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“THESE CHILDREN ARE MINE” – A CASE STUDY OF AN AFRICAN-AMERICAN FAMILY WITH DEAF CHILDREN: THE INTERACTIONS WITHIN THE FAMILY AND WITH EARLY PROFESSIONALS

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“THESE CHILDREN ARE MINE”
A CASE STUDY OF AN AFRICAN-AMERICAN FAMILY WITH
DEAF CHILDREN: THE INTERACTIONS WITHIN THE FAMILY
AND WITH EARLY INTERVENTION PROFESSIONALS

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ABSTRACT

The purpose of this qualitative research is to provide rich, descriptive data about the interactive dynamics of a working class African American family with two young deaf children, focusing on sibling relationships, parent-child/children relationship and the family’s relationships with early intervention professionals. This case study has been guided by family systems theory, examining the interaction patterns and relationships within the family subsystems in naturally occurring situations in their everyday lives. The interaction processes within the family and between the family and professionals, the social roles, communication strategies used and early intervention strategies and approaches have been closely analyzed.

The family consists of parents, siblings and extended family of cousins. The initial focus of the case study is a 2-year-old girl with severe to profound bilateral sensorineural hearing loss. She is the third of three children. She has an older deaf brother. During the course of the study, the focus changed to the family and its relationships with early intervention service providers.

Descriptive data were collected during an eight-month period through participant observation, interviews, videotaping. The study provides portraits of the family members, thematic analyses of the interactions within the subsystems, between the subsystems within the family and the interactions and relationships between the family and service providers and the relationships.

The findings disclose misconnections in 1) the interaction patterns within the family and between the family and intervention professionals, 2) cultural and belief structures between family and professionals, 3) developmental expectations and standards of the focus child and 4) collaboration between family-professionals and between professionals. The mother who is an
effective primary caregiver, adopted various roles in order to interact and provide multiple social experiences for her children. Data also reveal that the child’s strengths as she employs a wide range of communication strategies to initiate and maintain membership in the family. Her communication abilities and language development are influenced by the home culture and social experiences. Overall, the findings have implications for educators of deaf children, early intervention professionals, and research. Qualitative studies using the systems theory framework can provide a holistic view of the families with deaf children.
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CHAPTER I

REVIEW OF THE LITERATURE

The purpose of this case study is to provide rich, descriptive data about the interactive dynamics of a family with two children with hearing loss focusing on sibling relationships, parent-child/children relationships, and family relationships between parent/family and professionals. In order to understand these components, it is pertinent to critically review the literature to determine what is known about families with children with deafness and the early intervention services provided to them.

In this chapter, the general principles of system theory most directly relevant to family dynamics will be reviewed. Next, research on mothers interacting with their children will be discussed. This section will also include literature about mothers interacting with children with deafness. Next, there will be an overview of commonly studied sibling relationships. The research on this matter will include highlights about sibling constellation variables and sibling temperaments. Relationship between normal hearing and deaf siblings will then be discussed. Lastly, this chapter will conclude with a discussion about support services for children with hearing loss and their families and the nature of these services.
The Family System

A fundamental premise of family system theory is that parents and children form relationships, both between parents and children and among children and that these relationships affect each other (Minuchin, 2001; Stafford & Dainton, 1995). The essence of a family system is that relationships are not linear but circular; that is, the interactive patterns and family processes are seen as influencing and being influenced by all members of the system. Besides the relationship within the immediate family, family system theory also proposes an interactive relationship with the environment. The system affects and is affected by the cultural, social and political environments into which it is embedded (Bronfenbrenner, 1979).

Minuchin (1974) identifies some of the major principles guiding family system theory: 1) elements within the family system are interdependent and each contributes to the functioning of the system as a whole, 2) the family system consists of subsystems such as a parental subsystem, a sibling subsystem, and the functioning of one subsystem affects the quality of the functioning of the other subsystems, 3) interaction patterns within the family are not linear but circular, so that individuals have mutual influence on each other, 4) patterns within the family gravitate toward homeostasis and stability, 5) the family is an open system that can evolve and change in response to the changing circumstances.

Interdependence is a crucial concept in family systems theory (Stafford & Dainton, 1995); Bowen (1988) characterizes it as a “triangle”. No one is totally in controlled nor is unmoved by the actions of others in the family. Bowen views emotion as a biological phenomenon and the emotional system in each individual affects his or her relationships with another human. Human behaviors are predictable to the degree they are influenced by the
emotional expressions found within relationships. The interdependency among family members creates a wholeness, so the family can be seen as a holistic entity (Stafford & Dainton, 1995).

Thus, in systems theory, the focus is not on individuals in a family but on the whole family as a unit. Bowen (1988) concludes that humans have a tendency to group together and this “togetherness force” is most observable and quite natural. As a consequence, members eventually come together to establish a certain degree of similarity in terms of thoughts, principles and feelings. In other words, they become a family.

Second, the unit itself is composed of subsystems, but all the subsystems are interconnected. Whatever happens in one subsystem, the other subsystems are affected emotionally, physically, socially, and spiritually. No subsystem operates without being influenced by another subsystem. This system is defined as a collection of interrelated components with existing relationships among members in the components. Interaction and transaction of information occur between these components creating a bond of cohesiveness that is crucial to the system – a characteristic of the family as a unit. Although the family is a system with properties like any other system, its desire to adapt and respond to information, to establish social interaction and transaction with its subsystems, set it apart from other systems. A family is a biological living system and its origin of establishment and organization are special and different from the physical system. Although, in many ways, it shares some common properties with other systems, the biologically growing transitions of the members make it special.

As mentioned earlier, a family system is composed of subsystems. These subsystems are interconnected and the function of the subsystem causes a reaction from the other subsystems as they adapt to or modify each other. A definitive line between the subsystems does not exist; thus, these subsystems are not independent of each other. Theoretically, to understand the working of
the system, the subsystems are arbitrarily dissected from each other for closer internal analysis. However, in reality, it is impossible to detach the intricate working of individual subsystems within the family system as the subsystems mutually influence each other.

Third, the principle of circularity in family patterns makes family systems complex. Interactive and communication behaviors of the family members are not unidirectional but rather recurring action-reaction patterns (Kreppner, 2002).

It is pertinent, then, that there should exist some predictable patterns of behavior among family members in order to maintain stability or homeostasis. Homeostasis involves the tendency to establish a dynamic balance amidst changing conditions and relationships (Lambie, 2000). The moment the structure is changed, it is assumed that individuals will use various types of mechanisms, such as predictable patterns of communication, to maintain survival and achieve or re-establish balance within the family system.

Lastly, a family system is fluid and very much inclined to change and growth in structure which explains the openness of the system. A family adapts to the changing needs of the members and to environmental conditions. For instance, information about an addition of a new sibling to the family changes the existing structure - the spousal, mother-child, father-child subsystems – each of which slowly adapt in anticipation of the arrival of the new baby.

Besides the list of characteristics that define a family, the family system as a whole unit has some specific properties that make families quite complex. Consequently, when research on family is done, researchers tend to evaluate along one dimension, such as interaction between mother-child dyad or sibling-child dyad. With this in mind, the next section will discuss research on interactions between mother and child.
Mother-child Dyad Interaction

Research on parent-child interaction usually has focused on mother-child, based on the assumption that mothers have the greatest influence on the child’s development. Mothers are seen as agents of socialization, and it is assumed that significant personality changes take place very early in life when children spend much of their time at home under their mothers’ close supervision. Relationships between infants and mothers are looked upon as critical, giving rise to the assumption that mothers are an important influence in the lives of infants (Minuchin, 1974). Generally, mother is considered the primary caretaker who shapes the character and personality of her child.

With this position in mind, a considerable amount of research has focused on how mothers support the child’s communication development, which includes facilitating joint attention (Bakeman & Adamson, 1984), establishing pointing gesture (Masur, 1994), and using eye contact as means of communication (D'Odorico & Levorato, 1994). There is research to show that there is a correlation between language input with children’s early language output (Furth, 1973; McEntee, 1994; Meadow-Orlans, MacTurk, Preziioso, Erting, & Day, 1987). Mothers and children are constantly interacting and communicating to accomplish joint understanding. Jones and Adamson’s (1987) study examined how language is used in a dyadic interaction around specific tasks, such as book reading and free play in a home setting. Their results revealed that the type of task influence language use. Language utterances were elevated during free play and a high proportion of utterances are related to social regulative function, such as greetings and requesting.

The considerable amount of research that has been conducted on mother-child interaction has produced many interesting findings concerning child behaviors. Children express
communicative intents early in life by using gestures (Bates, 1976; Bates, Benigni, Bretherton, Camaioni, & Volterra, 1979; Bates, Camaioni, & Volterra, 1975). Bates’ (1976) proto-imperative gestures, such as open-handed reaching towards objects, are elements in early communication strategies that are later expressed in verbal directives. Gestures are a common mode of communication and are used before they are encoded into a conventional symbol system.

Studies by Masur (1994) examined the pattern of communication gestures between infants with their mothers in natural interactions such as during bath time activities. The results revealed that infants go through a progression of communicative acts, from gesture with vocalization to gesture plus divergent gaze and then to gesture and conventional verbalization. These non-verbal signals and communicative point gestures are considered to be precursors to linguistic performance, as they progress from isolated gestures to gestures plus vocalization and then proceed to gestures plus eye gazing and vocalization. In addition to understanding the non-verbal behaviors of young children, these studies provided a better understanding of the developmental stages of language and cognition.

Another body of literature, mother-child attachment theory, shows that maternal caregiving affects children’s social and emotional adaptation. The quality of mother-child relationship is significantly influenced by the mother’s own experience (Crowell & Feldman, 1988; Main, Kaplan, & Cassidy, 1985; Ward, Vaughn, & Robb, 1988). These studies, many conducted in clinical settings, conclude that the interpersonal relationships between mother and child strongly influence the social and emotional functioning of the child.

The literature reviewed on mother-child dyadic relationship provides a brief overview of the impact that the presence of an adult has on the communication and linguistic development of
a child. However, a child’s interactive partners rarely consist only of the mother, but rather a larger realm of father, extended family members, and especially siblings.

**Mother-Child with Deafness Relationship**

As research on mother-child interaction reached new heights, researchers began to examine the effects of childhood deafness on the quality of mother and child relationship. Similar to the hearing mother-hearing child research agenda, research on mother-deaf child interaction began with investigating the communication development and linguistic acquisition of deaf children when compared to hearing children, and how child deafness affected the mother and child relationship (Koester, Brooks & Traci, 2000; Lederberg & Mobley, 1991; Mohay, 1994; Small, 1986; Spencer, 1992; Wedell-Monnig & Lumley, 1980).

Wedell-Monnig and Lumley (1980) studied six pairs of hearing mother-deaf child and six pairs of hearing mother-hearing child in free play. The children were all about three years of age. The results demonstrated that the deaf children were less responsive to their mothers over time than hearing children, although both pairs of mothers were equally responsive to their children. Mothers of deaf children were more dominant in the interaction. The reason suggested was mothers tended to over stimulate their deaf children to compensate for the hearing loss and in doing so, come to control the interaction. The researchers concluded that child deafness can have a negative effect on the quality of mother-child interaction if there was no adequate means of communication.

However, another study by Lederberg and Mobley (1991) found that child deafness did not affect the mother-child relationship in any major way although communication was affected. The age of the children in that study ranged from twenty-two months to five years of age. The
contrast in results prompted another study by Lederberg, Willis and Frankel (1991) that reassessed mother-child relationship when the child was three years old. The results revealed that three-years-old who were deaf showed significantly less social initiative, social responsiveness, enthusiasm, interest and creative play while playing with their mothers. The study appeared to suggest that child deafness dramatically impacts mother-child relationship between 22 months to three years old. These behaviors might be attributed to language skills, maternal stress and the child’s lack of shared attention with mother.

Spencer (1992) investigated the expressive language of seven mothers with normal hearing and their deaf children when the children were 12 months old and again at 18 months of age. The mode of communication used by the pairs was total communication. The general conclusion from the study was that mother’s limited language production did not affect the infants’ acquisition of first expressive signs. However, Spencer speculated that linguistic communication between mother and children might be reduced, as the child grew older. Mohay (1994) reported that children at early age used a high degree of nonverbal communication, and these nonverbal gestures might be related to speech production.

Although these studies were done in both home (Mohay, 1994; Lederberg et al, 1991) and clinical settings (Spencer, 1992; Mohay, 1994), each study situated the mother-child dyad in a restricted place and time, without taking into account larger contexts as suggested in systems theory. These studies did not focus on the function of the parent-child subsystem in the families, but only on the production of language by each partner. There is a need to expand our perspective.
Sibling Relationship

Ecological factors that influence child development include siblings interactions. Cicirelli (1995) defines sibling relationships as the total of the interactions of physical, verbal, and nonverbal communication of two or more individuals who share knowledge, perceptions, attitudes, beliefs and feelings regarding each other, from the time that one sibling is aware of the other. A sibling relationship includes both overt actions and interactions between the sibling pair as well as covert subjective, cognitive, and affective components of the relationship, from quiet playing to bouts of arguing (Baskett & Johnson, 1982). Sibling relationships can continue to exist when the siblings are separated by distance and time without ongoing sibling interaction.

Relationships between siblings are an on-going, lifelong interaction. The interaction starts in early childhood and continues throughout all life stages and across the life span. In the course of the relationship, various critical life events may affect the relationship and change the interaction or cause some changes in the behavior of the siblings. Therefore, studies on sibling relationships or interactions have to be taken in a life span perspective, as this will enable one to see the impact of early events has in later relationships. Assuming that sibling interactions do have an impact, what are the early interactive patterns between siblings in the early part of the relationship?

Interaction between typically developing siblings

In the 1970s, sibling relationship was recognized as an important component in the family system (Brody & Stoneman, 1990). A large number of studies focusing on sibling relationships among young children became available from research groups in the United States, (Gibbs, Teti, & Bond, 1987; Lamb, 1978; Lamb & Sutton-Smith, 1982; Teti, Bond, & Gibbs, 1986; Vandell & Wilson, 1987), in Canada (Abramovitch, Corter, & Lando, 1979;
Abramovitch, Corter, & Pepler, 1980; Abramovitch, Corter, Pepler, & Stanhope, 1986; Abramovitch, Pepler, & Corter, 1982) and in Great Britain (Dunn & Kendrick, 1982; Dunn & Shatz, 1989). All of these studies focused on middle class families with two children, some in laboratory setting (Lamb & Sutton-Smith, 1982; Vandell & Wilson, 1987) and some in the home (Abramovitch et al., 1982, 1986; Dunn & Kendricks, 1982).

Studies on sibling interaction show that siblings exhibit a wide range of behaviors that differ from parent-child dyad interaction (Abramovitch, Corter, & Lando, 1978; Brody & Stoneman, 1990; Dunn, 1985; Dunn & Kendrick, 1979; Lamb, 1978). These studies give ample evidence to suggest that siblings provide social experiences that are different from other interactional experience in the family system. The findings from the studies suggest that siblings experience high levels of interaction and a wide range of behaviors with each other, such as empathy, concern, in addition to understanding the pragmatics of how to annoy and console each other (Abramovitch et al., 1978; Dunn & Kendrick, 1979; Lamb, 1978; Lamb & Sutton-Smith, 1982).

From a psychoanalytic perspective, the sibling relationship is based on the premise that the relationship is marked by jealousy, envy, rivalry and resentment. From his research on the role of siblings, Neubauer (1982) obtained evidence that young siblings’ reactions to one another were not exclusively a reflection of their relationship to the parents, but had special characteristics unique to the sibling relationship and was different from parental interactions. He believed that the shared moments between siblings go far beyond identification with the parents.

**Siblings and Social Roles**

Observations from research reveal that infants and siblings are able to take up various social roles as teachers (Lamb, 1978), nurturers (Baskett & Johnson, 1982), caregivers and
comforters (Dunn & Kendrick, 1982), allies in dealing with parents, as models of positive and negative behaviors (Brody & Stoneman, 1990; Brody, Stoneman, & McCoy, 1992), and as support figures and playmates throughout the life span (Teti, 2002). Findings from research are beginning to point out that the prosocial behaviors and agonistic behaviors exchanged between siblings (Abramovitch et al., 1978; Baskett & Johnson, 1982; Brody & Stoneman, 1990; Brody et al., 1992; Cicirelli, 1995; Dunn & Kendrick, 1979, 1982; Pepler, Abramovitch, & Corter, 1981; Sutton-Smith & Rosenberg, 1970; Vandell & Wilson, 1987), the nurturing roles (Abramovitch et al., 1978) and the imitation behavior of younger sibling (Lamb, 1978) are often first social experiences siblings have and these experiences have a major impact on their behavior and subsequent development. The sibling relationships seem to be characterized by varying levels of interaction and by a wide range of interaction patterns that involve a wide range of emotionally based behaviors, from laughing to crying, from yelling to hugging.

