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## Do Variations in Service Delivery Models Influence Parents' Perspectives in the Early Intervention Program?

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DO VARIATIONS OF SERVICE DELIVERY MODELS INFLUENCE PARENTS' PERSPECTIVES  
IN THE EARLY INTERVENTION PROGRAM?

by

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A thesis submitted in partial fulfillment of the requirements  
for the degree of Master of Science  
in the Department of Early Childhood Development and Education  
in the College of Education and Human Performance  
at the University of Central Florida  
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## **ABSTRACT**

This study has multiple purposes. The first purpose is to investigate whether variations in the Early Intervention (EI) service delivery model influence parents' perceptions of the quality of their EI services. The second purpose is to compare parents' satisfaction level with the early intervention program in the selected counties from Pennsylvania and Florida. The third purpose is to reveal whether families' residency determines the level of access to services. The study subjects were parents and caregivers whose children received services through the Part C early intervention program between January 2013 and January 2017. The targeted population for the study were residents living in Florida and Pennsylvania. Participants were selected from three counties in Florida, and three counties in Pennsylvania. The result of this study revealed that parents' satisfaction level was higher in a state where families had access to multiple services, sessions were provided more than once a week, and the services were provided across disciplines. In addition, the results indicated that parents' level of satisfaction was influenced by the quantity of the provided services, and families residing in Pennsylvania had better access to services than did a comparative group of families in Florida.

## TABLE OF CONTENTS

LIST OF FIGURES .....	v
LIST OF TABLES .....	vi
CHAPTER 1 THE PROBLEM.....	1
Introduction.....	1
Significance of the Study .....	3
Purpose of the Study .....	3
Research Questions .....	4
CHAPTER 2 LITERATURE REVIEW .....	5
Introduction.....	5
History of Early Intervention .....	5
Assessment and Eligibility.....	6
Variations between States .....	8
CHAPTER 3 METHODOLOGY .....	16
Introduction.....	16
Research Questions.....	16
Design, Recruitment, and Procedures .....	16
Instrumentation .....	18
CHAPTER 4 RESULTS .....	20
Introduction.....	20
Overview of Results.....	20
Analysis of Data.....	27
CHAPTER 5 DISCUSSION AND IMPLICATIONS .....	30
Introduction.....	30
Purpose of the Study .....	30
Discussion .....	30
Limitations .....	32
Implications for Future Research.....	32
APPENDIX A INSTITUTIONAL REVIEW BOARD APPROVAL.....	34
APPENDIX B INSTRUMENTATION: PARENT SURVEY .....	37

LIST OF REFERENCES ..... 50

## **LIST OF FIGURES**

Figure 1. Participants' demographics by county.....	21
Figure 2. Comparison of respondents' perceptions regarding service duration: Florida and Pennsylvania. ....	25

## LIST OF TABLES

Table 1	Number of Families Eligible for Multiple Services: Florida .....	22
Table 2	Number of Families Eligible for Multiple Services: Pennsylvania .....	22
Table 3	Respondents' Level of Satisfaction with Frequency of Services: Florida .....	23
Table 4	Respondents' Level of Satisfaction With Frequency of Services: Pennsylvania.....	23
Table 5	Respondents' Preferences for Frequency of Service: Florida .....	24
Table 6	Respondents' Preferences for Frequency of Service: Pennsylvania .....	24
Table 7	Respondents' Satisfaction with Frequency, Duration, and Quantity of Services.....	27

# **CHAPTER 1 THE PROBLEM**

## Introduction

Undoubtedly, one of the biggest challenges that parents and families can face is learning the devastating news that their infants or toddlers have a disability, chronic illness or a developmental delay. Infants and toddlers' early learning experiences, which lay the foundation for later development, can be affected by such conditions. Because early childhood education has an equally positive effect on both children with special needs and their typically developing peers, proper education and intervention are critical for families whose children were born with established conditions and/or demonstrate delayed development between birth and age three. The overall development of infants and toddlers with special needs will be positively impacted if their delay is identified early and they receive intervention services as early as possible (Mattern, 2015).

Consequently, the main objective of early intervention is the identification of eligible families for services and to provide the appropriate services based on the families' individual needs. The majority of the families receive early intervention services due to their children's specific needs, but services provided in the early intervention (EI) programs should be based on the families' needs (Bailey, McWilliam, Darkes, Hebbeler, Simeonsson, Spiker, & Wagner, 1998). After the recognition of the necessity for a well-organized and monitored early intervention system, the U.S. Congress introduced and passed Federal legislation to regulate the early educational system nationwide. At the time of the present study, Part C of the Individuals with Disabilities Education Act (IDEA) controlled and to some extent determined the basic



requirements that states must follow to provide the best EI practices for young children and their families (Scarborough, Hebbeler, & Spiker, 2006). However, because the descriptions of the basic requirements are rather broad and states have the flexibility to determine the main characteristics of the system whereby they provide the intervention, families may have limited access to services based on their geographic location. The final report of the findings in the National Early Intervention Longitudinal Study (NEILS) supported this theory. These findings indicated that the underlying factor for differences in service delivery was related to the organizational differences in states' early intervention systems (Hebbeler, Wagner, Spiker, Scarborough, Simeonsson, & Collier, 2001).

Numerous researchers have evaluated the efficacy of early intervention and measured parents' satisfaction with services. The result of these studies have indicated that families overall have been satisfied with the services provided related to their children's outcome (Bailey et al., 1998). Limited studies focused on parents' perceptions and satisfaction with the model within which their services were provided. The present study examined parents' level of satisfaction with the service delivery model provided by their local agencies. In addition, it investigated if families whose children receive multiple services across disciplines are more satisfied with the program than those whose children have access to limited services due to the regulations in their state. The researcher also sought to determine if geographic location impacted the level of access to early intervention services.

