A CASE STUDY OF THE INCLUSION OF SIBLINGS IN EARLY INTERVENTION

ACTIVITIES

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A CASE STUDY OF THE INCLUSION OF SIBLINGS IN EARLY INTERVENTION

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CHAPTER 1

INTRODUCTION

Background of the Problem

In recent years an emphasis in research has been placed on assessing the types of

intervention strategies which are most effective when utilized in early intervention (EI)

programs. The quality of a child's life as well as his or her overall positive development

is affected by many factors. One of the main contributors to a child's social and cognitive

development is the quality of family participation in the learning process

(Bronfenbrenner, 1979). Families consist of and are not limited to parents, siblings,

grandparents, aunts, and uncles. "Siblings of children with disabilities are integral

components of the family system" (Kresak, Gallagher, & Rhodes, 2009, p. 143). Siblings

can be a significant resource for professionals, but one that is often overlooked. Sibling

inclusion within EI strategies, such as play based-activities, may influence the child's

attention, communication, turn-taking, imaginative play, and positive social interactions.

Statement of the Problem

Siblings may provide unique interactions that others (i.e., parents and peers) do not;

they may even have the ability to take an important role in the teaching process for a

sibling diagnosed with a disability (Bennett, 1973; Cash & Evans, 1975; Colletti &

Harris, 1977; Hancock & Kaiser, 1996; Kresak et al., 2009; Miller & Miller, 1976).

Current recommended practices stress the importance of a family-centered Individualized Family Service Plan (IFSP) (Bailey et al., 2006). It is possible that an IFSP might contain outcomes that target increasing positive social interactions and understanding between the sibling and the child with disabilities. The provider might teach siblings different strategies and games, which will provide multiple opportunities for modeling and practice of specific skills the child with a disability is trying to achieve.

It is rare to read about sibling inclusion in EI practices. There are few attempts to explore how siblings could be involved in EI activities and the affects of their participation. We know little about the frequency of sibling inclusion in EI efforts. I propose a shift from traditional research to an alternative that views siblings as important to EI efforts as any other resource providers may choose to employ.

Purpose of the Study

The purpose of this qualitative study was to learn more about the inclusion of siblings in EI activities. I have been cognizant of the importance of family-centered practices during all stages of a child's development. However, I was perplexed by the lessened response of researchers regarding sibling-child interactions compared to that of parent-child relations specifically involving EI efforts. I was interested in learning more about what happens when siblings are included in play-based EI activities, since there is a possibility that more EI service providers could utilize this unique relationship, if they believe it will enhance the child's overall development. In addition, I hoped that my observations would guide me in learning more about whether or not siblings of children with disabilities appear to understand the thematic content of play-based experiences, when included in EI activities.

Research Questions

Not only did I want to observe sibling interactions, but, I also wanted to understand how service providers' approaches are affected by including siblings in EI activities. These questions were of curiosity to me because of my background as a teacher and an EI service coordinator. The following two questions guided my research while I began to explore interactions, relationships, challenges, and values that are found within each natural environment.

1. How does the inclusion of siblings affect early intervention activities?
2. How are service providers' approaches affected by including siblings in early intervention activities?

Importance of the Study

I grew up with three siblings who have special learning needs. Much of my time as a child was spent interacting with my brothers and sisters, taking care of them and their needs while my parents were at work, and engaging in playful activities with them. Drawing upon my own life experiences, I wanted to observe what types of interactions occur between siblings throughout their daily routines as well as with play during EI sessions. From these observations, I was hoping to discover more about how these interactions could be functional for increasing daily living skills and social development through EI efforts.

Moreover, I believed that practitioners and researchers could benefit from reflection regarding current professional practice. Participants may benefit from learning more about what happens when siblings are included within EI activities. Early intervention agencies, early childhood special educators, and families of children with disabilities,

may benefit from the dissemination of this study's conclusions. This study may direct future research regarding the inclusion of siblings in EI activities.

Definition of Terms

Early intervention (EI) services are services that are provided for children, birth-3 years, with developmental delays or established conditions (e.g., medical diagnosis, prematurity). EI programs include developmental/educational services, therapy (i.e., physical therapy, speech therapy, occupational therapy, and/or feeding therapy), and family support services. Agencies provide these supports on an individualized basis in the child's natural environment (Wright & Wright, 2011).

Drawing upon the works of Kresak et al., (2009) and Kim and Horn (2010), inclusion is defined in this study as the participation of sibling(s) during the EI activities in the natural environment. I distinguished participation as the presence of sibling modeling (e.g., hand-over hand) skills the child with a disability was learning, playing with the sibling (e.g., turn-taking), or their presence alone (e.g., sitting next to the child, observing the session).

Thematic content of play is defined in this study as the sibling's understanding of basic games and conventions. For instance, does the sibling understand the concept of turn-taking and sharing? The content of play was observed to determine if the sibling understood the types of games and activities that were desired by the child and therefore motivating (Buchanan & Johnson, 2009).