It can be argued that childhood experiences are valuable to siblings (Cicirelli, 1995), as they learn to negotiate their positions and to argue their differences with each other. Children then begin to be aware of others and the different personalities that make up individuals. Therefore, siblings play important roles in each other’s social life as they engage in many attempts to control each other through different social techniques (Abramovitch et al., 1978; Baskett & Johnson, 1982); the older sibling teach and nurture the younger one (Dunn & Kendrick, 1979). The child-sibling dyad provides opportunity for the younger child to learn about role-taking, role-complementary, role-reversal skills (Dunn & Kendrick, 1979; Lamb, 1978). The range of interactive patterns shown by the sibling dyad is extremely diverse and the patterns have some positive as well as negative attributes.
Sibling Constellation

In attempts to understand the sibling role, research has addressed various variables. Studies have focused on four aspects of sibling status, namely, birth order and sex of child (Lamb 1978; Sutton-Smith & Rosenberg, 1970), age spacing (Pepler, Abramovitch & Corter, 1981), and sex of sibling (Minnett, Vandell, & Santrock, 1983) in order to determine if the status of siblings modifies the nature of sibling interaction. Although the aspect of birth order has been found as significant, findings illustrate that children’s behaviors toward siblings vary depending on the sex of the child, the sex of the sibling and birth spacing.

Older female siblings were more likely to engage in positive or prosocial behaviors with the younger sibling. They seem to exhibit nurturing attributes and act like little mothers (Abramovitch et al., 1978; Baskett & Johnson, 1982) and teachers to their younger siblings (Minnett et al., 1983). Positive or prosocial behaviors include smiling, laughing, giving objects, comforting, showing physical affection and praising. In contrast, older male siblings were more likely to engage in aggressive or antagonistic behaviors. Aggressive or agonistic behaviors noted in these studies were of assertive physical acts, object struggle and negative verbalization. The children in Minnett’s studies were much older children (seven-eight years old) than the participants in Abramovitch and Dunn’s studies (20 months to 48 months old). These behaviors observed in the older age group were more evident than in the younger group children.

Birth spacing of siblings also affects the nature of sibling interaction. Siblings whose ages are closely spaced tend to show more aggression towards each other than when wide age spacing occurs, and where the older siblings were more likely to show positive behavior (Abramovitch et al., 1978; Minnett et al., 1983). These studies suggest older, first-born siblings were capable of showing empathy, care, concern and understanding to the younger siblings.
Siblings who were closer spaced in age were seen engaging in more aggressive interactive patterns.

However, some studies did not find any significance in the age interval or birth spacing of siblings and sex differences of the siblings (Abramovitch et al., 1982; Lamb, 1978; Pepler et al., 1981). These studies found birth spacing did not have any “significant effect on any measures of prosocial and agonistic behavior.” Two reasons may account for the contradiction in findings. Lamb’s (1978) studies, done in a laboratory setting, may have created a limited social and physical environment. The social restriction might have caused siblings to interact with one another and affected the nature of the interaction. Whereas, the findings from Pepler et al. and Abramovitch et al.’s longitudinal studies allowed the children to be observed over the period of time, and recorded data naturally occurring behaviors in naturalistic settings.

The children in Minnett et al.’s (1983) study were seven-eight year-olds whereas the children in Abramovitch et al.’s (1979) studies were between one to four years of age. The differences in the children’s ages in these two studies have bearing on the behaviors or patterns of the interaction. Once the siblings reach a stage of maturation, the interactive patterns of the siblings may change to become either more prosocial or more antagonistic.

The last aspect of sibling status, the sex of the siblings, is an important factor in the patterning of the sibling interaction (Abramovitch et al., 1982; Cicirelli, 1995; Dunn & Kendrick, 1982). In same-sex sibling dyads, Dunn and Kendrick (1982) found a significantly higher frequency of imitation of actions than between different sex sibling dyads. Same-sex siblings showed a lower percentage of negative interactions than different sex pairs. In addition, the researchers found that younger siblings at eight months old did not imitate the older one enough to make a significance in the interaction. The older siblings replicated the acts of the younger
siblings more. The pattern of interaction changed when the younger sibling reached 14 months of age. In terms of joint physical play, and gross motor activities, the researchers found no significant difference between same sex pairs or different-sex dyads with an elder boy or girl. The only difference found with between girl-girl pairs and boy-boy pairs was the level of physical aggression, in which the male pairs exceeded female pairs.

The findings in Dunn & Kendricks’s study contradicted Lamb’s (1978) and Abramovitch et.al’s (1982) studies, in which there were no sex differences in “imitative behavior” or replication behaviors in the same sex and different sex dyads. Younger male siblings, for example, imitated their older sisters as much as younger female siblings imitated their older brothers. Overall, both studies agreed that older girl sibling showed more prosocial behaviors to their siblings regardless of the gender. Older boys were slightly more prosocial to their younger female siblings than their male siblings. Again, the discrepancy in these two studies may be accounted for by the difference in age of the children, the younger children in Dunn and Kendrick’s study were eight months at the initial stage and 14 months in the follow-up study, whereas the younger children were 18 months and progressed to 36 months old in Abramovitch and Lamb’s study.

Most investigators of sibling interaction compared the interaction young children have with their older siblings to interactions with their peers. There were some who hypothesized that the behaviors found in sibling interaction were precursors to interaction with peers (Abramovitch et al., 1978; Vandell & Wilson, 1987). Vandell and Wilson found infants as young as six months who have had turn taking experiences with their mothers were able to engage in turn taking sequences with their siblings and peers. Tomasello and Mannie’s (1985) study showed siblings were able to make adjustments to aspects of speech register when talking to their infant siblings;
they addressed the infants in high pitch voice, short sentences and many repetition, the characteristics of “motherese”, although they were not identical to the mothers. In addition, siblings were less adept in providing linguistic scaffolding for the infant sibling.

Sibling Relationship and Objects

Another aspect of sibling relationship research is sibling and infant’s behaviors toward inanimate objects. Dunn and Kendrick (1979) seem to suggest that objects are not pivotal to social transactions. In many instances, many positive exchanges between siblings do not involve inanimate objects. This contradicts the finding about peer interaction in which objects are used to gain entry into social transactions and membership into a peer group (Elgas, Klein, Kantor, & Fernie, 1988). Dunn and Kendrick (1979) do not believe objects are necessary to enhance social interactions; their observations suggest that sibling engage in more complicated sequence of social interactions in the absence of objects.

Siblings and Positive Behaviors

Abramovitch and colleagues (1982) report observing a higher percentage of prosocial actions from both older and younger siblings in their longitudinal studies in all sibling groups. The increase in social behaviors in sibling interactions may be accounted for by the development of the children, and, as they interact, the younger siblings learn social skills from the older ones. However, these longitudinal findings are inconsistent with Lamb (1978) and Dunn and Kendrick (1982) who found that younger siblings initiated a higher percentage of prosocial behaviors than older siblings. There is little focus to illuminate a clear understanding of the kinds of social environments and social interactions siblings create for each other. For instance, Lamb’s 1978 study on 18 month-old infants and preschool-aged siblings in a laboratory setting examined sibling behaviors. He found that younger siblings constantly monitor the whereabouts of the
older siblings and maintained play proximity, even though older siblings rarely attempted to play with the younger siblings. Younger siblings exhibited higher degree of imitative and prosocial behaviors than the older siblings. Since a reason for such behaviors was not provided, and in the absence of information about the children’s social competence, it could be assumed that the restricted environment of the laboratory encouraged younger siblings to seek out their older siblings for interaction.

**Siblings and Negative Behaviors**

Other studies show some negative behaviors emitted by children with their siblings. A study by Baskett and Johnson (1982) shows that siblings are frequently seen alternating between prosocial behavior and “attention-demanding behaviors,” such as quiet play and arguing respectively. This study compares the interaction patterns of children with their siblings and parents. The children participating in this study were between four to eight years of age. Each child was individually observed interacting with his or her sibling and mother at home. The researchers found that the children exhibiting different sets of behaviors with siblings than parents. There were more undesirable behaviors with the siblings than with the parents, such as physical aggression, negative command, yelling, and/or non-verbal interaction. The researchers concluded that interactions with siblings seemed to be driven by negative reinforcement and punishment as a way to control the behavior of the others. In other words, such behaviors are interpreted as using aversive ways to force the other sibling into submission and to control each other. On the other hand, the submitting sibling has also learned appropriate ways to elicit positive response. Often, the younger child ends up being the submissive one. Lamb (1978) and Abramovitch and colleagues (1979, 1982) report that older siblings initiated over 80% of antagonistic behaviors. If the younger sibling initiate aggressive behaviors, the older siblings
often retaliate. Younger siblings would rather submit to counterattack than the older siblings. The nature of the interaction seemed to suggest that siblings learn “how, when and with whom to use aversive control techniques and how to respond to coercion from others,” (Baskett & Johnson, 1982, p.648). The interpretation of power technique was not discussed in other studies. Social power structure is a reality in social development and is essential in the socialization process.

The most prominent environment for young children is the home. However, from the findings discussed above, the studies to date have been conducted in various settings such as laboratory (Lamb, 1978), playroom in the preschool (Vandell & Wilson, 1987), vacant classrooms (Minnett et al., 1983), and in the home (Abramovitch et al., 1978; Abramovitch et al., 1982; Baskett & Johnson, 1982; Dunn & Kendrick, 1979, 1982; Minnett et al., 1983). The different sets of findings from different research environments indicate the importance of gathering data in more than one type of environment, with an emphasis on observing children in “natural” settings. The findings from these studies are not multifaceted and provide little understanding of the nature and circumstances of the behaviors. Further studies should be designed to focus on collection of data about the daily activities and routines of the family and siblings in naturalistic settings.

**Siblings and Conflicts**

Conflicts and differences, settled through the intervention of parents or on their own, provide the necessary experiences to help the siblings interact with their peers (Brody, Stoneman and McCoy, 1992). This is a reflection of the social world outside the home and these patterns may be considered precursors to other interactions with the peers and other individuals in the
later part of the life (Abramovitch, Pepler and Corter, 1982). However, conflict situations are not uncommon between siblings as older siblings exhibit a higher frequency of aggressive behaviors in order to dominate the interaction (Abramovitch et al, 1982; Berndt and Bulleit, 1985). Data have shown younger siblings initiating aggression and the older siblings often retaliated, thus exacerbating the conflict situations.

Although sibling conflicts repeatedly have been found to be common phenomena in families, very few studies have attempted to look at the causes of conflicts in sibling relationships. Two major research studies conducted by Brody and Stoneman (1987) and Brody, Stoneman & McCoy (1992) found that child temperament, maternal treatment and family climate have an effect on sibling relationship. Highly active and impulsive children elicit antagonistic behaviors from their siblings, irrespective of the birth order and gender. Highly active younger siblings behave more antagonistically toward their older siblings, who in turn counter that behavior. Parents were found to direct higher rate of affection, attention, controlling and affection toward the younger sibling (Abramovitch et al., 1982; Brody and Stoneman, 1987; Dunn and Kendrick, 1982).

*Features of Sibling Relationship*

Dunn and Kendrick (1982), in their longitudinal study, examine the quality of sibling relationship at the stage where the second-born siblings were 14 months old and the first-born between 32 and 57 months. The data show a high frequency of interactions and a wide range of intense emotions. The observations in the study reveal a picture of siblings interactions which goes against the notion that envy, jealousy, and rivalry as the core dimensions in sibling relationships. The study documents a complex range of affections very young children have
toward their siblings. The children’s non-verbal behaviors demonstrate their ability to express emotions and understand the pragmatics of relationships.

Dunn and Kendrick (1982) note four distinct features of the relationship from the study. They are 1) the salience of the behavior of the sibling; 2) the ambivalent nature of the behaviors; 3) the different frequencies and emotional qualities of the behaviors; and 4) the individual differences of the two children.

The first feature is the salient behavior of children in responding to interactions of siblings and other members of the family. At a very young age, siblings are aware of each other’s presence, behaviors and actions. This is obvious in the high frequency of imitative behaviors of the older sibling, and as the infant increase in age, the imitative role is reversed. This pattern of imitation behavior is consistent with the findings of Abramovitch et al (1979) and Lamb (1978) and demonstrate the power of the older child as a role model.

The second feature is the ambivalent nature of the children towards each other. There is an apparent pattern of behavior that alternates between prosocial and agonistic behaviors. Although there is a high frequency of playing together, imitation, and proffering of toys, there are also frequent bouts of yelling, pushing and hitting. Therefore, it is difficult to classify sibling relationship in a unitary dimension of friendliness, warmth and/or hostility. The wide range of emotions that transpires between siblings demonstrate that the quality of the relationship falls on the individual differences of the siblings. There is no single simple pattern of positive or negative social behaviors. It is common to see frequent friendly and hostile behaviors whenever they engage in interactive play.

The third feature is the frequency and the emotional quality of the behaviors of the children toward their siblings. The proportion of positive social behaviors expressed by the older
sibling is lower than the prosocial behaviors expressed by the younger sibling. In Dunn and Kendrick’s (1982) study, the mean prosocial behavior by older sibling is 55% and 70% for younger siblings. Again these findings parallel those of Abramovitch, Corter and Lando (1979) and Lamb (1978), both of whom note the higher frequency in prosocial behaviors of younger siblings toward the older siblings.

Finally, the last feature is the difference between the two children or the frequent “mismatch interactions.” In many observations, there is no mutual response in the siblings toward each other. The mismatch interactions account for 22% of all interactions in Dunn and Kendrick’s (1982) study. For instance, they find in the interactive exchanges that the older sibling’s hostile behavior might be responded by the younger sibling in a friendly way or a submissive manner. Abramovitch, Corter and Lando (1979) and Abramovitch, Pepler and Corter (1982) noted the younger sibling’s submission to the older sibling’s aggressive behavior. In such interaction, the younger sibling has an important role in maintaining the interaction.

Change of Research Focus

Another body of the research in sibling interactions has begun to explore the reasons why siblings think, do and feel the way they do and to link their cognitive acts to family circumstances (Furman, 1993; McHale & Crouter, 1996; Schwartzman, 1983; Weisner, 1993). Research on sibling relationships has made the shift from family constellations, such as gender, birth order, birth status and age, to the ecological and interactional dynamics within the context of the family functions. The research methodologies on sibling relationships are beginning to converge toward the family as a system. Investigators recognize that families contain several subsystems. These different subsystems are affected by events that occur in other subsystems. The family is not looked upon as a unitary whole but as a unit made up of interrelated
components in an ecological system. The study of sibling relationships explores the quality of sibling relationship within other family contexts such as parents’ marital status, or the presence of a sibling with disabilities.

McHale and Crouter (1996) conducted a study on the well-being of children in a family and explored the quality of the sibling relationships in different family contexts. This study used two most common types of data collection method: naturalistic home observation and extensive interviews. The interviews were done seven days a week every evening to gather data about the frequency and duration of the children’s activities. The investigators obtained data on every aspect of the children’s daily activities and household tasks, even those that were relatively low in frequency. They found children spending about 33% of their out-of-school hours with their siblings. Next, they examined what siblings did with their time together and found children whose siblings had disabilities spent a great deal of time in sibling care-giving activities. The data from the same study reveals that parents were most likely to exhibit patterns of “favoritism” or a parent showing differential treatment toward the child with disabilities.

Furman (1993), who developed a battery of instruments to measure relationship qualities, does not deny the effect that family constellation variables has on sibling relationships. However, he adds other factors, such as personality traits and the nature of parent-child relationship, as being important in the sibling relationship. Although the list is not exhaustive, two factors that may be crucial determinants of the nature of sibling relationships should be added: the extended family (grandparents or aunts and uncles) and spousal relationship or mother-father relationship (for single parent family where one of the parent has visitation rights.) These two factors will not be discussed here as they are not relevant to the study in question.
Mother-Child-Sibling Triads in Typically Developing Children

It is an undeniable fact that mothers have a tremendous impact on the development of the child’s language, social and emotional development. As work in this area has begun to gain recognition, the studies on family progressed from a mother-child framework to a broader family systems perspective. Many questions and issues have been raised that needed more research. One of them is to include other subsystems, such as mother-child-sibling triad interaction.