### Significance of the Study

Due to state regulations, as well as allocated federal and state financial supports, early intervention service models vary from state to state, and sometimes even within states. For instance, in Pennsylvania, eligible families have had access to services from multiple disciplines. Because of this, families of children with multiple needs, whose residence is Pennsylvania, often receive more than one therapy session per week. In contrast, in some other states, eligible families may have access to services from only one discipline, regardless of their child's needs. Since the introduction and adaptation of the early intervention (EI) program, several attempts have been made to measure success. A number of researchers have explored the efficacy of the EI services, but there has been limited research conducted to investigate and compare parents' perspectives of the different service delivery models. Learning about families' perspectives of the EI program could help administrators to develop and implement standards for an optimal service delivery model.

### Purpose of the Study

The present study has multiple purposes. The first purpose is to investigate whether variations in EI service delivery model influenced parents' perceptions of the quality of their EI services. The second purpose is to compare parents' satisfaction level with the early intervention program in the selected counties from Pennsylvania and Florida. The third purpose is to reveal whether families' residency determines the level of access to services.

The result of this study can provide additional information for future investigations of the effectiveness of the EI program. In addition, the findings of this study will assist the researcher in determining which service delivery model best supports families.

### Research Questions

The following questions were used to guide this research.

1. To what extent, if any, do variations in states' service delivery models influence parents' level of satisfaction with early intervention services?
2. To what extent, if any, does the quantity of provided services affect parents' level of satisfaction?
3. To what extent, if any does families' geographic location determine the level of access to early intervention services?

## **CHAPTER 2 LITERATURE REVIEW**

### Introduction

The literature reviewed in this chapter has been organized to focus around research associated with the following topics: history of early intervention; assessment and eligibility; variation between states.

### History of Early Intervention

The long-term benefits of early childhood education for infants and toddlers with special needs and developmental delays has been documented in the literature and well known by educators and related professionals for many years. Children grow and change rapidly during the first few years of their life, and their experience in early childhood will significantly influence their future development (Hoffman, 2016). Thus, it is critical that any delay in early childhood development is detected and identified as early as possible so that appropriate intervention can ameliorate the delay and challenges. Starting intervention at young ages will result in a better performance in academics, as well as, the decreased need for continued services as children age (Mattern, 2015).

The need for an organized and controlled early intervention program was recognized in the early 1960s, but the first public law that affected early intervention services, known as the Education for All Handicapped Children Act (EHA), was introduced in 1975. Before the enactment of this law, children with special needs had limited access to education, and their rights for education were often violated. Many states had laws that resulted in the exclusion of

students with special needs from the entire educational system based on their disabilities. The EHA ensured the rights and access to public education for individuals with disabilities or special needs in every state. (Raver, 2009). Since 1975, the law had several amendments, adding additional rights of public education to individuals with disabilities. Throughout the years, as legislation was shaped and improved, a wider range of services became available to individuals with special needs and their families. In 1990, the United States Congress reauthorized the law, and changed its name to Individuals with Disabilities Education Act (IDEA). At the 1997 re-authorization of IDEA, Part H, the first early intervention law, introduced in 1986, was renamed to Part C and extended services for infants and toddlers with disabilities in every state and jurisdiction. (Raver, 2009). In order to participate in the Part C program, states have been required to follow specific guidelines and regulations specified in the statute of IDEA. At the time of the present study, all states were participating in the Part C program and providing services for infants and toddlers in the early intervention (EI) system.

### Assessment and Eligibility

When a child is recommended for EI services, an independent team conducts the initial assessment and determines the necessary services based on the child's individual needs (Boyer & Thompson, 2014). No Child Left Behind (NCLB), was introduced in 2001 at the reauthorization of IDEA. The act requires schools to use the evidence-based methodology to improve students' academic performance. Even though the act was developed for children attending in general education, the use of the evidence-based approach has been expanded to the special needs population. EI programs nationwide have followed the evidence-based approach and use

standardized tests and assessments to qualify services and measure children's progress on their outcomes. The assessment tools utilized in the evaluation process should be appropriate to the child's development and should determine the child's needs across the developmental domains. There are several common standardized assessment tools used in the early intervention programs nationwide, but not all of them are applicable to measure the skills of young children. Early childhood professionals question if these standardized tests are the best tools to detect delays and measure progress in such a young age. According to Bagnato, Goins, Pretti-Frontczak and Neisworth (2014) authentic assessment tools are better equipped to provide an accurate picture of the child's functional skills, than conventional tests. In theory, evidence-based practice should provide various platforms to teach children the necessary skills, and educate parents in how the new skills can be generalized and implemented in everyday routines (Mattern, 2015).

Under the reauthorization, once children were found to be eligible for services, their families were entitled to a team-developed plan for services. Infants and toddlers eligible for the EI programs have demonstrated a wide range of needs according to their symptoms, delay, disorder or diagnosis, and goals, outcomes, and strategies should always be developed according to the families' individual needs (Popp & You, 2016). To fulfill the requirements of EI services, service providers have been obligated to develop specific and individualized goals together with family members. Initial and annual planning meetings provide the platform for the team to develop the Individualized Family Service Plan (IFSP), a document that lists the goals, and strategies. The IFSP document also includes valuable information about the child's functional abilities, the family's strengths and concerns, and the quantity, duration, and frequency of services the family will receive. High quality IFSP documents should be written by using

language that is understandable and usable to the family. However, despite the guidelines and training, professionals struggle to develop high quality plans (Jung, 2009).

#### Variations between States

Prior to the enactment of Part C, the roles and responsibilities of early intervention providers and agencies were unclear, and services differed significantly from state to state (Spiker, Hebbeler, Wagner, Cameto, & McKenna, 2000). Despite the fact that service providers nationwide follow the highlighted guidelines under Part C, the characteristics of states' EI organizational systems resulted in a wide range of variations in states' eligibility policies and service delivery. In its' 2000 NEILS study, Spiker et al. attempted to describe the variations of early intervention systems among states. A total of 20 states were selected for the study, and their EI delivery systems were analyzed. The researchers examined how services were provided within the participating states' local systems, described criteria for eligibility, listed the agencies involved with program delivery and reported the model that is used for service coordination and delivery in participating states. Spiker et al. (2000) concluded, "There is a considerable variation along a number of dimensions of states' early intervention systems" (p. 18). The framework indicated that the discovered differences can significantly influence eligible families' participation in the EI programs. However, the framework did not suggest how state-to-state variations affect the success of early intervention.

