkering with as far as you know, logic and thinking on top of, you know, fine motor skills and the language and social so sometimes I feel a bit like a like an interpreter, or like an ambassador of the toddler, you know, the kind of explaining like this is actually it may seem like he is just, you know, doing something ridiculous, But actually, if you watch, watch this, look what he's doing, and here's you know, here's why it's important. So yeah, and in order to do that, you gotta follow what the kid's interested in so. Takes a lot of practice. (Participant #3)

The other participant expressed using the strategy of parent education similarly, "Everything that I want to do with the family I want to show them that they can follow their child's lead and that we can still work on goals and developmental skills". (Participant #2)

### **Research Question #3: EIs Response to Child and Family's Level of Engagement**

#### ***Strategies***

Participants described the levels of the children's and families' engagement as having a significant role in their ability to provide effective services. "The service doesn't work if we don't

have family engagement in my professional opinion. So, I try to pull from everything that I've ever experienced to get families to engage.” (Participant #2). The top two strategies shared by participants that they felt helped them effectively engage with parents and children during service delivery provision were building rapport with families and coaching with the parents. Three participants frequently described building rapport with the families as a strategy that they felt helped them effectively engage with children and families. One participant described the importance of building rapport as a means of establishing trust with the families that are receiving services.

So that's a big part to kind of build that rapport. Get that trust factor going that relationship, that feeling that they can, you know, talk to me without me being judged or feeling like you know I'm some kind of like little expert in the ivory tower or things like that. (Participant #3)

Three participants described utilizing various components of coaching when working to build family and child engagement during service delivery provision.

If a family is not engaging with me, and I do have them present then I will usually ask them to do something. Like if I'm playing with the child, I'll ask them to take a turn to play with the child. If they are distracted, or the child is even distracted by the television, I might ask...can we watch a video of Coco Melon where maybe we know a song with gestures, so we could do that with them, and you could help them through it. (Participant #3)

Another participant described the importance of coaching as it related to the children's and families' outcomes.

That is something that has taken me a little bit of time to figure out, because coaching is one of the best things that you could do, because you want the family to be able to carry over these strategies, because that's where they're going to be most successful. The kids are going to be most successful. (Participant #4)

A participant in the study discussed their perspective as they adopted a family-focused strength-based approach within the state this study was conducted in, from a child-focused deficit-based approach that was utilized in her previous state of employment.

It was you bring a bag in; you play with the kid, you leave. So, when I moved here it was very different, and so I've had to wrap my head around that. But I like it so much better. I hate going in playing and leaving like, I, I feel like I'm not doing anything. Although fun, I'm not doing anything. (Participant #4)

Participants also described other notable strategies they perceived helped their ability to support family engagement: recognizing family systems, connecting families to community resources, and explaining to families receiving services the philosophy of early intervention.

### ***Barriers***

Participants described multiple barriers as related to their service delivery provision and how they felt those barriers affected their ability to support families' engagement. Three participants mentioned family engagement as a barrier, with two of the three stating that it was the biggest barrier they faced when providing services. "Family engagement is really the biggest one I'd say for other families" (Participant #3). Another participant described family engagement as a barrier resulting from families having received services from a deficit-based child-focused early intervention service delivery model that did not focus on building parental capacities to work with the child.

So? But of course, there are some of those families who either had previous therapy somewhere else, or with somebody else that wasn't doing coaching. And so, they're just like, okay. I'm kinda over here doing my thing or have their own things going on.

(Participant #4)

Another barrier participants identified that they felt affected their ability to engage with children and families was working with a family whose primary language spoken at home was different from the providers.

This is situational, but language is one. We, I feel like it's so important to use an interpreter if I don't speak the family's primary language. And so that is also something that's a priority for me is to make sure that I can go when an interpreter can go. Because if I'm not able to communicate what I'm doing, and why I'm doing it the way that I'm doing it. Then it's not really, they're not going to be able to practice what I'm trying to share with them. So, language can be a barrier. I think. (Participant #2)

Another participant described similar feelings, sharing situations where they felt interpretation services would help, but some families had turned down those services.

Sometimes it can be more difficult with families who I feel that interpretation services would benefit, and they decline. And you've got to work with a family and you're not all that... there's a certain level that sometimes is not always understood. And so really having to back up. What does meeting this family where they are, look like within the time that we have. (Participant #5)

### ***Environmental Factors***

Participants described environmental factors that they felt influenced their ability to successfully engage with children and families receiving services. Two participants described the

setting of service delivery as a factor that negatively impacted their ability to engage with children and families. One provider described the difficulty coordinating care with other providers within a childcare setting.

And then finally, I think one of the other big barriers is working in the childcare settings because a lot of a lot of childcares are like, okay, take them, Go right? No, no, no, that's not what we do, but it's very, very hard to coach, because they can't sit there and and talk to you, and listen to all your strategies, and watch everything you do, and practice the entire time, because they have a whole class. So, I have yet to really find the best practice in daycares. I do a lot of modeling a lot of pointing out a lot of "Hey, you're changing this kid's diaper. Tell me about this real quick, you know you have 2 seconds". So, I'm not a big fan of going into day cares unless they really really need our service in there. So, I try to figure out like, where is the big issue. Can it be addressed at home? Best versus at the Child Care Center? (Participant #4)

Another participant explained the setting they had the most difficulty engaging with children and families, as well as the early childhood educators they were working with, was in childcare settings due to the amount of distractions in the environment.

One would be what we just spoke about, which is getting engagement. My families, or even the hardest time I feel like to get engagement is actually, when I'm in a center, like a daycare center, early head start center because they're not the only child in the room, so it's harder to get the teachers focused on what we're doing. So, I'd say that that's a challenge just to get that engagement piece in some settings. (Participant #2)



Two participants stated that they perceived their ability to engage with children and families receiving services was affected by their “impact to control” over situations. One participant described this as a benefit to their ability to engage with children and families.

I have a little bit more control when families are coming to the group for a group therapy session for developmental services because ahead of time, I'm able to prep them for what is expected of them in that group setting. (Participant #2)

One participant described this as negatively impacting their ability to engage with children and families receiving services due to their inability to communicate with the family. “And yes, the mom didn't show up because her phone was turned off for no electricity, and [it was] our first appointment.” (Participant #5). Other discussed environmental factors that affected participants ability to engage with children and families were competing priorities and provision of service delivery.

### **Additional Factors**

#### ***Strategies***

One additional strategy that was shared by all 5 participants was individualizing services. Individualizing was shared by participants across all categories but was often discussed in relation to being flexible in their service delivery. One participant described using the strategy of individualizing in order to respond to the child’s interests, “I mean I just think you’re just constantly adapting. If the child is not responding, then you gotta stop what you're doing and try and do something else” (Participant #1). One participant discussed being flexible in their service delivery approach by shifting their service delivery plan to address the caregiver’s immediate concerns.