According to the family systems theory, all relationships in a family are interlinked. Whatever happens to a subsystem or interaction between two persons in a family is influenced by other members and affects all the members. Thus, in a sibling relationship, the interaction is influenced by the parents or mother or father. On the other hand, the mother or father’s actions have been affected by the children’s responses. In addition, in any interaction between two persons, there is a need to take into account the influence of the presence or absence of a third person and the possible effect on that person’s behavior in the dyad. Bronfenbrenner (1979) names this phenomenon as second-order effect. This section will review the role of the mother in a sibling dyadic interaction and what happens in a mother-child-sibling triadic relationship.

Research on family systems has emphasized that siblings raised within the same household grow up recounting different experiences (Dunn, 1985). Studies on the experiences of adolescent and young adult growing up at home suggest that they experienced different intrafamilial environments than their siblings in a wide variety of areas, and that parents perceived differences in their own treatment of their children (Daniels, Dunn, Furstenberg, & Plomin, 1985). Recent studies that focused on mothers’ relationships with siblings confirmed that parental behavior differs toward different siblings in the family. The parents and siblings in these studies are observed in a naturalistic as well as semi-structured environment (Abramovitch
et al., 1978; Abramovitch et al., 1982; Brody & Stoneman, 1987; Dunn & Kendrick, 1982; Pepler et al., 1981). The results from these studies suggest that when parents are with siblings, they tend to direct higher level of affection, responsive and control behaviors toward the younger sibling. Younger siblings already received more parental behavior just based on the fact of their less developmentally advanced status.

Mother’s Role in Sibling Relationship

A mother’s role as a source of influence on sibling relationship has been the research focus on triadic interactions. Brody, Stoneman and McCoy’s (1992) study suggests mother’s distribution of treatment toward siblings affects the dynamics of sibling relationship. Hostile and aggressive behaviors between siblings are related to differences in maternal treatment. This is supported by Dunn and Kendrick (1982) in which mother fosters closer sibling affection when she directs positive treatment toward older siblings. The older sibling shows a higher level of positive behaviors toward younger sibling. However, most observations shows the mother’s display of behavior to be consistent toward the older and younger sibling in terms of affection and verbal responsiveness (Abramovitch et al., 1978; Baskett and Johnson, 1982; Brody and Stoneman, 1987; Brody & Stoneman, 1990; Dunn and Kendrick, 1982; Dunn, Plomin, and Daniels, 1986).

Studies done in the last two decades on triadic relationship have found that sibling interaction is relatively low in the mother’s presence, and the siblings engage in a higher rate of aggression toward each other (Abramovitch et al., 1978; Abramovitch et al., 1982; Corter, Abramovitch, and Pepler, 1983; Dunn and Kendrick, 1979; Dunn and Kendrick, 1982; Lamb, 1978). Although the studies were done in naturalistic and laboratory setting, the results are consistent. These studies appear to suggest that the younger sibling prefers to interact with the
mother rather than with their sibling. The mother could differentiate her behaviors to accommodate the younger sibling and allow the child to take the lead as she engages the child in longer turn taking exchanges. The second possible reason for low levels of interaction and high levels of negative behavior is as an effort to obtain the mother’s attention. Although there is speculation that the level of negative behaviors differs depending on the age and gender of the siblings, the studies mentioned above do not find a significant difference.

An interesting finding by Dunn, Plomin & Daniels (1986) reveals an inconsistency in the maternal behavior toward the same child at the age of 12 months and 24 months which might be attributed to the different demands of the child. The mother’s sensitivity to the changes at different points in the child’s life is notable. Since the mother is sensitive to her children’s needs, it is not unusual to suggest that the mother is equally sensitive to the changes in siblings and their interactions; and her role in the interactions might change at different points in the siblings’ lives. The varied results and interpretations are just evidence of the different variables that need to be taken into account in relationships within the family.

Language Development in Triadic Interaction

A large number of studies have shown mothers or caregivers support communication and early language learning by scaffolding relevant questioning according to the child’s cognitive development (Ainsworth and Bell, 1974; Bates, 1976; Bates et al., 1975) facilitating joint attention and contributing to vocabulary acquisition (Bruner, 1975; Wedell-Monnig and Lumley, 1980). All these studies emphasized adult-child communication strategies. Later studies shift beyond the dyad to observe how children interact with more than one partner, (Abramovitch et al., 1978; Barton and Tomasello, 1991; Corter, Abramovitch & Pepler, 1983; Dunn & Kendrick, 1979, 1982; Lamb, 1978) or how the mother facilitated language growth in a triad situation.
Jones and Adamson (1987) examine the way language is used during mother-infant-sibling triadic interactions. This home observation focuses on the mothers and 16 pairs of siblings, whose ages range was between 18-45 months. The findings show that triadic interaction is almost three times longer than dyadic (Barton and Tomasello, 1991) as the frequency of turn taking is higher as the mother directs utterances to both siblings, although utterances to the older sibling are higher than toward the younger sibling. The mother does not change the quality of her infant-directed speech by using two different sets of speech functions with two of her children, even though there is less metalinguistic speech in a triad (Jones and Adamson, 1987). One obvious observation was the few verbal contributions, such as questions and topic initiation by the younger sibling. However, in a triadic interaction, the conversational weight is not on any of the siblings; the sibling who did not understand or have anything to say may just stay silent.

The type of language used is influenced by the type of activities. Book reading does not provide a wide an array of vocabulary acquisition due to the referential language used in books. On the other hand, free-play task provides wider range of language repertoire, such as social regulative, directive uses of the language and pragmatics skills (Barton & Tomasello, 1991), as the mother and siblings switch from concrete play to pretend play to imaginative play using the same free-play task. In another study, Dunn (1989) records the behavior of two to three year olds utterances to be “intrusive” when in conversation with their mothers and siblings, but they were quite capable of understanding the conversation not directed at them. This also substantiates the claim that infants are able to understand a considerably large amount of language that is not directly addressed to them. The intrusive utterance may seem ineffective initially, but it fosters turn taking and conversation skills. In these studies, children as young as 19 months (Barton and
Tomasello, 1991) or 24 months (Dunn and Shatz, 1989) begin to have a sense of participating in conversation; by the time they reach the age of three, there is considerable improvement in terms of higher rate of effective intrusion, and they contribute new and relevant information in the conversation. It appears the communication context serves as a language model for the young child's linguistic development (Barton and Tomasello, 1991; Dunn and Kendrick, 1982; Jones and Adamson, 1987). The younger sibling not only has two different salient language models but an additional stimulating linguistic environment from a triadic interaction.

The different family dynamics give us an illuminating perspective on the development of social understanding and interaction in young children. In addition, it reveals the diverse emotional quality in sibling relationships and mother-siblings triadic relationships. The conclusions from the research emphasize the importance of different behavior by the mother with each of her children. Those differences can be detrimental to the nature and quality of sibling relationships.

The various studies done on sibling dyadic interactions and mother-siblings triadic interactions have shown various findings. The findings from these studies have produced some converging evidence that has led to the belief that older sibling do play an important role in the socialization process of the younger sibling. Thus, sibling relationships are influenced, to a certain extent, by the behaviors of the caregivers or adults in the family.

The individual differences of the participants in terms of temperament, genetic disposition, and the set up of home culture are variables that cannot be ignored, but their impact is difficult to measure. The concept of home culture or systemic routines and values of the family are not discussed in the literature. As most of the studies examine sibling dyads and mother-sibling triads from the middle-class status, home culture would be assumed similar in
every home. However, cultures and traditions change with the tide of society, and societal values are fast changing the family structures. This raises some issues about interactions between family members in general and sibling interactions in particular.

**Sibling Dyads and Mother-Child-Sibling Triads in Children With Deafness**

This section of the literature review focuses on sibling dyads in children in which one of the siblings has hearing loss. This section reviews the literature related to deaf children with hearing family members. Ninety percent of children with hearing loss come from families with hearing parents and siblings. In addition, almost 80% of children with hearing loss have hearing siblings only, while almost 10% have both deaf and hearing siblings (Marschark, 1997). Therefore, the majority of children with hearing loss, do not have early experiences with other persons with hearing loss for at least the first two or three years of their lives, and those are the initial formative years of language and social development.

Whenever a member of a family is diagnosed with hearing loss, the parents are the only family members assumed to be experiencing major changes. The main concerns of parents are language development and mode of communication with other members of the family. Very few studies have examined interactions between a deaf and hearing sibling. There are studies, however, that investigated language preference of hearing and deaf twin pair (Gaines and Halpern-Felsher, 1995) and the language and cognitive development of the deaf and hearing twin sisters (Schirmer, 1989). These two studies found some parallel results; the twins, who were between three and five years old were at very different stages of language development, and the frequency of communication between the twin with normal hearing and the twin with hearing loss was low, as both children directed conversation more to hearing members of the family. The
findings seem to support the notion that the difference in auditory receptivity is a major factor in the failure to develop good communication, an opinion which is later supported in a study conducted by Yoshinaga-Itano, Sedey, Coulter and Mehl (1998). The cognitive level of the hearing twin in Schirmer’s study was comparable to the sibling with hearing loss. This indicates that the same age sibling is relatively “naïve” to the deaf twin’s need of additional language input and attention. It is apparent that the presence of older siblings helps to build up conflict, aggressive and prosocial interactions, which might be necessary to stimulate and challenge younger siblings to a higher linguistic, cognitive and social level.

Research on mother-child dyad interaction on hearing families shows the vital role mothers play as a communication partners to their infants. The mother, being the primary caregiver, is the key person in providing language input and a social structure for her young child. Similar studies were conducted in hearing parents and their deaf infants. However, research on interaction with other family members from a family system perspective does not include examining families with deaf children. Very little research concerns itself with characterizing the nature of the interactions between deaf children and their older siblings. There is very little knowledge about how sibling relationships might affect or be affected by one deaf child. Marschark (1997) assumes “some changes will be subtle while others not so subtle” and the changes will depend on the parent’s acceptance of the deaf child in the family. He further assumes that the lack of communication in the family will create a high level of negative emotionality, such as jealousy or indifference, in the hearing siblings toward the deaf siblings.

Conversation or interaction is a form of social activity that is purposeful and goal-directed. It is aimed at “enabling the participants to integrate their behavior in order to achieve the purpose of one or other or both of them” (Wells, 1986, p.53). A great deal of information is
transmitted, directly and indirectly, as children engage in spontaneous interaction. They not only learn to use language, but also they learn about a great many other things such as pragmatic and (or) communicative skills. Based on the same principle, if siblings are considered as important social agents and a good resource for role models among hearing siblings, it would then be appropriate and interesting to find out if siblings play the same functions in a hearing sibling-deaf child dyad, and if second-order effect exists in a child-mother-sibling triad.

Kaplan and McHale’s (1979) case study examined the communication and play behaviors of a preschooler with hearing loss and his younger hearing sibling. The age of the children at the time of the study was 50 and 38 months respectively. One prominent feature of the interaction that was a lacking was joint communication strategy. The communication between the two siblings relied largely on physical contacts, signs and gestures. Seventeen percent of the hearing sibling’s communication attempts were deemed unsuccessful, as he failed to get the attention of his brother. The boys’ activities were mostly manipulation of play materials and imitation of physical actions. Kaplan and McHale compare the findings in this study with Lamb’s (1978) and find some inconsistency. Lamb’s data suggest higher frequency of imitation by the younger sibling, but Kaplan and McHale’s data show an even distribution between the siblings. They also emitted affiliative and proximity seeking behaviors equally. Kaplan and McHale note that the behaviors of the siblings, which contradict Lamb’s, might be due to similar level of cognitive development.

Only one study conducted by Evans (1995) was found using qualitative approach to document a deaf child’s communication experiences in a family context. The data were collected over a period of 6 months using interviews, participant-observation and videotaping. The results reveal that family practices are defined by the leadership roles of the parents. The practices are
supported by the children and through this attitude the family functions as a whole unit. Further, results show the deaf child in the family is an active and competent communicator in the family as she uses language appropriately for a variety of purposes. She employs an array of communication strategies to achieve mutual understanding with family members.

Early Intervention

Public Law 99-457, the Education of the Handicapped Act Amendments of 1986 mandates family and community involvement in school-based programs. The Individuals with Disabilities Education Act (IDEA), which was reauthorized in 1997, encourages increased parental participation especially in the decision making process and the development of the child’s education plan (Calderon, 2000). The law was expanded to include the services to be made available to infants and toddlers with handicaps. Some of these potential services could include family training, counseling and home visits, case management services, medical services for diagnostic or evaluation purpose, early identification, screening, assessment services, social welfare, other health services to enable the infant or toddler to benefit from other early intervention services. Parental involvement is vital and the main component in any early intervention program. In a survey on early intervention programs conducted by Stredler-Brown and Arehart (2000), 91% of the 500 surveys received report a parent-centered component in their programs. Parents play a crucial role in making decision about their child’s educational planning. As such, recognizing that the child and family must truly be as one unit, the intervention field requires an Individualized Family Service Plans (IFSP).

The public laws which mandate parental involvement, encourage investigation of parental influence on their children’s development that focus on a variety of variables, such as
maternal education or maternal communication patterns (D'Alonzo, 1982; Griffith, 1996). Past studies on parental involvement with high risk and special needs children show that parents are instrumental in the teaching of academic, language, social, motor and vocational skills and managing their child’s behavior (D'Alonzo, 1982; Kelly, 1973; Leyser, 1985). However, studies with hearing families of deaf or hard of hearing children demonstrate mixed results on links between family influences and the child’s academic, language and psychosocial adjustment (Calderon, 2000) and the mode of communication. Calderon and Greenberg (1993) and Power and Saskiewicz (1998) found maternal coping and functioning strategies are factors that have significant impact and are positively related to the child’s functioning abilities. Parent-professional relationships are often marked with mistrust, hostility, indifference and disillusionment, which cause both parents and professionals to be unable to help and support the child (Leyser 1985).

It should be mentioned that these studies are empirical studies in which the findings reveal relationships between variables. Calderon and Greenberg (1993) find positive relationship between maternal problem-solving skills and the child’s emotional understanding, reading achievement and social problem solving skills, while parental sophistication and socio-economic status positively correlate with the child’s reading achievement. However, Musselman and Kircaali-Iftar (1996) do not find conclusive evidence that high degree of parental involvement has a great impact on effective child functioning. They conclude that the outcome of a child’s development is not solely based on educational interventions. Rather, interactions between educational interventions and other aspects of family functioning impact the child’s development.
Data on the effectiveness of early intervention with deaf children are limited. The findings from the limited data reveal contradictory results. Moores (1985) concludes there is little evidence that early intervention has lasting benefit; a conclusion supported by Musselman, Wilson and Lindsay (1988). Seewald, Giolas and Ross (1985) find no relationship between communication mode (oral or signed) and the age at which hearing aid usage is initiated or age of first program. In contrast, Martineau, Lamarche, Marcoux and Bernard (2001) find some characteristics of early intervention program having an effect on higher academic achievement. Communication mode, socioeconomic status of the family, assessment, and parental involvement are some of the characteristics that relate to higher early intervention effectiveness. Results from this study suggest that oral mode of communication is particularly effective with children from average or higher income families. Deaf children from working class or disadvantaged families may face double handicaps in relation to language development. Thus the appropriateness of the services can be questioned. Parental compliance is found to be unrelated to better outcomes. However, the researchers admit difficulty in measuring parental involvement and parental support in relation to the development of the deaf child. Similarly, Harrison, Dannhardt and Roush (1996) encounter the same problem in their study and they cite a lack of direct access to the parents as being a major obstacle.

In the last two decades, early identification of hearing loss or diagnosis of hearing loss in young children is occurring at increasingly younger ages and some children are receiving some form of intervention by six months of age (Calderon & Naidu, 2000; Mayne, Yoshinaga-Itano, Sedey, & Carey, 2000b). These are statistical averages of the availability of early intervention programs of various characteristics across a region. However, research on the nature of early intervention programs and the impact on children and their families has been scant (Calderon,
Bargones, & Sidman, 1998; Calderon & Naidu, 2000). Most investigations on early intervention focus on speech, receptive language and expressive vocabulary (Calderon & Naidu, 2000; Mayne, Yoshinaga-Itano, & Sedey, 2000a, 2000b; Wallace, Menn, & Yoshinaga-Itano, 2000) and very few attempts have been made to understand the social-emotional, family-professional interactions from a family system perspective. As suggested by Musselman and Kircaali-Iftar (1996), further research on the deaf child’s development need to focus on family variables framed by a systems perspective. There is a lack of understanding of how familial and ecological factors may directly impact interactions and development.