CHAPTER 2

REVIEW OF THE LITERATURE

Family-Centered Practices & Siblings

In the past, family services such as EI were typically defined by child-oriented

practices. Today, these services have been redefined to acquire a family-centered

approach. A family-centered approach is characterized by the service providers' attention

to supporting the entire family, along with the child with a developmental delay, chronic

illness, or disability. Quality, family-centered programs have guidelines that must be

upheld and valued. Service providers and teachers are beginning to learn more about the

importance of family members and recognize that they are the true experts of the child

with a disability. Furthermore, professionals must thrive to collaborate with families

based on their individual needs and requests. Family-centered services are constantly

being redefined and changed as the needs of today's families' change (Howard, Williams,

& Lepper, 2005).

A child with a disability impacts the entire family (Dyson, 1998). In the past, studies

and literature have been responsive to the needs of parents, more often than not the needs

of the mother. As mentioned above, family-centered practice encompasses all family

members, including siblings. Siblings of children with disabilities experience their own

personal needs and issues. Dyson (1998) found "siblings often feel guilty, lonely, and

incompetent" (p. 57). In addition, many siblings have expressed that they would like to better understand their sibling's disability.

In a study, 114 preschool children, between 3-4 years of age, were studied in order to understand the influence of variables on the theory of mind development. The study found that as the child aged onward from 3 years of age, sibling interactions increased as mother interactions decreased. Cognitive development was related to sibling interaction, but with contributing factors involved. These factors were birth order, age gap between siblings, size of the family, and gender (Arranz, Artamendi, Olabarrieta, & Martin, 2002). Developmental levels in various skill areas were assessed, along with the quality of family interactions, quality of attachment, and the children's performance when faced with a series of mind tasks (Arranz et al., 2002).

Researchers have begun to investigate whether or not family relationships influence cognitive development. The basis of this current research (Arranz et al., 2002) can be traced back to the research of Vygotsky (1978), and his theory of social interactions as the key element of cognitive development. Lastly, the study found that siblings were more inclined to engage in symbolic play with the child with a disability than the mother.

As recognized in research (Bingham & Abernathy, 2007; Dempsey & Keen, 2008; Kresak et al., 2009; Mandell & Murray, 2005), best practice in early childhood special education and intervention should involve a family-centered approach. Therefore, siblings' needs must be recognized and met, as well as the rest of the family's needs. Stoneman (2005) stated, "our challenge as researchers is to find out more about what distinguishes these children and their families and to learn ways of better supporting them" (p. 341). Along with understanding the needs of the family and siblings,

practitioners should recognize that a healthy family environment and the participation of siblings in intervention programs may increase the success level of the child with a disability or delay. Research has shown that older siblings might shield younger siblings from the harmful effects of their environment and therefore positively influence their development (Widmer & Weiss, 2000). Accordingly, if professionals focus on the needs of the sibling as well as the child with a disability, support is expected to have a more positive effect when it comes from siblings that are themselves better adjusted. One study indicated that siblings improved their knowledge about disabilities, increased their involvement with their sibling with a disability, and built up their own self-esteem when they participated in the program (Naylor & Prescott, 2004). Along these lines, the authors proposed the following:

> The development of permanent sibling support groups via multi-agency services, support groups should have specific aims (private time away from disabled siblings, to make social interactions available, to enable them to be a part of a group process, and improve coping strategies), families should be carefully assessed and made fully aware of services, drop-in support services should be considered, and individual needs of siblings should not be ignored if group work is not appropriate. (p.205)

All family members have the right to be listened to and should feel safe and secure in their family environment. Each and every family has unique needs which can be determined with a thorough evaluation. The results of the evaluation can guide the provider in determining which services and supports are most appropriate for the family as a whole.

Inclusion of Siblings

Kresak et al. (2009) conducted a review of the literature in order to examine the inclusion of siblings in EI programs. The authors found two studies to date that met the

criteria, one that was published and the latter unpublished (McBride, Brotherson, Joanning, Whiddon, & Demmit, 1993; Rutland and Jung, 2008). With family-centered practices in mind, both studies evaluated how siblings were included in EI efforts as well as within the IFSP goals and outcomes.

Kresak et al. (2009) conducted their own mixed methods research study investigating the inclusion of siblings of children with disabilities by EI providers. The purpose of this study was to reveal "parents perceptions of how siblings are included in early intervention routines" (p. 145). The study was conducted in a Southeastern state EI program with 153 parents who participated over a two year span. The parents were given a *Sibling Questionnaire*, which consisted of various questions that were open-ended, multiple choice, and demographic. Surveys were returned by 87 parents. Kresak et al. (2009) found the following:

> The results of this survey remind us that parents perceive siblings as an important part of early intervention for young children with disabilities. Siblings are an integral part of the family and are often key players in the experiences and learning opportunities that children with special needs have in the home and community context (p. 149).

Additionally "results also indicated a significant correlation between having goals for siblings on the IFSP and whether siblings were included by the service provider in sessions, thus indicating the importance of including goals for siblings on the IFSP document" (p. 150).

This study reveals that some parents do believe siblings play a vital role in the learning process of children with disabilities. Parents may need to advocate for inclusion if they feel their child with a disability may benefit from the participation of a sibling.

Service Provider's Approaches

Current research on the effects the inclusion of siblings has on service providers' approaches in EI activities was not found, however, there are some research studies that focused on teacher preparation regarding family-centered practices (Bingham & Abernathy, 2007; Mandell & Murray, 2005; Prosser, 2008). Family-centered practice recommendations for the classroom teacher are just as applicable for EI providers (with a few adaptations). Initially, families should be exposed to family-centered practices through EI services. Once the child transitions to the public school setting, the expectation is that family-centered practices are sustained.