In an attempt to ensure high quality EI services for eligible families in every state, the Division of Early Childhood (DEC) of the Council for Exceptional Children (CEC) established criteria for best practices. The indicators for best practices for early intervention were as follows:

(a) service should be delivered in the least restrictive environment; (b) family members and parents should be part of the service; (c) families should have access to a team with multiple disciplines; (d) provided service should be evidence-based, and individually appropriate for the family's unique needs. EI service provider agencies nationwide should adhere to these expectations and develop their policies and standards according to these requirements.

Despite the fact that service providers nationwide follow the highlighted guidelines for best practices, states have the flexibility to determine the eligibility criteria for participation in the state's EI program (Scarborough et al., 2006). Presently, available data indicated that each year more and more families would benefit from services from various early intervention programs. According to the Early Childhood Technical Assistance Center, in 2015, 357,715 children were enrolled in the early intervention program and served annually under Part C. By 2017, this number increased to 373,000. Many scholars examined the reasons for such a dramatic increase. They have suggested, in their findings, that the early identification of developmental delays and the increasing survival rate of premature infants account for the growing number of referrals for EI services (Smith, 2010). One of the main referral factors in early intervention has been a detected or assumed developmental delay. Part C under IDEA uses a broad definition to determine developmental delay. Without the standard definition, states have the right to define the term and develop their criteria for eligibility (Rosenberg, Robinson, Shaw, & Ellison, 2013). These researchers investigated how the diverse eligibility criteria among states influenced the proportion of the enrollment. They concluded that eligibility criteria across the nation vary and states use a wide range of measures to qualify children with a delay for services. In some states, a 25% delay on one or more domains is enough for referral, while in others only a 50% delay will



result in eligibility for services. States with stricter eligibility criteria have seemed to limit access to the program for infants and toddlers with minimal delay, but states with less strict eligibility criteria “could mischaracterize large numbers of children with minimal delays and make far too many children candidates for Part C services” (Rosenberg et al., 2013, p. 41). These findings are consistent with those of McManus, Magnusson, and Rosenberg (2014), who concluded that states with more strict eligibility criteria limit the access for eligible families.

Grant and Isakson (2013), conducted a study to examine if state-to-state variations restricted otherwise eligible families’ participation in EI programs. The focus of the study concentrated on families in poverty and families of children with low birth weight. The study’s results supported the findings of Hebbeler et al. (2001) that not all eligible children (in their focus groups) received support through early intervention due to the variations in the intake process and the utilization of available services. The findings in the NEILS also indicated that state-to-state variations in eligibility can result in enrollment in the EI program in one region but no acceptance in another state.

The variations in states’ funding, policies, and regulations influence who is served, what services are offered, and how the EI services are being provided for families in need. Individual states’ intake processes and the criteria for eligibility are determined by the state Lead Agency. Each state has the authority to identify the department in charge of overseeing its early intervention program. At the time of the present study, a total of 21 different departments were serving as the Lead Agencies across the nation, but in most states, the Department of Education, the Department of Health, or the Department of Public Welfare served as the Lead Agency. In their 2017 study, Twardzik, MacDonald, and Dixon-Ibarra explored the relationship between

enrollment rate in Part C and the department of the Lead Agency. The authors found that states, where early intervention administration fell under the Department of Health, had broad eligibility criteria. Consequently, in those states, the enrollment rate was higher compared to states where the Department of Education was appointed as the Lead Agency. The variations in states' funding, policies, and regulations also can influence who is served, what services are offered, and how the EI services are provided for families in need. The impacts of these differences for families and intervention outcomes are yet to be investigated (Hebbeler et al., 2001)

High quality EI programs maximize parents' and family members' participation in the intervention. Years of research have shown that children under age three are more responsive to EI services if the services are provided in their natural environment. Families' homes, places in the community, and centers where children with special needs have the opportunity to interact with typically developing peers are considered as natural environments (Hoffman, 2016).

According to Fordham, Gibson, and Bowes (2012), providing services in the natural environment opens the possibilities to develop outcomes and strategies that are more family centered than child centered. Family members' participation in the intervention process is better supported and the program is more effective if services are provided in an environment where both the child and the adult feel most comfortable. As a response to the research findings, the center-based practice, which was utilized in the 1990s, has gradually been replaced by home-based practice nationwide (Hoffman, 2016). According to the final report of the NEILS, 76% of the participating families received EI services in their natural environment

In the traditional intervention, a provider-led approach was used where the therapist's focus was on the child, and parents were not engaged with the activities. Researchers such as

Childress (2004) have suggested that the traditional provider-led approach should be replaced with a triadic intervention, where family members are invited to join the sessions and their interaction with the child plays an important role in the intervention process. According to Childress, (2004), “In early intervention parents are seen as their child’s best teachers and as the people who knows the child best” (p.166). Salisbury (2013) conducted a study to compare families’ engagement in the triadic approach versus the provider-led approach. Their findings supported the idea that the triadic approach provided increased opportunities for parents’ involvement and optimized caregiver-child interaction during the sessions. Furthermore, during the triadic intervention approach, the provider can coach parents on how to embed the strategies in the family’s every day routine so that the child’s learning is supported when the therapist is not present. A major aspect of family’ engagement in intervention is a positive relationship between families and service providers. Researchers have found that positive relationships with families resulted in an increased parent participation rate in the sessions and provided open communication platforms for visiting professionals (Hoffman, 2016; Patton, 2015). Families’ involvement in their children’s intervention have additional benefits such as an increased rate of their satisfaction (Dunst, Bruder, & Espe-Sherwindt, 2014). Moreover, parents believed themselves empowered to advocate for their children and that their participation in service related decision-making process was sufficient (Aaron, Palisano, Gracely, O’Neil & Kolobe, 2014; (Popp & You, 2016). However, families’ structures and values differ from each other. Thus, service providers should develop specific approaches for family involvement regarding the given child’s and family’s priorities.