Statement of Problem

The review of the literature reveals that most studies on mother-child interactions examine the effects of a caregiver on the interaction in terms of communication and linguistic skills. Similarly, studies on mother-deaf child interaction focus on the mode of communication and the acquisition of language and communication skills using stimulation that is of the typical sort. To fully understand communication and social development of a child, an analysis of the family system and the effects different communication partners make on the interaction must be made (Bronfenbrenner, 1979).

Studies on sibling relationship document the presence and absence of a variety of communication behaviors and social behaviors in using variables related to family constellation. These empirical studies document social, emotional, cognitive, linguistics, perceptual skills of children with siblings. However, the research fails to investigate how the interplay of these dynamics affects development. Research on sibling relationships needs to examine beyond a single subsystem.
Research efforts on sibling dyadic relationships and mother-child-sibling triadic relationships, using family constellation variables do not reveal a comprehensive understanding of siblings’ social experiences within the family. Furthermore, the limited studies on mother-deaf child-sibling triadic interaction only paint a narrow picture of the social world of deaf child within the family. There is a significant need to study sibling relationships within the context of the family (Brody and Stoneman, 1990; Furman, 1993; McHale and Crouter, 1996), using a qualitative approach.

The existing studies on mother-child, sibling relationship and triadic interaction were conducted in middle class Caucasian families. The demographics of the United States are changing rapidly at this present day. As the population of minority groups increases, including the population of children with special needs from minority groups, there is a need to study different families from a family perspective.

The effects of early intervention programs for children with hearing loss has not been well researched (Calderon, Bargones & Sidman, 1998). The limited research that has been done only reveals outcomes that emphasize speech and language achievement. As detection at younger ages becomes more prevalent and more children are receiving early intervention support, there is a call for extensive longitudinal study of early intervention as a process in which analysis of multiple family, individual and program factors are taken into account (Guralnick, 1997).

There is limited knowledge of family dynamics, and a lack of qualitative studies that describe the interaction dynamics of a child with deafness and the family. A qualitative case study is proposed to investigate and describe the nature of interactions in a family with a deaf child over several months. This study also proposes to examine the family’s relationship with
early intervention professionals to gain a deeper insight into the role of early intervention in the larger context of the child and family.

**Research Questions**

1. What do we know about the social interactions of two deaf children and their family from a family systems perspective?

2. What can we learn about the relationships between a family with two deaf children and early intervention professionals?
CHAPTER II

METHODOLOGY

Introduction

The purpose of this study is to describe the interaction dynamics that exist in the life of a two-year-old deaf child and members in her family using family systems approach. The project has been conducted with the family and multiple early intervention service providers across multiple settings, including the home, a preschool setting and aural rehabilitation therapy setting. An ethnographic approach is used for various reasons which will be discussed in the next section. Discussion of the selection of participants, setting, method of data collection and data analysis techniques is included.

Rationale

This study focuses on a single family, utilizing an ethnographic approach so as to enable the investigator to examine in-depth the relationships and dynamics of a deaf child’s interactions with multiple family members and with early intervention service providers. The early intervention professionals include two home-based early interventionists, an aural rehabilitation specialist, and teachers from a preschool program in which the child was enrolled.

Broderick (1993) asserts that family system theories are grounded in a belief of circularity. Using statistical and quantitative methodology to study families has yielded a myopic view of family relationships and interactions. Furthermore, quantitative studies rely on
hypothesis and assumptions that provide linear explanations and causality. In the past, studies on family interactions and relationships have been limited to a mother-child dyad or mother-sibling-child triad in a more structured context without taking into consideration other family environments. This methodological limitation has failed to reflect a broader systemic perspective. Ethnographic methods give a rich description of family dynamics over a period of time. Family interactions are more fully understood from insider as well as outsider perspectives. Therefore, it is important to obtain perspectives from members of the family as well as non-family members who are in contact with target child and the family.

An ethnographic approach allows more flexibility in terms of methods of collecting data. Ethnographic research is defined as an inductive model for studying human behaviors as they take place in natural settings (Goetz & LeCompte, 1984). It utilizes multiple techniques for gathering data, such as participatory observation, interviews, audiotape and videotape. Use of multiple sources of data provides opportunities for triangulation of data. Studies using this approach permit investigators to establish relationships with participating families, and allows for a more holistic view of the phenomenon under investigation.

**Choice of Participants**

The two important factors impacting the choice of participants were the socio-economic status of the family and the age of the deaf child. I wanted a family where the child would be between the ages of 18–24 months and had a bilateral sensorineural hearing loss. In addition, I wanted a lower-income, working class family. The mode of communication between the deaf child and members of the family was irrelevant to the study.
Initial attempts to locate such a family were made by contacting two agencies: a non-profit organization that worked with the deaf community and a health agency affiliated with the state Department of Health. The non-profit organization provided a wide range of services to the deaf including a reading program for young deaf children and families. The assistant director of the organization, after being informed of the nature of the study, agreed to contact two families who, according to her, might be interested in participating in the study. She was of the opinion that these families might be willing to share their lives with an outsider for a period of time.

The program coordinator of the second agency, which had an early intervention program for families with young deaf children, was very helpful and agreed to send out information about my study via a newsletter. A cover letter describing my research was sent to her and it was posted in the agency’s bimonthly newsletter.

Two weeks later, I received a phone call from a mother expressing an interest in my study. She had a three-year-old deaf daughter and a three month old hearing son. I made an appointment to see that family. Shortly afterwards, I received the telephone numbers of two additional families from the assistant director of the non profit organization. After obtaining verbal consent, I contacted the mothers of the families and explained my research agenda over the phone. After this explanation of my research, both mothers agreed to meet with me.

I met with the families individually at their homes. The first family lived in a small town 30 miles away from a major city in the Midwestern part of the United States. The town had two main streets, and most of the families lived in trailers and were on welfare. The other two families lived in the city. At the first meeting, information about the family background and the children’s hearing loss status were gathered with the purpose to select only one family. The
second issue discussed was the amount of commitment the family was willing to put into this study.

The Linford family was chosen for several reasons. First, the child involved met the criteria established for age and hearing loss. Second, the assistant director of the non-profit organization was of the opinion that the mother of the family, had always been supportive of any support services given to the family and was always willing to share. Third, the family was willing to commit time, and other resources to the study. Fourth, the family lived in a neighborhood that was relatively near, about a 15 minute drive for me.

The first meeting was set up for June 12, 2001. The mother was informed of the intent of the study and was told that the study would involve observing her daughter interacting with her siblings and herself in a natural environment. The observation would include videotaping. It was further explained that all the observations would occur during the normal routine of the children and I would act strictly as an observer. There would be no formal testing or evaluation and the environment would not be manipulated or interrupted in any way or form pertaining to the communication and daily interactions of the children and with the mother. In addition, the mother received an informed consent and an outline description of the nature of the study. A copy of the informed consent (Appendix A) was signed, and a copy given to the family for their records.

**Description of the family**

A brief description of the family will now be presented. A more detailed description of the family will be presented in the results chapter. The family consisted of a father and a mother, Jenny, an eight year old son, Joe, a four year old son, Seth, and a twenty-five-month-old
daughter, Tina. Joe and Tina both had bilateral sensorineural hearing loss whereas Seth had normal hearing. The father worked in a factory and was not present in the home throughout the entire period of the study. His daytime factory job started early in the morning and he came home late in the evening.

Jenny was a tall woman, with shoulder length hair. She was usually dressed in a casual manner. She had a pleasant personality who laughed at every little antic in which the children were engaged and was very hospitable. She loved the children and allowed them to play together as long as they were safe. She was a quiet woman who preferred the sanctuary of her own home. She was the primary care-giver when the study started and remained so throughout the entire course of the study. She was also responsible for the household decisions which included the children’s educational plans.

The oldest child, Joe, was an eight year old boy, identified with severe to profound hearing loss when he was eighteen months of age. He was tall for his age. He had a pleasant face and loved to smile. His friendly demeanor made him a likeable boy. At the time of the research, he was attending this school for the deaf. Joe vocalized to attract the attention of his mother and brother. Jenny described her oldest son as being very intelligent and very helpful. Joe helped around the house whenever he could.

The second child, Seth, was four years old. He had normal hearing and attended a regular pre-school in the afternoon. Seth had two big round eyes and an ever-ready smile. He used manual signs and gestures with his siblings while interacting with them, whereas, he communicated verbally with his mother.

The youngest child, the target child in this study, was Tina. She was identified with a severe to profound sensorineural hearing loss. Tina was a cute little girl and always ready with a
smile. She was an active little girl who was curious about everything around the house. She was searched for different toys and engaged in various play activities at home. She liked to look at books and draw. Her ‘art work’ was seen on all the storybooks. The sitting room and dining room floors were always cluttered with toys and books.

**Setting**

The data were collected in the participants’ home, the preschool and the aural rehabilitation treatment center. The family started participation in this research project on June 12, 2001, with the my first home visit. However, due to medical problems, actual home visits to collect data commenced on the last week of July. Since the emphasis of the study was on the communication and relationships within the family subsystems, no attempts were made to control or manipulate the interaction environments. As the children were not allowed to play outdoor, interactions occurred mainly at the sitting room, dining area, kitchen and basement. The majority of the observations and videotape sessions occurred in the family’s home. The videotape sessions were unstructured and taken by the mother. In addition to children’s interactions, home visits by early intervention specialists, aural rehabilitation therapy and a day at the preschool were also videotaped.

**The Home**

The family’s house was located 10 miles northwest of a major city in the Midwestern part of the United States. It was a three bed-room two-story townhouse situated in a predominantly African American neighborhood. The family had lived in the house for six years. Jenny kept to herself most of the time and the children were not allowed to play outside at all. The only times
she went out of the house were to drive the children to school, for aural and speech therapies, to go to the store and to church.

Sessions with home-based early intervention specialists occurred on the living room floor (Figure 2.1). The children would gather around and watch Tina, Jenny and her visitors. The sessions were exclusively for Tina and Jenny would sit next to her or within the proximity. The other children would sit and watch until one of them came up with an idea of an activity and would walk away to the next room. Occasionally, the children would be invited to participate in the activities with Tina.

Figure 2.1: Floor plan of Tina’s house (First Floor and Basement)
The second setting was the aural rehabilitation treatment center in a children’s hospital located in the city. The room where the therapy was conducted was approximately eight feet by eight feet (Figure 2.2). It had built-in cupboards and cabinets. There was a writing desk with a telephone belonging to the therapist. There was a low round table and two low chairs at the corner of the room. An open shelf full of toys was placed next to the table. Tina would sit next to the therapist at the table. Aural rehabilitation sessions were held every Wednesday.

Tina’s toddler classroom was on the third floor of an old school building that had been a residential school for the deaf for over sixty years. Recently, the school became a day school where students commute daily as the enrollment of out-of-town students decreased. However, the residence facilities were maintained for a small number of out-of-town residents.

Tina’s classroom was spacious. It was once used as a dormitory. The space where beds were once situated became common play area for the toddlers. A large common room became the discovery reading room and a smaller room became the lunch room. (Figure 2.3)

**Data Collection**

The data collection process began following the approval from the West Campus Human Subjects Review Board of the University of Cincinnati and after written consent was secured from Tina’s mother. The data collection procedure was divided into two phases; the first phase, included observations and videotape sessions and was done to provide an understanding of what the family daily routine, especially Tina’s routine, was
Figure 2.2: Floor Plan of Aural Rehabilitation Room
Figure 2.3: Floor plan of Tina’s toddlers’ classroom
like at home. Then the second phase focused on Tina’s interaction in school and aural rehabilitation therapy and included interviews to gather information about her relationships and routines with her support service providers.

For the first phase, data were collected using various methods: hand-written field notes, informal interviews, and videotapes. A total of eighteen home visits were made and added into the database. The length of each home visit ranged from 30 minutes to 2 hours 30 minutes. Hand-written field notes were recorded at every home visits as interactions occurred. Some further notes were written immediately after a home visit or observation session. During the course of the home visits/observations, informal interviews with the mother were conducted. These interviews were documented in a notebook and were sometimes recorded on videotape. A video camcorder was used to capture the interactions between the target child and members of her family. The camcorder was set on a tripod throughout the home visit and the tape was left running the entire session. After the visit, the camcorder was given to the mother to videotape the children in unstructured settings without the presence of the investigator. Twenty-three hours of videotapes were recorded at home in which two were home-based sessions with Tina. This became additional data for the investigator to draw a holistic picture of what it was like in the family.

A fixed schedule for home visits and observations was never set up due to the busy schedule of the family. However, I phoned the family once a week and tried to schedule a home visit once week. All the home visits occurred at different times of day and different days of the week. Jenny was so flexible that most home observations occurred within one day’s notice or anytime she was at home with the children. Interaction sessions that were videotaped at home
included 1) Jenny’s interaction with Tina, 2) Tina with her siblings and cousins and 3) sessions with home-based early intervention specialists.

Formal interviews were conducted with Jenny and the interviews were audio taped and later transcribed. These interviews occurred outside the videotaped observations. A total of four hours of formal interviews were audiotaped and added into the data record. During the interviews, Jenny gave me written artifacts of Tina’s and copies of Tina’s early intervention progress reports and family goals. This information was incorporated into the data set. Further information and clarification from Jenny was obtained over the phone.

For the second phase of data collection, I spent an entire day at Tina’s school to observe what her school day was like and all the activities Tina participated in were videotaped. The videotape length was 3 hours. Immediately after that, I conducted a 65 minute interview with her teachers. Tina was also observed and videotaped in a clinical setting with the aural rehabilitation therapist for 50 minutes and again immediately after the session, I interviewed the therapist for 20 minutes. Further attempts to videotape Tina with the aural rehabilitation specialist were not successful due to technical problems and some unforeseen circumstances. (Tina misplaced her cochlear implant external speech processor and tension grew between the Mother and the aural rehabilitation professionals).

Sessions with home-based early intervention professionals were videotaped. A total of two hours and thirty minutes were recorded. Interviews with the home-based specialist were done over the phone on three occasions as the office was situated quite a distance away in another county and heavy workload made it difficult to schedule meetings with the investigator. A total of 1 hour 45 minutes of interview was included in the database. Copious notes of the
interview were recorded. Further questions and communication with her was conducted through fax.

Table 2.1: Data Summary

<table>
<thead>
<tr>
<th>Data</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Home Visits</td>
<td>18 visits</td>
</tr>
<tr>
<td>Videotape at Home</td>
<td>23 hours</td>
</tr>
<tr>
<td>Videotape at Home with early intervention specialists</td>
<td>2 hours 30 minutes</td>
</tr>
<tr>
<td>Videotape at Pre-School</td>
<td>3 hours</td>
</tr>
<tr>
<td>Videotape at Aural Rehabilitation Therapy</td>
<td>50 minutes</td>
</tr>
<tr>
<td>Interview with Mother</td>
<td>4 hours</td>
</tr>
<tr>
<td>Interview with Teacher</td>
<td>65 minutes</td>
</tr>
<tr>
<td>Interview with Aural Rehabilitation Specialist</td>
<td>20 minutes</td>
</tr>
<tr>
<td>Field Notes for Home Visits</td>
<td>71 pages</td>
</tr>
</tbody>
</table>

**Data Analysis**

Analysis of the data for this study was guided by the ethnographic studies of Taylor (1983) and Taylor & Dorsey-Gaines (1988). In addition, since the purpose of the study was to examine interaction dynamics, a micro-ethnographic approach advocated by Erickson (1992) was employed.
Phase One

The first phase in the analysis process was to review all interviews, field notes and videotapes to determine the various people who had contacts with the participating family, primarily with Tina, and their relationships, and the context in which the interactions occurred. All the tapes and segments were categorized and then catalogued according one of three categories: 1) siblings, 2) parent-children and 3) Tina/family–professionals.

To fully understand the family, I took a close look at the social interactions between and among various family members: parent with children and among siblings. Interactions among the Mother and the various children who populated her world, namely, Joe, the oldest with congenital deafness, Seth, the second child who had normal hearing, Tina, the youngest with severe to profound deafness, and their cousins, Jane, Jessie, T.N. and Micah were categorized under 1) mother-Tina subsystem and 2) sibling-Tina subsystem.

However, dyadic interaction just between Tina and Jenny did not exist, so interactions in which mother-child with an additional sibling present constituted the mother-Tina subsystem. As I attempted to describe these interactions, I began to ask myself more and more questions. These questions arose out of the gaps that I found as I tried to build up a picture of this family and tried to make sense of the daily lives of the members in the family. Many times I had to phone the mother for further clarification as well as to confirm my presumptions.