Mandell and Murray (2005) conducted a qualitative study focusing on the inclusion of family-centered practices within teacher preparation programs. The purpose of this study was to stress the importance of providing pre-service teachers with diverse experiences regarding teacher-family relationships. The Family-Centered Preservice Model (FCPM) program was developed in order to prepare future teachers of children with disabilities, age birth to 8 years. Preservice students took part in coursework, internships, and workshops accentuated by recommended family-centered practices.

Mandell and Murray (2005) found that "in the absence of family-centered undergraduate instruction, almost 70% of participants reported relying on their own personal family experiences as a framework for working with families" (p. 76). Therefore, each participant forms his or her own perspective of family from personal experiences. As suggested by the researchers, preservice teachers would benefit from participation in various service delivery models as well as quality interactions with diverse families. Family participation in preservice programs has increased over the

years, but is still very minimal. Moreover, Mandell and Murray (2005) add that recruiting families of various backgrounds and strengths to take an active role in the instruction of future educators would ultimately benefit teacher-family partnerships in the future.

Mandell and Murray's (2005) study consisted of a small number of participants in a single location and generalizability might be limited. With this in mind, it is important to realize that unless teacher preparation programs are providing the necessary instruction on family-centered practices, most teachers will not value the approach or lack the skills and resources necessary to even begin the endeavor.

A study was conducted by researchers Bingham and Abernathy (2007) at the University of Nevada-Reno, in order to assess the effectiveness of a university course on development of preservice teachers' skills associated with working cooperatively alongside parents of children with disabilities. The course was required as part of teacher certification and graduation from the university. The course provided students with an understanding of concepts, principles, and legal mandates of appropriate practice, while emphasizing the family-centered model. The participants were undergraduate and graduate students at the university working towards various degrees. A majority of the students were working towards teaching certification.

The researchers analyzed concept maps that were completed by the students at the beginning and at the conclusion of the course. The researchers studied the concept maps to observe transformations in the students' beliefs in regards to their role as the teacher in a partnership with families (Bingham & Abernathy, 2007). The concept maps allowed the students to reflect on their learning experiences at the beginning and at the end of the course.

The researchers noted that often practicing teachers in the field believe they do not have the necessary skills to build partnerships with the families of their students (Bingham & Abernathy, 2007). Most teachers are open to building quality relationships with the families but don't know where to start. They lack the skills, resources, and support from administration needed to effectively create environments that are family-centered.

The results of the study showed that students gained valuable knowledge in a one-semester course in regards to their role as a teacher within family-centered practices. A significant increase was noted in the students' understanding of issues families endure when raising a child with a disability. Participants became aware of the roles of parents, financial concerns that stem from caring for a child with a disability, family resources, and the importance of advocacy. Bingham & Abernathy (2007) found the following:

> The implication for teacher education programs is to develop robust programs that respect pedagogy, but facilitate the transformation of teacher candidates from a stereotypical view of themselves as a teacher into a reflective, respectful partner in the educational experiences of the child. (p. 40)

Some limitations were recognized in this study. Bingham and Abernathy (2007) noted "while some students took the time to create complex maps, others did not take sufficient time to develop their maps" (p. 56). Therefore, it is unknown what those particular students actually took away from the course. Those students who had detailed concepts maps may have had prior knowledge of family-centered practices.

Researchers are finding that there are numerous practicing teachers in the field who value partnerships with families, but they are reporting a feeling of unpreparedness and the failure of administration in providing support, resources, and guidelines for family-

centered practices (Bingham & Abernathy, 2007; Prosser, 2009). Further research may explain what lessons, activities, and experiences preservice teachers must participate in, as they prepare to become teachers whose beliefs are characterized by the family-centered approach. Collaboration at all levels in the community and government will also create more powerful partnerships. During the review of literature, opposing viewpoints to family-centered practices did not surface. Further exploration of preservice models that were ineffective would be warranted.

CHAPTER 3

RESEARCH METHODS

Qualitative Methods

From my own theoretical and philosophical understandings, qualitative research consists of both interpretation and analysis. Data collection is an evolving process. As patterns begin to emerge, trends and curiosities are reflected upon and guide the next steps of observation and inquiry. Interpretation and analysis are an ongoing part of data collection. (Bogdan & Biklen, 2007) Important to the presentation of my study, I have used thick description (Geertz, 1973), the anthropological approach of explaining with rich detail the reason behind human actions.

The research method chosen was the case-study. This collective study focused on a specific issue (i.e., inclusion of siblings in EI activities). Multiple sources of data were gathered and triangulated, in order to provide more in-depth insight on the issue (Creswell, Hanson, Clark Plano, & Morales, 2007). Data collection consisted of fieldnotes, transcripts from interviews, review of individualized family service plans (IFSPs), as well as video recordings. Creswell et al. (2007) state that "case study research studies an issue explored through one or more cases within a bounded system (i.e., a setting or context)" (p. 245). The setting in this case study was a child's natural environment. The issue of inclusion was explored intensely within this setting. Data

included a detailed description of each service provider's approach as well as narratives

of how the child and his or her sibling(s) interacted or responded during the EI activities.

