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### A Case for Early Intervention Speech Therapy for all Children in the Foster Care System

Moriah Manchack

*Ouachita Baptist University*

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## Chapter 1

### Introduction

Communication is the very basis for our lives as humans. Without communication, humans would never have survived as long as they have. Every meaningful relationship, every time we need help, every time we want to express what we feel, we rely on some form of communication. Nearly every aspect of our lives revolves around our ability to communicate. Spoken communication, while only one way that we can communicate, is also one of the most important. If you want to do well in school, get a job, go to the store, or any number of typical, everyday things, you often rely, at least a little, on spoken communication.

What if I were to tell you, however, that you could not communicate with speech. Or, even if you could, it would be difficult for others to understand you because of how you said the words. Though it would be possible for you to adapt and find alternate methods of communication, the most clear, efficient, and effective way to communicate your needs and desires would be through spoken language.

Let us consider another hypothetical scenario. A child was born that had the potential to develop “normal” speech and language (spoken communication). Every structure involved in the language learning and production processes were present and functional. They began to follow the typical developmental patterns, and were on the same developmental track as their peers. Unfortunately, they experienced a trauma that added pressure to their brain development in a way that negatively impacted their speech and language development. Now this child is on the developmental track to have delayed or disorders speech and language. In this scenario, the child was born with the potential and capacity to develop typically, but something that was out of their control took place, and they will now develop at a slower rate than their peers and have

disordered speech and language. If this same child, however, was given access to speech and language therapy, though they don't yet talk, the possibility that they will develop "normal" speech and language has increased. This is the purpose of Early Intervention Speech Therapy.

In the scenario above, the terms speech and language disorders or delays were used to characterize the interruption or lack of development. Speech refers to the sounds of our language that we use to form words. Someone with a speech delay or disorder is unable to produce, or say, those sounds clearly. Speech also includes those who have a voice that may be raspy or breathy sounding as well as those who have difficulty speaking smoothly - what is known as stuttering. Language is comprised of words that we use to communicate. A language delay or disorder would be characterized by someone with difficulty understanding words and sentences spoken to them, using words and sentences to express themselves, as well as reading and writing problems (American Speech-Language-Hearing Association, n.d.-b). Further clarification between the terms "delayed" and "disordered" is also important for understanding about early intervention. Delayed speech means that the child is developing typically, but at a slower rate than his/her peers. Disordered speech indicates the child is developing speech in an abnormal way (Speech and Hearing BC, 2014). For the purposes of this paper, these terms will often be used together, as either one, or even both, can be induced by trauma. One other important term from above is Early Intervention Speech Therapy (EI). Early intervention speech therapy is defined as the speech therapy services that are provided for children between the ages of birth and three years old, and their families (American Speech-Language-Hearing Association, n.d.-a). These services are provided to children with identified or suspected speech and language delays or disorders.

## **Purpose**

The purpose of this thesis is to examine the evidence that supports the idea of mandatory entry into early intervention speech therapy services for children who have been placed in the Foster Care system. My initial interest for this topic developed during my Communication Sciences and Disorders classes on normal speech and language development. In later courses about speech and language disorders, I learned about the possible interruptions to this normal development, and the consequences when not addressed with intervention. Through these classes, I was astounded by the fact that a child who would otherwise develop normally could be changed by their environment, resulting in speech and language delays and disorders.

While there are etiologies that cannot be changed, such as genetic disorders, it is also possible that a child who would likely have progressed typically is affected by something in their environment, which causes them to develop delayed or disordered speech. Regardless of the etiology, research has supported the efficacy and effectiveness of early intervention. Early Intervention (EI) takes advantage of the neuroplasticity of a young child's brain. The younger the child, the more connections and adaptations can be made that set a standard for future learning (Good et al. 2011). For the child with speech and language delays or disorders, EI reinforces the neural pathways needed to develop communication skills.

This made me think of the children who are in the Foster Care system. These children have all experienced trauma in some way or another. They are the children who can so easily "fall through the cracks" in our society, but deserve better from us. Finally, I wanted to research what the state of Arkansas was doing to help these children. I wanted to find out if there were any laws in place, and the provisions made, to ensure that these children can receive the much needed services.

My hope for you, as the reader, is that by the end of this paper, you will see the enormous benefits that could be realized by making Early Intervention Speech Therapy a required service for all children between the ages of birth and three years old who enter into the Foster Care system.