The sibling subsystem involved Tina’s brothers, Joe and Seth and her cousins, TN, Micah, Jane and Jessie. Her cousins were with the family everyday so that they became a part of the family and were considered Tina’s siblings. Seth referred to them as sisters and brother a few times in the presence of the investigator. It should be noted that there were overlapping themes identified in these two subsystems.
Lastly, the third subsystem, Tina with early intervention professionals were identified and categorized. Segments that comprised these categories were dubbed onto separate tapes to facilitate fine-grained analysis.

*Phase Two*

The initial step in this phase was to view the recordings of the mother and children nonstop twice, once with the volume on and then fast forward speed with the volume on mute mode. This allowed me to identify who were the active participants in the social clusters. Under each category, the analysis of the videotapes were further broken down into the nature of activities or routines. Additional knowledge I received from the field notes and home observations was incorporated into the analysis of the videotapes. These activities and routines were further analyzed into segments identified by locations and social scenarios. The transcripts from the social segments were further analyzed by identifying interaction process (initiation of activity, maintaining social membership) and communication behaviors, both verbal and non-verbal (e.g. eye gaze, shaking of head, hand gestures). Analysis of these interactions allowed me to focus on the social roles and rules and play strategies assumed by the children and the interaction characteristic of circularity.

The themes identified in the first sibling system were related to the social activities and rules, membership of social group, and communication strategies. The themes found in the parent-children subsystem included social roles adopted by mother.

*Phase Three*

The final phase of data analysis involved the third subsystem; child/family-professionals subsystem. Once again, the videotape segments were categorized based on the individual
professionals with Tina. Each session of Tina with respective professionals were analyzed. The themes included interaction process, activities and relationships with the family were identified.

The final step in this phase involved examining the relationships established between the family and the respective professionals. At this point, communication with mother and several of the professionals took place over the telephone for clarification. Communication using a facsimile machine was also utilized. The history of the relationships which started before the onset of the study had to be taken into account in the analysis.

The segments mentioned were transcribed into narrative form to minimize the level of reconstruction. Minute details of verbal language were not done as it was not the purpose of the study. The categories that emerged were summarized in the following table.

Table 2.2: Categories and Themes

<table>
<thead>
<tr>
<th>Basic Categories</th>
<th>Sub-Categories</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sibling Subsystem</td>
<td>1. Social Interaction</td>
</tr>
<tr>
<td></td>
<td>2. Communication Strategies</td>
</tr>
<tr>
<td></td>
<td>3. Play Activities and Materials</td>
</tr>
<tr>
<td>Mother-Children Subsystem</td>
<td>1. Social Roles</td>
</tr>
<tr>
<td>Family-Professional Subsystem</td>
<td>1. Interaction Process</td>
</tr>
<tr>
<td></td>
<td>2. Materials and Activities</td>
</tr>
<tr>
<td></td>
<td>3. Relationships with Family</td>
</tr>
</tbody>
</table>
Tests of Reliability

Interobserver validity and reliability checks were obtained after the final phase of analysis. First, segments that depicted identified social scenarios and communication behaviors of the children and mother were viewed with the mother. This was done to substantiate the typical interactions and communication behaviors of the family members. Further interviews to verify interpretations were done while viewing the videotapes and immediately after the viewing sessions. The second interobserver was an independent individual who have never met the family. She was an African American teacher of the deaf, who had forty years of experience teaching and working with deaf children and families. A discussion between the researcher and this teacher was held. In this discussion session, interaction dynamics, mother’s expectations and family values and belief systems were discussed. This was to substantiate my interpretation of the family’s home culture that influenced the family’s decision-making process. In addition to this, several segments of videotapes were viewed, after consent from mother was obtained.

My role as an observer changed to a participant observer in the middle of the study. In the course of the study, I was concerned with the question of access without intrusion. Although the cooperation and support of the family was essential for this endeavor, I wondered about the authenticity of the data obtained due to the ‘intrusion’ factor. My concerns were finally laid to rest after my discussion with the independent observer, who confirmed my interpretations. She expressed her surprise at the personal information that was shared with me. She explained that, from her personal experience working with families and as a member of an ethnic group that values privacy, families do not share private personal information with “strangers.” I was reminded of Taylor and Dorsey-Gaines’ (1988) closing remarks, “it is through our willingness
to involve the families in the research process that we will be able to establish boundaries in an atmosphere of mutual trust and cooperation” (p.229).
CHAPTER III

RESULTS AND INTERPRETATION

To study a family system, the task of the researcher is to learn about the daily ordinary events of family life. It is through these normal daily events that the familiar is made “strange” and patterns of behavior and interaction are identified in a family. In a family where none of the members are found with any disability, the patterns of behavior among members are related and influenced by one another. The same can be said about families with children with deafness. Although there might be a difference in the mode of communication, the patterns of interaction and behavior are still influenced by members of the family. One major difference is the families who have children with deafness from other family constellations, is that they are in contact with intervention care providers. Thus, the perspective taken in this study is to examine the relationships of a child with deafness with members of her family and the relationships of the family with intervention professionals.

The purpose of this study was to develop a better understanding of the dynamics of a working class African-American family with two deaf children and the relationships that developed between the family and early intervention service professionals.

Initially, the key participant in the study was Tina, the two-year old youngest child in the family. As the study proceeded, the focus turned to the family. Tina’s mother furnished me with most of the data regarding her children, family and the early intervention support services.
Although Tina was the main recipient of the services, her mother was the liaison between her and the professionals.

This chapter is divided into four sections. The first section provides a description of the family. It is followed by a description of the sibling subsystem. The third section describes the interactions between the mother and the children. The fourth section describes the early intervention sessions at home, in school as well as in a clinical setting. The relationships between the family and intervention professionals will be included in this section.

**The Linford Family**

*The Immediate Family*

The Linfords lived a neighborhood 10 miles northwest of a major city in the Midwestern part of the United States. The predominantly African-American neighborhood was relatively quiet in the day time as most of the residents were away at work and children are in school, but on several occasions, loud music could be heard coming from a neighbor’s house. Most of the residents own their own vehicles and cars were seen driving in and out of the neighborhood at any time of the day.

Directly across from the Linford house was a small hill where three apartment buildings were situated. The apartments were always open for rental as there was always a rental sign out in the lawn. Residents in the neighborhood did not own their houses. All the houses were managed by a rental agency that overlooked the maintenance of the houses and surrounding areas. There was a community swimming pool where children and parents swam in the summer. It was also managed by the rental agency.
The family’s house was a three bedroom two-story townhouse. The family had lived in this house for six years. The family members kept to themselves most of the time and the children were not allowed to play outside at all without supervision because Mrs. Linford felt the area was not safe for children to play on the street. Furthermore, the number of cars driving around the neighborhood increased dramatically over the years and her deaf children would not be able to hear on-coming cars in the street. The Linfords had talked of moving away, but circumstances had not yet allowed them to do so. Preferably, they would like a house with a fenced in backyard where the children could play.

The first floor comprised of two rooms: a living room, a dining room with an attached kitchen and a bathroom. The rooms were separated by a wall with a sliding closet and a short hallway leading to the bathroom. From the dining area, through a closed doorway was the staircase leading to the basement. Opposite from the basement doorway was a sliding glass door that gives access to a small patio. The patio had two chairs and a grill. The patio was usually used in late spring and the summer. The staircase leading to the second floor was near the front entrance. The second floor included three bedrooms and a bath.

The entrance had a screen door and wooden door that led to the living room which was approximately 16 feet by 12 feet. The doors were always closed to prevent the heat from coming into the house during summer and the cold during winter. This room had only one window with Venetian blinds. Most of the time the blinds were pulled down to prevent direct sunlight from coming into the room. The room air-conditioning unit was directly below the window. In the summer, it was turned on the whole day to cool down the first floor of the house. Next to the window, at the corner of the room was a television and videocassette recorder. A three-seater couch was placed across the window against the wall. Next to the couch was a writing desk,
stacked high with books, folders and papers. A second couch was placed near the doorway leading to the dining room and kitchen.

The dining room, approximately 10 feet by 9 feet had a linoleum-covered floor. There was a round dining table against the wall. The corner formed by the wall and sliding door, there was another television set. Across from the dining table, was the kitchen, approximately 9 feet by 9 feet. It was equipped with a stove, sink, microwave oven and a refrigerator. Jenny cooked most of the family meals in the kitchen. In the summer, the family would grill out on the patio on weekends. Jenny’s husband did the grilling. She did not like the sun much and would rather stay indoors.

The basement was originally a garage. The family turned that area into a playroom for the children. The garage door was kept locked at all times. It had two plastic toy cars the children drove in, two dozens folded metal chairs stacked in one corner and a 3 feet by 4 feet ball pit filled with small plastic balls. A washing machine and a dryer stood in the opposite corner of the basement. A soft white bulb in the ceiling was the only source of light. The children spent a considerable amount of time playing here. Their favorite play activity was jumping into the ball pit. They climbed up on the folded chairs and took turns jumping into the ball pit. The children appeared to have an enjoyable time.

The Linford family constituted a working class African American family. Mr. Linford came from a single parent household where his mother worked to raise him. Although he has a younger brother, they did not grow up together. Mr. Linford worked in a factory and he commuted about 15 miles every day. He was out of the house by 6:30 a.m. and he was usually home by 7:00 at night. He worked five days a week and spent his weekends at home with his
family. He had a friendly personality and loved to engage anybody he met in lengthy conversations.

During the study, I met with Mr. Lindford once but I talked with him over the phone on several occasions. He knew who I was and welcomed the idea of his family participating in this study. Decisions concerning the children and household were made by his wife, but Mr. Lindford seemed to support her whole heartedly. For example, last Christmas, he took a week off from work to stay home with the children while Jenny went on a vacation with some friends. It was a much needed vacation for Jenny and she appreciated her husband’s support.

As noted, Jenny was a tall woman who had shoulder length hair and wore glasses. Her easy going, pleasant personality made her a likeable person. She was usually dressed in a casual manner. Her patience with the children was commendable because she tolerated the children’s screaming and shouting at home. She described herself as being a “simple woman and doesn’t know how to say much.” She was the primary care-giver when the study started, and continued to be over the course of the study.

She graduated from college with an associate degree in Early Childhood Education. She hardly remembered her father because he died when she was very young. Her mother supported the family and provided for their needs. Jenny is the oldest of five children; three girls and two boys. In April 1992, Jenny’s mother died. When Jenny turned 21 in August of that year, she became her siblings’ legal guardian. She “raised these children” and feels like “an old lady trapped in a young body.” As guardian of four siblings, she became the pillar of the family and worked to create a strong bond between her and her siblings. “I am like mama. They just don’t go away. They go for a while and they come back to me. Now they multiplying, they are coming back and they won’t leave,” she laughed. One of her brothers stayed with the family
occasionally. The youngest brother, the baby of the family would visit during the holidays. Her sisters lived in the same city and they have a child each. The children were left in Jenny’s care during the day.

Jenny met her husband at church. All of Jenny’s three pregnancies were high risk and she had to have bed rest three months before each delivery. She “went through a lot for these children,” which explained her protectiveness of her children.

Joe was a healthy 8lbs 3 oz newborn. He went through the normal developmental milestone until he was eighteen months old. Jenny noticed he grew quiet and stopped responding to sounds especially to his name. He was taken to the hospital for a hearing test and was identified with a severe to profound bilateral sensorineural hearing loss. Jenny immediately signed up with social service. Joe was two and half years old when he was referred to a speech and hearing center. He was described as being unable to focus, demonstrating impulsive, aggressive behavior toward the staff. He was labeled as having behavioral problem. “Now this child was two and a half years old, you know and what do you expect. …he can’t hear, he can’t talk. He’s angry. And I said, if you woke up and can’t hear anymore, you’ll be angry too. I said, my son does not have a behavioral problem.” Joe was passed from one staff member to another. Every effort to get him to conform or behave was attempted. However, Joe’s behavior did not change and after one turbulent year, he was asked to leave the center.

As a new mother with a child with deafness, Jenny did not know of the availability of early intervention service nor was she given any information. She remembered seeing a poster about 761-BABY program on the wall of the speech center but she did not have any inkling what it was. “Nobody told me about it,” Jenny told me. So the first summer after Joe was identified, with school out and no speech therapy, Jenny went to the library in search of information to help
her son. She found some sign language books and videotapes about manual communication with
the deaf. Using those references, she made a scrapbook of all the words she thought she would
use with Joe. Now, Jenny uses the scrapbook with Tina.

At age three, Joe went to a program for children with hearing loss in a public school. He
was placed in an inclusionary classroom with a sign language interpreter to help in class. Since
he was the only student with deafness in the classroom, he did not have any peers to
communicate with and did not have any deaf role model. Jenny saw a lack of progress in Joe’s
communication skills. So Jenny decided to transfer Joe to a private residential/day school for the
deaf, which is where he was attending when this study began.

Joe knew when to vocalize to attract the attention of his mother, brother and cousins.
Jenny described her oldest son as being very intelligent and very helpful. Joe helped around the
house whenever he felt like it. He was given an intelligence test as part of the selection process
to identify potential candidates for cochlear implant and his test score was in the 90 percentile.
He received a cochlear implant in May 2001.

Joe’s diagnosis of hearing loss shocked Jenny for only a short period of time. She knew
she had to respond to Joe’s need for communication but since there was no history of deafness in
the family before this, Jenny did not know where to turn for advice. The only experience Jenny
had with deaf people was her relationship with a high school friend who was deaf.

The second child, Seth, was four years old when the study began. He has normal hearing
and attended an inclusionary pre-school program in a public school district that served deaf, hard
of hearing and normally hearing children ages three to five. His teacher used total
communication in the classroom. The summer after Joe was identified and subsequent summers,
Jenny and Seth would continue to add new pictures and signs into the scrapbook. Jenny and Seth
used the scrapbook to learn sign language so they could communicate with Joe. Strangely, Joe was the one who did not show any interest in learning sign language initially but he later changed his mind when he saw Jenny and Seth having fun. During the study, Seth used gestures to communicate with his siblings most of the time but he was also seen using some signs with Joe in play situations. Several times, Jenny would facilitate communication between Seth and his deaf siblings. He communicated verbally with his mother. Seth was the ‘cry baby ‘ of the family according to his mother.

The youngest child, Tina, was Jenny’s “own little lady.” Tina was Jenny’s favorite child as she has been “waiting for her for a long time.” She was born on May 13, 1999. She was 25 months old when the study started. The etiology of Tina’s hearing loss is not known, but Jenny suspected it is a result of perpetual middle ear infection between the ages of four months to ten months. She was sent to the ENT clinic for treatment. When her ears were healed, pressure equalization tubes were inserted into her ears. However, infection would set in again and she had to be treated again. At that point, her hearing status had not been evaluated. After repeated appeals by the mother, Tina was finally given a hearing test at 17 month of age and diagnosed with a severe to profound sensorineural bilateral hearing loss. (pure-tone average 100 dB HL). She was fitted with two behind the ears hearing aids on early November 2000. In January 2001, further tests were given to Tina after Jenny repeatedly requested a cochlear implant for her child. Tina finally received a cochlear implant on June 15, 2001.

Tina was a cute little girl and always ready with a smile. Every time I visited the family, her hair was braided with blue, pink and red beads all over her head. She was an active little girl who was curious about everything around the house. She loves to play with her brothers and she eagerly joined in any activities the boys were involved in. She was always looking for different
toys to play with but her favorite were books and drawing. Her “art work” could be seen on all the books. Jenny bought her a note-book to draw in, which she used everyday. The sitting room and dining room floors were always cluttered with toys and books. “She rearranges my house,” Jenny jokingly said.

When the study began, Tina was still not saying any intelligible word. She hardly vocalized to get her mother or her siblings attention. Tina was attending a toddler pre-school program at the school for the deaf Joe attended. Jenny wanted Joe and Tina in the school for the deaf for several reasons: they needed to know other deaf people which Joe did not get at the inclusion program in the public school; Joe and Tina would have deaf role models and finally, the children’s signing skills would improve since they would have a chance to practice with other deaf children and adults.

The Extended Family

Besides daily child care for Joe, Seth and Tina, Jenny cared for two female cousins, a niece and a nephew everyday in the summer. The cousins were Jane who was eight years old and Jessie who was three. The cousins arrived at the Linfords at 6:30 a.m. and left about 5:00 p.m., Mondays through Fridays. Also, Jenny’s youngest sister, Amy, who was expecting her second child, would bring T.N., her fourteen month old daughter to Jenny’s two or three days a week. Jenny’s second youngest sister, Lara, has a son named Micah who was four months old when the study began. Micah was cared for by Jenny four days a week. Lara would bring Micah as early as 6:30 a.m. and pick him up at 8:00 p.m. Sometimes Micah would stay until late in the night, when Lara was too busy with work. The cousins’ frequent presence in the Linford’s house earned them a place as close family members. So on any given summer day, Jenny cared for
from five to seven children. However, when the school year started, Jane stopped coming to the house as she went to school and there were normally only five children at home.