Or do I need to take, for example, do I need to take time to let them kind of vent about what's up in the forefront of their mind, you know, even if it has nothing to do with you know what we had on our plan? (Participant #3)

Another participant described that individualizing services was a requirement of the profession due to the rapid growth and development that children and families experience within the first three years of their child's life, and that as practitioners it is important to always respond to the individual priorities of each family.

There are some families that are still very against, you know, using signs. Okay, cool, you know. We'll figure out a different way. Or are the kids just not picking up on signs? How can we get them to communicate in a different way? What about a PEC system, you know? So, flexibility really is the number. One thing of early intervention. You have to be flexible. These kids are ever changing their first 3 years of life. They're growing so much family. All families are different. All families have different priorities, and they find different things important than other people may find important. So, I really think, going into a home and providing a service and early intervention, you have to have an open mind, and you have to be okay with this family might not want this, or might not like this. (Participant #4)

Another additional factor that was discussed by four participants as a strategy they utilized was addressing the families' immediate concerns. Multiple participants expressed that while they were mindful of the goals on the child's IFSP, the caregiver's priorities often determined what the providers focused on that day. Three providers expressed that the family's pressing priorities in turn were their most pressing priority during their service delivery sessions. One provider discussed this in relation to the short duration of service delivery sessions.

I'm only seeing them one an hour a week, you know. I'm still going to be like, 'Well, what's happened with the child that they've been not sleeping well or feeding.' Well, you know, there can be some just some physiological things that we'll check in on. But really, it's about again, family priorities. And how am I gonna adapt to meeting the child where they are mindful of what we're working on? You know I'm. I have in my head always the bigger picture. Parents have in their head what's their priority that session, you know.

(Participant #5)

One participant also explained how addressing the families' immediate concerns was a strategy that they often employed due to those concerns being the priority of the families.

I start every session with what's been going on. And what do you need help with, you know? So yes, they're there, and yes, in early intervention. You know most of the goals. You can document pretty much anything towards them, because their little kids, you know. So, it's play, and it's communication, and it's walking, or you know, whatever it is. So usually I can find the place to put everything. But to be honest, it's not my number one go to, it's what is important to you, and how can I help you through that? And I tell families all the time like we may not have a goal for sleeping. But if you have a concern with sleeping absolutely, we're gonna work on it, no doubt. (Participant #4)

Another participant from a different part of the state also discussed that addressing certain priorities like sleeping, as well as eating, often took priority within their service delivery sessions.

but the third piece I'll be honest has to do with the parent, the parent concern so, and that is always a moving target. So, and I'm very open with our families that if I come in and you have something on your mind that is just, you know, really pressing, that you really

want to talk about, please. We can talk about that. It may not be part of the goals, but it, for example, a really common one is sleep. So we aren't, if they aren't sleeping, if they aren't eating and kind of that base are not met. We have to start there before we can get into anything higher level. (Participant #3)

## **Impact of Child's IFSP Goals on Service Delivery**

### *Strategies*

Participants were asked to what impact a child's current IFSP goals had on their decision making each session in regard to service delivery. Four participants shared that goals influenced their service delivery decision making, however addressing the families' immediate concerns always took priority within each session. One participant described that they looked at three things in order to prepare for each session. The first was the contact notes from the previous session, the second was the IFSP goals in order to compare and contrast to the contact notes, and they stated that,

the third piece I'll be honest has to do with the parent, the parent concern so, and that is always a moving target. So, and I'm very open with our families that if I come in and you have something on your mind that is just, you know, really pressing, that you really want to talk about, please, we can talk about that. It may not be part of the goals, but it, for example, a really common one is sleep. So we aren't, if they aren't sleeping, if they aren't eating and kind of that that base are not met. We have to start there before we can get into get into anything higher level. (Participant #3)

A participant delivering services within another part of the state shared a similar approach to their service delivery decision making regarding addressing family priorities, in this case using an example surrounding issues regarding the child's safety.

I walk into the home and the family says, “I'm not concerned about the fact that he's not taking steps at all today, but yesterday he choked and gagged on a cookie”, like, then we're not, well, we're not doing walking, we're doing whatever they are most concerned about in that moment. So, the goals do impact what I'm gonna do. But, and obviously I have to write my note associated with the goals, so we at least check in on the goals. It just might not be the total focus of the whole session, because the family priority is what is number one for me personally as a provider. (Participant #2)

One participant described that while goals helped inform their decision making, they felt that “They're secondary to parent priorities... I can address any goal within a parent's priority” (Participant #5). One participant expressed that while the child's IFSP goals influenced their service delivery, sometimes they felt the goals were not reflective of the child's current skill level.

Granted sometimes the goals with an IFSP is what the parents want. And so, a goal may be about talking and they haven't set a goal up for a kid who's on the spectrum, the autism spectrum, so if there's no goals about imitating, eye contact, attending, imitating play. You know, there's those pre foundational skills, preverbal skills, that you have to have before you can talk. (Participant #1)

The other most commonly discussed strategy when participants were discussing the impact of a child's IFSP on their service delivery decision making was utilizing the strategy of a reflective practice. One participant shared how reviewing the IFSP goals helped give them an understanding of what they might be able to expect,

So, the ISFP goals help me kind of have an idea of what might happen when I go into the family's home, especially my new kiddos that I have not met before. Or when they're

coming into the group setting for the developmental services to seeing the goals gives me an idea of what I can expect from them potentially. (Participant #2)

One participant shared that they reviewed the IFSP goals in relation to their contact notes from the previous session in order to inform their decision-making prior to service delivery.

So, it definitely has a pretty big impact I would say. It affects how I plan for session. So, when I am preparing, in fact, I have a stack of them sitting right here next to me. I always look at a child. I look at 3 things. I look at my contact note from the last session. What did we work on? Kind of refresh my memory of what we did, especially for my kids I only see like once a month, and then I also will then look at the IFSP. Look at the goals kind of compare and contrast what we worked on last session kind of where it falls within the goals. (Participant #3).

Another participant shared a similar statement, expressing their use of reflective practice when preparing for service delivery sessions. “The first is that I go in, and I’m like here the goals that that were written at the initial and where they at, you know, just trying to get a good baseline if anything is changed” (Participant #4).

## Discussion

This study investigated how early interventionists adapted their instruction when delivering services to children and families in natural environments. The student researcher wanted to investigate further, how early interventionists respond to changes in a child's interests, skill levels, and level of engagement, as well as what factors they perceived influenced their service delivery decision making. Research shows that EIs need to account for, and respond to, a variety of internal and external factors in order to provide high-quality service delivery to children and families. It is important for the field to ensure that practitioners are utilizing strategies and evidence-based practices that are family-focused, strengths-based, culturally responsive and individualized to each family's strengths, priorities, concerns, and learning preferences. Research has shown that there is a need in the field of EI to investigate how to lessen the gap between effective practice and actual practice. Participants described various internal and external factors that they felt influenced their decision-making during service delivery. Participants interviewed in this study were working as developmental specialists contracted under Virginia's Part C Early Intervention system in separate parts of the state.