## Chapter 2

### A Case for Early Intervention Speech Therapy

At first glance, Early Intervention Speech Therapy may appear to be a ridiculous notion. Children between the ages of birth to three years old are barely talking anyway, so why would there be a need for speech therapy services?

That question can be answered with understanding something called neuroplasticity. As stated earlier, neuroplasticity involves neural networks that allow us humans to make new neural connections and adapt to our surroundings. However, it is so much more complicated than that. Neuroplasticity is how the interaction of our genes and environments influence the “maturation of neural circuits” and its ability to “shape changes in the physical and mental development” of a child (Inguaggiato et al., 2017, p. 304). Our brain cells have the ability to make positive or negative changes based on influence of intrinsic and extrinsic factors (Shaffer, 2016). This is to say that our experiences can physically change the development of our brains. While we always have some neuroplasticity, it tends to function more effectively when we are babies. In fact, this neuroplasticity is so important that the youngest years of our lives are deemed “critical periods” for different developmental events in which our brains are most sensitive to “acquiring instructive and adaptive signals from the external environment” (Inguaggiato et al., 2017, p. 304).

Evidence has shown that there are indeed critical periods for the normal acquisition of speech and language. Language development is enhanced during these critical periods through a rich, stimulating environment that offers new experiences for the brain to make those neural connections for the child. This stimulating environment can be provided through music to which the child is exposed, the sounds of his or her environment, and the voices of those around them

experienced through activities such as shared reading with a parent or another child. Families are the key to the language exposure of a child. Solid family structures and active parents are important factors for language learning in children. When a child grows up in a home that provides strong support for his or her development, then there is an increase in the amount of positive language exposure that a child experiences. Children with educated parents who are active communicators receive significant language input to help their speech and language development. These parents often introduce several different types of language stimuli such as books and their everyday one on one communication with the child. Children from these healthy home situations often develop the language skills that they need to be productive and active members of society. These children are able to communicate their needs and wants, and their opportunities in life (for example, job opportunities) are not hampered by non-productive communication skills. Unfortunately, when a child does not have access to these healthy home situations, they do not receive the language exposure that they need, and often develop poorer language skills.

The most important aspect of a stable family environment is the language interaction that the child receives. In a study that compared the ability of American born infants at ten months of age to distinguish between the sounds of Mandarin after one month of exposure to human interaction or to audio and videos. Those that received human interaction were able to distinguish between the sounds at a “statistically equivalent” rate as infants from Taiwan who had heard Mandarin all of their lives. However, the children that were exposed to Mandarin from audio and videos were only able to distinguish between the sounds at the same level as infants who had never been exposed to Mandarin before (Schwartz, 2003). This study highlights the importance of healthy interaction in the language learning process. While this interaction alone



was not sufficient for the children to learn Mandarin, their great strides in learning the sounds of the language in such a short time gives insight into the language learning abilities of children during their critical periods. The difference between the infants exposed to audio and/or video, and those exposed to human interaction also demonstrates the importance of interaction in the language learning process. Families that have a more stable environment, and expose their children to a variety of language stimuli help to foster and support the speech and language development of their children.

We can see the importance of critical periods when studying congenitally deaf children. “Whereas most babies begin producing speech like sounds at about 7 months (babbling), congenitally deaf infants show obvious deficits in their early vocalizations, and such individuals fail to develop language if not provided with an alternative form of symbolic expression” (Purves et al., 2001). These deaf children who fail to develop language clearly demonstrate the presence of critical periods and give us a glimpse of the consequences of interrupting the process of language development. What is even more interesting is that if deaf children are exposed to sign language at an early age (just like a hearing child would be exposed to the sounds of his or her own language), they begin babbling with their hands, rather than with their voices (Purves et al., 2001). This would suggest that the critical period does not just exist for the ability to produce a language but for the ability to learn language in and of itself. The critical period determines a child’s ability to connect meaning to the arbitrary sounds and symbols of language.

It is important to keep in mind the critical periods and the importance of neuroplasticity, when looking at the process of language development when interrupted during this critical period. The example of a child with hearing loss illustrates the interruption to acquiring language with the absence of sensory input during the critical period for language development. However,

when the family system does not allow for a child to receive the language exposure that he or she needs due to poor education or negligence, or does not give the child the support required to make sense of the incoming information, the child's language learning process is interrupted.