The Summer I Met the Family

June 12, 2001 was a warm summer day when I knocked at the door of the Linfords for the first time. A tall woman who introduced herself as Mrs. Linford opened the door. She was expecting me. I introduced myself and shook her hand. Behind her stood a little girl with braided hair and a boy with big round eyes. They were curious to know who the visitor was. They looked at me and smiled when I said, “Hello!” The boy ran back to the kitchen but the girl stayed with her mother. “This is Tina,” said Mrs. Linford*. Tina boldly came up to me as I sat on the couch with her mother. I shook her hand.

I heard voices of children coming from the kitchen and as I turned my head towards the sound of the voices, Mrs. Linford explained that it was her children and their two cousins playing. She had three children of her own and she baby-sat their cousins, Jane and Jessie while their parents were at work. Besides these children, she also took care of her nephew, Micah who was four months old and T.N., a fourteen-month-old niece on a regular basis. On any given day in the summer, Mother would take care between five to seven children.

To my untrained eyes and ears, the household sounded chaotic and looked unkempt. My perception and opinion changed when my home-visits increased and my relationship with the family strengthened. In the seemingly chaotic situation, there were rules and regulations, by which, I noticed, the children had to abide. There were behaviors unaccepted by Mother and some were encouraged more than others such as the sharing of play materials. Small conflicts

* * From this point on, Mrs. Lindford will be addressed as Mother in all the description and discussion.
were resolved by the children themselves. Mother rarely intervened unless conflicts turned in a brawl or squabble. There were rooms in the house the children were not allowed to play in without Mother’s permission or supervision. One of the places was the basement. The children were only allowed to play with certain play materials in a particular area in the basement. I was privileged to be given a short ‘tour’ of the basement which was used for storage as well as for laundry. However, one corner of the basement had been turned into a small ball pit. It was filled with small balls surrounded by stacked up folded chairs. The chairs were stable enough to be used as a platform for the children to jump off into the pit.

During the summer a sign language instructor worked with Jenny every Wednesday and she attended a six-week sign language class for parents at Joe’s school every Thursday evening from 6:30 – 7:30. The sign language class was part of an early intervention program offered by the county where the family lived in. In the summer, when the study started, her daily routine started at 7:00 in the morning. The cousins arrived at 7:30 when their parents dropped them off at Jenny’s house on the way to work. Jenny’s own children started getting up by then. She fed them breakfast every day and the children were then left to do whatever they wanted to do indoors. They were not allowed to play outside. They played in the sitting room, dining area and the basement.

Sibling Subsystem

The sibling subsystem, was the most obvious subsystem in my initial introduction to the family. Upon further analysis, three prominent characteristics of the subsystem that emerged were 1) social interactions, 2) communication strategies and 3) play activities and materials.
Social Interactions

Play Scenarios.

The children’s social interactions occurred in a variety of scenarios. The scenarios will be described in this sub-section to provide a comprehensive understanding of the children’s social experiences at home.

During summer, Jane, Joe, Seth, Jessie and Tina spent a considerable amount of time indoors and a large proportion of it was spent in the basement at the ball pit. Of course it was done under the watchful eye of Mother. The children climbed up the chairs one after another and they took turns jumping into the ball pit. Jane and Joe who were older, initiated different jumping styles and the younger ones, Seth and Jessie followed behind. For instance, Jane sat on the platform and Joe playfully pulled her leg and she fell into the pit. Next Seth sat on the platform and Jane pulled him down. This went on until all the children had a turn. When it was Tina’s turn, everyone stood around and encouraged her to jump. They waved their hands gesturing her to jump. She waved back. She was afraid to jump. So Joe lifted her up and gently drew her down.

When the children ventured away from the ball pit, Mother would call them back, with “get back over there” or when the children got too noisy, they would be reprimanded and sent upstairs for time out. All the children except Joe and Tina communicated verbally. Knowing that Joe and Tina were deaf did not stop the other children from talking to them and their being treated like hearing members of the group. In one instance, Tina was sitting in the pit with Jessie. They were throwing the small balls up in the air. “Tina! Tina! Move!,” Jane called out as she stood on the platform looking down. Tina was not aware she was being spoken to and continued to throw the ball. So Jane climbed down and patiently took the balls from Tina’s hand and put
them by the side of the pit as an indication for Tina to move to the side of the pit. Joe and Tina communicated through gestures and some vocalization if needed. They used simple gestures such as hand waving and pointing, which conveyed present intentions.

Play scenarios such as the aforementioned were common in this family. The children were constantly engaged in social activities, such as talking about a television program, or teasing each other. Meals were intermingled with play activities that would spillover to the next room. The older children, Jane and Joe, would play with the younger ones, Seth, Jessie, Tina and even Micah and vice versa. The play interactions were always fun-filled and involved everyone regardless of their age, physical size or birth order. For example, Joe was seen teasing T.N. by making funny faces at her. When Tina saw that interaction, she walked up behind Joe and tapped him gently on his shoulder. When he turned to look at her, Tina put her face in front of Joe’s and rolled her eyes. Then she smiled. Joe got up and pretended to be a monster to frighten her. She laughed, turned around and ran. Joe gave chase, playfully walked like a monster toward Tina. Tina squealed with delight as she dodged from Joe’s clutches. This went on until Joe collapsed on the couch.

Tina initiated the interaction after she saw Joe making faces at T.N. Such spontaneous play was everyday phenomenon. Tina associated freely with Joe who was physical larger than her. She was not apprehensive about approaching him and had the appropriate communication skills to initiate an interaction. Likewise, his response was complementary to the visual cues exhibited by Tina.

The older children would make accommodations to include the younger children. For instance, everyone, from Jane to Tina had a turn to jump off the platform into the ball pit in the basement. Although Tina was afraid to do it the first time, the older children patiently
encouraged her to jump. Finally, Joe guided her by lifting her off the platform and gently dropping her down. In another instance, Jane and Jessie were pretending to go to school with two toy school buses. They parked the buses under a chair. “They stay there for a while,” said Jane to Tina while pointing to the buses as she got up to get a car. Tina vocalized and pointed at the buses. “They stay there,” said Jane again. Tina oblivious to what was said continued to point at the buses. So Jane pushed one of the buses out from under the chair and gave it to Tina. Tina pushed the bus around and then parked it under the chair. Then Tina got up and walked away. This is evidence that there were no fixed scripts in the children’s play sessions. The older children made accommodations and adaptations for the younger children to be part of the group.

Of course, Micah, the youngest of the children, was never left out of the group. Mother would place him in a baby stroller near the other children, so that he could be part of the group. On other times, he would be placed in the baby seat on the floor. The older children were observed tickling him, touching him and sometimes, trying to bend his limbs and pinch his cheeks playfully. On many occasions, such actions irritated Micah and he would cry out in protest. Mother would rescue him and tell the children to leave him alone with this remark “He is not a toy!!”

**Meal Time at Home**

Meals were never strictly just eating at the table. It was another social activity. The television was on for anyone who chose to watch. And for those who did not want to watch, they could engage in other activities while eating. For instance, one afternoon the children were seated at the table for lunch. Everyone had a plate of food and a cup of juice. After a short period, Joe left the table and came back with a bottle of ketchup. He squeezed some on his plate and then vocalized to get Jane’s attention. He showed her the ketchup and she nodded while
pointing at her plate. So Joe went over to her side and squeezed some ketchup on her plate. Tina walked away and came back with a doll. She sat on the floor near Jessie’s chair and played with the doll. Periodically, she looked up, and then went back to her doll, or she went to Joe and requested food. Joe handed her a french fry. She took it and happily went back to her doll. Seth got up and started playing with Micah who was in his baby walker. Then he went back to his plate and put some food in his mouth. Then resumed his interaction with Micah. There were overlapping activities at the dining area, where everyone freely engaged in one activity or another as they ate. Mother would clean up when the children showed signs that they had enough food. This was indicated when the children got up from their seats to initiate some new play activities outside the dining room. Food not finished would be covered on the table or put in the refrigerator. The children were allowed to resume eating when they were tired of playing, but this rarely happened.

Disagreements

Disagreements, verbal or non-verbal, were common and the outcomes were usually dominated by the older children. The younger child would react by crying. For instance, as the game in the basement proceeded, Tina began to throw large Lego pieces and the children’s shoes into the pit. Joe picked them up and put them on a chair and then he sat on them. Tina went over to him and tried to push him away. He pushed back. After several exchanges, she started to cry. Joe refused to budge. Mother kept quiet the whole time. She did not intervene. Finally, Joe gave in and got up from the seat.

On several occasions during my observations, the children’s squabbles over play materials would resolve by themselves without any intervention from an adult. The disturbance die down naturally or the children would turn their attention to something else. One afternoon
during one of my home visits, the children, Joe, Jane, Seth, Jessie and Tina were playing with toy vehicles in the dining room. Tina was pushing a large toy Cadillac on the floor. Seth went over to her, grabbed the car and ran off. Tina burst out crying and ran after him. She tried to get the car back. Wailing, she looked at her mother and pointed at Seth. Seth dodged her and ran to the sitting room. He met Joe on the way. Joe quickly grabbed the car from Seth’s hand. This time, Seth burst out wailing loudly as he went to his mother for help. Joe ignored the racket he just created. He put the car on the floor and pushed it. Tina tried to get the car back from Joe but he had his hand on the car to claim ownership of it. So she decided to play with Jessie’s toy bus instead.

On another occasion, Mother intervened when the situation had the potential of getting out of hand and someone getting hurt. For instance, Joe brought a large plastic storage container into the pit so that he could put the balls in it. Jessie and Tina helped him. Seth and Jane were standing on the platform waiting for a chance to jump down. “Don’t hurt my sister,” said Jane. Seth jumped and missed Jessie. Jane climbed down and overturned the plastic container. She wanted to get the container out of the pit. Joe grabbed one end of the container and a tussle broke out. Mother quickly intervened. Jane dropped the container, turned and walked away. Jessie and Tina resumed putting the balls back into the container.

In the summer, the television was turned on to children’s programs such as “Barney and Friends” or other cartoons. The children rarely sat in front of the television to watch an entire program. They played with toy vehicles, engaged in pretend play such as riding on a school bus. In the midst of such play, squabbles would break out, just like the one described above. Once it was over, play would resume. The children involved in the squabble would pout for a short while but they could never stay away for long. In the car episode aforementioned, Seth walked away
pouting. He stayed in the sitting room for several minutes. After several minutes of chilling out, he walked back to the kitchen and resumed playing as if nothing had happened.

_Social Membership_

The children knew the implicit regulations in the social group activities. There was shared consensus as to what were the accepted play behaviors. Being a member of the group was of utmost important, which means being physically present in the midst of the group. Playing by oneself in the middle of the rest of the children was considered being part of the group. This was seen many times, where Tina with a book or a doll in her hand would position herself in the middle or at the peripheral of an activity such as the pretend play – ‘going to school.’ No one wanted to be left out of the group for too long. Time out for the disruptive member(s) of the group was short and when the child rejoined the group, he or she would be welcomed again. There was no fear of being excluded or excommunicated by the other members of the group. Apart from self-monitor time out, the children tried to resolve their own disagreements and conflicts.

_Communication strategies_

Everyone had a place in the group, whether one was normally hearing or deaf. Communication among the children occurred both verbal and non-verbal modes. Tina and Joe were not given any special treatment. They were given similar opportunities and treatment just like the rest of the children. Tina and Joe knew when to vocalize to get the attention of the other children. Pointing, nodding of head and tapping on the shoulders were the common communication strategies adopted. The mode of communication of the group forced Joe and Tina to read non-verbal cues in order to be a member of the group. In many of my observations
of Tina, she would spend her time observing the other older children play and then situate herself physically in the middle of the activity. Her communicative behaviors were prompted by the visual and tactile cues given by the older children. For instance, she would not climb up the chairs and jumped into the ball pit, if she had not seen the other children doing it. She wanted to push the school bus because she saw Jane and Jessie pushing the buses. She later parked the bus under the same chair because Jane and Jessie parked the buses there initially.

*Play Activities and Materials*

From the description above, it should also be noted that the children’s activities were impromptu and there were no pre-planned scripts. The older children changed the scripts to accommodate the younger siblings for a period of time. When the younger children left the play area or changed their focus, the scripts would be reverted back to the versions before the interruptions. In addition, the children were observed engaging in drawing, writing and reading. These activities were not only related to literacy practices but they were included in the social experiences of the children. For instance, Tina were observed using drawing and writing to initiate membership and maintain membership of the larger social group. When she saw Joe, Seth and Jessie sitting in a row with papers and pencils, Tina literally jumped into the middle of it to investigate what they were doing. Several minutes later, she came back to the group with a piece of paper in one hand and a pencil in the other.

The play materials consisted of tangible objects mother bought at half price bookstores and donated by friends, early intervention professionals and various groups. However, most of the objects were home furniture converted to serve the children’s play purposes. For instance,
cushions from the couch were converted into a make-shift fort or cushions were made into writing desks or writing slabs.

**Mother-Child/Children Subsystem**

In the second subsystem, Mother as the key player, motivated and dictated the mother-children interactions by setting up implicit rules and regulating appropriate behaviors. The regulations reflected her cultural and belief structures on how siblings and family members should relate to one another. The regulations were embedded in the subsystem which indirectly influenced the children’s behaviors among themselves. Hence, the sibling subsystem functioned according to the Mother’s belief structure. Further analysis of the mother-child/children subsystem revealed that Mother adopted a variety of social roles. Several of the roles were determined by the children’s interaction behaviors, whereas several were assumed by Mother as she actively structured the children social environment. In this section, Mother’s roles will be described in accordance to multiple scenarios at home.

**Mother and Children**

“These children are mine. And that’s why I said I don’t know what’s wrong. I had these children and I quit my job so I could make sure these children have a better (life) I refuse to you know. I don’t know what people think. I could see by.. parents mistreat, there are parents who hate their children, there are parents who mistreat their children. Here I am trying to break my neck trying to have my children have the best. And still people … I feel I am sinful, you know. I just don’t understand. But I love my babies….” Thus, Mother revealed her feeling about her children.
I once asked Mother what her dreams and hopes for her children were. She wanted them to ‘be independent and have a wonderful life.’ She wanted to give as much opportunity to her children just like any other children. She has the same aspirations for them as any parents do for their children. This explained the various summer programs she wanted her children to participate in, such as church field trip for Joe and Seth, summer camp for Joe, summer preschool program for Tina.

When school started in August, Jane stopped coming to the house as she attended school in the day. Jessie and Micah were brought to the house every morning before 7:00 whereas T.N. came whenever, her mother needed a baby sitter. Joe went to the school for the deaf. The bus would pick him up between 6:45 to 7:00 a.m. Tina started attending a full day toddler’s program at the school for the deaf and Seth attended a public preschool program in the afternoon. Although there were fewer children in the house, Mother was kept busy driving Tina and Seth to and from school. Joe and Tina also had to go for aural rehabilitation therapy on Wednesday afternoons and speech/language therapy on Saturdays. The family went to church for prayer meetings and Bible study on Wednesday and Friday nights. In addition to school and clinical therapies, Tina received home support services from two early intervention specialists, one from the Department of Health and one from the Department of Mental Retardation and Developmental Disabilities.

Mother quit her part-time position at her day care center on May 31, 2001. When Mother was working, Seth and Tina who were too young to attend school, went to the day care center with her. The decision to quit her job was to ‘refocus on her children’ as the task of driving Joe and Tina for speech language therapy and aural rehabilitation therapy was too demanding. She
was glad she has made the decision. In the summer 2001, the family went through one “adventure” after another.

*Mother and Home Environment*

My observations of this family demonstrated that Mother set up a safe home environment for the children. It involved limiting the play area to specific rooms in the house such as the sitting room, dining and kitchen. She emphasized safety in the home several times which I documented in my field note observations and interviews. For instance, doors to the bathroom and basement were closed at all times. In one of my home visits, I overheard Mother asking Seth if the basement and bathroom doors were closed. I noticed the bathroom door was closed but not bolted and the light was always on because I could see the light through a crack in the door.