The student researcher reviewed literature that was focused on the examination of Early Interventionist's perspectives surrounding their service delivery approaches across a wide variety of specific circumstances that EI's can, and often are, faced by in various settings. These topics explored specific situational issues and common challenges faced by early interventionists. The studies reviewed showed that early interventionists perceived a combination of internal and external factors that affected their service delivery decision-making. Internal factors that were discussed across the studies included the children and families' unique needs, the provider's own

knowledge, beliefs, and perceptions, and working within an interdisciplinary model of collaboration. External factors discussed included policies, professional development, an individuals' caseload size, cultural and linguistic factors of families served, and the community/environment that they were providing delivering services. The literature review focused on broad situational themes affecting the natural environment, examining in detail a number of situational/ environmental challenges.

Each participant shared that responding to the child's level of engagement, interests, and skill level were all factors they considered during service delivery decision making. Participants shared their perspectives surrounding factors that affected their service delivery provision. The findings showed three themes: (1) Strategies EIs reported using to help children and their families who are receiving services; (2) Barriers that EIs reported facing while providing services to those children and families; and (3) the Environmental Factors that EIs reported affecting their service delivery provision. Due to this study's use of a semi-structured protocol, participants mentioned various internal and external factors that they felt affected their ability to provide responsive services that did not directly answer the questions asked, however provided valuable information.

### **Strategies**

The top three strategies that participants interviewed in this study reported using the most were individualizing, reflective practice, and using a child-led approach. The next three effective strategies were Coaching, Addressing Families Immediate Concerns, and Building Rapport with Guardians. Investigating which strategies participants perceived to be the most appropriate when responding to individual changes of the children and families they are serving helps to inform the field of which evidence-based practices are most appropriate. Sharing and disseminating can



help inform the field and encourage EIs to reflect on their own practice resulting in a higher quality of services. The strategy of individualizing was shared by all five participants and was the most discussed strategy by the participants. Participants described that the individual circumstances of each child and family necessitates a strategy of individualizing interventions, interactions, and supports tailored to their individual needs and circumstances. This is similar to what was shared in the focus groups from Spence et al (2023) and Salisbury (2010). Participants discussed that there was a need to practice flexibility when delivering services due to the range of needs of the children and families to whom they provide services. All five participants also described utilizing the strategy of reflective practice. The participants utilized reflective practice in various ways; reflecting on their preservice training, results from assessments, and their prior documentation, as well as reflecting on previous sessions in order to inform current and future service delivery decisions. Four participants stated that the first thing they did when delivering services was refer to the IFSP to read the child's goals.

All five participants expressed that they took a very child-led approach when providing services to children and families. Child interests were described by participants as “huge” and “a gift”. Participants shared the importance of responding to the child's interests that have been directly expressed as well as child interest's that were noticed through observation. One participant shared that they felt responding to the child's interests in turn builds trust with the caregivers and contributes to strong parent-professional relationships that supports their ability to keep providing services to the family. This is reflective of what was shared in the literature from Keilty (2008) who described caregiver disengagement from voluntary services can be due to a lack of strategies used that focused on engaging with the child. It is important for the field of EI to understand strategies that maximize family engagement to not only ensure that family

members are more likely to continue services, but that they are also active participants in the E.I. process. Two participants shared this was due to their background working in places that used a child-led curriculum. Four participants expressed that observing and responding to children's interests resulted in higher levels of child engagement. This is consistent with the findings from Dunst et al. (2001) that showed learning opportunities that were interesting and engaging to children and provided children with chances to explore and practice skills are needed to promote children's developmental growth. Understanding how to effectively use child-led strategies supports the child's engagement and motivation and is a contributing factor to higher quality service delivery.

All but one participant described using the strategy of coaching when discussing their decision-making during service delivery. In early intervention, coaching interactions with the parents are an integral component of service delivery provision. Coaching consists of 5 main features: (1) joint planning, (2) observation, (3) action, (4) reflection, and (5) feedback (Rush and Shelden, 2005). Participants used the word coaching while often referring to one or two of the 5 main features. Action, reflection, and feedback were the most frequently discussed features of coaching. One participant discussed that they had first worked in a state that utilized a more deficit-based child-focused early intervention service delivery approach. They expressed that adopting the strengths-based family-focused service delivery approach was an adjustment; however, they prefer this coaching model. This mirrors the perspectives from Salisbury et al. (2010) that showed all but one practitioner preferred adopting a family focused service delivery approach. It is vital for the field to understand components of high-quality coaching in order for EIs to support caregiver competence as well as develop a strong rapport with the families they are delivering services to.

Four participants in this study described addressing families' immediate concerns as an essential part of their service delivery decision making. Participants stated that while they did consider the child's IFSP goals when making service delivery decisions, if a parent had an immediate concern surrounding the child, that priority was focused on first. Other factors pertaining primarily to needs that are reflected in the physiological and safety levels of Maslow's hierarchy of needs were discussed as examples of immediate concerns of the family. Three participants shared the example of sleep when discussing immediate concerns. Participants expressed that when they were working with children and families, they always addressed these immediate concerns as priorities. Three participants expressed building rapport with guardians as a strategy they used to promote the engagement of the families who were receiving services. One participant mentioned building rapport with the child in addition to the caregivers as a strategy they utilized. Three participants felt that a lack of engagement of the child and families receiving services was the biggest barrier to their providing effective services.

### **Barriers**

Participants were asked what barriers they faced during service delivery. The top three barriers that EIs shared were family engagement, scheduling, and the family's primary language. All barriers fell under the third research question and were not mentioned by participants regarding research questions one or two. Understanding what barriers practitioners face when responding to changes in a child's skill level, interests, and level of engagement can help the field of EI to identify what strategies are appropriate to use in order to overcome those barriers or lessen their impact. Participants described a lack of family engagement as a barrier to their ability to provide effective services to the children and families who are receiving services. Participants also described issues with scheduling service delivery sessions with families.

Participants discussed instances where families turned down interpreter services that would have proved beneficial. They expressed that they felt that families were missing vital information that they were trying to communicate and vice versa due to the language barrier.