Federal legislation requires states to provide 16 services for qualifying families (Hallam, Rous, Grove, & LoBianco, 2009; Raspa, Hebbeler, Bailey, & Scarborough, 2010). The EI provider team varies but can include physical therapists (PTs), occupational therapists (OTs), nutritionist, developmental specialists, vision therapists, speech and language therapists (SLPT), hearing specialists, and social worker services. Various researchers highlighted that the best service providing model is the Transdisciplinary Approach (TA) in early intervention. The TA is a holistic model, in which team members learn about each other's disciplines and are able to provide services across the developmental domains. In addition, the TA is family centered and requires close collaboration among team members. Boyer and Thompson (2014) supported this theory. However, they indicated that the major aspect of the model, role release, was a challenging factor of the TA. Role release in TA requires professionals and team members to learn more about each other's disciplines, and share information and expertise with other team members. According to King, Strachan, Tucker, Duwyn, Desserud and Shillington (2009), following the role release model can be difficult for professionals, as the model requires a robust collaboration among team members. Moreover, not all professionals can effectively train others about their specialty; and often team members do not think other professionals (outside their discipline) should provide similar services to those that they provide.

King et al. (2009) stated that the positive aspect of TA is that it provides an increased opportunity for communication, and family members' involvement is maximized in every step of the process. O'Neil, Ideishi, Cave and Kohrt (2008) examined this theory from the parents' and service providers' point of view. They conducted a study with 50 adult participants in six focus groups. Of the six focus groups, one included parents and one included therapists/service

providers. The study focused on the parents and therapists' perception of early intervention services. The researchers concluded that some families were confused regarding the roles of the different specialties. Furthermore, the authors found that TA did not provide opportunities for open communication between team members. O'Neil et al. (2008) stated, "Parents and providers confirmed that if a parent could not or would not act as the 'bridge' then communication across providers didn't happen" (p. 128). Although, every state has used the transdisciplinary approach as a service delivery model, the variations in states' regulations and EI utilization can result in some states eligible families having limited access to the different type of services (Spiker et al., 2000).

Another aspect that varies state to state is the rate of intensity within the available services provided. Although access to and the intensity of the available services should reflect each family's individual needs, Hallam et al. (2009) suggested that the different characteristics in each state's service delivery model determine, to great extent, the quantity of provided services, as well as the frequency and duration of those services. In general, families should have access to a variety of services. However, Hallam et al. (2009) examined the characteristics of the service delivery model in Kentucky, reporting that families' income, culture, and geographical location played a role in the determination of service delivery and intensity.

There has been an ongoing debate among scholars as to whether service intensity has a positive effect on families' outcome in EI. Parents view intensity as a critical factor in their children's progress (Hallam et al., 2009; Hoffman, 2016). Innocenti and White (1993) indicated that intensity, in fact, can influence the efficacy of EI services, as not every family has the resources to support its children's development at an optimal rate. Parents' educational

background, financial situation and cultural background can highly influence the effectiveness of the EI service; in some cases, a more intensive intervention would result in better progress. The NEILS indicated that on average families receive less than two hours of EI services on a weekly basis from one discipline. However, because children eligible for intervention show a wide range of needs, the NEILS data did not indicate if the provided hours and services met the families' individual needs.

The aim of early intervention programs has been to provide access to high quality programming for families with young children with special needs. The effectiveness of the program greatly depends on a number of variables and various indicators. The success of the program can be jeopardized if eligible families are not identified and enrolled in the program on time, if collaboration among team members is not facilitated, and if services do not reflect the families' needs. In addition, the intensity, frequency, duration, and quality of the services can influence the efficacy of the program (Mattern, 2015). Even though several researchers have discussed the effectiveness of the EI programs, more studies are needed to investigate how comfortable the families are with the services they receive and which is the optimal approach.

## **CHAPTER 3 METHODOLOGY**

### Introduction

This chapter contains the methods and procedures used to conduct the study. Included are: a restatement of the research questions along with a discussion of the research design and instrumentation used to conduct the study. The study was initiated only after the University of Central Florida's Institutional Review Board had approved the study (See Appendix A).

### Research Questions

The following research questions guided this study:

1. To what extent, if any, do variations in states' service delivery models influence parents' level of satisfaction with early intervention services?
2. To what extent, if any, does the quantity of provided services affect parents' level of satisfaction?
3. To what extent, if any does families' geographic location determine the level of access to early intervention services?

### Design, Recruitment, and Procedures

The data presented in this study was a result of a survey research design focused on (a) the investigation of families' perceptions of their child's early intervention program, and (b) the examination of their level of satisfaction with their current service delivery model. The study subjects were parents and caregivers whose children received services through the Part C early intervention program between January 2013 and January 2017. The targeted states for the study

were Florida and Pennsylvania, and participants were selected from the Central Florida area and the Western region of Pennsylvania. Subjects were selected to participate in this study using purposive sampling procedures. The sampling for this study was purposive because only subjects who met the inclusionary criteria were selected for this study. To recruit participants, the researcher contacted administrators from early intervention provider agencies and requested assistance to disseminate the anonymous survey link to the families they served. Provider agencies' contact information was obtained from a state approved provider list. To recruit participants from the state of Pennsylvania, the researcher used the "Approved Statewide Provider Listing" directory, published on the Pennsylvania Department of Education website. Likewise, to recruit participants from the state of Florida, agencies from the targeted counties were selected from the "Early Steps Referral Contact List" published on the Florida Health website. Contact was made via phone and email.

The first contact was an introductory email, with an attachment of the explanation of the study and a request for assistance for dissemination of the survey. The email included an anonymous link to the survey, as well as a short letter to the participants. The first attempt to recruit participants was made in January 2018. In February, a reminder email was sent, and a final email was sent in March. The survey was available online for 12 weeks through Qualtrics Survey Software, and it was closed on April 9, 2018. The request for assistance in survey distribution was not always welcomed, and some agencies declined the request.