A focus was placed on specific situations that occurred during the observations which

may in turn provide further insight regarding inclusion of siblings.

Data were collected in the natural environment (i.e., six weeks in the months of

January and February 2011). Two of the three families were unable to participate the

entire six weeks due to scheduling conflicts, illnesses, and one child aging out of EI

services. Trustworthiness was preserved by setting out to uncover relationships and

patterns with no means in altering the natural environment and its events.

Data Sources

Two EI programs in the state of Texas gave approval for the study to be conducted

with one of their service providers. The service provider was referred to the study by the

Director at both EI agencies. Families (i.e., parents and/or siblings) who had a child under

the care of the service provider were given the opportunity to participate in the study.

In order for the service provider, family, and sibling to participate in the study, three

criteria had to be met. First, the service provider had to report that he or she was

including siblings in EI activities in the natural environment with one or more families.

Second, the service provider was providing therapy or developmental/educational

services for a child with a disability or medical diagnosis, who is eligible by law, and was

currently receiving EI services from an EI program in the state of Texas. Third, consent

was obtained from the service provider and from the parents and siblings who agreed to be participants in the study.

The researcher conducted direct observations in the natural environment (i.e., home) during multiple EI activity sessions with three families who provided consent. As mentioned above the direct observations took place over a six week period. Family A was able to participate for the entire six weeks. Families B-C participated for three of the six weeks. As discussed in Chapter One, limitations to the study could be viewed by some as to be Families B-C's minimal participation.

The direct observations of Family A were conducted during weekly 45 minute sessions provided by a licensed physical therapist. All but one session was conducted in the early morning. The second to last observation was conducted in the afternoon due to a change in the provider's schedule that particular week. The eligible child receiving services was 2.5 years of age with a diagnosis of cerebral palsy. The child has significant motor development delays. He has two sisters, ages 3 and 8. The oldest sister was present during two of the six sessions. Primarily, most interactions were observed between the eligible child and his youngest sister. The mother was present for all sessions. It is important to note that during a few of the sessions, there was another child (non-sibling, 1 year old). All of the EI sessions took place in the family's living room or kitchen area.

Families B and C were receiving EI services from the EI provider at the second agency. This provider was a developmental therapist whose background is characterized by the understanding of the "whole" child and his or her overall development. Both families were receiving one weekly visit at 45 minutes a session during the afternoon and

early evening. As mentioned above, Family B did not give permission for videotaping. The researcher made a choice, halfway into the study, to not videotape Family C. There were multiple situations where videotaping for Family C was not practical (e.g., the eligible child was asleep, the sibling was not present in the session, there were other non-family members present who had not given consent to videotaping). Therefore, the researcher chose to take detailed fieldnotes for both of these families.

Family B consisted of two children (ages 19 months, 2.5 years) who were eligible and receiving EI services. The youngest child (19 months) was eligible for services due to motor delays. The second child (2.5 years) was eligible due to concerns regarding communication and articulation skills. Three other siblings were present during the observations, ages ranging from 6.5-9 years. The mother was present for all EI sessions. It was common for the EI sessions to be conducted in the family's living room or kitchen area.

Family C consisted of one child (2 years 11months) who was eligible for EI services due to delays in communication, cognition, and social-emotional skills. The child has one sibling who is 6 years old. The mother was present for all sessions. Additionally, the grandmother was present for two of the three sessions. All of the sessions took place in the family's living room.

Data Collection

Data consisted of multiple sources which included observations, field notes, interviews of providers, review of children's IFSP goals and objectives, peer reviews, and debriefing (Glesne, 1999). Time was set aside after each visit to reflect on the interactions

that took place between all those present within the natural environment. After each

session, I reviewed my fieldnotes and/or videotapes (Family A only). In addition, I

transcribed the data from the video recordings (i.e., activity & environment descriptions,

conversations, and observer's comments). Moreover, I wrote "after the fact" notes that

shaped my thinking about the data I wanted to collect on the next visit (Hubbard &

Power, 1999). Subsequently, I revisited the videos and my notes to formulate any

additional observations. Furthermore, I chose to examine in greater detail "shorter

vignettes" of what I felt to be meaningful sibling interactions (Hubbard & Power, 1999).

Data Analysis

Data analysis was characterized by an extensive amount of time devoted to

continuous interpretation of my perspectives, regarding the interactions I was observing

in the natural environment. I recognized that my own perspectives and background could

inadvertently influence the way I acted as a researcher. The "lens" with which I was to

view the environment was inevitably shaped by all my previous experiences. Therefore, I

was mindful of maintaining an open mind, so patterns could shape themselves without

preconceived notions (Hubbard & Power, 1999).

Utilizing "constant comparison" (Garza, 2009), I examined all fieldnotes and

transcripts from all three families. For each new passage I selected, I compared previous

codes that had been applied to the preceding passages. Gibbs and Taylor (2010) state that

"constant comparison," "ensures that your coding is consistent and allows you to

consider the possibility either that some of the passages coded that way don't fit as well

(and might therefore be better codes as something else) or that there are dimensions or

phenomena in the passage that might well be coded another way as well" (p. 2). An inductive approach to coding was chosen. Codes were developed through systematic examination of the data, rather than applying predetermined codes (Bogdan & Biklen, 2007). First, I created a master list of codes that were more descriptive in nature (Gibbs & Taylor, 2010). I went through all my transcripts and fieldnotes and assigned codes to observation and conversation segments, while keeping track of them on the master list. Once I had my master list, I went back through the codes and combined them based on their compatibility with a broader category assignment. This systematic process allowed refinement of the codes (Bogdan & Biklen, 2007). The categories that were derived from the coding can be found in Table A.