Participants described environmental factors they felt affected their ability to deliver effective services including the setting of service delivery, tension between the environment and provider, and family buy-in. Providing services to the child within their natural environments and routines is a central part of the mission of Early Intervention. Participants described that the setting of service delivery affected their perceived ability to provide effective services in various ways. Participants described that delivering services to children within childcare settings made it difficult to provide effective services due to the distractions and demands of the other children involved, as well as the lack of interaction they had with the caregivers. Participants shared strategies such as recording sessions to share with caregivers. The student researcher learned that as we seek to understand the perspectives of practitioners, the manner in which a question is asked is vitally important. In retrospect I believe some of the questions could have been crafted more specifically to enable the study to draw more accurate conclusions. Finally, it seems that more regular “unstructured” communication between academic researchers and practicing early interventionists would be helpful to both groups. As previous academic research on these subjects has noted, this is an extremely complex field with a very broad range of variables for the early interventionist to consider. At the same time, I concluded that early interventionists are in fact extremely adaptive in their work, though it was not always described in academic terms. The research indicates the need for ongoing training and professional development surrounding strategies for utilizing child-led approaches, individualizing interventions, as well as supporting family engagement. Early interventionists would benefit from training surrounding providing a

culturally responsive practice in order to address the needs of the diverse families that receive services. Future research exploring factors that support family engagement as well as collaboration amongst other providers can enhance service delivery. Further research on factors regarding early interventionist's service delivery decision making can further the field's understanding of facilitators and barriers to effective service and greater improve child and family outcomes.

### **Limitations**

One limitation of this study was that the student researcher did not pilot the interview protocol with EIs. The ability to revise the questions more specific to the field as well as the ability to develop more appropriate probes was lost, resulting in missed opportunities for clarification or further expansion on certain questions. A possible limitation of this study is that participants may have been influenced by social desirability bias. Although participants remained anonymous, there is a possibility due to discussing the nature of their work involving children and families that participants shared responses intended to present themselves in a more favorable way. These could possibly impact the reliability and validity of these responses.

### **Implications for research**

This research on early interventionists' service delivery responsiveness underscores the need for early interventionists to provide a flexible, culturally responsive, and family-focused service delivery. The findings show that EIs can benefit from actively responding to the child's interests. The findings also highlight the need for individualizing interventions, interactions, and supports based on the child and family's own unique strengths and needs. The research indicates that pre-service training must equip future early interventionists with the skills to assess and address the highly individualized needs of the children and families receiving services.

Incorporating case studies and training scenarios surrounding various situations and challenges faced within the field can help provide EIs with “real world” practice. The findings also highlighted the need for EIs to engage in regular reflective practice of their own service delivery provision during prior sessions. In order to inform best practice, further research is needed to investigate which appropriate strategies EIs can utilize to overcome barriers surrounding family engagement, scheduling, and language. Understanding the barriers faced by EIs can help the field to identify effective and appropriate strategies to effectively address them.

## **Conclusion**

This research study examined the perspectives and practices of early interventionists surrounding their service delivery decision making in natural environments. The findings of this study highlighted the significance of EIs using a child-led approach, individualizing, and engaging in a reflective practice in response to changes in the child’s interests, skill levels, and level of engagement. The findings also showed that EIs felt their service delivery decision making was impacted by barriers related to scheduling, language, family engagement, and the service delivery setting. These findings indicate a need for early interventionists to receive ongoing training and support on individualizing interventions in order to address children’s and families’ individual strengths and needs, as well as the development of supports in order to address barriers related to language and scheduling. The findings of this study highlight the importance of responding to the challenges and opportunities that are unique to each child’s unique natural environment in order to provide a high-quality, strengths-based, culturally responsive, and family-focused service delivery.

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# Appendix A: IRB Approval Letter



Christine Spence <spencecm@vcu.edu>

## Notification: IRB HM20024469 Spence - IRB Correspondence

IRBPANELA@vcu.edu <IRBPANELA@vcu.edu>  
Reply-To: IRBPANELA@vcu.edu  
To: spencecm@vcu.edu

Mon, Oct 3, 2022 at 3:24 PM

**VCU**  
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TO: Christine Spence  
Christine Spence  
CC: Brian Wysong

FROM: VCU IRB Panel A  
RE: Christine Spence; IRB HM20024469 Influencing Factors on Service Delivery Decision Making within Early Intervention

On 10/3/2022, the referenced research study qualified for exemption and was approved by limited IRB review according to 45 CFR 46 by VCU IRB Panel A under exempt category 2(iii).

Category Research that only includes interactions involving educational tests, survey or interview procedures, or observation of public 2(iii) behavior when Identifiable information is recorded by the investigator, and the IRB conducted a limited IRB review

The information found in the electronic version of this study's smart form and uploaded documents now represents the currently approved study, documents, and HIPAA pathway (if applicable). You may access this information by clicking the Study Number above.

### COVID-19 Notice

In the context of the COVID-19 pandemic, the IRB expects the research will proceed in accordance with other institutional policies and as outlined in this submission and if applicable, in the study's COVID-19 Contingency Protocol. IRB approval does not necessarily mean that your research may proceed. For more information on investigator responsibilities and institutional requirements, please see <https://together.vcu.edu/>.

The Principal Investigator is also reminded of their responsibility to ensure that there are adequate resources to carry out the research safely. This includes, but is not limited to, sufficient investigator time, appropriately qualified research team members, equipment, and space. See WPP #: IX-1 Principal Investigator Eligibility and Statement of Responsibilities

If you have any questions, please contact the Human Research Protection Program (HRPP) or the IRB reviewer(s) assigned to this study.

The reviewer(s) assigned to your study will be listed in the History tab and on the study workspace. Click on their name to see their

## Appendix B: Interview Protocol

### Introduction:

First off, I want to thank you so much for taking time out of your busy schedule. My name is Brian Wysong and I am pursuing my master's degree in Early Childhood Special Education at Virginia Commonwealth University. I am researching influences that affect decision-making when working with children and families service delivery plans during each EI session.

### Reason we are here:

During the interview I am going to ask you a series of questions regarding service delivery and about factors that influence service delivery from session to session. I know that you will be discussing your livelihood and I want to express that you are encouraged to talk openly and freely. Your participation will not impact your employment and your supervisor will not have access to this information.

### Time and Procedures:

This interview will take around an hour to complete. Upon completion of the interview I will summarize and share with you what we have discussed.

### Recording and Confidentiality

With your permission I will be recording our zoom session today. This will be reviewed solely by myself, a fellow Early Childhood Special Education Master's student, and my Professor. After the recording has been transcribed it will be deleted.

Do I have your permission to record today? Great. Are there any questions you have before we begin?

### Questions and probes

#### Question #1

Please tell me about your journey to becoming an early interventionist.

Probe if they ask for clarification. -What attracts, or attracted you initially, to this field?

#### Question #2

What impact, if any, does a child's current IFSP goals have on your decision making from session to session in regard to service delivery.

#### Question #3

How does a child's and/or family member's current level of engagement affect your service delivery plan for the day?

