

The Effects of Early Intervention For Children Birth to Five:

A Meta-synthesis

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## The Effects of Early Intervention For Children Birth to Five:

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**Abstract:**

This meta-synthesis analyzes the effectiveness of early intervention among children with developmental delays ages' birth to five years old. The meta-synthesis will examine the parents' involvement in their child's education, and how parent involvement affects the child's development. Lastly, the analysis will reveal how early intervention is implemented in a home-based program, in a school-based program, and in which setting does the child flourish the most.

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### **1. Introduction**

#### *1.1. Background*

Historically, it has been debated when the exact moment of learning begins in children. Is it at the point where the brain starts sending neurological signals to the body while a child is still in the womb, or is it when the first breath of air is being taken? Regardless of when a child starts learning, learning comes in many different forms. In the developmental years, most young children will see and hear someone talk. From this, they will instinctively mimic the person, and overtime, the children will learn how to speak. When children are feeling the pain of a sharp object or the burn on their skin, most children learn that some objects are harmful to the touch. Children will taste and smell food, and soon develop a like or dislike for different foods. Humans are always learning; from the day of our first breath until our last.

As humans are always learning, this leads to more questions. At what rate does learning occur? Is there a normal rate of learning established for people? As I look at the development of children from birth to five, there are different critical developmental stages. These stages all have an average age frame in which they should occur. According to scientist Jean Piaget, there are three different stages of a child's life. First is sensory

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motor stage, which is 0-2 years old. This stage is when an infant responds to the world in sensory and motor scheme. The second stage is Pre-operational stage; age 2-6 this is when Piaget believes that language lifts children's thinking to a new level. The last stage is At about 6 years of age, Piaget believes that children abandon their egocentric and non-logical thought as they develop an organized system of scientific and Mathematical concepts. (Sylva, K., 1997)

However, what happens if children do not meet the time frame that is considered to be the norm? These children would meet one of the requirements for the Early Intervention program in the American school district. We will begin by outlining the history of the early intervention program and how it has evolved.

Early intervention has a very young history in the United States. In 1975, Congress passed Public Law 94-142, which is referred to as Individuals with Disabilities Education Act (IDEA). However, it was first called Education of All Handicapped Children Act, and focused on ensuring that all school-aged children would receive a free appropriate public education. The law did not address the issue regarding children who are not of age to attend school, such as infants and toddlers. Early Intervention programs for young children with disabilities did not become part of the law until 1986 (Center for Parent Information and Resources, 2015). Many aspects have changed over the years when it comes to Early Intervention programs. We will now look at the current requirements to be eligible for this program. There are two important requirements for the Early Intervention program: age and development or cognitive delay. We will discuss the

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development and cognitive delays first. A child needs to be diagnosed with one of these delays, and also receive an assessment for an Individual Family Service Plan (IFSP). These tools are to provide information on the areas the child needs to work on that would be the most beneficial.

Why are Early Intervention programs important for children with developmental and cognitive delays? Studies show that children that are diagnosed with a developmental or cognitive delay and start receiving early intervention services, make greater progress through the developmental stages than children that do not receive services until later in their development (Thomaidis, Loretta, Kaderoglou, & Efthalia, 2000).

When talking about the current Early Intervention program, there are many different beliefs of when early intervention starts and finishes. According to the Center for Parent Information and Resources (2015), early intervention services encompass the first three years of life. The Building Advocacy Resources and Community Developmental Services (2015) refer to early intervention ages being from 3-5 years old, while the Brigance Assessment Tool refers to the age of birth-8 years old. Throughout my findings, the most common age range for early intervention begins at birth and ends at five years of age when children are entering into Kindergarten. This will be the age range referenced in this meta-synthesis.

Research also stated that involved parents who are receiving resources and support with their child have a better understanding on how to help their child

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(Kellar-Guenther, 2014). Having children who have been diagnosed with a delay can cause extra emotional, mental, and social stress. To help with the emotional and sociological strain within the family, by the natural way the Early Intervention Program has been developed, the parent has a larger support system that consists of the teachers and other parents of children with delays. This helps to minimize the strain on the parents, and then eventually the strain for the children with delays.

#### *1.2. Author's beliefs and experiences*

I have been working with individuals with disabilities for the past 15 years, and for the last seven years, I have been teaching these individuals as an Elementary Physical Education teacher and Structured Learning Classroom (SLC) teacher. I was able to develop and lead summer camp programs for individuals with disabilities ranging in age 6-25 years old. I, as the student, have been in Resource classrooms with the diagnosis of Dyslexia. The students that I taught who had disabilities vary in many different ways from their background to their disability. Through my experiences, I have come to realize that there is a pattern with students that have received early intervention and those that have not. The primary pattern I have observed is parents who have gone through the Early Intervention program have a different, larger understanding, and less stressful approach to their children. I also have noticed that the parents whose children attend early intervention, often they can better provide guidance in a more effective way for the child.

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In my experiences, children who have received Early Intervention services have developed in their academics and social skills at a higher level, then those children that have not received Early Intervention services. For example, currently I have two children in my SLC class. Both children have Autism, are five years old, and are developmentally on the same level. One student has been receiving Early Intervention services from birth and the other student has not. The one student who has received early intervention is on grade level for her age, and does not have behavior concerns in class or at home. Her mother and father are both calm and understanding parents that know how to best assist their child. This child has been given the foundation to be successful both in school and in life.