At the conclusion of the study, I conducted a broad interpretation of what I learned. These observations and interpretations can be found in the research findings section of this paper. A case analysis was conducted which will provide an opportunity for some generalizations to be made (Creswell et al., 2007).

CHAPTER 4

RESEARCH FINDINGS

Results

Observations in the Natural Environment

Overall, the providers believed that the inclusion of siblings in EI activities was a benefit to both the sibling and the child with a disability. They both reported that at times there were barriers to including the sibling in a session (i.e., jealousy, competition, taking toys away). The "teaching" sessions with the siblings may help alleviate some of these barriers. If the sibling is able to understand how he or she is helping the child, he or she may be more of a valued participant than a distraction or hindrance.

There were specific themes that became apparent during my systematic analysis which were related to how sibling inclusion affects EI activities. Positive characteristics of sibling inclusion included motivation, affection, modeling, praise, and attending to the needs and mood of the child with a disability.

There were a couple of moments in which I observed the child with a disability being motivated by the sibling's presence. In more than one session at Family A's home, I witnessed a game of "catch me" between the child in the walker and the sibling. The

sibling ran around the house and hid, while singing out "nah, nah, boo-boo, you can't catch me." By observing the child in the walker, he appeared to be thrilled with this game. He moved faster in his walker than before the game. He called out her name when she went into hiding. When she came out of hiding and came towards him he screamed and laughed. He moved towards wherever she was hiding. He seemed to tolerate the walker for longer periods of time during this game as long as there weren't any other distractions (e.g. being sick, or interference from non-sibling). Without this game he would have just been participating in a physical activity that may have seemed more like work than fun.

Affection was designated at a positive theme. I observed hugs, kisses, a touch to soothe, and a game of tickling. During one session with Family C, immediately when the sibling was present in the session, the child ran over to his sibling and tickled him saying, "tickle, tickle, tickle."

There are two moments that come to mind when one sibling protected the other. During a session at Family A's house, a non-sibling was present and had taken away a toy from the child. The child was unable to retrieve the toy and the sibling stepped in and redirected the non-sibling while getting the toy back. During a session at Family B's house, one of the children fell to the ground. One of the younger siblings ran over to the fallen child and put his hand on his back. He checked to make sure he was okay and said "Are you okay?"

Modeling was one of the strongest themes present in this study. There were multiple occurrences of hand-over-hand assistance by the siblings during multiple play and

physical activities. Below, I will showcase a small piece of data from my fieldnotes which characterizes a modeling session. The provider was teaching the sibling a skill for her to use with her brother in the future.

> *The provider takes a few minutes to show the sister how the brother needs help with putting the domino near his thumb, in order for him to get a good grasp. Using the sister's hand, the provider shows the sister how to place the domino is his hand. The provider says, "See your brother has a hard time doing this" (shows the thumb around the domino). "So when you put it in his hand try and get it between his thumb and his finger, ok, let's let you try." The provider watches the sister follow through with the directive and says, "There you go, pause, between his thumb and his fingers."*

This was not the only time I was able to observe a provider participating in this type of teaching lesson. There were times that the siblings appeared to know how to help the sibling and they were able to model skills without the assistance of the provider. For example, the sibling in Family A retrieved a toy for the child. The toy was one that was difficult for him to manipulate. Without any verbal prompts, she took her hand and placed it on his and helped him play with the toy. She also verbally labeled the color of the objects on the toy which he mimicked.

> *The sibling grabs another toy and asks, "You wanna play with this?" She takes her hand and places it on his and moves it to push a button. She says the color. She tells her sibling to "say orange"…pause…"2,3". She smiles and sings the alphabet. The child smiles back at the sibling.*

Praise was a common theme and came in the form of verbal phrases, clapping, or affection. The siblings would respond to achievements by yelling out "Yay," or "You did it," or "You got one," as well as times where they would give them a kiss or hug.

The last major theme addresses siblings' responses to needs and moods. These were characterized by the sibling taking care of the child's physical needs such as wiping a nose, getting him a snack, or retrieving an item needed for an activity. Also, there were times when a sibling would respond to an emotional response or change in mood from the child. The scene below exemplifies this major theme.

> *When the non-sibling takes away the toy from the child, the child's facial expressions become angered and contorted and he begins to vocalize more loudly. The sibling notices the child's change in mood and gives him a bus (a desired toy). The sibling proceeds to get a drum for herself. She says his name and tells him to look. The child looks at the sibling and quiets down as she plays the drum.*

The sibling seemed to understand that the child was not happy that the toy had been taken away. She gave him a desired toy (i.e., researcher had seen him request the bus during other visits) and proceeded to sit next to him until he was calm.