When a child experiences an interruption to the language learning process, it can severely affect their ability to communicate later in life. In some cases, that child may never have the ability to communicate beyond the most basic level. A famous and well-documented case of a thirteen year old girl raised under conditions of almost total language deprivation gives evidence to the consequences of interrupted language development critical periods. While the girl received intense training after she was rescued from her living situation, she never achieved more than the most rudimentary level of language communication (Purves et al., 2001). However, interruption to the language development critical period does not only come in the form of language deprivation. It can also take the form of neglect. Another study compared the early language development and child behaviors of children between the ages of three and ten with consideration to their upbringing. Children with a history of familial neglect, children with a history of Institutional rearing, and children without a history of neglect were compared. It was found that the children with a history of familial neglect and institutional rearing demonstrated lower cognitive and language scores, and exhibited more behavioral problems than the children without a history of neglect (Spratt et al., 2012). These studies demonstrate the debilitating consequences that can occur in a child's language development when the critical period for language development is interrupted, and the developmental track derailed by environmental factors.

Now that we are aware of the presence of these critical periods, and the dangers of an interruption to speech and language development during these critical periods, the need for early

intervention speech therapy is evident. Children's inability to speak does not mean that they are not free of risk for developing speech or language delays or disorders when their critical period is interrupted. Furthermore, when the neuroplasticity of the human brain is the most effective and efficient within the first three years of life, Early Intervention speech and language therapy should be both encouraged and employed all the more (Goode et al., 2011).

A general description for Early Intervention services is not sufficient to fully understand why these services are so desperately needed. A more in depth look into EI services provides a better explanation as to why they are effective and what they entail. Often when children are eligible for EI services they do not just receive therapy for speech and language. They may be in need of any number of therapy services to help them meet all of their developmental milestones. These children receive therapies designed to support their development from a variety of service providers in a variety of fields that form an interdisciplinary team of professionals. For example, a child could be in need of physical therapy, occupational therapy, and speech and language therapy. These different professionals would work together to ensure that this child receives all of the support that he or she needs in order to return to or maintain their developmental track.

The professionals will begin by extensively evaluating the children to determine their strengths and weaknesses, and what types of services that they could benefit from. The evaluations assess the child's individual abilities, interaction between the child and their caregivers, and the developmental, social, and communication history of the child. After this comprehensive evaluation is complete, the various professionals meet as a team that includes the parents and/or caregivers to discuss the services and interventions most likely to benefit the child at that time. The therapists often work as much with parents and caregivers as they do with the child, since an integral component for successful intervention is the role of the parent who learns

to facilitate and support the child by using the intervention strategies and techniques outlined by the various professionals who work with the child. The therapists serve as a model for the behavior that the families can use to help their child's development.

The involvement of the family or caregivers is a very important part of early intervention services. While therapists can help and encourage a child's development, they are only there for a short time a few days of the week. The family or caregivers are with the child and are involved in the day-to-day interactions that a child between birth and three years experiences. Research supports that caregiver involvement in the early intervention therapy process produces "positive effects on children's physical, cognitive, social, and language skills" (Carnes, 2012). Even though children in the Foster Care system may not have a stable living situation, or the same caregivers over an extended amount of time, the caregiver's interactions with the child are crucial to the child's overall development. Regardless of where the child is placed, caregivers need to be aware of the child's specific needs and be given training and guidance that best supports healthy child development. .

In addition to studies on neuroplasticity and the importance of critical periods, another important factor when considering EI services is the efficacy of the various speech therapy programs. Ward (1999) studied children between the ages of eight-and 21-months who were at risk of development language delays or disorders and were receiving EI speech therapy. Results indicated that only 5% of these children who received EI services continued to show delay at the age of three, where as 85% of the children in the control group who received no EI services did exhibit a language delay at the age of three. While this study only followed the children through the end of their eligibility for EI services, it demonstrates that EI services are effective in supporting stronger speech and language development in children between the ages of eight and

21-months. In contrast, without EI services, these same children who may later be placed in speech therapy services in school which means time missed from their academics and their peers at a significantly higher cost to governmental resources.