## Instrumentation

No published survey was available to address the researcher's questions. The researcher developed a 21-item questionnaire specifically for this study. The first section contained the screening questions for eligibility. The survey items were grouped together strategically to explore participants' perspectives and opinions. Each aspect examined was rated either using a Likert-type five-point scale, or a two-point scale for nominal format items. The Likert-type five-point scale was used in statements where participants were asked to select their responses from the following choices: Strongly Agree, Agree, Neither Agree nor Disagree, Disagree, and Strongly Disagree, or Very Satisfied, Satisfied, Neither Satisfied nor Dissatisfied, Dissatisfied and Very Dissatisfied. Approximately eight items were presented in ordinal format, asking participants to select one of the five responses that closely resembled their feelings related to the statement. The questionnaire used in this study was not validated, but it was used in a pilot format to check for clarity and parent understanding of the items of the questionnaire. Based on their feedback, revisions were made. The final version used in this study is presented in Appendix B.

Of the 21 survey items, items 6 and 7 were developed to examine if the child was provided with all the services that he or she was found eligible for at the initial assessment. Items 8, 9, 10, and 11 were created to gauge parents' perceptions about the frequency and the duration of the services. The purpose of item 12 was to measure if parents were overwhelmed with managing and organizing the services. Survey items 13 and 14 were used to explore the respondents' opinions about the accessibility to the services in their county. In the final section, items 15-21 measured parents' overall satisfaction level on various items and focused on parents'

overall experience with their early intervention experience. The completion of the survey took approximately five minutes for each participant to complete. Descriptive analysis of the data were used to generate the results, and the resulting data were analyzed and compared by states.

## **CHAPTER 4 RESULTS**

### Introduction

Due to the nature of the recruiting process and the eligibility criteria, the researcher was unable to determine the size of the target population, how many families were contacted and invited for the study. Participants were eligible for the study if they were adults 18 years or older; they indicated that they live one of the selected counties; and their children received EI services for 12 consecutive months between January 2013 and January 2017. A total of 49 individuals initially responded to the survey but only 40 met the inclusionary criteria. Of the 49 who completed the survey, nine results were eliminated because the respondents' children were not enrolled in the early intervention program for 12 consecutive months.

### Overview of Results

Responses to demographic questions indicated that of the 40 respondents, 64.1% (n=25) were from Florida and the remaining 35.89% (n=15) were from Pennsylvania. Of the 25 respondents from the state of Florida, over 32% (n=13) of the respondents were residents of FL-1 County; approximately 23% (n=9) were from FL-2 County; and 7.5% (n=3) resided in FL-3 County. Of the 15 Pennsylvania respondents, 27.50% (n=11) of participants were residents of PA-1 County; 7.5% (n=3) were residents of PA-2 County; and 2.50% (n=1) resided in PA-3 County. Results are displayed in Figure 1.

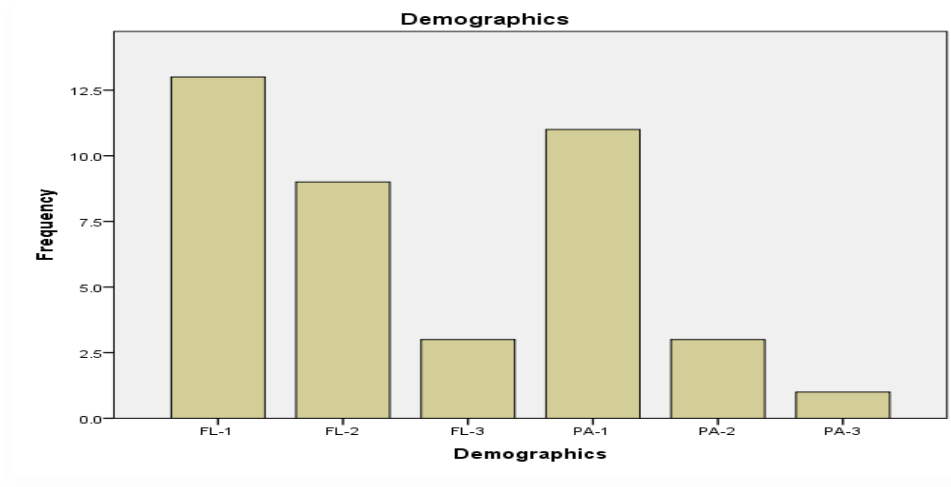


Figure 1. Participants' demographics by county.

Data showed that 52% (n=13) of the Florida participants' children were eligible for services from multiple disciplines at the initial IFSP meeting. However, as shown in Table 1, approximately 61% (n=8) of these eligible children received services from only one discipline. In contrast, and as shown in Table 2, of the 15 Pennsylvania respondents, 86% (n=13) were eligible for services from multiple disciplines, and 100% (n=13) of the children received services from multiple providers. The responses suggest that children living in Florida had less access to services from multiple disciplines, than did children living in Pennsylvania.

Table 1

*Number of Families Received Multiple Services: Florida*

Disciplines	Frequency	Percentage
Single Service	8	61
Multiple Service	5	39
Total	13	100

Table 2

*Number of Families Received Multiple Services: Pennsylvania*

Disciplines	Frequency	Percentage
Single Service	0	0
Multiple Service	13	100
Total	13	100

The total responses to survey item 8 indicated that respondents were more satisfied than dissatisfied with the frequency of the services. However, state to state data comparison suggested that in the state of Florida, approximately 56% (n=14) of the respondents were satisfied with the frequency of services. In the state of Pennsylvania, however, more than 90% (n=14) of respondents expressed satisfaction with the frequency of the services. The results of the analysis are displayed in Tables 3 and 4.