The final themes are situations that can be described as distractions. There were several cases when the child from Family A was working on an activity and the non-sibling would take away the toy that he was working with, causing him to get upset and frustrated. During another session the child wanted an apple the sister was eating and was unable to focus on the session. By her being in the environment with a desired object he could not have, the session appeared to become more frustrating and difficult for him. The dynamics of the environment can easily be changed depending on those that are

present. For certain activities, a sibling inclusion may not be as appropriate if they are unable to understand the learning process at hand. It is up to the provider to decide how and when to include the sibling.

Interview Responses

Below, the interview data are reported. The data are divided into sections based on each of the five interview questions. Providers' responses for each questionnaire are organized by repeating ideas. Included, are multiple examples of direct quotes expressed by both providers.

Question 1

"How do you include siblings in early intervention activities?"

Both providers reported that they use siblings to assist with games and activities that require turn-taking. The providers take time to "teach" the sibling strategies during the EI sessions. These strategies are effective in helping the children with the disability continue to practice the skills they are working on when the provider is not there. The providers both believed that modeling was an important aspect of sibling inclusion. I observed each provider modeling various skills for the siblings. After the modeling session was over, they would ask the sibling to repeat what he or she had just learned. By doing this, the provider was able to evaluate whether or not the sibling had mastered the skill, so that they could use it later with the sibling. Lastly, reciprocal or interactive play was brought up. Provider B responded, "Children learn appropriate social and play skills naturally through interactions with other children." The provider went on to say, "Through these

activities you are able to touch on communication, motor, cognitive, and social-emotional goals." The providers both adhere to the "natural environment" by utilizing daily routines and interactions to support the child's overall positive development.

Question 2

"How often do you include siblings in early intervention activities?"

Provider A reported that at least 75% of the time siblings are included in the EI activities. The provider goes on to report, "I try to include them whenever possible, unless they are continually disruptive to the therapy session." There are times that a sibling's participation may become more disruptive than supportive as mentioned in some of the findings above. Provider B pointed out that, "On the other hand, teaching sometimes has to come in the form of not doing as much. For example, a child with a communication delay may have gestures and sounds interpreted for them by siblings and opportunities to enhance communication are missed."

Question 3

"How do you think including siblings in early intervention activities affects the child with a disability?"

Providers A and B both believe that the inclusion of siblings in EI activities is an overall positive experience. Provider A stated that, "Family goals often include criteria related to playing with siblings, being understood by the entire family (immediate and extended), taking turns, and other reciprocal activities." Siblings were viewed by both providers as being great motivators for the child with the disability. When the child with

a disability is able to practice with the sibling throughout the week, their continued development is positively affected. Lastly, Provider B provided a prime example of how a sibling can become a motivator through play.

Provider B stated:

> The child with a disability has a sibling that participates in what might be viewed as hard work from therapy sessions, thus, changing the perception to one of fun and games with siblings. They have the opportunity to see the sibling model new skills at an appropriate and safe level for the child's specific needs.

In summary, what the child may otherwise think would be an undesired activity, may in fact become desired, by the participation of the sibling.

Question 4

"How do you think including siblings in early intervention activities affects the "typically" developing sibling?

Provider A stated that, "It teaches them patience, allows them to feel empowered by helping others, and teaches them a way to interact with their sibling." Empowerment was a repeating theme. Provider B stated, "They are empowered to be "mini-teachers" and to help make a difference." The providers felt that the sibling was just as positively affected as was the child with a disability.

Question 5

"What type of training have you had in regards to inclusion of siblings in early intervention activities?"

Provider A and B reported that they have not received any training regarding sibling inclusion. They both mentioned previous personal and professional experiences which have shaped their understanding of the importance of sibling involvement. Provider B reported that, "I observed other early intervention providers and their attempts to include siblings. We all realize the benefit of their inclusion."

Discussion of Findings

My findings offer a view of siblings as influential in offering support to children who are being served in EI programs. From the data I collected during my observations and interviews, I was able to determine familiar codes and themes which characterized a natural environment where sibling inclusion was present. Below, I will discuss the main themes that were determined through the analysis of the results.

Motivation & Praise

First, we will look at the topics of motivation and praise. The simple act of a sibling being present seemed to be motivation for one child. When the sibling was present the child seemed to be more interested in the activity. For example, when the child was in the walker practicing his walking skills, he seemed to move faster and work harder when the sibling was present. The child would respond to the sibling's presence by talking, gesturing, or moving towards the sibling to be closer. Most of the siblings seemed to be cognizant of when to give praise. When a task was finished accurately by the child, the sibling responded by clapping or with a verbal praise. For family A, the child would request the sibling throughout the session by calling her name. Overall, the sibling's presence seemed to provide another option for motivation (besides the mother) and an

additional bearer of praise. There seemed to be a correlation between the closeness of the siblings' relationship and the amount of motivation that was observed.

Modeling

Next, the topic of modeling will be discussed. There were multiple times when the child would practice a skill with the sibling rather than the provider. The providers often took the time to provide "teaching" moments. Teaching moments occurred when the provider would model for the sibling certain strategies that would be useful in assisting the child during daily routines. These daily routines might consist of feeding time, dressing, walking, and playing games. Modeling consisted of both hand-over-hand and verbal prompts.