As with all things, EI therapy does have limitations and there are several factors that can affect the results of EI speech therapy. Involvement of caregivers, underlying conditions of the delay or disorder, and the knowledge and proficiency of the therapist all have the potential to affect the outcome of EI speech therapy services. Despite these limitations, the evidence supports that overall, EI speech therapy has proven to be an effective tool to improve the overall speech and language development of children who are considered at risk for speech and language delays and/or disorders.

## **Chapter 3**

### **Foster Care and Trauma:**

#### **Why Children in the Foster Care System Qualify as At-Risk**

The definition of an at-risk infant or toddler is “an individual under three years of age who would be at risk of experiencing a substantial developmental delay if early intervention services were not provided to the individual” (IDEA, 2004). As stated before, the purpose of the Foster Care system is to provide the “temporary placement of children...” and “to meet their ongoing needs until it is safe to reunify them with their birth parents or other family members. Sometimes this can take a week or two; sometimes it can take a few years.” (Ohio: Foster, Adoption, Kinship Care, 2018). According to the most recent children’s bureau statistics, “there were an estimated 437,465 children in foster care on September 30, 2016 which is an increase of approximately 10,000 children compared to the same date the year prior” (iFoster, n.d.). Of those children, 41% are between the ages of zero and 5 (The Annie E. Casey Foundation, 2020). While these children are in foster care, their parents are given the opportunity to improve the home and personal situation that led to the child’s removal and allow the child to return to a safer and healthier home. This is a worthy goal, but during the parents’ time of recovery and/or improvement the child is separated from the parent — and that can be a traumatic experience for a child.

Trauma is defined as “any form of impairment to the psyche that is a direct result of a difficult event” (Papovich, 2020, p. 2). Children who enter into the Foster Care system have experienced trauma from the event or events that resulted in their placement in the system, as well as the instability from being removed from their homes. The process of entering the Foster Care system can in itself be a form of trauma as children may not know where they are or where

they will be from one day to the next. Separation from the parent and/or siblings along with the absence from the familiar can have detrimental effects on a child's physical and mental well being. Simply removing the child from an unsafe and unhealthy environment "does not remove the trauma from the child's memory" (The Center for Youth and Family Solutions, 2018). The effects of their traumatic experiences are not easily forgotten even when placed in a stable and loving foster care home. The effects of these experiences can be realized throughout a lifetime.

Studies have examined the effects of the trauma that children in the Foster Care system experience in concern of their mental and physical health. In fact, many children in Foster Care system experience Post Traumatic Stress Disorder (PTSD). Studies have shown that 90% of children in foster care have trauma exposure, and 30% of children who have left the system meet the conditional requirements for PTSD (Papovich, 2020, p. 2). These traumatic experiences can severely affect a child's physical and mental development. The development of children between the ages of zero and three is so interconnected, therefore a trauma can affect every aspect of their development, including their speech and language.

Carol Westby in her 2018 that looked at the relationship between traumatic events and speech and language development stated that "children who have been exposed to five or more significant adverse [childhood] experiences [or ACEs] within the first three years of childhood face a 76% likelihood of having one or more delays in their language, emotional or brain development." Another study done by Audette Sylvestre reported results that substantiate Westby's research that found the language skills of children who have experienced abuse and/or neglect are delayed when compared to other children. The findings of this study also demonstrated the need of early detection and intervention for these children in order to "positively stimulate their development" (Sylvestre et al., 2015). Another study focused

specifically on the maltreatment (neglect or abuse) of children, and their language skills. It was found that the performance on language comprehension tests correlated with the severity of abuse or neglect that a child received, but that all children who were abused or neglected (even those that were only generally neglected) scored lower than children without a history of neglect in the language comprehension tests (Fox et al., 1988). These studies demonstrate the effects of the interrupted critical periods of the children in the Foster Care system, and how these interruptions can negatively affect the children's speech and language development. These effects regarding delayed speech and language development indicate the importance of early detection and intervention (EI services) as the key to stimulating the development of children in the Foster Care system, and preventing their traumatic experiences from negatively impacting the rest of their lives. Unless action is taken prior to manifestation of the problem itself, the effects of this trauma will continue to affect their ability to integrate into society and develop healthy social and cognitive skills.

Early intervention services are designed to mitigate the effects of these traumas from impacting these children into adulthood. We have an opportunity to help these at risk, invisible children to overcome their traumatic experiences and develop typically along with their peers. If even one child in the Foster Care system is able to overcome their trauma with the help of EI services, it is worth ensuring that every child who enters into the Foster Care system receives the support that they need to be successful. This classification as at-risk should automatically qualify them for placement in all early intervention services, including Speech and Language therapy.