Besides the physical environment, Mother monitored the children’s behaviors constantly, either auditory or visually. On November 6, 2001, I visited the family in the afternoon. Joe, Seth, Jessie, Tina and T.N. were at home with Mother. They had just come home from school. T.N.’s mother left her with the family for a few hours so that she could rest. She was pregnant with her second child. When I arrived, Seth was fast asleep on the couch. Tina was walking around searching for something to play with and Joe was sitting on the couch watching a television program. After several minutes, Joe went to the kitchen and came back with a plate in one hand and a fork in the other. On the plate were some pieces of sausage. He sat on the floor and ate his sausages. T.N. walked up to him and sat next to him. She looked at his mouth and then at the plate. Joe made a face at her and started to tease her. Soon they were laughing together. Mother quickly got Joe’s attention and verbalized (signing simultaneously) “give me your fork. Make sure T.N. is not holding a fork.”
Mother was constantly monitoring to make sure the home was safe for the children. The safety measures imposed were not only for Joe and Tina but for everyone. Mother felt she had more control over the home environment than the environment outside. The children were not allowed to play outside without supervision because she considered the outdoors to be unsafe for the children. Once, some boys in the neighborhood threw stones at Joe and yelled some unfriendly words at him. Joe who could not hear the words, thought they were playing with him. Mother forbade the children to be outdoors because Joe and Tina could not hear passing cars. The cars didn’t slow down although there was a speed limit in the area. The children rode their bicycles on the sidewalk outside the front door once when I visited in the summer. Mother stood outside to supervise.

*Mother and Structured Activities*

When the school year started, I noticed Mother began to focus on more academic activities with the children. In the day time with Joe in school, Mother would set up more structured activities for Tina, Seth and Jessie. She would control each activity and lay out the parameters. This was clearly seen when Mother, Tina, Seth and Jessie engaged in shared reading and working on jigsaw puzzles together.

From the analysis of my field notes, I realized Mother’s roles were very much determined by the number of children in the cluster. In larger cluster, she positioned herself on the periphery of the children’s play activities and in smaller groups, there were more direct interactions between Mother and children. The key players determining group size were the two older children, Joe and Jane. For instance, I notice when Joe was at home, the children were engaged in more free play and Mother situated herself in a supervisory role to ensure the environment was
secure and when restoring order was warranted she would act as a disciplinarian. However, these roles changed when Joe wasn’t around.

On October 9, 2001, I visited the family in the afternoon. I brought along a camcorder and a bag of grapes. Tina and Seth had not gone to school. Mother decided to have the children stay home because there wasn’t enough money to buy gasoline to drive the children to their respective schools. When I arrived, they had just finished having their lunch and were resting on the couch. Mother was also on the couch and Tina climbed up next to her. Mother and I talked for a short while. I gave Tina some grapes. She ran to the basement and a minute later, returned with Seth and Jessie behind her. They took some grapes and sat on the couch with Mother. They thoroughly enjoyed eating the grapes. Jessie finished hers first. While I was talking to Mother, Tina walked up to Jessie and gave her more grapes. Mother said “Tina…,” then she verbalized and signed, “Tina is sharing” Seth walked to Mother and asked ‘What?” “Tina is sharing. Tina is sharing her grapes with Jessie.” Tina gave Mother the twigs from the grapes. Mother pointed to the kitchen and said. “Throw it away. Throw it away.” Tina ran to the kitchen. Mother looked at Tina running to the kitchen and said, “Get your book, Seth.” Tina ran back to Jenny, stretched out her right hands to ask for more grapes. Looking at her hand, Jenny verbalized “What?” while making a gesture with both palms open and shrugged her shoulders. Then she verbalized and signed, “No more. No more”. Tina turned to me with outstretched hands. I said and signed, “No more. All gone.”

“Tina, where’s your book?”, Mother asked. “Seth, go get some books.” Then she looked near the couch for some books and said, “I need to get them….,” “I got it, “ said Seth as he went to the book shelf near the TV. Tina looked at him to see what he was up to. Seth took two books. Tina grabbed them from him. “Give them to her,” said Mother. Seth let go of the
books and went back to the shelf for more. He got two more and gave one to Jessie and sat next to her. Tina gave both books to Mother. They opened the books. Mother picked up Tina and put her on her own lap. Seth says, “look Mama! What’s this? Sports?” Jenny looked over and asked “What is it? Basketball?” “Basketball?” echoed Seth. He closed his book and walked over to Mother right and looked at the book Tina was reading. “Tina is going to read to us or sign for us,” said Mother. She opened Tina’s book entitled About Animals. “She writes on it,” said Seth. “She writes on everything,” responded Mother. “Tina, say, ‘cat’” said Mother as she signed the word “cat” (all ten fingers spread on both sides of her nose out to her cheeks). Tina turned to Seth and with her right hand, she wanted to touch Seth’s cheek and accidentally touched his eye. Seth rubbed his eye. “No, you do cat. Don’t do Seth,” said Mother as she took Tina’s hand away. Tina signed ‘cat’. “Good job” said her mother. “She hurt me” said Seth and walked away. He picked up Mr. Potato-Head from the floor. Mother and Tina continued to look at the book. ‘Look. Monkey!’ said Mother as she moved her arms to imitate a monkey. Tina looked at Seth and waved her hand, beckoning him to come. “She wants you to come, Seth. She wants you to do ‘cat’” said Mother and signed the word “cat”. Seth walked to both of them and looked at the book. He repeated and signed the word, ‘cat’. Then he walked away.

Every time Mother verbalized and signed a new word to Tina, Seth would walk back over to them. He would look at Mother and then at the book. Then repeat the word verbally and sign it. “Look, mama. Chair”, said Seth and signed the word “chair”. If she wasn’t looking, he would call out to his mother until she looked up at him. The moment Mother looked at him, he would walk away and play with Mr. Potato-Head. This interaction pattern occurred several times.

Mother brought out two boxes of puzzle and opened one on the floor. She put the other box on top of the couch. She took out pieces of puzzle one by one and verbalized and signed the
colors “green, red, yellow” to Tina who imitated her mother. Mother took all the pieces out and spread them on the floor. The jigsaw puzzle was a scene of a sitting room with an armchair, table and chairs of different colors, shapes and sizes from the story “Goldilocks and the Three Bears”.

“Okay, Tina, you got to help mummy” said Mother without signing. Jessie and Seth sat down in front of her. All four sat in a circle around the puzzle. Tina picked up a blue piece and waved her left hand at Mother. When Mother looked at her, Tina pointed to the blue piece. Mother kept quiet and continued to spread out the other jigsaw pieces on the floor. Tina threw the piece she was holding onto the floor, got up and walked over to the couch to get the second puzzle box. She stumbled and almost tripped over Mother’s legs. Mother cast a casual glance at Tina as she climbed up the couch and took the second box of puzzles. Mother turned toward Tina, on her knees, took the box from her and said, “No, one at a time” and signed “no” twice and “one” once. She pointed at the puzzle on the floor and said, “Play with this one” but signed “play”. Tina shook her head. Mother was clearly setting up the parameters in which the activity would take place. The rules were one puzzle at a time and everyone played together. Mother put the second box away and turned her attention back to the puzzle on the floor. She helped Jessie and Seth with the pieces. Tina stood and looked around for a while and then decided to join the group again. T.N., the baby cousin, cried out from upstairs. Mother called out “T.N., do you want to come down?” T.N. cried out again. Mother continued with the puzzle. “She will slide down the steps” said Mother referring to T.N. Meanwhile, Tina sat with the group and picked up a big puzzle piece and pointed at it. Mother took it from her and placed it with the correct connecting piece. She took another piece and gave it to Tina. “Put it right here, Tina.” Seth and Jessie looked at the pieces of puzzle without touching them. Then Seth picked up a piece and held on to it. “Put here, Tina. Turn it around.”
After a while TN started to whine. It was a sign for Mother to attend to her. She went upstairs and came down with TN in her arms. Mother put her down on the floor. Jessie tried to put a piece but Tina stopped her. She turned to mother and beckoned her to come. But Mother did not see her. “We need help, mama” Seth finally said. “You have to wait, Seth. I told you I was going to get T.N., right?” Mother looked at Tina. She verbalized and signed, “Where’s blue?” Seth picked up a piece and said “Right here.” Mother took it away from him and said “Let her get it.” Mother verbalized and signed again ‘Where’s blue?’ Tina was busy giving pieces of jigsaw puzzles to T.N., ignoring her mother. Mother stopped for a while, and looked at Tina. Then she resumed the jigsaw activity with Seth and Jessie. When Tina finally looked up at her, she asked “where’s blue?” while signing. Tina took the puzzle pieces from T.N. and puts them with the rest of the jigsaw pieces. While doing that, Tina accidentally pushed T.N. and the little girl burst into tears. Tina looked up, wondering what has happened. Mother stopped what she was doing and looked at T.N. and Tina. Then she decided to ignore the incident and went back to the jigsaw. Tina continued putting the jigsaw pieces back into their place. T.N. stopped crying. Mother picked T.N. up and put her on her lap while watching Seth, Jessie and Tina worked on the jigsaw. Then Tina gave Mother the last piece, which was a triangle and mother handed that to Jessie. As Jessie tried to fit the last piece in, Mother asked, “What shape is that?” without signing. “A triangle,” answered Seth. “Yeah,” acknowledged Mother. “I remember,” said Seth happily. Jessie could not fit in the triangle. So Seth tried as he turned the triangle round 90° to fit into the blank space. He failed. Tina pushed Seth’s hand away and took the piece from him. She fitted the last piece perfectly into the puzzle. “Yeah” called out Seth. “Yeah, good job, good job.” Mother verbalized and signed to Tina. She clapped her hands. Jessie, Seth and Tina joined in.
Then Mother pointed to different colors in the puzzle. She verbalized and signed the colors. ‘Tina, green.’ Tina imitated her. Seth repeated the words and imitated the signs. Jessie sat and watched. She imitated some of the signs in slow deliberate movements. Mother pointed to purple and signed it. “Blue,” says Seth. When Mother corrected him, “purple,” Seth quickly changed and repeated after her mother “blue” and signed the word “blue.” “Look mama! Green!” said Seth. “Look! Chair!” “Look! Bear!” “I can sign other words.” “We are still doing our colors,” said Mother. After naming all the colors, she pointed at the objects in the puzzle. Mother began with a bear. “Tina, mama bear,” said Mother while she signed “bear” simultaneously. Tina imitated the sign. Seth named and signed every object Mother pointed to for Tina. “Look, Ma ma. Look!” called out Seth at each word. Mother glanced at Seth, and said, “Yes” and turned to attention to Tina again. Mother carried on with the same pointing and signing pattern with Tina. Mother verbalized and signed the word. When everything in the puzzle was named, she verbalized and signed simultaneously “Finish. Let’s clean up.” Tina signed “Finish” and jumped into the middle of the puzzle and picked up the pieces. Seth and Jessie joined in when Mother handed them the box. When the last piece was in the box, Tina looked around for the lid. Seth, who was behind Tina, then held the lid high up above his head. Tina saw it and tried to get it from him. He lifted it even higher. Tina cried out, pointing at the lid. She stood up, pulled his shirt and stretched her hand for the lid. Seth turned his body to move out of her reach. “Seth, give it to her,” said Mother. Tina quickly grabbed the lid from him and handed it to Mother. “Thank you,” Mother signed and verbalized simultaneously. “Go get the other box,” said Mother, pointing to the box. Tina quickly climbed up the couch to get the second box. “Only Tina. Nobody else can get the box.” Tina gave Mother the box and they began to work on the second puzzle. Mother went through the same routine with the children.
Mother explained that these were the materials the early intervention specialists used with Tina. They read with Tina and taught her the manual signs. They taught her colors and shapes. Mother was encouraged to continue using the materials. She further explained that the children would read and “play” with the puzzles whenever they want. Mother did not plan any fixed schedule for reading and writing with the children, for instance, story reading before bedtime. So she would grab any time in the day to work with Tina on her communication or language skills.

Structured Activities with Tina

In my visits, I have never observed a mother- solitary child dyad interaction between Mother and Tina nor was it ever captured on the videotapes. It was obvious the number of children in the family did not permit any mother-child dyad interaction. Interactions between Mother and Tina occurred in the presence of another sibling. For instance, early one morning, while waiting for the time to drive Tina to school, Mother and Tina shared a joint reading session with Jessie looking on. Mother opened her scrapbook of picture words with manual communication signs. “Come here, Tina,” said Mother. Jessie sat on her left and Tina stood on her right. “Book,” Mother verbalized and signed simultaneously. Tina sighed “Book.” They turned the page together. “Look, car” said Mother while she signed “car.” Tina imitated the sign. “Look, cookie” said Mother signing ‘cookie’. “Good Tina,” praised Mother. “Baby. Baby crying” Mother verbalized and signed. Tina signed “baby cry.” Jessie cast a watchful eye on the exchanges between Mother and Tina. She imitated the signs once or twice. This pattern of reading went on for another six exchanges before Tina turned her attention to a soft toy on the floor.
In the midst of these structured activities, Mother would inject behaviors she wanted the children to emulate. Mother gave positive reinforcement to the children when she saw them exhibiting appropriate behaviors toward each other. For instance, she praised Tina for sharing her grapes with Jessie. She signed and verbalized simultaneously to emphasize the point that sharing was an accepted behavior and indirectly formed an expectation that this was the appropriate behavior to expect. In another instance, she reminded Seth to be kind to his sister. She provided appropriate behaviors for the child to model such as expressing “Thank you.” For instance, in the small group activity of jigsaw puzzles, Mother deliberately signed and emphasized “Thank you.” when Tina handed her the lid of the puzzle box at the end of the activity.

Mother became an interpreter for Tina when Seth did not understand Tina’s communication intent. She would explain Tina’s intention and provide Seth with directions as to what he should do in response to Tina’s intent. In addition, Mother became an active communicator using both, verbal and non-verbal modes, with her children.

Mother and Discipline

Watching Mother with the children, I discovered she rarely disciplined the children because there was never a need to do so. She was stern with the children but I saw her exercise disciplinary measures only once, where she issued threats and made the children have on time out. When asked how she felt about taking care of four to seven children a day, she replied she did not bother her a bit. “Besides, the noise and running around in the house doesn’t seem to drive me crazy. It’s easy.”

On any given day, the children would actively play in a world of their own creation. As Mother mentioned before, “They entertain themselves at home.” During one of my weekly visits,
Joe was building a make shift fort with the cushions from the couch. Then he crawled in and buried himself under the cushions. After about thirty seconds, Seth went over and grabbed Joe’s foot. He wanted to pull Joe out. As the two brothers, pulled and tugged, laughter and screeches could be heard. As a result, the walls of the make shift fort collapsed. Then the boys started throwing friendly punches at each other. Seeing the excitement, Tina threw herself on top of them. Mother sensing the situation would go out of control, stood in front of them with hands at her waist, which implied a threat to send them up to their bedroom. Seth and Joe stopped immediately. Tina calmed down when she saw the boys calm down. Every body settled down and sat quietly on the couch.

Clearly, Mother did use threats to make her children behave, but it was the only disciplinary action I saw her take to gain control of her own children. What was so amazing about this action was that Mother conveyed the threat without any manual or oral communication and Joe and Seth stopped immediately. It was explained later that the children did not like being sent up to their bedroom in the middle of the day and they were afraid Mother would carry out her “threat.” Evidently, Mother used this threat regularly and it seemed to work. No physical action or harsh threat was needed. This disciplinary measure adopted by the mother demonstrated that she knew what the children disliked - termination of social activity and being taken away from the social group - and she used that information to maintain control of the group.

*Mother and Children’s Conflicts*

In many home situations, sibling rivalry or squabbles are common phenomenon and this family was no exception. Siblings competed for their mother’s attention and squabbles occurred over toys or books. What sparked off sibling squabbles in this family no one knew. Mother
gave up finding the causes or reasons for these sibling outbursts long ago. Most of the sibling squabbles that I observed were between Seth and Tina. They took turns being the aggressor.

Here are two examples: As I stepped into the house one afternoon, I saw Tina climbing down the stairs with Jessie. She had two books in her hand. She smiled when she saw me. We exchanged greetings; I smiled and waved at her and she came over and touched my hand. Then she sat down on the couch with Jessie beside her. With her feet dangling short of the floor, Tina opened one of the books. Seth quietly went over to her, snatched her book and took off with it. She gave a loud cry and ran after him. They struggled for the book for a short while and Tina managed to get the book back from him. Seth, in a desperate attempt, tried to snatch it out of her hand. She turned and ran as fast as she could toward Mother. With Seth behind her, she cried louder. Seth ran after her, crying for the book. He caught her hand and snatched the book out of her hand again. This time, Tina got feisty and decided to fight for the book. A tussle almost broke out when Mother intervened and took the book from Seth and gave it back to Tina. “There are so many other books here, why do you want the one she was holding? She was sitting there doing her thing and Seth disturbed her,” Mother explained. Then, she took a book from the shelf and gave it to Seth.