Attending to Needs

The topic of attending to the needs of the child will be discussed. Often times, I witnessed the Mother requesting the siblings assistance with daily living skills (e.g., changing a diaper, getting a tissue, getting a snack, helping with positioning, helping with feeding). The sibling was often responsible for some of the care the child with a disability required. Additionally, I observed the sibling responding to the child's needs without any verbal prompts. For example, there were moments that the siblings seemed to know what the child desired when his mood changed or when he babbled or made gestures.

Distractions

Finally, we will discuss the topic of distractions. Distractions were present in all of the natural environments. Some environments had more distractions than others. An addition of a non-sibling member seemed to become a major distraction for the one child. The age of the sibling seemed to also affect the amount of distractions that occurred. The

older siblings seemed to be more understanding of which of their actions would be distracting (e.g., eating in front of the child, taking a toy away, or the TV being on). Natural environments could be more distracting and agitating, depending on who was present. The non-sibling, who was unpredictably present, seemed to change the natural environment's dynamics by creating multiple moments of disruption.

CHAPTER 5

CONCLUSIONS

Conclusions

Including siblings in the intervention program and providing support to all family members may in turn create an environment in which developmental and social accomplishments thrive. Research has recognized the importance of family involvement in the educational lives of children (Bingham & Abernathy, 2007). However, my study challenges practitioners and researchers to explore how the inclusion of siblings in EI activities may benefit the child with a disability as well as their sibling. Practitioners would benefit from implementing sibling inclusion within their own practices while conducting their own evaluation of inclusion's effectiveness.

Researchers are finding that there are numerous practicing teachers in the field who value partnerships with families, but they are reporting a feeling of unpreparedness and the failure of administration in providing support, resources, and guidelines for family-centered practices. It is important that collaboration occur on multiple levels. Recognizing the inclusion of siblings in EI services within family-centered practices can be beneficial, but it requires teamwork.

Statement for Further Research

Further research that focuses on the perspectives of the provider and the sibling regarding inclusion is warranted. It would be interesting to learn more about how siblings feel about inclusion. Are there times when they are not interested in participating?

Further research needs to be conducted to examine the correlation between preservice programs' curriculum and the overall transformation of students' beliefs regarding family-centered practices. Both of the service provider's did not have any preservice training regarding sibling inclusion. It would be valuable to know if there are any programs that exist which offer these professional development opportunities.

Limitations of Study

From my case study of two EI providers employed by two different agencies and three diverse families, I cannot make generalizations to all EI providers, agencies, or sibling relationships and families' natural environments. Another limitation is the relatively short period of observation (six weeks of 45minute sessions held once a week, beginning January 24th, 2011 and ending February 28th, 2011).

I would have liked to have had more time to spend in the natural environment, especially for Families B-C. While Family C provided permission to videotape, I chose only to take fieldnotes due to some interferences (i.e., the eligible child was asleep one of the sessions, the sibling was not present in one session, and during another session there were other non-family members present who had not given consent to videotaping). In addition, one of the families did not provide consent for videotaping. Therefore, I had to rely on writing detailed fieldnotes without the added benefit of videotaping.

During the first videotaped session of Family A, the sibling was aware of the recorder. She investigated the recorder several times, and when she did I informed her that I was videotaping her brother and her family. The sister sat with me and watched the recording for a few minutes and then returned to the activity at hand. By the end of the session she appeared to be accustomed to its presence.

Recommendations for Practice

Educators and EI service providers must set the standard to uphold a family-centered approach. When educators and service providers are able to recognize the ecological characteristics of a child with disabilities as well as their family, they will be able to assist in an appropriate manner.

The effect of sibling involvement can be measured by success in social relationships, physical and cognitive skills, as well as daily living skills. When siblings and the child with a disability are partners in the learning process, both children ultimately benefit. Collaboration allows the instruction to be carried over into the home during everyday routines in the child's natural environment when the provider is not present. Parents, siblings, and providers can work together to create activities that are appropriate for the child's development.

Table A-Codes and Descriptions

Codes	Descriptions
1. Environment	*Family and non-family members present, time of day, weather, physical environment, objects in the environment.*
2.Communication and Conversation	*Calling out for sibling, conversations between provider and Mother or provider and sibling(s), conversations between siblings, requests, reflections, opinions, non-verbal body language, and gestures.*
3. Play	*Chase game, gives toy, coloring, sharing, offering toy, singing, modeling, drawing, mimicking, turn taking, desired activity.*
4. Participation	*Responds to needs/mood/requests, sitting next to, moving towards, moves faster, independent, listening, gains attention, attends to activity.*
5. Interference	*Takes away toy, not following directions, transition, distractions, competition, refusal.*
6. Disposition	*Content, emotional response, frustration, calms down, tolerates, happy, smiling/laughter, crying, anger, tired, sick.*
7. Learning Activity	*Providing choices, practice, physical activity, hand-over-hand, desired activity, manipulates, teachable moments, directions, modeling.*
8. Relationship	*Protection, attends to and understands needs, motivation, care, health, friend, requests sibling in their absence, affection.*
9. Motivation	*Praise, desired activity, sibling, Mother.*
10. Independence	*Frustration with assistance, motivation, wanting to be like the others.*

REFERENCES

Arranz, E., Artamendi, J., Olabarrieta, F., & Martin, J. (2002). Family context and theory of mind development. *Early Child Development and Care, 172*(1), 9-22.