Table 3

*Respondents' Level of Satisfaction with Frequency of Services: Florida*

Level of Satisfaction	Frequency	Percentage
Dissatisfied	4	16.0
Neither/Nor	2	8.0
Satisfied	8	32.0
Very Satisfied	6	24.0
Total	23	92.0
Missing	2	8.0
Total	25	100.0

Table 4

*Respondents' Level of Satisfaction with Frequency of Services: Pennsylvania*

Level of Satisfaction	Frequency	Percentage
Dissatisfied	1	6.7
Satisfied	7	46.7
Very Satisfied	7	46.7
Total	15	100.0

Interestingly, the vast majority of the respondents indicated that, they would like to have services on a more frequent basis regardless of their response to the previous question. However, when the data were categorized by state, only 26% (n=4) of the Pennsylvania respondents expressed a preference for services on a more frequent basis, but 92% (n=23) of the Florida respondents indicated that they would like to have services more frequently. These data suggest that parents believed that frequency was an important factor in their children’s progress. These results are displayed in Table 5 and Table 6.

Table 5

*Respondents' Preferences for Frequency of Service: Florida*

Preference for Service	Frequency	Percentage
Same	2	8.0
More frequent	23	92.0
Total	25	100.0

Table 6

*Respondents' Preferences for Frequency of Service: Pennsylvania*

Preference for Service	Frequency	Percentage
Same	11	73.3
More frequent	4	26.7
Total	15	100.0

Respondents also connected the pace of the progress with the intensity of the services. This may reflect an underlying belief that the early intervention process is more effective if the sessions are provided on a more frequent basis and that the sessions are long enough. It appears that there was a significant difference in service duration between the two states. The majority of the respondents from Florida indicated that the early intervention sessions were 30 minutes long, but the average duration of a session was 60 minutes in Pennsylvania. Of the Floridian respondents, 52% (n=13) believed that the sessions were not long enough, but 100% (n=15) of the respondents from Pennsylvania indicated that the length of the services were appropriate for their children's needs. Results regarding service duration are displayed in Figure 2.

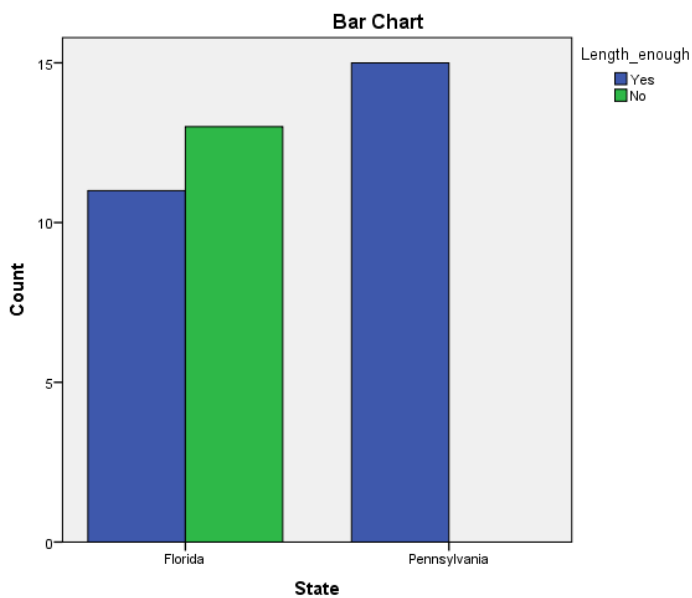


Figure 2. Comparison of respondents' perceptions regarding service duration: Florida and Pennsylvania.



Of the respondents from Florida, 52% (n=13) indicated that the services were not sufficient (in duration) for their children's needs, and the same percentage of respondents believed that the early intervention program in their counties did not provide access to all available services. In contrast, the majority of the respondents from Pennsylvania were satisfied with the length of service duration, and only one participant believed that the county did not provide access to all available services.

The vast majority of the respondents indicated that their satisfaction level was greatly influenced by the frequency, duration, and quantity of the services. The data were very similar between the two states: approximately 86% (n=34) of the respondents from both states agreed or strongly agreed with the statement that their level of satisfaction with the early intervention program was influenced by the frequency, duration and quantity of the services. Interestingly, the rating of the respondents' experience with early intervention was not influenced by these three factors; and more than 70% (n=28) of the total respondents rated their experience as very good or good, 12% (n=5) of them average, and 15% (n=6) of them poor. Results are displayed in Table 7. The analyzed data did suggest that there are differences between service delivery models from state to state and that these differences influence parents' perceptions of their children's services.

Table 7

*Respondents' Level of Satisfaction with Services*

States	Levels of Satisfaction with Services					Total
	Poor	Average	Good	Very Good	Excellent	
Florida	6	4	4	1	9	24
Pennsylvania	0	1	6	5	3	15
Total	6	5	10	6	12	39

Analysis of Data

Research Question 1

*To what extent, if any, do variations in states' service delivery models influence parents' level of satisfaction with early intervention services?*

To answer this research question, the researcher first examined the factors that influence parents' level of satisfaction. Responses to survey items 15, 16, 17, and 18, suggested that the quantity, the length and the frequency of the received sessions were determining factors in parents' satisfaction level with the early intervention program. Approximately 37% (n=15) of the total respondents indicated a strong agreement with the statement that the quantity, length and frequency of the received sessions influenced their level of satisfaction, and over 45% (n=18) of the total participants agreed with this same statement. Data suggested that session frequency was likely the most important element for the parents. Of the 25 respondents from Florida, approximately 50% (n=12) of the respondents were very satisfied or satisfied with the program,

but the satisfaction level in Pennsylvania was over 90% (n=13). The structure of the states' early intervention program determines the frequency, duration and quantity of services. The data showed that there was a clear indication that the service delivery model was different between the two selected states. The differences in the service delivery model influenced families' level of satisfaction with the program.

#### Research Question 2

*To what extent, if any, does the quantity of provided services affect parents' level of satisfaction?*

Based on the analysis of the overall data, the researcher drew the conclusion that families' satisfaction level was higher in Pennsylvania because the state provided services across disciplines at a higher rate than provided in Florida. Although the researcher has no evidence that these differences between the two states were caused by the different characteristics of the delivery model, the data suggested that families whose children received multiple services across disciplines were more satisfied with the program than those whose children had access to limited services due to state regulations.