The second student who is also five started life in Dillingham, AK, a remote village, where he was living in an unstable single-mother home, and did not receive Early Intervention services. He did not receive services until he moved to Anchorage at the age of 4. One year later, this student is not on grade level for his age, and he does have behavior concerns in class and at home. Prior to receiving services, he has been very difficult both in the home and at school. However, now that he has been receiving school services he has made great gains in his behavior and also in his academics. The student now lives with a non-biological father. The father desires the best learning opportunities for the child, but has not received the resources or support that the parents of my other student have received. He is stressed and tired much of the time, and at a loss for how to best help the child. This is one of many examples of how the child can make age-level

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improvements after receiving Early Intervention services than a child who does not receive these services. Also by receiving such services, it helps the parent's physical and mental health, which again further benefits the child.

#### Questions:

1. How is early intervention being implemented in birth to 5 year-old programs?
2. What are the effects of early intervention in home-based programs vs. school-based environment?
3. Is early intervention effective for students that have early childhood developmental or cognitive delays?
4. In what ways is early intervention helping both the parents and the child?

#### *1.3. Purpose of this meta-synthesis*

The purpose of this meta-synthesis is to find and analyze articles that pertain to early intervention. The first purpose is to discuss the methods being implemented in early intervention programs. Next will be a discussion concerning the way parents are involved during the early intervention process and the effects of the support they receive.

Additionally, pertinent research will identify how early intervention effects students with cognitive disabilities and severe physical disabilities. Lastly, a comparison will be made in regard to how methods are implemented differently.

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### **2. Methods**

#### *2.1. Selection criteria*

The 34 journals articles for this meta-synthesis meet the following criteria:

1. The journal articles show data of the benefits of early intervention.
2. The journal articles present the different methods of how early intervention is implemented.
3. The journal articles show different countries' methods and effectiveness of early intervention.
4. The journal articles also present the effectiveness of the involvement of parents and family members in the child's life.

#### *2.2. Search procedures*

Database searches and ancestral searches were conducted to locate items for this metasynthesis.

##### *2.2.1 Database searches*

Using the search engine Educational Resources Information Center (ERIC UAS, Ebscohost), these specific search terms were entered:

1. "Early Intervention"
2. "Early Intervention" AND "Special Education"
3. "Early Intervention" AND "Preschool"
4. "Early Intervention" AND "Special Needs"

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5. “Early Intervention” AND “Autism” AND “Preschool”
6. “Blind” AND “Preschool”
7. “Play Program” AND “Blind” AND “Preschool”

These searches produced a total of 37 articles: (Roberts, Williams, Carter, Evans, Parmenter, Silove, et al., 2011; Odom, & Wolery, 2003; Jacko, Mayros, Brady-Simmons, Chica, & Moore, 2013; Nahmias, Kase, & Mandell, 2014; Hanline, 1999; Thomaidis, Kaderoglou, Stefou, Damianou, & Bakoula, 2000; Sukkar, 2013; Hsieh, 2008; Barton, Lawrence, & Deurloo, 2012; Zucker, 2010; Mawdsley, & Hauser-Cram, 2013; Utah State Univ., 1993; Reichow, 2012; Kellar-Guenther, Rosenberg, Block, & Robinson, 2014; Salisbury, & Copeland, 2013; Chiang, & Hadadian, 2010; Bennington, 2004; Hatton, Ivy, & Boyer, 2013; Lawton, & Kasari, 2012; Applequist, McLellan, & McGrath, 2010; Odluyurt, 2011; McMahon, 2014; Nwokah, Hsu, & Gulker, 2013; Chiarello, Palisano, Orlin, Chang, Begnoche, & An 2012; Desrochers, Oshlag, & Kennelly, 2014)

#### 2.2.2 Ancestral searches

An ancestral search involves reviewing the reference lists of previously published works to locate literature relevant to one’s topic of interest (Welch, Brownell, & Sheridan, 1999). No ancestral searches were part of this analysis.

#### 2.3. Coding procedures

I developed a coding form to categorize the information presented in each of the

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34 articles. This coding form was based on: (a) publication type; (b) research design; (c) participants; (d) data sources; and (e) findings of the studies.

#### *2.3.1. Publication type*

I evaluated and classified each article according to publication type (e.g., research study, descriptive article, guide, opinion piece/position paper, annotated bibliography, or review of the literature). Research studies employ systematic methods to gather and/or analyze quantitative and/or qualitative data. Descriptive articles describe experiences and phenomena but do not employ systematic methods to gather and analyze data. Guides recommend specific strategies and/or explain how practitioners might implement particular programs, policies, or curricula. Opinion pieces/position papers explain an author's opinion about a particular issue; these articles may support or advocate for particular educational objectives, political views, policy positions, or philosophical ideas. Annotated bibliographies include a list of articles on a given topic with brief summary of each piece of work. Reviews of the literature summarize and synthesize the essential themes of previously published works on a particular topic (See Table 1).

#### *2.3.2. Research design*

I classified each empirical study by research design (i.e., quantitative research, qualitative research, or mixed methods research). Quantitative researchers collect and analyze numerical data. Qualitative researchers use language (as opposed to numbers) to describe experiences and phenomena, and to tell people's stories. Mixed methods research combines quantitative (i.e. numerical) and qualitative (i.e., non-numerical)

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research methods within a single study (Table 2).