#### Question #4

What barriers do you encounter during service delivery?

#### Question #5

[Type here]

How does a child's changing interests affect your service delivery from session to session?

Question #6

How do you adapt your service delivery as a child's skill level changes?

Question #7

When you are making a decision about service delivery that you will use in response to changes, what are some of the things that help you make these decisions?

**Table 1: Literature Review Matrix**

Overall Topic: How does an early interventionist make service delivery decisions in response to the child’s current goals, skills, interests, and current level of engagement.

Author(s), Year of Publication	Participants	Research Questions	Research Design	Measuring Instruments	Major Findings	Limitations
<p>Raab, M., &amp; Dunst, C. J. (2004). Early intervention practitioner approaches to natural environment interventions. <i>Journal of Early Intervention</i>, 27(1), 15–26.</p>	<p><b>Participants</b> 16 participants from two different early intervention programs</p> <p><b>Location</b> Southeastern state.</p> <p><b>Occupation</b> SLP (n = 4) Early Childhood Educators (n = 4) Special education (n = 3) Social work (n = 2) Psychology (n = 2) Occupational therapist (n = 1).</p> <p><b>Educational background</b> Master’s degrees (n = 13) Bachelor’s degrees (n = 3)</p> <p><b>Gender Identity</b> All female</p> <p><b>AGE</b> 24 to 59 (M = 41.06, SD = 10.23)</p> <p><b>Race</b> not provided</p>	<p>How do experience levels between a group of experienced and a group of inexperienced early interventionists relate to their understanding of learning environments both (a) in the context of both nondescript guidance about Part C E.I. requirements, (b) and the differing perspectives of the meaning and operationalization of natural environments and the natural environment provision.</p>	<p>Qualitative</p> <p>Focused interview protocol</p> <p>-The researchers were trying to identify how practitioners conceptualized and used natural environments in their work with young children.</p>	<p>-One face-to face interview conducted by one of two research assistants. -The interview consisted of the same five questions. -The interview protocol included five main questions and 15 follow up (probe) questions. (2 to 6 for each main question) The interview was face to face and conducted by one of two research assistants.</p> <p>-Transcripts were coded for analysis. The codable segments were defined by a reference to or a description of an activity setting or “microlocation”. -Interrater reliability of the case study descriptions was assessed by having two raters score a randomly selected portion of each practitioner’s transcribed interview</p> <p>“The focus of analysis was the differences between type of program and between practitioners within programs.”</p>	<p>-Proportionally more of the experienced practitioners’ examples of natural learning environments were classified as community locations compared to the novice practitioners (39% vs. 7.9% respectively) and proportionally more of the novice practitioners’ examples were classified as early childhood program locations compared to the experienced practitioners (26.5% vs. 13.4% respectively).</p> <p>-Novice practitioners were more likely to describe natural environments as a mix of decontextualized and contextualized settings where the focus of intervention is adult directed learning opportunities and practitioners themselves are the agents of producing or eliciting adult-desired behavior. -In contrast, experienced practitioners were more likely to describe natural environments as contextualized settings where the focus of intervention is predominately child-initiated learning and practitioners (with one exception) facilitate or mediate parents’ abilities to provide their children everyday natural learning opportunities. -Further investigation is needed to establish whether practices change as a function of increased knowledge and understanding of natural learning environments</p>	<p>-The sample size was small and precludes generalization to larger groups of providers</p> <p>-Self-reported data</p> <p>-Lack of standardization in definition of natural environment</p>