Bailey, D. B., Bruder, M. B., Hebbeler, K., Carta, J., Defosset, M., & Greenwood, C., et al. (2006). Recommended outcomes for families of young children with disabilities. *Journal of Early Intervention*, *28*, 227-251.

Bennett, C. W. (1973). A four-and-half year old as a teacher of her hearing impaired sister: A case study. *Journal of Communication Disorders, 6,* 67-75.

Bingham, A., & Abernathy, T. V. (2007). Promoting family-centered teaching: Can one course make a difference? *Issues in Teacher Education*, *16*(1), 37-60.

Bogdan, R. C., & Biklen, S. K. (2007). *Qualitative Research for Education: An Introduction to Theories and Methods*. Boston: Pearson Education, Inc.

Bronfenbrenner, U. (1979). *The ecology of human development*: *Experiments by nature and design.* Cambridge, MA: Harvard University Press.

Buchanan, M., & Johnson, T. G. (2009). A second look at the play of young children with disabilities. *American Journal of Play, 2*(1), 41-59.

Cash, W. M., & Evans, I. N. (1975). Training preschool children to modify their retarded siblings' behavior. *Journal of Behavior Therapy and Experimental Psychiatry, 6,* 13-16.

Colletti, G., & Harris, S. L. (1977). Behavior modification in the home: Siblings as behavior modifiers, parents as observers. *Journal of Abnormal Child Psychology, 5*(1), 21-30.

Creswell, J. W., Hanson, W. E., Clark Plano, V. L. & Morales, A. (2007). Qualitative research designs: Selection and implementation. *The Counseling Psychologist, 35,* 236-264.

Dempsey, I., & Keen, D. (2008). A review of processes and outcomes in family-centered services for children with a disability. *Topics in Early Childhood Special Education, 28*(1), 42-52.

Dyson, L. L. (1998). A support program for siblings of children with disabilities: What siblings learn and what they like. *Psychology in Schools, 35*(1), 57-63.

Hancock, T. B., & Kaiser, A. P. (1996). Siblings' use of milieu teaching at home. *Topics in Early Childhood Special Education, 16*(2), 169-190.

Garza, Ruben (2009). Latino and White high school students' perceptions of caring behaviors: Are we culturally responsive to our students? *Urban Education*, *44*(3), 297 -321.

Geertz, C. (1973). *Thick description: Toward an interpretive theory of culture.* NY: Basic Books.

Gibbs, G. R., & Taylor, C. (2010). How and what to code. *Online QDA.* Retrieved from http://onlineqda.hud.ac.uk/Intro_QDA/how_what-to-code.php

Glesne, C. (1999). *Becoming qualitative researchers: An introduction.* (2nd Ed.). NY: Longman.

Howard, V. F., Williams, B., & Lepper C. (Ed.). (2005). *Very young children with special needs: A formative approach for today's children.* Columbus: Pearson Prentice Hall.

Hubbard, R. S., & Power, B. M. (1999). *Living the Questions: A Guide for Teacher-Researchers*. Portland: Stenhouse Publishers.

Kim, T., & Horn, E. (2010). Sibling-implemented intervention for skill development with children with disabilities. *Topics in Early Childhood Special Education, 30*(2), 80-90.

Kresak, K., Gallagher, P., & Rhodes, C. (2009). Siblings of infants and toddlers with disabilities in early intervention. *Topics in Early Childhood Special Education, 29*, 143-154.

Mandell, C. J., & Murray, M. M. (2005). Innovative family-centered practices in personnel preparation. *Teacher Education and Special Education*, *28*(1), 74-77.

McBride, S. L., Brotherson, M. J., Joanning, H., Whiddon, D., & Demmitt, A. (1993). Implementation of family-centered services: Perceptions of families and professionals. *Journal of Early Intervention, 17,* 414-430.

Miller, N. B., & Miller, W. H. (1976). Siblings as behavior change agents. In J.D. Kromboltz & C. E. Thoresen (Eds.), *Counseling methods* (pp. 426-434). Austin, TX: Holt, Rinehart, & Winston.

Naylor, A., & Prescott, P. (2004). Invisible children: The need for support groups for siblings of disabled children. *British Journal of Special Education, 31*(4), 199-206.

Prosser, T. (2009). Personnel preparation for preservice early intervention providers: Supporting families' participation in university classrooms. *Journal of Early Childhood Teacher Education, 30,* 69-78.

Rutland, J. H., & Jung, L. A. (2008). *Service coordinator's use of routines to develop early intervention outcomes: A study of Kentucky's IFSPs.* Poster presented at the Conference on Research Innovations in Early Intervention, San Diego, CA.

Stoneman, Z. (2005). Siblings of children with disabilities: Research themes. *Mental Retardation, 43*(5), 339-350.

Vygotsky, L. S. (1978). *Mind in society: The development of higher psychological processes.* Cambridge, MA: Harvard University Press.

Widmer, E. D., & Weiss, C. C. (2000). Do older siblings make a difference? The effects of older sibling support and older sibling adjustment on the adjustment of socially disadvantaged adolescents. *Journal of Research on Adolescence, 10*(1), 1-27.

Wright P. D., & P. D. Wright. (2011). IDEA 2004. *Wrightslaw,* Retrieved from
    http://www.wrightslaw.com/idea/index.htm

VITA

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