In automatic placement, children in the Foster Care system would be placed into the EI services upon their entry into the system. This would allow the Early Intervention professionals to reach these children at the absolute earliest possible moment. With the knowledge that the



earlier that services are rendered the more effective they are and the higher likelihood these services have of preventing a delay or disorder. This automatic placement would give the professionals the most opportunity to provide the support that these children need and give them the best opportunity to overcome the interruption of their development.

The trauma that children in foster care experience does not have to undermine the rest of their lives. If they are given the support that they need, these children could continue on or return to their normal developmental process. They could avoid delays or disorders in many areas, including speech and language. This would allow them to continue their development even after they entered into the school system, and would help them to avoid the social and educational repercussions of having a speech or language delay or disorder as an adolescent.

## Chapter 4

### Legal System and Early Intervention Therapy in Foster Care

In 1999 Sheryl Dicker wrote about the judicial commission on justice for children, “ensuring that young foster children and their families receive needed Early Intervention services is critical not only for their healthy development but to promote reunification with biological families,” suggesting that EI services are crucial in ensuring that children in the Foster Care system are successful. In interviews that I conducted with professionals and parents that were involved in the Foster Care system and Early Intervention Speech Therapy services, I learned that according to procedure, every child that is placed into the Foster Care system receives a rather extensive health and wellness evaluation. In this evaluation, health professionals would evaluate the mental, physical, and developmental wellbeing of the child. After these evaluations, the children are then placed in services that are deemed necessary.

Within 72 hours, all children who have been removed from their homes should receive an initial health screening that includes “head-to-toe physical” that is ideally done by the child’s Primary Care Physician (PCP) (Arkansas Department of Human Services Division of Children and Family Services, 2013). Then, within 60 days of placement, a comprehensive health assessment should take place. This assessment includes cognition/achievement, speech/language development, hearing, vision, medical, emotional and behavioral development. These assessments are conducted by a multidisciplinary team of professionals within the Arkansas for Medical Sciences Project for Adolescent and Child Evaluation (UAMS PACE) Program. The evaluation involves a pediatrician/advanced practice nurse, a licensed psychological examiner/licensed mental health professional, and a speech-language pathologist. (College of Medicine: Pediatrics, 2021).

In the state of Arkansas, any Foster Child or ward of the state under the age of 21 is eligible to receive full Medicaid Benefits. According to the Arkansas Department of Human Services (DHS) on the Division of Medical Services website, Medicaid is described as thus:

Title XIX, popularly known as Medicaid, is a joint federal and state program that provides necessary medical services to eligible persons who are not able to pay for such services to help these families and individuals become or remain independent and able to care for themselves.

Each state has some sort of Medicaid program to meet the federal mandates and requirements as laid out in Title XIX. Section 7 of Act 280 of 1939 and Act 416 of 1977 authorized the State of Arkansas to establish and maintain a medical care program for the indigent and vested responsibility for regulating and administering the program in the Arkansas Department of Human Services. The Arkansas Medicaid program was implemented January 1, 1970.

Individuals are certified as eligible for Medicaid services through the state's county Human Services Offices or District Social Security Offices. The Social Security Administration automatically sends SSI client information to DHS (Arkansas Department of Human Services, 2021).

The website lists those eligible for Medicaid and includes "the parent or the relative who is caretaker of a child with an absent, disabled, or unemployed parent" and those "under the age of 21 and in foster care. ARKids First is the Medicaid program that pays for necessary medical services for Arkansas children by using state and federal money to pay for these services. This means that the Arkansas Foster Care system has the means to pay for children to receive Early Intervention Speech Therapy, that would be covered in full by Medicaid (ARMedicaid, 2016).

However, in my research, it did not appear that the Foster Care system is designed to automatically schedule the children to receive early intervention services in the state of Arkansas.

The Individuals with Disability Education Act 2004 (IDEA) provided specific requirements of agencies in each state concerning their early intervention programs. To receive federal Part C grant money, the programs must provide proof of meeting the requirements such as ensuring

“that appropriate early intervention services will be available to all eligible infants and toddlers in the State, including those who are in foster care, in the custody of a public child welfare agency, or otherwise considered a ward of the State” (Child Welfare Information Gateway, 2013).