#### *2.3.3. Participants, data sources, and findings*

I identified the participants in each of the studies (e.g., 3-5 years old students with disabilities or parents with children with disabilities ages 3-5). I also identified the data sources that were analyzed for each study (e.g., interviews, observations, focus groups, parent focus groups, surveys, or standardized tests). Finally, I summarized the findings of each study (See Table 2).

#### *2.4. Data analysis*

I used a modified version of the Stevick-Colaizzi-Keen method previously employed by Duke (2011) and Duke and Ward (2009) to analyze the 39 articles that I included in this meta-synthesis.

### **3. Results**

#### *3.1. Publication type*

I located 39 articles that met my selection criteria. The publication type of each article is located in Table 1. 12 of the 39 articles (30.7%) review of the literature, (Carroll, Clare; Murphy, Geraldine; Sixsmith, Jane 2013, Celeste, Marie 2006, Chiang,

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Linda H.; Hadadian, Azar 2010 Dulmus N, Catherine. 2010, Hatton, Deborah D. Ivy, Sarah E Boyer, Charles 2013, Hsieh, Hsieh-Chun 2008, Iarocci, Grace; Virji-Babul, Naznin; Reebye, Pratibha 2006, Lawton, Kathy; Kasari, Connie 2012, Marks, S. B. 1998, Mawdsley, Helena P.; Hauser-Cram, Penny 2013, Reichow, Brian 2012, McMahon, Eugene 2014, Sukkar, Hanan 2013) 10 of the 39 articles (25.6%) where research study (Kellar-Guenther, Yvonne; Rosenberg, Steven A.; Block, Stephen R.; 2014, Laurie A, Costanza, Sally. 2009, Matthews, Alice; Rix, Jonathan 2013, Murphy, Jeanne Lovo; Hatton, Deborah; Erickson, Karen A. 2008, Nahmias, Allison S.; Kase, Colleen; Mandell, David S. 2014, Odluyurt, Serhat 2011, Roberts, Jacqueline a, Williams, Katrina b, Carter, Mark c 2003, Su, Xueyun; Long, Toby; Chen, Lianjun; 2013, Thomaidis, Loretta; Kaderoglou, Efthalia; 2000, Van der Schuit, Peeters, M. 2009) 9 of the 39 articles (23%) in this meta-thesis was guide research, (Applequist, Karen L.; McLellan, Mary J.; McGrath, Eileen Romer 2010, Barton, Erin E.; Lawrence, Karen; Deurloo, Florian 2012, Bennington, Andrea 2004, Fidler, Deborah J 2007, Hanline, Mary Frances 1999, Jacko, Virginia A.; Mayros, Roxann; Brady-Simmons, Carol; 2013, Meadan, Hedda; Meyer, Lori; Snodgrass Melinda; Halle, James, 2013, Thompson, Stacy D.; Bruns, Deborah A. 2013, Zucker, Gloria H. 2010) 4 of the 39 articles (10.2%) are descriptive works (Chiarello, Lisa Ann; Palisano, Robert J.; 2012, Clark, Christine; McDonnell, Andrea P. 2008, Nwokah, Eva; Hsu, Hui-Chin; Gulker, Hope 2013, Odom, S. L.; Wolery, M. 2011). 1 of the 39 articles (0.02%) is Annotated bibliography (Desrochers, Marcie N.; Oshlag, Rebecca; Kennelly, Angela M. 2014) 1 of

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the 39 articles (0.02%) is a Position paper (Poulou, Maria 2015) and 1 of the 39 articles (0.02%) are Case Study (Salisbury, Christine L.; Copeland, Christina G. 2013)

**Table 1**

<b>Author(s) &amp; Year of Publication</b>	<b>Publication Type</b>
Applequist, Karen L.; McLellan, Mary J.; McGrath, Eileen Romer 2010	Guide
Barton, Erin E.; Lawrence, Karen; Deurloo, Florian 2012	Guide
Bennington, Andrea 2004	Guide
Carroll, Clare; Murphy, Geraldine; Sixsmith, Jane 2013	Review of the literature

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Celeste, Marie 2006	Review of the literature
Chiang, Linda H.; Hadadian, Azar 2010	Review of the literature
Chiarello, Lisa Ann; Palisano, Robert J.; 2012	Descriptive work
Clark, Christine; McDonnell, Andrea P. 2008	Descriptive work
Desrochers, Marcie N.; Oshlag, Rebecca; Kennelly, Angela M. 2014	Annotated bibliography
Dulmus N, Catherine. 2010	Review of the literature
Fidler, Deborah J 2007	Guide
Hanline, Mary Frances 1999	Guide
Hatton, Deborah D. Ivy, Sarah E Boyer, Charles 2013	Review of the literature
Hsieh, Hsieh-Chun 2008	Review of the literature
Iarocci, Grace; Virji-Babul, Naznin; Reebye, Pratibha 2006	Review of the literature
Jacko, Virginia A.; Mayros, Roxann; Brady-Simmons, Carol; 2013	Guide
Kellar-Guenther, Yvonne; Rosenberg, Steven A.; Block, Stephen R.; 2014	Research Study

