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# An Exploration of Service Delivery in Early Intervention over the Last Two Decades

## Abstract

*Throughout much of the 1990's in the United States, early intervention services were often provided through a center-based therapeutic or medical model. However, today we recognize the natural environment is typically the most developmentally appropriate setting for all children to learn. Therefore, programs now aim to serve children in their homes, child care settings or places they spend the majority of their days. This investigation will examine current studies and literature pertaining to early intervention service delivery, and compare the findings to similar studies conducted over the last two decades. By getting a clearer perspective on how service delivery has changed and evolved over the years, we can work toward meeting each family's unique needs.*

## Keywords:

*Early intervention, families, service delivery*

## Introduction

The first few years of a child's life set the stage for the rest of his or her development. For young children with disabilities, these years are even more crucial. Early intervention is defined by Dunst (2007) as, "The experiences and opportunities afforded infants and toddlers with a disability by the children's parents and other primary caregivers (including service providers) that are intended to promote the children's acquisition and use of behavioral competencies to shape and influence their prosocial interactions with people and objects" (p.162). To meet the wide-ranging needs of these young children with disabilities, Public Law 99-457 was enacted in 1986 to extend services to include infants and toddlers with developmental disabilities. As a result, early intervention (EI) programs were created and implemented.

During much of the 1990s in the United States, center-based or clinic-based service delivery options were quite prevalent and typically located in schools, clinics or early childhood centers. During this time, early intervention services tended to follow a more medical or deficit based approach (Harjusola-Webb, Gatmaitan, & Lyons, 2013; McWilliam, 2012). Center-based service delivery was implemented for a number of reasons.

Cost was always a factor when programs examined how best to serve children and families (Barnett & Escobar, 1989). In addition, a center-based approach also allowed more families to be able to access services since they were typically at one location. In other words, the families went to the services rather than the services coming to them.

Since early intervention is focused on children, birth through age 3, the natural environment should also be an element in programmatic decisions regarding service delivery (McWilliam, 1996). Home-based services are typically provided either in the child's home or a location where the child spends the majority of his/her day. Dunst (2001) states that the natural environment creates learning opportunities within the context of the family or community. The convenience of early intervention service providers providing services at home was quite appealing to many parents and families. However, not much data existed during this time to determine what the perceived benefits and drawbacks were to each of these types of service delivery. Over the past few decades, the literature on this subject clearly stated that parents and early intervention professionals have differing views and perceptions of how services should be delivered (Weston, Ivins, Heffron & Sweet, 1997).

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Specific characteristics of early intervention programs such as: (a) the Individual Family Service Plan (IFSP), (b) the parent-professional partnership, and (c) the communication process between families and professionals should all be considered when examining early intervention programs. These are all crucial aspects of any early intervention program which will, in turn, affect the quality of service delivery (Filer & Mahoney, 1996). The goal of this investigation is to look at how services have changed and evolved over the last two decades. In order to do this, the variables listed above will be further explored. The research questions that will drive this investigation are the following: (a) How have early intervention service delivery models changed over the last two decades to meet the needs of children and families? and (b) How can we continue to ensure that early intervention practices remain family-centered?

### **Family-Centered Early Intervention**

Today, many professionals and parents continue to have differing opinions on the real meaning of family-centered early intervention. The concept of family-centered early intervention is often interpreted as having different meanings for both parents and early intervention professionals (Guralnick, 1998). Dunst, Trivette, and Hamby (2008) stress that family-centered intervention practices should always actively involve family members to locate resources and supports necessary to care for their children. Relationships between service providers and families also need to be considered when we are analyzing family-centered early intervention services (Kelly, Zuckerman & Rosenblatt, 2008).

The underlying principle of programs serving children with developmental delays and their families should be oriented toward helping them become more self-sufficient (Aron, Loprest, & Steuerle, 1996). The family-centered approach to service delivery requires professionals to consider

the family's priorities and values first (Able-Boone, 1996). A program's services should not only supplement but also complement a family's inherent strengths and abilities. There is not always one accepted model of early intervention but rather many programs that vary in their design features. An important element of family-centered practice is choice. Epley, Summers, and Turnbull (2010) found that family choice was less frequently associated with the nature and extent of the family-professional partnership, and that it emphasized parental involvement rather than the ultimate choice in decision making.

When considering the type of early intervention program that is most effective for each family, White and Casto (1989) suggest some key dimensions to keep in mind. The setting of the program (whether the program takes place in a home-based, center-based, or combination of home- and center-based setting) will determine a great deal about what type of intervention is offered. Duration and intensity of services are other factors for families to consider. How often and how long home visits or center-based sessions last. Family involvement is another key aspect to keep in mind when considering a program. Even though Public Law 99-457 stipulates that early intervention should be family-focused, there is a wide interpretation of what constitutes family involvement. Epley, et al. (2010) investigated characteristics and trends in family-centered conceptualizations and found that an important element of family-centered practice is family choice. Finally, philosophical orientation is what will guide the program itself. This may focus on the family's personal beliefs and values.