#### Research Question 3

*To what extent, if any, does families' geographic location determine the level of access to early intervention services?*

To answer this research question the researcher compared the responses to survey items 13 and 14. Florida respondents (52%) (n=13) expressed the belief that their children did not have access to all available services. They indicated that their children's needs were underserved by the early intervention program provided by their county. In contrast, 92% (n=14) of the

Pennsylvania participants believed that they had access to all available services, and 80% (n=12) indicated that the quantity of services provided were sufficient for their children's needs. The analyzed data suggested that families living in Pennsylvania had better access to all available services than families living in Florida. Thus, in the present study, the families' geographic location determined the level of access to EI services.

## **CHAPTER 5 DISCUSSION AND IMPLICATIONS**

### Introduction

Every family of an infant and toddler with special needs is entitled to early intervention services under PART C of the IDEA. However, due to state level regulations and undefined terms, the early intervention program can be profoundly different from state to state. As the literature review has shown, the structure of the early intervention program varies not only on the state level, differing from county to county within a single state. States' funding sources, the department in charge of administering the program and local regulations impact who is served and what services are provided. Access to services, eligibility criteria, service frequency and duration vary and can influence the efficacy of the program.

### Purpose of the Study

This study has multiple purposes. The first purpose was to investigate whether variations in EI service delivery model influenced parents' perceptions of the quality of their EI services. The second purpose was to compare parents' satisfaction level with the early intervention program in the selected counties from Pennsylvania and Florida. The third purpose was to reveal whether families' residency determined the level of access to services.

### Discussion

Due to the nature of the recruiting process and the eligibility criteria, the researcher was unable to determine the size of the target population, and that how many families were contacted and invited for the study. It is believed that the results of this study provide a strong indicator for

a larger population of respondents. The study revealed that parents' satisfaction level was higher in a state where families had access to multiple services, sessions were provided more than once a week, and the services were provided across disciplines. Also, it appears that parents viewed intensity as the road to success. It is important to note that one of the main purposes of the early intervention program has been to provide support to families. The success of intervention greatly depends on parents' participation in the process. Parents, caregivers and other family members should always be present and actively engaged in the various activities. The early intervention process will be more effective if parents are aware of their role in the sessions and understand how to implement strategies in their everyday lives.

The results of this study indicate that parents' level of satisfaction was influenced by the amount of the provided services. Although both Florida and Pennsylvania have provided access to a multidisciplinary team, the number of authorized services for eligible families was higher in Pennsylvania than it was in Florida. Access to limited number of services can be devastating to families where children demonstrate significant delays on all developmental domains; thus, services across the disciplines would be the most effective.

The overall result of the study suggests that families' geographic location determines accessibility to services. The findings of the researcher in this study revealed that families residing in Pennsylvania had better access to services than did a comparative group of families in Florida.

## Limitations

The limitations of this study were as follows. Due to the eligibility criteria the sample size might not represent the population of families whose children were enrolled in the early intervention program between January 2013 and January 2017. Second, the counties were selected purposively to reflect differences between the two states. It is possible that selecting participants from all counties and regions of both states would have resulted in a different outcome of the study. Including more regions and states in the study would have resulted in a more comprehensive picture of parents' beliefs and opinions about the services. Third, the questionnaire was developed by the researcher and was not validated for the purpose of the study. The researcher was not present at the administration of the survey and cannot be certain that the respondents understood the questions and that all responses were a true reflection of their feelings.

## Implications for Future Research

To examine families' satisfaction levels with various factors of the early intervention program, future researchers should use a larger sample size and target all counties in the selected states. Collaboration with administrators of service provider agencies may be needed to reach the families whose children are enrolled in the program. Further, to measure satisfaction, a more robust survey with established validity and reliability should be used. Because the variations between states' early intervention program affect the development of the IFSPs, future research should be focused on how the developed documents address the families' needs. Moreover, researchers should investigate if the developed strategies address the families' concerns. Finally,

in any future studies, consideration should be given to further explore the standards of an optimal service delivery model in the early intervention program.



**APPENDIX A**  
**INSTITUTIONAL REVIEW BOARD APPROVAL**



University of Central Florida Institutional Review Board  
Office of Research & Commercialization  
12201 Research Parkway, Suite 501  
Orlando, Florida 32826-3246  
Telephone: 407-823-2901 or 407-882-2276  
[www.research.ucf.edu/compliance/irb.html](http://www.research.ucf.edu/compliance/irb.html)

### Determination of Exempt Human Research

From: **UCF Institutional Review Board #1  
FWA00000351, IRB00001138**

To: **Andrasne Weiszaupt**

Date: **December 18, 2017**

Dear Researcher:

On 12/18/2017, the IRB reviewed the following activity as human participant research that is exempt from regulation:

Type of Review: Exempt Determination  
Project Title: Exploring Parents' Perspectives of the Effectiveness of the Early Intervention Program; Do Variations of Delivery Models Influence Parents' Perspectives in the Early Intervention Program?  
Investigator: Andrasne Weiszaupt  
IRB Number: SBE-17-13613  
Funding Agency:  
Grant Title:  
Research ID: N/A

This determination applies only to the activities described in the IRB submission and does not apply should any changes be made. If changes are made and there are questions about whether these changes affect the exempt status of the human research, please contact the IRB. When you have completed your research, please submit a Study Closure request in iRIS so that IRB records will be accurate.

In the conduct of this research, you are responsible to follow the requirements of the [Investigator Manual](#).

This letter is signed by:

A handwritten signature in black ink, appearing to read "Gillian Morien".