<p>Salisbury, C. L., Woods, J., &amp; Copeland, C. (2010). Provider Perspectives on Adopting and Using Collaborative Consultation in Natural Environments. <i>Topics in Early Childhood Special Education</i>, 30(3), 132–147. <a href="https://doi.org/10.1177/0271121409349769">https://doi.org/10.1177/0271121409349769</a></p>	<p><b>Years' work experience working with children with or at risk for disabilities</b> 1 to 27 years' experience (M = 13.23, SD = 9.20)</p> <p><b>Case Load</b> not provided</p> <p><b>Participants</b> -6 Early Intervention providers with CEIP (Chicago Early Intervention Project)</p> <p><b>Occupation</b> One O.T., One P.T, Two SLP's, Two Developmental Therapists.</p> <p><b>Educational Background</b> All 6 held at least a master's degree, licensure, and credentialing relative to their respective discipline and the Illinois EI System.</p> <p><b>Race</b> Caucasian = 3, African American = 1 Hispanic origin = 2</p> <p><b>Gender</b> 5 females 1 male</p> <p>-Parents and primary caregivers of 68 infants or toddlers enrolled in Part C home visiting programs in Chicago. 30% African</p>	<p>Part C providers perspectives and experiences over a 2-year period adopting and implementing a collaborative consultation approach to home visiting in urban neighborhoods.</p>	<p>-Exploratory case study</p> <p>Mixed-Methods</p>	<p>-Stages of Concern Questionnaire (SOCQ) Used to assess provider perceptions about the adoption and use of the family-centered principles and adult support and teaching practices represented in the Chicago Early Intervention Project model. Administered at the outset of the project or at the point of initial hire and was repeated in the spring of each year. -Wrap up sessions twice weekly -quarterly data review sessions (large group discussions across all project years) -Text-based data from SoCQ interviews, wrap-up sessions, focus groups, and data review meetings were converted into a single data set by merging word processing document transcripts. 62 individual and group sessions were used to distill an aggregate understanding of adoption and utilization patterns with these providers. Transcripts were independently read by the first author and a doctoral level research assistant and emergent categories were developed using a comparative procedure</p>	<p>-Positive changes occurred in perspectives about family-centered routines-based intervention among all but one of the providers</p> <p>-A collaborative approach is challenging for providers and requires time, practice, and support to implement.</p> <p>-Program level planning, time, training, process and learning supports, and individual experiences were examined and found to be important variables in the changes made by providers and this program over time.</p>	<p>-The sample size was small and precludes generalization to larger groups of providers</p> <p>-All six providers in the sample "wore two hats" providing home based and center-based interventions.</p> <p>-Although the SOCQ is widely used, it relies on self-report and researcher interpretation of percentile graphs to infer meaning about provider perceptions.</p>
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<p>Spence, C. M., Rooks-Ellis, D. L., Brown Ruiz, A., Ann Fish, L., Jones-Banahan, B., O'Grady, C. E., &amp; Sulinski, E. (2023). How early interventionists support families experiencing vulnerable circumstances: A closer look at family-centered practice. <i>Children &amp; Youth Services Review</i>, 144, N.PAG. <a href="https://doi-org.proxy.library.ycu.edu/10.1016/j.chldyouth.2022.106752">https://doi-org.proxy.library.ycu.edu/10.1016/j.chldyouth.2022.106752</a></p>	<p>American, 49% Latino, 13% were Caucasian, and 8% were Asian or other Ethnic backgrounds. 45 boys and 23 girls. 52 with developmental delays, 6 with neurological or sensory disabilities, and 10 with Down syndrome or Autism.</p> <p>67 Early Interventionists who were either employed or contracted by Maine's IDEA Part C workforce and each of the states 16 counties. (they represented 58.8% of the State of Maine's E.I who were contracted by Maine's part c at the time. 67 out of 112 total)</p> <p><b>Race</b> Participants identified as primarily white (99%) 66/67</p> <p><b>Gender Identity</b> Female (n = 65, 97%) Male (n = 2, 3%)</p> <p><b>Occupation</b> Service coordinator 15 (22.3) Early childhood special educator 14 (20.9) Occupational therapist 10 (14.9) Speech language pathologist 9 (13.4) Special educator, other than ECSE 9 (13.4) Physical therapist 4 (6.0)</p>	<p>“The introductory questions asked participants to discuss their role in early intervention and their definition of vulnerable circumstances. The remainder of the questions asked participants to report on the family-centered strategies used when supporting families identified with vulnerability, including poverty, foster children and parents, children who have experienced maltreatment, parents with disabilities, immigrant families, refugee families, and children with neonatal abstinence syndrome. Probing questions asked EIs to share strategies used as part of their role as a mandated reporter, describe how they differentiated poverty from neglect, and explain the sources of knowledge used to support their work with families in vulnerable circumstances. “</p>	<p>-Thematic qualitative analysis</p> <p>-9 focus groups across the state of Maine in order to understand (a) how EIs defined the vulnerable circumstances of the families they serve, and (b) what FCPs EIs report using with families in these identified vulnerable circumstances.</p> <p>-To explore the first research question, participants were asked to define and describe their understanding of the term ‘vulnerable’ as related to the families they support with EI services.”</p>	<p>-Nine semi structured focus groups across the state.</p> <p>-Participants completed a written consent and a demographic survey.</p> <p>-Focus group size ranged from 2 to 16 participants, with an average of 7 and averaged 1 hour and 35 minutes and used a semi-structured protocol.</p> <p>-Demographic survey asked participants questions about “working in early intervention, and length of time working in the profession for which they were trained.</p> <p>“Additionally, participants responded to questions about the location of current employment, personnel preparation and professional development experiences in which they participated that were specifically related to supporting families in vulnerable circumstances.”</p> <p>Data Analysis “To understand participants’ descriptions of vulnerable circumstances for families in EI, research team members conducted a transcript review and compiled a list of responses. Responses were</p>	<p>-In response to Research question 1, ““How do EIs define vulnerable circumstances of the families they serve?” ... A majority of focus groups consistently identified factors such as poverty (6/9 groups), grandparents raising children (5/9 groups), drug exposure at birth/substance abuse within family (7/9) and having a primary caregiver with mental health issues (8/9 groups). In some cases, slightly different terminology was used to describe vulnerable circumstances (e.g., “poverty”, “low SES”, “financial/income insecurity”), and those responses were grouped together by perceived intent or common meaning. Some factors were mentioned by several groups, although not a statistical majority. For example, having a caregiver with a disability came up several times but was only specifically identified by four of the nine groups. While there appeared to be overlap between the Maine definition (see Dwyer, 2019 above) and participants’ responses, there was not always complete agreement between the two.</p> <p>-4.3. <i>Family capacity-building</i> During focus group sessions, participants often described the provision of services in accordance with families’ wishes and choices alongside examples of acknowledging, empowering, and building upon the family strengths.</p> <p>4.4. <i>Family-professional partnerships</i> Family-professional partnerships are described as</p>	<p>-One limitation of this study was that the data was self-reported.</p> <p>- “Another limitation of this study was the use of a convenience sample. However, our sample included EIs from each of the nine regional sites providing services and are representative of Maine.” - “Finally, because we chose to conduct this study using focus groups attended by regional teams, there is a chance that participants were impacted by social desirability bias”</p>
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Educational technician 2 (3.0)  
Teacher of deaf/hard of hearing 3 (4.5)  
Licensed clinical social worker 1 (1.5)

**Educational Background**

Master's degree (n = 38, 56.7%)  
Bachelor's degree (n = 25, 37.3%)  
Associate's degree (n = 2, 3%)  
Doctoral degree (n = 1, 1.5%)  
No answer (n = 1, 1.5%)

“to address the second research question, participants described the family-centered strategies they used to support families in the vulnerable circumstances “

then grouped based on similarities across groups and compared to the state definition in the Maine report”  
“The research team examined the codes and identified and defined the themes. If disagreement occurred, the team discussed each perspective and came to consensus on the final code and theme. The 1328 segments were then grouped into one of seven themes, using a thematic qualitative analysis approach”

**Quality Indicators**

“Two members of the research team not involved in the data collection phase were trained to complete a fidelity check to ensure all components of the study were completed for each focus group, including signed consents, audio recording, and demographic survey completion. “

“Trustworthiness and credibility during the analysis phase were established through researcher triangulation and collaborative work, with varied viewpoints being heard “

family members and professionals in equal partnership and include such concepts as equality, mutuality, and teamwork. Participants described positive family-professional partnerships as an important strategy to use when supporting families in vulnerable circumstances in 38 segments (16.0%). While this is also a strategy that should be used when supporting all families in early intervention, the importance of this partnership included acknowledgement of the complex lives of families beyond EI.

*4.5. Individualized family services* During the focus groups, participants provided examples of individualized family services, describing scenarios in which assessment, goal setting, and interventions were matched to the needs of each family. Strategies for individualization occurred across many of the topics discussed during the focus group sessions. Of the 237 segments coded in the “Family-Centered Strategies” theme, 100 (42.2%) were coded as practices that individualized family services.