Program supports are also a critical piece of early intervention programs that may determine what type of program best fits with each family depending on their needs. Those program supports that were mentioned as preferred by the majority of parents regardless of the age and disability of their child include: emotional support, informational support, and service supports (Santelli, Turnbull, Sergeant, Lerner & Marquis, 1996). Emotional support refers to the parent having someone who listens and understands them. Information support is simply having information about their child's disability and being able to access community resources in a timely manner. Finally, service supports encompass such things as group meetings for either emotional or educational support. Service providers working with families may want to ensure that their programs offer and encourage these particular supports for individual families.

## Changes in Early Intervention Service Delivery Models

Most would agree that early intervention service delivery has changed a great deal over the last few decades in the United States. The child's natural environment is often described as the most developmentally appropriate learning environment for children with developmental delays (Bruder & Dunst, 1999). There are many unique features of home-based early intervention models. For administrators, cost analysis is often considered when determining what level and types of services will be offered to families. Barnett and Escobar (1989) looked at a cost analysis of children receiving services from a clinic-based program in which children would come into a center for speech therapy compared to a home-based program where parents were taught to incorporate speech therapy into daily routines at home. Surprisingly, the results of the cost analysis indicated home programming was considerably less expensive and more effective for both the child and family. Some of the factors considered in the analysis were personnel costs, transportation, materials/ supplies, and equipment.

Some programs use home-based services as a supplement to those services the child is already receiving. The P.L.A.Y. Project (Play and Language for Autistic Youngsters) is an example of a home-based parent-mediated program that coaches parents and caregivers to interact and engage with their children in a meaningful way by following the child's lead. This evidence-based approach addresses the functional development and interactions between parents and their children with autism by using a home-consultation approach to intervention (Solomon, Van Egeren, Mahoney, Quon Huber, & Zimmerman, 2014).

In a study evaluating the effectiveness of a home-teaching program for children with autism, Ozonoff and Cathcart (1998) found that the children who received home-based services demonstrated significant improvements, relative to those children who did not receive any additional home services. The improvements of the children were in the areas of cognitive and general developmental skills. An issue raised in this particular study was whether or not these developmental improvements would continue if parents were not provided with the guidance and skills needed in order to work with their children on a regular and daily basis. If parents are not included in the child's intervention program, then how can we expect them to effectively work with their children at home?

Some potential issues of a home-based early intervention program are the travel time and lack of

parent-to-parent support (Bricker & Kaminski, 1986). Highly paid personnel, such as therapists, spend much of their time traveling to homes and thereby have less one-on-one interaction time with families. The lack of contact with other parents can also be a shortcoming for home-based services, especially if parents desire the support of other parents. However, if services are being delivered in a family-focused manner, then parents will receive the benefit of having one-on-one time with professionals to answer questions and to learn new skills to incorporate into the child's daily routine at home. Innocenti and White (1993) suggest that there is a need to examine the differential impact of home visiting on different types of families. For instance, parents who do not have a strong support network may benefit more from home visits than parents with an extended social support network.

Just as there are unique features of home-based services, the same holds true for center or clinic-based services. One potential benefit of a center-based program is the parent-to-parent support. Other parents are often an important resource for many families in the early intervention system. Parents of children with disabilities of all severity levels will usually value the opportunity to talk with other parents and families who share their experiences (Santelli, et al., 1996). Many families often receive helpful emotional support from other parents, and feel that other parents truly understand what they are experiencing (McBride, Brotherson, Joanning, Whiddon, & Demmitt, 1993). Professionals may also encourage parent-to-parent support because they may be trying to help families develop support systems of their own. McBride et al. conducted interviews with families and professionals regarding perceptions of early intervention services, and found that professionals often stated that it was important to connect families together with one another because they (the professionals) would not always be there for the families, especially after the child has turned three and enters into the preschool system.

Some possible service delivery issues identified with center-based programs are collaboration, professional identity, and evaluation of effectiveness (McWilliam, 1996). Despite the benefits of collaboration, some professionals fear the collaborative process in practice. Their concerns are that collaboration will limit their independence, be a threat to their professional identity, or even challenge their views on early intervention itself.

Professional identity, another issue, refers to areas such as role acceptance, role release, and cultural discrepancy (McWilliam, 1996). Integrated services in a center-based program require the therapists and early interventionists to concern themselves with areas of development outside their train-

ing and comfort zone. They are also asked to perform tasks which may be outside their areas of expertise, thus creating a challenge for many professionals. It can also be difficult to evaluate the effectiveness of center-based programs since services may be geared toward groups rather than individuals.

Functionality is another potential issue in center-based programs (McWilliam, 1996). When children are taught specific skills outside of their own environment, the concern becomes whether or not the child will be able to generalize these skills to their own functional contexts. Taken out of their contexts, many skills taught to young children have relatively limited application.