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Laurie A, Costanza, Sally. 2009	Research Study
Lawton, Kathy; Kasari, Connie 2012	Review of the literature
Marks, S. B. 1998	Review of the literature
Matthews, Alice; Rix, Jonathan 2013	Research Study
Mawdsley, Helena P.; Hauser-Cram, Penny 2013 Reichow, Brian 2012	Review of the literature
McMahon, Eugene 2014	Review of the literature
Meadan, Hedda; Meyer, Lori; Snodgrass Melinda; Halle, James, 2013	Guide
Murphy, Jeanne Lovo; Hatton, Deborah; Erickson, Karen A. 2008	Research Study
Nahmias, Allison S.; Kase, Colleen; Mandell, David S. 2014	Research Study
Nwokah, Eva; Hsu, Hui-Chin; Gulker, Hope 2013	Descriptive work
Odluyurt, Serhat 2011	Research Study
Odom, S. L.; Wolery, M. 2011	Descriptive work
Poulou, Maria 2015	Position paper
Roberts, Jacqueline a, Williams, Katrina b, Carter, Mark c 2003	Research Study
Salisbury, Christine L.; Copeland, Christina G. 2013	Case Study

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Su, Xueyun; Long, Toby; Chen, Lianjun; 2013	Research Study
Sukkar, Hanan 2013	Review of the literature
Thomaidis, Loretta; Kaderoglou, Efthalia; 2000	Research Study
Thompson, Stacy D.; Bruns, Deborah A. 2013	Guide
Tomasello M, Nicole, Manning R, Amy,	Position paper
Van der Schuit, Peeters, M. 2009	Research Study
Zucker, Gloria H. 2010	Guide

*3.2. Research design, participants, data sources, and findings of the studies.*

I located 10 research studies that met my selection criteria. The research design, participants, data sources, and findings of each of these studies are identified in Table 2.

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(Kellar-Guenther, Yvonne; Rosenberg, Steven A.; Block, Stephen R.; 2014, Laurie A, Costanza, Sally. 2009, Matthews, Alice; Rix, Jonathan 2013, Murphy, Jeanne Lovo; Hatton, Deborah; Erickson, Karen A. 2008, Nahmias, Allison S.; Kase, Colleen; Mandell, David S. 2014, Odluyurt, Serhat 2011, Roberts, Jacqueline a, Williams, Katrina b, Carter, Mark c 2003, Su, Xueyun; Long, Toby; Chen, Lianjun; 2013, Thomaidis, Loretta; Kaderoglou, Efthalia; 2000, Van der Schuit, Peeters, M. 2009)

### Table 2

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Authors	Research Design	Participants	Data Sources	Findings
Kellar-Guenther, Yvonne; Rosenberg, Steven A.; Block, Stephen R.; 2014	Quantitative research	191 households, children not older than 3.5 years old	Longitudinal research	Early intervention should be delivered in a natural setting, to better assisted the parents and child. Parent involvement is also crucial to the child and there education.
Laurie A, Costanza, Sally. 2009	Quantitative research	Eight consecutive families, children no older than 36 months of age	Denver Model Pivotal Response Training	The data shows that one hour of therapy can lead to lasting changes in young non-verbal children. Future empirical study is needed to determine if there are more effective methods in producing parent and child change.
Matthews, Alice; Rix, Jonathan 2013	Mixed methods research	Four families with children with disabilities.	In-the-picture strategy, observation,	Everyday play activities in early intervention does foster "Little c" creativity.

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				Removing the pressure on parents to carry out activities as part of program that may restrict the child's learning though play.
Murphy, Jeanne Lovo; Hatton, Deborah; Erickson, Karen A. 2008	Quantitative research	192 teachers of young children with visual impairments.	Online survey, peer review of data	The findings suggest that comprehensive resources for prompting early literacy in young children who are visually impaired in literacy-related skills needs to develop and be validated.
Nahmias, Allison S.; Kase, Colleen; Mandell, David S. 2014	Quantitative research	98 preschool aged children.	IEP's, differential abilities scales, psychologists and research assistants	Children in inclusive settings experienced greater average gains in cognitive scores then some children who attended placement without typically developing peers.
Odluyurt, Serhat 2011	Qualitative research	3 children with Developmental disabilities.	Screening sessions, full probe session,	The study aimed to determine the

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			teaching, generalization and maintenance session.	effectiveness of Constant Time Delay (CTD). The study found that children that received CTD where able to more easily generalize the skills when they where in inclusive settings.
Roberts, Jacqueline a, Williams, Katrina b, Carter, Mark c 2003	Mixed methods research	94 children 41.5 months-43.7 months old	The autism diagnostic observation schedule	Intervention planning needs to be individualized to meet the needs of children with autism most effectively. The severity of autism varies to greatly to say that small groups or large groups meet the needs of the child.
Su, Xueyun; Long, Toby; Chen, Lianjun; 2013	Quantitative research	156 parents of children with ASD. 141 children with ASD	Investigator-de signed questionnaire containing 154 items	Early intervention in China is a ongoing struggle. The lack of resources for parents and families to

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				receive services is the hardest struggle of the families.
Thomaidis, Loretta; Kaderoglou, Efthalia; 2000	Quantitative research	24 children aged 8 months to 5 years	Griffith's mental development scales	Early intervention program had a significant documented effect on the general developmental level of the treatment children as measured by DQ scores.
Van der Schuit, Peeters, M. 2009	Quantitative research	48 children with Intellectual Disability, 107 children without disabilities of chronological age, 36 children without disability of the same mental age	Questionnaires concerning aspects of HLE	HLE of children with ID differed from that of children in the chronological age group on almost all aspects. It was found that the children with ID develop language slower than typically developing children, but seem to follow the same developmental steps.