*4.6. Non-exemplars of family-centeredness* While the participants in the focus groups shared a variety of strategies used to support families experiencing vulnerable circumstances, we also heard some descriptions of their work that did not align with family-centeredness. In some instances, this misalignment seemed to be due to a lack of understanding of FCPs.

found that rurality may compound this issue (Decker et al., 2021). Providers reported individualizing family services more often than any of the other family-centered key elements, perhaps because individualization is inherent within the Individualized Family Service Plan (IFSP) and the state’s EI model. However, it was unclear at times where there was a boundary between creative ways to support families, using research-informed practices within an RBEI model, and utilizing strategies

<p>Weglarz-Ward, J. M., Santos, R. M., &amp; Hayslip, L. A. (2020). What Early Intervention Looks Like in Child Care Settings: Stories from Providers. <i>Journal of Early Intervention, 42</i>(3), 244–258. <a href="https://doi.org/10.1177/1053815119886110">https://doi.org/10.1177/1053815119886110</a></p>	<p><b>Participants</b> 24 total SLP (n= 5) Developmental Therapist (n = 3) Teacher (n = 6) Director (n = 2) Childcare assistant (n = 1) Owner (n = 3) Social Worker (n = 1) Social Emotional Consultant (n = 1) Occupational Therapist (n = 1) Physical Therapist (n = 1)</p> <p><b>Work setting</b></p> <p><b>Location</b> Large midwestern state</p>	<p>Experiences of Early intervention providers in different childcare settings</p>	<p>Qualitative Nonexperimental</p>	<p>-Survey responses and literature review were used to inform focus group protocol.</p> <p>-8 Focus groups</p> <p>Four groups of child care providers Four groups of E. I.'s -Qualitative data from focus groups were analyzed using a six-phase thematic approach to identify patterns in the data.</p> <p>24 childcare and EI providers participated in 8 focus groups across one state to discuss their experiences with EI services in childcare settings.</p>	<p>that went beyond the role of an EI. There is no specific guidance on this, and therefore EIs were left to make their own decisions regarding what was appropriate individualization. We also must consider what individualization means when families have a child who is eligible for EI, along with another area of vulnerability that impacts the entire family. Additionally, in response to many of the questions related to a specific area of vulnerability (e.g., parent with a disability, neonatal abstinence syndrome, foster family), EIs discussed reviewing the families' immediate concerns while not needing the diagnosis or medical history. Coordination and collaboration across systems may support families in knowing who is able to support in what way (i.e., who can transport a family or make calls on their behalf). Although practitioners may have a broad definition of FCP (Epley et al., 2010; Foster, 2020), EIs are encouraged to use the field's professional guidance to individualize family services, including EI/ECSE Standards (2020) and DEC Recommended Practices (2014).</p> <p>Participants concluded that it is difficult to identify common characteristics of E.I. visits to childcare programs.</p> <p>-The common characteristic was variability across programs and providers in providing individualized services to each child and family.</p> <p>-It was common for childcare providers to not be fully involved in the E.I. process or in visits to childcare programs.</p> <p><b>3 major themes emerged from data</b> (e.g., 1 participant experiences with EI in childcare settings, 2 factors that support or hinder inclusion and collaboration, 3 moving forward to successful collaboration),</p> <p>Six main codes were identified surrounding the provider's perspectives with EI visits in childcare setting:(a)roles and responsibilities of providers, (b) communication among providers, (c) location of EI services (d) EI visits as a disruption, (e) carrying over strategies into child</p>	<p>The sample was smaller than anticipated</p>
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<p>Wright, A., Hiebert-Murphy, D., &amp; Trute, B. (2010). Professionals' Perspectives on Organizational Factors That Support or Hinder the Successful Implementation of</p>	<p><b>Recruitment Pool</b></p> <p><b>Occupation</b></p> <p><b>Educational Background</b>  bachelor's degrees (n = 11)  master's degrees (n = 10)  associate's degree (n = 3)</p> <p><b>Gender Identity</b>  All women</p> <p><b>Age</b>  The average age of participants was 43.42 years (SD = 9.57)  The average age of E.I providers was 47.83 (SD = 14.51)</p> <p><b>Race</b>  Caucasian (n= 17)  African American ( n = 5)  Asian (n= 1)  Latino ( n = 1)</p> <p><b>Years' work experience in child care</b>  M = 13.17 years (SD = 8.54)</p> <p><b>Case Load</b></p> <p><b>Participants</b>  -36 participants  -Service coordinators, senior supervisors, program managers, key informants)  -Of the 34 service coordinators eligible to participate in study, 24</p>	<p>-The research study aimed to investigate what organizational factors E.I professionals perceived supported or hindered the implementation of Family Centered Practices FCP.</p>	<p>-Qualitative, descriptive, and exploratory study</p>	<p>-Semi-structured individual interviews with service coordinators (averaging an hour in length) as well as key informants (averaging 2 hours) -semi -structured focus groups with open end questions with supervisors/managers (lasting 2 hours)  -demographic questionnaire</p>	<p>care routines, and (f) variability impacts collaboration.  <b>Implication for practice-</b>  Results suggest "both childcare and EI providers should develop relationships with each other at individual, program, and community levels."  -Also partnering with families can help strengthen communication</p> <p>"The results of this study show that a change in practitioners' understanding of different characteristics of natural learning environments is possible."</p> <p>"Further investigation is needed to establish whether practices change as a function of increased knowledge and understanding of natural learning environments"</p> <p>-The overwhelming majority of participants stated that they were in favor of implementing FCP in their workplace; however, respondents identified many challenges in implementation.</p> <p>-Data analysis produced 5 key themes reflecting professionals' perceptions of organizational factors that impact the implementation of FCP.</p> <p><b>1)Caseload Size and Activity</b></p>	<p>limitations</p>
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Family-Centered Practice. Journal of Family Social Work, 13(2), 114–130. <https://doi-org.proxy.library.vcu.edu/10.1080/10522150903503036>

(70%) agreed to participate in in-depth interviews that explored their understanding and use of FCP.

**Work setting**

**Location**

**Recruitment Pool**

**Occupation**

All social workers

**Educational Background**

Social Worker at either a  
BSW level (n = 23)  
MSW level (n = 6)  
BA (n = 5)  
RPN/RN (n = 2)

**Gender Identity**

80% were women  
7 males  
29 women

**Age**

M = 43.5 years (Sd = 8)

**Race**

not provided

**Years' work experience working in child disability services**

(m = 11 (sd = 7)

**Case Load**

“Mean caseload reported by service coordinators was 73 (SD=24.3), with a minimum of 22(part time worker) and a maximum of 118. “

With the exception of one key information, participants shared that caseload size was “a major factor that hindered the implementation of a Family Centered (FC) model to service delivery.”

“However, due to caseload size, resulting time constraints, and coordinating specific family needs (e.g., the child’s multiple service needs such as speech language, and occupational therapy, or respite needs), it was very difficult to implement FCP. A service coordinator’s response reflects this perspective: ‘The reality is that our caseloads are very high . . . it’s nice to say we’d all like to be family centered and make sure a family receives all this data and it’s all written down nicely for them and we have quarterly contact with them or whatever but that is just not always the case . . . I think with the very nature of the numbers that we carry it’s not always that easy to have that perfect little picture.’”.

**2) Supervision**

“Many participants responded that supervision of service coordinators, and in particular, the role of supervisors, influenced the degree of FCP implementation”

**3) Collateral service provision**

“This thematic category includes participants’ references about other programs within the organization or agency services, including interdisciplinary service providers. Education, health services, occupational therapy, speech language therapy, other government providers (e.g., social assistance), and child welfare are examples of collateral service providers.”  
-” Many (n.16) service coordinators stated although they worked from a FC approach, they experienced difficulty with other service providers that resulted in negative experiences for families.