Finally, evaluation of effectiveness is a central issue that is ongoing in most all early intervention programs (McWilliam, 1996). Families sometimes attribute child success to therapy received in early intervention settings, which is referred to as the attribution theory. Considering the amount of time a therapist spends working directly with a child compared to that of parental interactions at home, attribution of success to therapy is probably inflated.

A common criticism of center-based programs is they often do not provide parents with enough opportunity to teach their young children skills which can be applied to other settings. Interactions and interventions with familiar items can help children with developmental delays to generalize some of their developmental skills (Stokes & Baer, 1977). Follow-through from parents is a crucial aspect of all early intervention programs. It is important parents feel comfortable enough to implement ideas and suggestions gained from early interventionists and therapists at home.

Parental participation is also another factor that may vary considerably, according to Bricker and Kaminski (1986). For parents who are looking more for a respite or child care service rather than an educational experience, center-based programs may not benefit the child or the family. Parents must be willing to actively participate in their child's early intervention program, whether it is in a center or at home.

Parents are not always presented all of their options for the type of program and method of service delivery available to families. Sontag and Schacht (1993) found that children less than eighteen months old were significantly less likely to be receiving center-based classroom or group instruction. The authors suggest that many families who were interviewed for their study did not feel informed about the breadth of service options available in order to make an informed decision regarding their specific needs. In other words, families were

not given adequate choices as far as the type of service delivery they preferred.

### **Implications for Early Intervention Service Delivery Today**

Since many early intervention programs have shifted to delivering early intervention services in the child's natural environment, the studies mentioned throughout this article can be used as a comparison to better understand how service delivery has changed over the last two decades (McEwen & Sheldon, 1995). Rush and Sheldon (2011) describe a similar shift currently going on in the field of early intervention. Therapists, early childhood special education teachers, and early interventionists are now moving from a direct service model to a coaching or consultative model. The idea behind this concept is to empower those parents and caregivers working with the children on a daily basis. However, this requires a great deal of role release, which may be difficult for those who are accustomed to a more traditional therapeutic approach to intervention. McWilliam (2015) suggests that the future of early intervention will require professionals to use a unique approach for each family according to each family's individual needs. When coaching families, we must be careful not to use a judgmental approach when assessing the quality of intervention since each family may have a completely different set of beliefs, expectations, and resources.

There is much debate over the amount or intensity of intervention needed to produce favorable developmental outcomes ranging from 15-20 hours per week (Dawson & Osterling, 1997). Vismara, Columbi & Rogers (2009) found there is evidence that children can progress with relatively low intensity intervention. One is then led to believe families truly *do* make a difference when following through with interventions they have learned by working with their child's early interventionist. Incorporating a family-centered approach to intervention not only benefits the child, but may also give parents more confidence in their parenting skills.

In 2009, Rickards, Walstab, Wright-Rossi, Simpson, and Reddihough conducted a study to determine if home-based services and/or center-based services produced more positive child and family outcomes. Interestingly, they discovered a weekly home visiting program in addition to a center-based program resulted in more favorable cognitive development in the children compared to those who only received center-based services. Another study conducted in 2011 found that center-based small group intervention did not meet the needs of all children with autism, including their families (Roberts, et al.). This may lead to the conclusion that home-based

services in combination with a center-based intervention could be helpful for those needing extra support.

Participation-based intervention emphasizes the participation in community activities and the day to day routines of children (Campbell, 2004). This approach to intervention does not rely on a snapshot of development but a continuous observation in the child's natural environments (i.e. park, library). This type of intervention is also a useful way to observe children's natural interactions and play behaviors with other children (Torrey, Leginus, & Cecere, 2011). As a result, parents may be better able to determine if their child is exhibiting age appropriate skills compared to their same-age peers.

Consistency and high quality are key aspects to any early intervention program. The Professional Development Community of Practice Project in Ohio describes the need for fidelity within interventions provided for families. In order to ensure families, receive quality and consistent early intervention, professional development must be created to support the implementation of high quality services (Harjusola-Webb, et al., 2013). Families should always receive high quality services no matter what type of service delivery they choose.

It is often difficult to prove the efficacy of early intervention due to a child's maturation, environmental factors, and genetics. In an article addressing the myths of providing early intervention services in a natural environment, Sheldon and Rush (2001) ask a very pertinent question: Who are clinic-based or center-based services really better for? Therapists and early intervention providers may have to abandon their comfort zones in order to make certain the answer to this question will always consider the child's natural environment.

The challenge for families in the future will be to continue to advocate and take on the role of decision maker when deciding what early intervention services are best for them. Families should also keep in mind their needs may change as their child gets older and the early intervention system will need to accommodate and be sensitive to these changes. Parents know their children best. The challenge for early intervention professionals will be to continue to empower and guide families as they navigate early intervention services and programs in order to discover what works best for each individual family.

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