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#### *3.2.1. Research design*

Seven of the articles (70%) used quantitative research design. (Kellar-Guenther; Rosenberg, Block, 2014; Costanza, 2009; Matthews, Jonathan, 2013; Murphy, Hatton, Erickson, 2008; Nahmias, Kase, Mandell, 2014; Odluyurt, 2011; Su, Long, Chen, 2013; Thomaidis, Kaderoglou, 2000; Van der Schuit, Peeters, M. 2009). One of the articles (10%) used qualitative research. (Odluyurt, 2011) And two of the articles (20%) used mixed methods research. (Roberts, Williams, Carter, 2003).

#### *3.2.2. Participants and data sources*

The large majority of the research of the meta-synthesis analyzed preschool-aged children from ages 3-5 years old with disabilities. Out of the 10 research articles, 5 of the research articles (50%) studied children 3 years and older (Kellar-Guenther, Yvonne; Rosenberg, Steven A.; Block, Stephen R.; 2014. Nahmias, Allison S.; Kase, Colleen; Mandell, David S. 2014 Roberts, Jacqueline a, Williams, Katrina b, Carter, Mark c 2003 Thomaidis, Loretta; Kaderoglou, Efthalia; 2000 Roberts, Jacqueline a, Williams, Katrina b, Carter, Mark c 2003). 5 of the 10 research articles (50%) of the studies researched children under the age of 3 years old (Laurie A, Costanza, Sally. 2009 Matthews, Alice; Rix, Jonathan 2013 Murphy, Jeanne Lovo; Hatton, Deborah; Erickson,

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Karen A. 2008 Odluyurt, Serhat 2011 Van der Schuit, Peeters, M. 2009 Su, Xueyun; Long, Toby; Chen, Lianjun; 2013)

#### *3.2.3. Findings of the studies*

Of the 10 research articles, the findings are as follows.

1. Families and caregivers struggle finding support and help needed to assist their child who has a disability. Most of the families and caregivers do not know where to find the agencies that offer early intervention or there are not programs or agencies available to help support the child.
2. All of the studies are still in need of having more extensive research to better understand the benefits of early intervention for children with and without disabilities.
3. In the research of children receiving early intervention vs. children not receiving early intervention. It is found that children that receive early intervention develop their social and developmental abilities at a much greater rate than those children that do not receive early intervention.

#### *3.3. Emergent themes*

Of the 34 articles there are four recurring themes clusters.

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1. Early Intervention programs are an effective strategy to improve the academics of children with Development Delays.
2. Parents of children who receive early intervention have a better understanding of their child's disability and a better support system outside of their home.
3. Many studies need more research to better understand the benefits of early intervention.

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**Table 3**

<b>Theme Clusters</b>	<b>Formulated Meanings</b>
<b>Early Intervention is an effect strategy to improve the academics of children with Development Delays.</b>	<ul style="list-style-type: none"> <li>● Children show greater gains in communication vs. children that do not receive early intervention services.</li> <li>● Children show greater gains in fine motor vs. children that do not receive early intervention services.</li> <li>● Children develop self-help skills that are age appropriate.</li> <li>● Children develop math and counting skills that are age appropriate.</li> <li>● A larger percentage of children transition into a general education classes.</li> <li>● Children are less prone to fall behind in their academics.</li> <li>● Children have a greater understanding of social interaction.</li> <li>● Children are able to retain information longer than children that do not receive early intervention.</li> </ul>
<b>Parents of children receive Early Intervention have a better understanding of their child's disability and a better support</b>	<ul style="list-style-type: none"> <li>● Parents are less likely to suffer from depression</li> <li>● Parents are more educated about how to interact constructively with their child.</li> <li>● Parents have a greater support system outside of their home.</li> </ul>

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<p><b>system outside of there home.</b></p>	<ul style="list-style-type: none"> <li>● Parents make friends with other parents with child that have disabilities</li> <li>● Parents have a better understanding about the screening process.</li> <li>● Parents are given a greater understanding about their rights.</li> <li>● Parents are given a greater understanding of their child's rights.</li> </ul>
<p><b>Many studies needs more research for a better understanding the benefits of Early Intervention.</b></p>	<ul style="list-style-type: none"> <li>● The study is limited to small groups.</li> <li>● Using small group study's minimizes the general ability of the results.</li> <li>● Longitudinal effects of early intervention have not been studied adequately.</li> <li>● The longitudinal studies only covered children birth to 8</li> <li>● Not all disabilities are represented in the studies.</li> <li>● Support for early intervention is not abundant.</li> <li>● Funding for early intervention programs are limited.</li> <li>● Screening and referral proses are difficult to obtain.</li> </ul>

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#### **4. Discussion**

##### **4.1 Early Intervention is an effect strategy to improve the academics of children with Development Delays.**

Early Intervention services are an effective strategy to improve the academics of children with development delays. When children receive early intervention, the children show great gains in many different academic core areas. Most children starting early intervention at birth and engage in these services until the age of 5, show a greater understanding of academic areas such as math, reading, writing, social skills, and self-help skills. Studies show that children who receive early intervention do not digress in academics as quickly as children who have not received early intervention. The children who receive these services have more positive results in this area of academics as well as in the area of social skills.