**4) Training**

“All of the study’s respondents identified training as a key factor that facilitated a FC model. Service coordinators and supervisors who had a formal social work education stated that they believed this education provided them with a knowledge base that was congruent with

-All eight management staff (composed of senior supervisors and program managers from the participating service organization chose to participate in the focus group.

a FC approach and as a result believed themselves to be better versed in FCP than workers without a social work background.”

**5) Policy**

“Policy refers to all references made by respondents concerning program, organizational, or system-wide policies that supported or hindered the implementation of FCP.”

“Respondents noted that policy concerning families with children with disabilities created problems for the successful implementation of FCP. Unclear or conflicting policy was reported to result in multiple interpretations by families, service coordinators, and supervisors alike, which ultimately resulted in variability in service provision.”

“service coordinators, supervisors, and key informants were in support of the implementation of a FC model of service delivery which provides an ideal organizational dynamic to facilitate the success of this implementation (Gummer, 1990).”

“Despite supporting a FC approach, professionals identified many obstacles, in particular, high caseloads, limited supervision, insufficient training, and a lack of integrated services and policies.”

**Table 2: Codebook**

<b>Parent Code</b>	<b>Subcode</b>	<b>Definition</b>	<b>Code frequency</b>	<b>Provider Frequency</b>
<b>Barriers</b>				
	Technology	The participant describes technology being used in the home as a hindrance to service delivery due to being a distraction to the parents and/or child	2	1
	Lack of understanding of E.I. philosophy	Participant or provider does not understand the philosophy of Early Intervention focuses on identifying and working towards reducing the effects of disabilities or delays through creating functional outcomes that are based on a family’s identified needs and take place within the family’s natural environment. Early interventionist's support family members and caregivers in a child's life in a way that respects the families’ cultural beliefs and learning preferences.	1	1
	Confidence	Participants describe a lack of confidence in their service delivery provision	1	1
	Scheduling	Participant describes issues scheduling service delivery sessions due to providers and participants conflicting schedules	4	3
	Family engagement	Participant describes a family/family member's lack or absence of engagement as a barrier to service delivery	4	3
	Family's primary language	Participant describes working with families who are English Language Learners that have turned down interpretation services as a barrier due to information that is potentially lost.	3	2
	Implications of COVID	Participant describes the way Covid 19 has affected service delivery (masking impacting language learning)	1	1
	Provider contradiction	Participant contradicts a previous statement.	1	1

Strategies				
	Parent engagement through modeling	The provider describes modeling an intervention/s for the parents to engage them directly with practicing the intervention/s.	2	1
	Addressing families' immediate concerns	The provider describes addressing the families' immediate concerns regardless of the IFSP goals	7	4
	Evidence Based Practices	The provider mentions use of a developmentally appropriate or age-appropriate practice (i.e., expansion, scaffolding, narration, modeling)		
	Individualizing	participant mentions flexibility in responding to individual situations, responding to the child's needs or level of engagement, or responding to the needs or engagement of the family	16	5
	Connecting to community resources	Participant mentions connecting families to resources within the community	3	2
	Provider development	The provider mentions participating in ongoing professional development in order to support their service delivery	5	2
	Use of existing resources	Participant mentions utilizing existing resources within the home and community to support child development	3	1
	Building rapport with guardian/s	Participant mentions building a relationship with family in order to support the child's development through strong teaming	7	3



Parents as experts on child	Participant acknowledges addressing the parents as experts on the child in order to build rapport with parents and/or inform their own service delivery	3	1
Celebrating success/ ongoing progress	The participant describes celebrating/mentioning the progress the child is making with the parents	5	2
Parent education	The participant describes building parental capacity by educating parents or sharing child development information	6	4
Progress monitoring	The participant mentions ongoing assessment/ progress monitoring in order to inform service delivery to accurately respond to child's current skill level	4	2
Coaching	The participant mentions building parental capacity through the 5 main components of coaching (joint planning, observation, action, reflection, and feedback).	9	4
Explanation of E.I. philosophy	The participant mentions explaining the focus of service delivery is to support the child's participation in family and community activities that are important to the family through accessing supports, services, and parent coaching	4	4
Virtual engagement	The participant mentions use of technology to engage with families outside of the session or direct service	1	1
Masking as safety	The participant describes following the child's lead or responding to the child's interests	1	1
Child-led	The participant describes following the child's lead or responding to the child's interests	7	5
Hands on	The participant describes using hands on activities and interventions with the child and/or family	1	1
Reflective practice	The participant describes reflecting on their preservice training, use of assessment/prior documentation, or reflecting on previous sessions to plan	10	5

		current/future service delivery or to make service delivery decisions		
	Knowledge of development	The participant describes using their knowledge of child development to inform service delivery	6	4
	Recognizing family systems	The participant describes recognizing the family system with which they are working in order to inform service delivery	3	3
	Use of technology	The participant describes utilizing technology within the child's home to support the child's goals	1	1
	Goals as foundation for intervention	The participant mentions referring to the child's goals as the foundation for their intervention planning	1	1
	Use of assessment in decision making	The participant describes using information gathered from assessments of the child/family to inform their service delivery decision making	1	1
	Teaming	The participant mentions communicating with the other service providers on the child's IFSP or colleagues in order to utilize other professional perspectives to inform service delivery.	4	3
<b>Environmental Factors Impact Service Delivery</b>				

Provision of service delivery	The participant mentions differences in provision of service delivery based on setting (i.e., home, daycare, community, etc.) or philosophy (e.g. across states, systems)	3	3
Setting of Service Delivery	The participant describes the community/location where the family lives as impacting service delivery	3	2
Impact on control	The participant mentions environmental factors (i.e., technology, setting) within the session impacting their control during service delivery	2	2
Impact on engagement	The participant mentions environmental factors (i.e., technology, setting) within the session impacting engagement during service delivery	1	1
Tension between environment and provider	The participant mentions or describes conflict between environment and personal preferences, attitudes, beliefs or job requirements and expectations	3	3
Positive impact of telehealth	The participant describes that the parent coaching model was much more effective utilizing video coaching than in person.	1	1
Competing Priorities/ Family Buy-In	The participant mentions how competing priorities of the caregivers and/or professional are negatively affecting service delivery or the family's willingness to participate. (professional working on multiple time sensitive deadlines outside of service delivery i.e. CPS)/(Caregiver working on making dinner/ or dealing with other immediate concerns during service delivery)	8	4
Acknowledgment of professional skill	The provider acknowledges their own professional skills level and its impact on their service delivery.	1	1

	Expectation vs. reality	Participant or provider describes a difference in reality versus what they were expecting during service delivery.	2	2
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