Signature applied by Gillian Morien on 12/18/2017 01:05:52 PM EST

Designated Reviewer



University of Central Florida Institutional Review Board  
 Office of Research & Commercialization  
 12201 Research Parkway, Suite 501  
 Orlando, Florida 32826-3246  
 Telephone: 407-823-2901 or 407-882-2276  
 www.research.ucf.edu/compliance/irb.html

**Determination of Exempt Human Research**

From: **UCF Institutional Review Board #1  
 FWA00000351, IRB00001138**  
 To: **Andrasne Weiszaupt**  
 Date: **May 08, 2018**

Dear Researcher:

On 05/08/2018, the IRB reviewed the following activity as minor modifications to human participant research that is exempt from regulation:

Type of Review: Exempt Determination  
 Modification Type: Revised study title from "*Exploring Parents' Perspectives of the Effectiveness of the Early Intervention Program; Do Variations of Delivery Models Influence Parents' Perspectives in the Early Intervention Program?*" to "*Do Variations of Delivery Models Influence Parents' Perspectives in the Early Intervention Program?*" Revised Study Application, version 1.4, attached. Revised Protocol and consent uploaded in iRIS.  
 Project Title: Do Variations of Delivery Models Influence Parents' Perspectives in the Early Intervention Program?  
 Investigator: Andrasne Weiszaupt  
 IRB Number: SBE-17-13613  
 Funding Agency:  
 Grant Title:  
 Research ID: N/A

This determination applies only to the activities described in the IRB submission and does not apply should any changes be made. If changes are made and there are questions about whether these changes affect the exempt status of the human research, please contact the IRB. When you have completed your research, please submit a Study Closure request in iRIS so that IRB records will be accurate.

In the conduct of this research, you are responsible to follow the requirements of the [Investigator Manual](#).

This letter is signed by:

Signature applied by Kamille Chaparro on 05/08/2018 12:04:35 PM EDT

Designated Reviewer

**APPENDIX B**  
**INSTRUMENTATION: PARENT SURVEY**

## Parent Survey

---

Q1 Are you 18 years old or older?

Yes

No

---

Q2 In which county do you live?

Orange, FL

Seminole, FL

Volusia, FL

Allegheny, PA

Butler, PA

Beaver, PA

---

Q3 Was/Is your child enrolled in your states' Early Intervention Program and received/receives any services or therapies?

Yes

No

Q4 Was/Is your child enrolled in an Early Intervention Program for 12 consecutive months between January 2013 and January 2017?

Yes

No

---

Q5 At what age did your child start to receive services?

---

Q6 What type of services was your child eligible at the initial Individualized Family Service Plan (IFSP) meeting? Please select all that apply and indicate the frequency of the services.

	1 session per week	2 sessions per week	3 or more sessions per week	Less than 1 session per week
Physical Therapy	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Occupational Therapy	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Speech Therapy	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Developmental Therapy	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Vision Therapy	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Nutrition	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Hearing Therapy	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Social services /respite,advocacy,parent classes/	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Service Coordination	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Other (Please Specify)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q7 On a weekly basis, how many therapies are/were scheduled for your child? If your child received services on bi-weekly or monthly basis, please indicate it in the "other" box.

0

1

2

3

4 or more

Other \_\_\_\_\_

Q8 Overall, how satisfied are/were you with the frequency of the received services and therapies?



	Very Satisfied	Satisfied	Neither Satisfied nor Dissatisfied	Dissatisfied	Very Dissatisfied
Physical Therapy	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Occupational Therapy	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Speech Therapy	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Vision Therapy	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Developmental Therapy	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Hearing Therapy	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Service Coordination	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Nutrition	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Social Services	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

-----

Q9 If you had a choice, would you prefer services on a more or less frequent basis?

More Frequent

Same

Less Frequent

---

Q10 Please indicate the length of the services/therapies. Select all that apply.

	30 minutes	1 hour	More than 1 hour
Physical Therapy	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Occupational Therapy	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Speech Therapy	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Vision Therapy	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Developmental Therapy	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Hearing Therapy	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Service Coordination	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Nutrition	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Social Services	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

---

Q11 Do you feel that the sessions were long enough to optimize your child's development?

- Yes, I feel that the sessions were long enough
  - No, I feel that the sessions were not long enough
- 

Q12 Do you agree that managing and organizing visits from service providers is/was overwhelming

- Strongly Agree
  - Agree
  - Neither agree nor disagree
  - Disagree
  - Strongly disagree
-

Q13 Do you agree that the amount of provided services are/were sufficient for your child's needs?

- Strongly Agree
  - Agree
  - Neither agree nor disagree
  - Disagree
  - Strongly Disagree
- 

Q14 Do you feel that the Early Intervention program in your county provides access to all available services?

- Yes, I feel that my child received the services he/she needed
  - No, I feel that my child didn't have access to all the services he/she needed
-

Q15 Please rate your satisfaction level with the frequency, duration and quantity of the provided services/therapies.

	Quantity	Frequency	Duration
Very Satisfied	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Satisfied	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Neither Satisfied nor Dissatisfied	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Dissatisfied	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Very Dissatisfied	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q16 Do you agree that the quantity of the received sessions influenced your level of satisfaction with the Early Intervention?

- Strongly Agree
- Agree
- Neither agree nor disagree
- Disagree
- Strongly disagree

Q17 Do you agree that the length of the received sessions influenced your level of satisfaction with the Early Intervention?

- Strongly Agree
  - Agree
  - Neither agree nor disagree
  - Disagree
  - Strongly disagree
-

Q18 Do you agree that the frequency of the received sessions influenced your level of satisfaction with the Early Intervention?

- Strongly agree
  - Agree
  - Neither agree nor disagree
  - Disagree
  - Strongly disagree
- 

Q19 Overall, how satisfied are you with the service delivery model provided in your county?

- Very Satisfied
  - Satisfied
  - Neither Satisfied nor Dissatisfied
  - Dissatisfied
  - Very Dissatisfied
-

Q20 Overall, how would you rate your experience with the Early Intervention program?

- Excellent
  - Very Good
  - Good
  - Average
  - Poor
- 

Q21 Please indicate the location of the services

- Therapist came to my home to provide services
  - Services were provided at a medical or therapy center
-



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