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Through all of the research, I was only able to find positive effects on children who received early intervention. This is important because the research found that for those children who did not receive early intervention services, showed difficulties in their academics and social skills. Overall, the research found children who are given the help they need from the start of life have a better chance to flourish in these two areas. This is because the children critical developmental periods were nurtured in a way that the child could flourish.

#### **4.2 Parents of children receive Early Intervention have a better understanding of their child's disability and a better support system outside of their home.**

Parents of children who receive Early Intervention services have a better understanding of their child's disability, and a better support system outside of their home. Just having the knowledge in knowing that there is help for a child that suffers from a disability is a very important aspect for a parent. When a child receives early intervention it not only help the child but the parent as well. Parents are less likely to suffer from depression, because they are getting support both from teachers as well as other parents. The parents also have more education about how to interact with their child to best help in their everyday life. Parents have a greater support system outside of their home by making friends with other parents with children who have disabilities. They have a better understanding about the screening process. Parents are also given a greater

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understanding about their rights and the rights of their children because of different support groups.

When I interact with parents who are starting the process of getting their child Early Intervention services, it can be an overwhelming experience. When a parent starts early intervention from birth, it is a much easier transitioning from one stage of development to the next. When a parent can join in groups of other parents with children that have a disability, it creates a support for that parent. When a parent is struggling with their child and don't know what to do, they can find help from the other parents or other support groups. However, when a parent does not start early intervention when their child is at a young age, many times both the parent and the child suffer emotionally, physiologically, and academically. This can be caused from many different reasons. The parent's time could be fully consumed by the care of their child. This can cause isolation, and the parent might not see friends, family, or be able to work. The parents without the appropriate social interaction have a great tendency to suffer from depression. In the end, the studies show that the benefits for both the parents and the child are a positive experience, in comparison to the families that do not get early intervention.

#### **4.3. Many studies need more research for a better understanding the benefits of Early Intervention.**

Many studies need more research to better understand the benefits of Early Intervention services. These studies are limited to small groups. Longitudinal effects of

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early intervention have not been studied adequately, and not all disabilities were represented in the studies. Strategies for teachers or parents to help improve early intervention skills were not provided. Support for early intervention as a whole is not abundant, and funding for early intervention programs are limited. With these difficulties, another one is the screening and referral processes can be difficult to obtain.

The research shows that early intervention works with young children. From what longitudinal studies were represented, it showed the positive effects of early intervention of children with disabilities. However, most of the studies also stated more data was needed to provide a conclusive answer if early intervention works. When reading through the research, it was identified that parents find it hard to find the right early intervention program for their child, and that in the more rural areas the services are not present. The parents have to rely on in-home services, which from what the data shows, is not as effective as school-based services.

### **5. Conclusion**

All of the information presented in this meta-thesis support the benefit of early intervention for children with developmental delays. The research shows that children who receive early intervention demonstrate a higher degree of ability in the areas of math, writing, reading, social skills, self-help skills, fine motor, and gross motor skills.

Academic success seems to correlate with early intervention. Giving these children a head start in their academics allows for them to be more successful in their life. However,

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when looking at the children who did not participate in early intervention and started receiving services at age 5, they did not show the expected improvement in developmental skill areas. The data shows that these children do not retain the information as well, therefore they are at an intellectual disadvantage who the children that receive early intervention. These children also do not excel in their socialization skills, which can hinder their ability to have an appropriate relationship with their peers and family members.

The findings of this Meta-Thesis also showed the benefits of early intervention for the parents, not just the children. When the parents were able to get their child into Early Intervention services, it started the parents and the child on a path for improvement. With the child getting these services, it allows the parents to better understand the disability that their child has. The parents are able to receive the education of how to better assist their child in their education. When dealing with the emotional strain of having a child with a disability, the parents were able to have other parental support if they were in a school-based early intervention program.

When looking at the data of parents that children did not receive early intervention for their child, I found that most of the parents suffered from depression for many different reasons. First, most of the parents reported that they did not know what to do with their child and felt overwhelmed. With feeling overwhelmed, it would become too much stress for the parent, and depression and hopelessness would set in. When the parents were asked the reason they felt overwhelmed, the parents reported that they did

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not have a support system with the other parents and schools. This is showing the importance of having a support system, and the support that early intervention can provide for parents with children with developmental delays.

During this meta-synthesis, I asked if there was a difference in home-based early intervention programs compared to school-based early intervention programs? When looking at the research, it was found that children in a school-based program scored higher in the areas of academics, socialization, and self-help, than children in home-based programs. The research stated the reason that the school-based program is more beneficial in school based settings then the home-based program is because parents and children were getting 3-5 days a week services in which they were getting both teacher and parent support at the schools. The home-based program offered parents teacher support 1-2 times a week. The child and parent did not have peer interaction with as many other individuals with disabilities. This goes back to parents and children not getting the support through a school, teacher, and parent support system. To be around a support system that faces the same adversities is key to the success of children and their parents.