With funds specifically set aside for EI services for the children in the Foster Care system, it is important that they are given access to the services.

At this point, we have determined that children in foster care are at-risk of developmental delays in their speech and language. Additionally, in Arkansas the ARKids Medicaid program is in place that provides medically necessary services at no cost to the children in the Foster Care system. Unfortunately, eligibility of early intervention services does not extend to all of these children because the determination of who is considered “at-risk” is left to the State’s discretion.

An example that may be more familiar than EI services is state requirements for a child in the school system to receive speech and language therapy services that are covered by Medicaid. School students whose assessment scores are at the lower end of the normal bell curve will receive speech and language therapy services that are paid by the Medicaid system. That does not mean that other children would not benefit from speech and language therapy, but they do

not qualify have their services covered, putting the financial burden on the parents. The same could happen for the children in the Foster Care system.

Without automatic placement into EI services, the decision to place children three and under in EI services falls to the state. For a child in a tumultuous situation, constant movement could impede comprehensive health assessments and keep a child from receiving needed services. Furthermore, if a child is not exhibiting signs of developmental delay or a caregiver is not trained to identify warning signs, a child would be un identified until he or she exhibited significant and obvious indicators of delay. Had this same child been placed in EI services immediately upon placement in foster care, he or she may have been provided the therapy services that would prevent many years of later intervention and possible academic and/or social problems. Should a child be able to pass the health screening and evaluation that he or she receives upon entering into the Foster Care system, it would be likely that the child would not receive any further services.

Arkansas laws and programs are in place that have the potential to provide Early Intervention services to children who are placed in the Foster Care system. However, as in any program or plan, there are obstacles that prevent identification of those who need the services, and for those who are identified, the obstacle of due process to get the services scheduled and carried out in a timely manner. Lack of resources, both human and monetary, are two of the biggest challenges along with the lack of education and/or knowledge about the overall impact of speech and language development in regard to each person's academic, social, and professional future. Without change regarding determination of eligibility for speech and language therapy services, children who have needs are not receiving the care and support that they need to be successful.

## **Chapter 5**

### **Conclusion**

In this paper, I have explored the definition of Early Intervention Speech Therapy, eligibility of speech and language services, and the benefits to these services to the healthy development of young children's speech and language development. I have also given a brief overview of of the Foster Care system, the trauma experienced by the children who are placed in foster care, and the effect on their overall development including their speech and language skills. Although much change is needed in providing for these children in the Foster Care system, there is hope. By using the laws and programs such as IDEA and ARKids Medicaid that are already in place, I can have a role in effecting change.

As a future speech-language pathologist, it falls on my shoulders to be the advocate for these children and to work on their behalf toward changes made in the provision of medically necessary services to this underserved population.

## Chapter 6

### Opportunities for Further Research

Evidenced based research supports the positive outcomes for speech and language skills for children who are at-risk during the critical periods of overall development. Although the benefits of EI services are proven to be effective, the change is needed in the identification and scheduling of these services for children who are in the Foster Care system. Future research in this area could greatly impact the perch and language therapy services these children receive.

Research that compared the cost of services for children who had automatic entry into EI while in foster care with the cost of services of children who did not receive services initial school age would provide additional data that could be... It would seem that the evidence supporting the effectiveness of early speech and language intervention would indicate an overall cost reduction for services as well as a reduction of overall time spent receiving services. If research found that to be true, then the cost savings could be applied to additional resources such as more training for those who make initial decisions as to placement for medically necessary services once a child is placed in foster care. Because children in EI services could only receive those services for a maximum of three years, it is my hypothesis that the cost of providing services could be mitigated by the short amount of time that they could receive the services. Children who are in the school system can qualify for services for years, which can be costly and time consuming for all involved.

Another area would be a longitudinal study that followed the children in the Foster Care system who received EI services throughout their school experience. Valuable information could be collected regarding their social and educational progress as compared to children in the Foster Care system who did not receive EI services. With a study like the, there are many potential

benefits by having data to support or negate the idea that the children can continue their educational experience without repercussions of their past trauma. With speech and language delays and disorders also being linked to reading and writing difficulties, at-risk children who received EI services could be followed through their educational experience to determine if those problems were avoided in later educational experience in comparison to at-risk children who did not receive the services.



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