How are early intervention programs being implemented in our schools and home-based programs? During the research there were many different models represented. One difference was in the amount of time services were provided a week. It varies from home-based programs that met with a child 1-2 times a week to school-based programs where the child came 3-5 times a week. There were also specialized disability

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schools such as blind or hard-of-hearing schools, which where both residential and day schools. There are many different models presented for children with disabilities. The one area that seemed to be universal in all of the programs is play. By looking at the research I found the foundation for most of the programs was letting the children play. This appeared to be essential in every program. What I found is early intervention is implemented in children's lives in many different ways. Some programs are found to produce better results then others. However, they are all there to help the child and the family in the academic journey.

In conclusion, this meta-thesis shows that early intervention for children ages birth to 5 is can be effective. I do not believe early intervention is just for children with disabilities, but for all children. By getting children into an early intervention program and allowing them to explore their world through play, peer interaction, and adult interaction, they are getting the best start in life, academically and socially. Therefore, to say that early intervention is not needed for our children or to cut funding for early intervention is foolish. The research shows nothing but positive for both the child and their families. This meta-thesis showed early intervention is the best start for children with developmental disabilities.

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**Reference:**

Applequist, K. L., McLellan, M. J., & McGrath, E. R. (2010). The Apprenticeship

## The Effects of Early Intervention For Children Birth to Five:

### A Meta-synthesis

- Model: Assessing Competencies of Early Intervention Practitioners. *Infants And Young Children*, 23(1), 23-33.
- BARC Developmental Services – a non profit human services agency in Bucks County, PA. (n.d.). Retrieved December 1, 2015, from <http://www.barcprograms.org/PublicPages/Home.aspx>
- Barton, E. E., Lawrence, K., & Deurloo, F. (2012). Individualizing Interventions for Young Children with Autism in Preschool. *Journal Of Autism And Developmental Disorders*, 42(6), 1205-1217.
- Bennington, A. (2004). Science and Pre-School Children with Special Educational Needs: Aspects of Home-Based Teaching Sessions. *British Journal Of Special Education*, 31(4), 191-198.
- Carroll, C., Murphy, G., & Sixsmith, J. (2013). The Progression of Early Intervention Disability Services in Ireland. *Infants And Young Children*, 26(1), 17-27.
- Celeste, M. (2006). Play Behaviors and Social Interactions of a Child Who Is Blind: In Theory and Practice. *Journal Of Visual Impairment & Blindness*, 100(2), 75-90.
- Chiang, L. H., & Hadadian, A. (2010). Raising Children with Disabilities in China: The Need for Early Interventions. *International Journal Of Special Education*, 25(2), 113-118.
- Chiarello, L. A., Palisano, R. J., Orlin, M. N., Chang, H., Begnoche, D., & An, M.

## The Effects of Early Intervention For Children Birth to Five:

### A Meta-synthesis

- (2012). Understanding Participation of Preschool-Age Children with Cerebral Palsy. *Journal Of Early Intervention*, 34(1), 3-19.
- Clark, C., & McDonnell, A. P. (2008). Teaching Choice Making to Children with Visual Impairments and Multiple Disabilities in Preschool and Kindergarten Classrooms. *Journal Of Visual Impairment & Blindness*, 102(7), 397-409.
- Desrochers, M. N., Oshlag, R., & Kennelly, A. M. (2014). Using Background Music to Reduce Problem Behavior during Assessment with an Adolescent Who Is Blind with Multiple Disabilities. *Journal Of Visual Impairment & Blindness*, 108(1), 61-66.
- Fidler, D. J., & Nadel, L. (2007). Education and children with Down syndrome: Neuroscience, development, and intervention. *Mental Retardation & Developmental Disabilities Research Reviews*, 13(3), 262-271.  
doi:10.1002/mrdd.20166
- Hanline, M. F. (1999). Developing a preschool play-based curriculum. *International Journal Of Disability, Development & Education*, 46(3), 289-305.
- Hatton, D. D., Ivy, S. E., & Boyer, C. (2013). Severe Visual Impairments in Infants and Toddlers in the United States. *Journal Of Visual Impairment & Blindness*, 107(5), 325.
- Hsieh, H. (2008). Effects of Ordinary and Adaptive Toys on Pre-School Children with Developmental Disabilities. *Research In Developmental Disabilities: A Multidisciplinary Journal*, 29(5), 459-466.

## The Effects of Early Intervention For Children Birth to Five:

### A Meta-synthesis

- Iarocci, G., Virji-Babul, N., & Reebye, P. (2006). The Learn at Play Program (LAPP): Merging Family, Developmental Research, Early Intervention, and Policy Goals for Children with Down Syndrome. *Journal Of Policy And Practice In Intellectual Disabilities, 3*(1), 11-21.
- Jacko, V. A., Mayros, R., Brady-Simmons, C., Chica, I., & Moore, J. E. (2013). Blind Babies Play Program: A Model for Affordable, Sustainable Early Childhood Literacy Intervention through Play and Socialization. *Journal Of Visual Impairment & Blindness, 107*(3), 238-242.
- Kellar-Guenther, Y., Rosenberg, S. A., Block, S. R., & Robinson, C. C. (2014). Parent Involvement in Early Intervention: What Role Does Setting Play?. *Early Years: An International Journal Of Research And Development, 34*(1), 81-93.
- Lawton, K., & Kasari, C. (2012). Teacher-Implemented Joint Attention Intervention: Pilot Randomized Controlled Study for Preschoolers with Autism. *Journal Of Consulting And Clinical Psychology, 80*(4), 687-693.
- Marks, S. B. (1998). Understanding and Preventing Learned Helplessness in Children Who Are Congenitally Deaf-Blind. *Journal Of Visual Impairment & Blindness, 92*(3), 200-11.
- Matthews, A., & Rix, J. (2013). Early Intervention: Parental Involvement, Child Agency and Participation in Creative Play. *Early Years: An International Journal Of Research And Development, 33*(3), 239-251.
- Mawdsley, H. P., & Hauser-Cram, P. (2013). Mothers of Young Children with

## The Effects of Early Intervention For Children Birth to Five:

### A Meta-synthesis

- Disabilities: Perceived Benefits and Worries about Preschool. *Early Child Development And Care*, 183(9), 1258-1275.
- McMahon, E. (2014). The Role of Specialized Schools for Students with Visual Impairments in the Continuum of Placement Options: The Right Help, at the Right Time, in the Right Place. *Journal Of Visual Impairment & Blindness*, 108(6), 449.
- Meadan, H., Halle, J. W., & Ebata, A. T. (2010). Families with Children Who Have Autism Spectrum Disorders: Stress and Support. *Exceptional Children*, 77(1), 7-36.
- Murphy, J. L., Hatton, D., & Erickson, K. A. (2008). Exploring the Early Literacy Practices of Teachers of Infants, Toddlers, and Preschoolers with Visual Impairments. *Journal Of Visual Impairment & Blindness*, 102(3), 133-146.
- Nahmias, A. S., Kase, C., & Mandell, D. S. (2014). Comparing Cognitive Outcomes among Children with Autism Spectrum Disorders Receiving Community-Based Early Intervention in One of Three Placements. *Autism: The International Journal Of Research And Practice*, 18(3), 311-320.
- Nwokah, E., Hsu, H., & Gulker, H. (2013). The Use of Play Materials in Early Intervention: The Dilemma of Poverty. *American Journal Of Play*, 5(2), 187-218.
- Overview of Early Intervention | Center for Parent Information and Resources. (n.d.). Retrieved December 1, 2015, from <http://www.parentcenterhub.org/repository/ei-overview/>

The Effects of Early Intervention For Children Birth to Five:  
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- Odluyurt, S. (2011). The Effects of Constant Time Delay Embedded into Teaching Activities for Teaching the Names of Clothes for Preschool Children with Developmental Disabilities. *Educational Sciences: Theory And Practice, 11*(3), 1457-1460.
- Odom, S. L., & Wolery, M. (2003). A Unified Theory of Practice in Early Intervention/Early Childhood Special Education: Evidence-Based Practices. *Journal Of Special Education, 37*(3), 164-173.
- Poulou, M. (2015). Emotional and Behavioural Difficulties in Preschool. *Journal Of Child & Family Studies, 24*(2), 225-236. doi:10.1007/s10826-013-9828-9
- Roberts, J., Williams, K., Carter, M., Evans, D., Parmenter, T., Silove, N., & ... Warren, A. (2011). A randomised controlled trial of two early intervention programs for young children with autism: Centre-based with parent program and home-based. *Research In Autism Spectrum Disorders, 5*1553-1566.  
doi:10.1016/j.rasd.2011.03.001
- Salisbury, C. L., & Copeland, C. G. (2013). Progress of Infants/Toddlers with Severe Disabilities: Perceived and Measured Change. *Topics In Early Childhood Special Education, 33*(2), 68-77.
- Su, X., Long, T., Chen, L., & Fang, J. (2013). Early Intervention for Children with Autism Spectrum Disorders in China: A Family Perspective. *Infants And Young Children, 26*(2), 111-125.

## The Effects of Early Intervention For Children Birth to Five:

### A Meta-synthesis

- Sukkar, H. (2013). Early Childhood Intervention: An Australian Perspective. *Infants And Young Children*, 26(2), 94-110.
- Sylva, K. (1997). Critical periods in childhood learning. (No. 1).
- Thomaidis, L., Kaderoglou, E., Stefou, M., Damianou, S., & Bakoula, C. (2000). Does Early Intervention Work? A Controlled Trial. *Infants And Young Children*, 12(3), 17-22.
- Tomasello, N., Manning, A., & Dulmus, C. (2010). Family-Centered Early Intervention for Infants and Toddlers With Disabilities. *Journal of Family Social Work*, 163-172. doi:10.1080/10522150903503010
- Thompson, S. D., & Bruns, D. A. (2013). Perceptions of Early Intervention Services: Adolescent and Adult Mothers in Two States. *Early Childhood Research & Practice*, 15(1),
- Van der Schuit, M., Peeters, M., Segers, E., Van Balkom, H., & Verhoeven, L. (2009). Home literacy environment of pre-school children with intellectual disabilities. *Journal Of Intellectual Disability Research*, 53(12), 1024-1037. doi:10.1111/j.1365-2788.2009.01222.x
- Vismara, L. A., Colombi, C., & Rogers, S. J. (2009). Can One Hour Per Week of Therapy Lead to Lasting Changes in Young Children with Autism?. *Autism: The International Journal Of Research And Practice*, 13(1), 93-115.
- Zucker, G. H. (2010). Intervention Strategies for Pre-School Students with Special Needs. *Forum On Public Policy Online*, 2010(5),

The Effects of Early Intervention For Children Birth to Five:

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