The second example occurred at home on a different day. Mother once again had to intervene to settle another dispute over books. Seth was reading a book on the sitting room floor when Tina crept up behind him and snatched the book away from him. Seth tried to get it back but she was quick. She ran to the kitchen and hid the book behind her back. Seth followed her to the kitchen and cornered her. In the struggle that followed, Seth pulled her shirt and accidentally scratched her face. She screamed and ran to Mother. Mother took the book from her and kept it. ‘No,’ Mother verbalized and signed simultaneously to both of them. Tina cried even
louder, hoping the tears would overturn Mother’s decision. Mother ignored her. Seeing it was futile, Tina stopped crying. She and Seth then turned and walked away.

Disputes similar to the aforementioned occurred everyday. Sometimes the disputes turned into physical fights. In such events, Tina could get very aggressive, according to Mother: “She is very bossy.”

Mother and Other Maternal Roles

It slowly became apparent to me that Mother did not just become a care provider to her children. In the family, she was much more than just a cook or a safety guard in the home environment. She played many roles with the children. She was physically nearby for the younger children to run to when they needed cuddling or some physical comfort. Seth and Tina were seen crawling up to her lap in between play for a short period of time. Mother would hold them and comfort them on her lap. It almost seemed like the younger children, especially, Tina needed emotional respite from the ostensibly chaotic social world of the children. In a social environment where Joe and occasionally Jane dominated the play structure, being the low man in the totem pole could be wearisome for a deaf child like Tina who constantly depended on visual cues to maintain membership of the group.

In my last interview with Mother, I asked how she would define herself in relation to the family. First and foremost, she saw herself, in this order, as a teacher, a doctor, a provider/caregiver, transporter and advocate. I could see her in some of the roles mentioned. She adopted the role of a teacher with Tina, Seth and Jessie, where she conducted structured/planned activities such as reading and jigsaw puzzles. She would situate herself in center, lay out the parameters and control the situation. She set up the pieces of puzzle on the floor, indicating the parameters in which the activity would take place. When Tina moved away to initiate another
puzzle activity, Mother clearly and firmly verbalized and signed, “No! No! Play with this one,” and pointed at the puzzle on the floor. Mother was reinforcing her rules again especially for Tina, and the object of that activity was to teach Tina the concept of colors using a jigsaw puzzle. Even her approach to elicit answers from the children was similar to classroom instruction.

Mother’s role as a protector and caregiver was very prominent throughout all my observations and interviews. She made the home environment as safe as could be for the children to play in without getting hurt. She emphasized safety in the home several times, using language such as, “Boy, get off my table. What’s wrong with you? You gonna fall and knock your head off. You don’t do that. That’s dangerous,” as she helped Seth get down from the table. I overheard Mother asking Seth if the door to the basement was closed. This was to ensure Tina and T.N. would not accidentally tumble down the basement stairs.

I also realized that Mother was constantly monitoring the children and the environment to make sure the home was safe for the children. For example, once, in the middle of an interview at the sitting room, Mother quickly jumped up from her seat and ran to the kitchen. I heard her ask, “Jessie, do you need to potty? Quick, go to the bathroom.” I could hear Seth say, “Jessie gonna potty. Jessie gonna potty.” Evidently, she heard Seth calling for help while she was talking to me (which I did not hear). Since the interview was audio taped, I replayed it sometime later, and the interruption was recorded in the audiotape. This indicated to me that Mother, although busy with the interview, was vigilant of the children’s needs and actions. She was also watchful of the children. Sibling disputes were left to the children to resolve their differences. She only intervened when the situation escalated out of control. The safety measures imposed were not only for Joe and Tina but for everybody in the house.
Literacy Practices in the Family

The purpose of early intervention is to facilitate and scaffold a child’s social, communicative and language development (Arehart & Yoshinaga-Itano, 1999) as well as support and assist parents in the development of the child’s social, emotional, language and communication competence. Early intervention services are, hopefully, driven by this ultimate purpose and as such the curriculum entails elements and components that are linguistically and literacy based. It would be appropriate then to explore the literacy practices experienced by Tina specifically and her family in general.

Book reading, writing and drawing were integral activities in the children’s world at home. Mother was observed encouraging the children’s participation in these activities as otherwise assumed of working class families (Taylor & Dorsy-Gaines, 1988). Mother emphasized several pre-literacy skills which she considered important for Tina to acquire such as page turning and manipulation of pencil, to name a few.

In all the home observations, field notes and videotapes, there were episodes of Tina and her siblings being involved in writing, reading and drawing. All these literacy practices were done at any time of the day, without any particular schedule or routine. For instance, one early morning, after Joe has gone to school, Mother was busy getting breakfast for the rest of the family. Tina was on the sitting room floor. Jessie who was already at the house was sitting on the couch looking at Tina while Micah, the nine-month old cousin, was in the baby seat on the floor. Tina took out four big picture books. She laid them all on the floor. She arranged them to form a square and then she rearranged them again into a row. After that, she sat on the floor, picked up the first book and put it on her lap. She turned the first page and looked at the pictures. Then she turned to the next page. She pointed at the pictures and waved “bye bye.” She turned to Jessie
and beckoned her to join in. When Jessie did not respond and just sat on the couch, Tina went back to the pictures. She flipped through the pages and then signed “finish”. She closed the book and got up to rearrange the books on the floor one more time. She got bored with the activity and walked over to Micah. She looked at him, turned the baby seat to face her and started to rock him. Her mother said and signed simultaneously, “Leave him alone, Tina. Clean up! Clean up!” Tina looked at her. “Clean up, Tina,” she said again. Tina went over to the books and picked up one book at a time and put them away. Mother came over and turned the baby seat back to its original position.

Then Mother took out a sign language scrapbook, opened the book and put it on the floor for Tina. Mother made the scrapbook on her own. She photocopied the pictures, signs and labeled them herself. Each page had a picture, label and a picture representing how the word is signed. She made the scrapbook four years ago when she was learning sign language so that she could communicate with Joe. Now the book is a good source of reference for her and the children.

Mother stood in front of her and started with the word “book.” Mother signed and verbalized the word simultaneously. Tina imitated the sign “book.” This was followed by “orange,” “red,” “green,” “blue.” Tina walked over to Jessie, took her right hand, folded her thumb in and shook it near her face to imitate the sign “blue.” However, Jessie was uncooperative, so Tina left her on the couch and walked back to where Micah was. She continued to sign the word “blue.” Then she sat next to Micah. Mother said “Tina, boy, boy.” Tina looked at her and signed “boy.” Tina turned to Micah and sign the word in his face. “Tina, girl” and Tina signed the word “girl.” She turned again to Micah and signed it in his face. “Tina, mum.” Tina imitated the sign and then signed in Micah’s face. This pattern of signing continued:
‘dad, church, cow, rhino,’ and then Seth came into the room and called “Mama.” Seth sat on the other side of Micah and joined in: “thumb, car, butterfly.” Seth interrupted by saying, “Mama look,” then he signed the word. “Good job,” Mother praised him. ‘Ma ma look, cat’ said Seth and signed the word “cat.” Tina also signed the same word. More words were signed: “cookie, bicycle, eat.” Then Tina looked down at the scrapbook and started to turn the pages. Seth quickly tried to pull the book away from her. “No Tina. Look mama!” said Seth. “Let her turn the pages. She has to learn,” said Mother. Tina took the book and put it in front of her. She turned a page, looked at the picture. She signed “bicycle” but Mother verbalized it as “motorcycle”. “That’s a bike,” corrected Seth as he imitated Tina. “Well, yes you are right. That’s a bicycle. Sorry,” admitted Mother. Tina turned another page. “Doggie,” said Mother and signed it. “Ma ma look cat,” said Seth. Tina imitated the sign and turned to Micah and signed it in his face. This pattern continued further with more words “dog, eat.” Jessie came over from the couch and looked at the book. Then Tina turned to a new page and signed “elephant” three times before Mother noticed the sign and praised her. “Right, Tina, elephant. She did it on her own. Good job Tina.” Then Seth imitated the sign ‘elephant’. Every time a word was signed, such as ‘moon, friend, cat, sleep etc’, Tina would look at Seth to make sure his signs were exactly like hers and then she would turn to Micah. If his signs were different, she would correct them by touching, changing the shapes and position of his hand(s). Obviously, the children enjoyed this activity. When Mother wanted to stop the activity by signing “finish,” Seth and Tina imitated her. But Seth resumed the activity by calling out to her, “Look Ma ma! Cat!” and the whole pattern of verbalizing and signing continued again. The activity went on for many exchanges between Mother and the children.
This type of reading was regularly carried out as a group at no particular scheduled time and no particular place in the house. This was a social activity for the children. A similar pattern of reading, in which Mother would verbalize and sign the object simultaneously and the children would imitate the signs, was done with other picture books.

Besides reading and looking at books, the children were not inhibited from drawing or writing (see Appendix B). Tina loved to draw (and write). According to Mother, all the picture books in the house were filled with Tina’s writing on every page. In the Reading a Book scenario, Seth made a comment about Tina’s writing in the story book and Mother’s reply was, “She writes on everything. That’s her decoration. She thinks it’s so wonderful writing on books.” The children, especially Tina, were permitted to write on anything and with anything they could get their hand on. The wall next to the stairs leading to the second floor was covered with scribbles and drawings done with color pencils. Hanging on the wall in the sitting room was a full-size paper cut out figure of Joe. Joe’s name in upper case letters was written in the middle of the figurine.

The children were allowed to read, write and draw. This was seen many times during my home observation. On one home visit, Tina was sitting on the floor looking at a picture book. She opened the book and looked at the first page. Then turned to the second and third page. She pointed at the pictures. When she saw me, she brought the book over to me and pointed at a picture of a ball. “A red ball,” I said and signed to her. She nodded her head and turned to the next page. She pointed at a picture of a bus and before I could say anything about the bus, she flipped the rest of pages quickly and closed the book.

Tina knew how to turn the book to its right side up and turn the pages. She had seen her mother and siblings pointing at pictures and talking about the pictures. Reading was also a social
activity in which Tina, her mother and her siblings read together, looked at pictures and signed the words together. At times, they had their own individual books but most of the time, they shared a book. They looked at the same picture and usually Tina decided when to turn the page. Whenever, Seth tried to turn the page, he was either literally stopped by Tina or Mother would tell him, “Let her do it. She has got to learn to turn the page.”

In many of my home visits, I would bring along an audiotape, videotape and a note book. Whenever I opened my book to write some notes, Tina, if she was the room, would come and stand next to me. She would look at what I was writing and when asked if she wanted to write, she would nod her head. I would then tear a piece of paper off my note book and give it to her. She would go to the writing desk, take a pencil or a color pencil and sit next to me. She would start writing small clusters of circles all over the paper and show them to me.

Episodes of Tina and her siblings writing/drawing were also captured on the videotape. One afternoon, Mother was sitting on the floor with Tina next to her. Jessie was on the couch behind her and Seth was walking around looking for something to do. Tina had a piece of paper in her hand. She took a book and put it under the paper and started to write. I gave Seth a piece of paper. He went to the desk and took a color pencil. He showed it to his mother, “Look Ma!” and sat down on the floor and wrote something. Every time he wrote something, he showed it to his mother, “Look Ma!” Jessie came to me for a piece of paper and I gave her one. She sat near Seth and started to write. Tina got up and sat next Seth and Jessie. All three lay flat on their stomach and started to write. After a short while, Tina looked at Jessie’s paper and tried to snatch the paper from her. Jessie took the paper away, got up and walked to the couch. Seth quickly got up and walked to the bottom of the stairs. Tina started to cry as her attempts to get Jessie’s paper failed. “No, Tina,” said Mother. Tina continued to cry. “No. you want to sleep” said Mother.
Tina looked at her mother. Mother signed and verbalized, “You want to sleep?” Tina signed “No.” “You want to sleep. Don’t say no to me,” said Mother. “No! No! No!” Tina signed and shook her head. Tina got up from the floor and walked to her mother. Mother picked her up and sat Tina on her lap. “Look, Ma!” said Seth as he showed Mother his paper. “You did all the circles?” asked Mother. Seth nodded his head and sat on the floor next to Mother. Mother took hold of Tina’s hand and wrote TINA and verbalized simultaneously. Tina took the pencil and wrote on her own. Seth gave Mother his paper and she wrote his name on the paper for him to copy. Next, Mother took Jessie’s paper and wrote her name for her to copy. Meanwhile, Tina was still sitting on Mother’s lap and wrote circles and crosses that looked like letters “o” and “t.” “Good job, Tina. You wrote o’s and t’s. Good job, Tina.” Mother acknowledged Tina writing and clapped her hands. The rest of the children clapped at Tina’s achievement of writing letters “o” and “t.” Tina continued to write a few more “t’s” and “o’s” and then put the paper down and turned her attention to the window. Mother called out to Tina to show me the paper. Tina brought the paper over to me. Then Tina went to Jessie, took her paper and showed me Jessie’s paper. Jessie had drawn pictures of flowers on her paper.

More evidence of the children engaging in small groups writing/drawing activities was also captured on videotape (October 11, 2001). Joe, Seth and Jessie were sitting next to each other on the couch. They had cushions on their laps as tabletops for them to write on. Joe and Seth had a piece of paper each. Joe vocalized and started to write. Seeing that, Seth started to write, too. Jessie looked over Seth’s shoulder to see what he was writing. Joe paused for a while, looked at Seth and teased him with the pencil. Seth playfully brushed off the pencil and went back to writing. Seth pointed at Joe’s paper and then at his. He signed “bird” and stretched out his hand up. Joe pointed at his paper and signed “cat” and then pointed at Seth’s paper. Tina
who was not too far away climbed up the couch and tied to squeeze in between Seth and Jessie. “It’s full,” said Jessie. Tina sat on top of Jessie. “Mooove! OUCH!” Jessie cried out. Mother came to the rescue. “Sit here, Tina,” as she pulled a chair and set it near the couch. Tina had a piece of paper in her hand. She looked at their papers to see what they were doing. Then she climbed down and was on her merry way. Joe tore a piece of paper from his notebook and gave it to Jessie. He passed her a color pencil. After a short while Tina climbed up the couch again and joined the group. Writing and drawing are social activities done as a group. These activities would be interspersed with short intervals of teasing and then the children would redirect their attention back to drawing and writing.

There were many children’s story books such as Baby Bop Discovers Shapes, A to Z, My Blue Book, to name a few, and children’s puzzles, which Mother bought from half-price book stores and the library. In addition, there were animated videotape movies such as Snow White and the Seven Dwarfs, as well as Christian stories. Some of the stories were in American Sign Language.

Tina enjoyed writing and drawing. Mother gave her three notebooks which she used at home and in the car. On February 26, 2002, during my last visit, Mother proudly showed me of one of Tina’s notebooks, and Joe’s drawing. “Tina loves to draw,” Mother kept saying. She flipped through the pages and explained the drawings and writings. Tina drew pictures of the sun, stick figures, and flowers. On some of the pages, she wrote her name which usually began with the first letter of her name followed by scribbles. Mother wrote Tina’s name for her to copy on some pages and she copied some of the letters in her name all over the page.

When the study began in the summer, Tina’s language development level were at the gesture stage. She used pointing, nodding of head and touch to convey her communication intent.
Her communication skills improved as her repertoire of signs increased during the course of the study. She progressed to single word and imitation stage. She even started to vocalize more to get her communication partners’ attention.

*Family’s Socio-Economic Situation*

With two children who have hearing loss, Mother has to deal with various public agencies. They include social welfare, Department of Health, hospital, school, and the Department of Mental Retardation and Developmental Disabilities. The Department of Health keeps her informed about up-and-coming events pertaining to deafness, education and parent support meetings through a newsletter every quarter. She receives letters and medical reports from the hospital, progress reports from school, speech/language pathologists and service coordinators. At the end of every therapy session at home, a progress report is given to Mother to read and sign. In addition to progress reports, Mother writes her own short reports about the home visits made by early intervention providers. She even wrote a short note about my visit and what I did with the family. Mother is involved in the educational planning for Joe and Tina in which her contributions are documented and a copy given to her. All official letters, reports and correspondence received after Tina was identified with hearing loss are kept neatly and in chronological order in a three ring binder.

Besides dealing with public agencies, Mother writes to companies requesting free samples of household goods and personal items that are advertised. When I visited the family, I saw a package of free sample delivered by the mailman. When asked what was in the package, Mother laughed as she explained her interest in looking for free offers in the newspapers especially lady’s stockings, “I love stockings and these are new products. I don’t mind as long as
I don’t need to pay for them.” I told her about free diapers offered by a major manufacturer to families who were interested to participate in research on diaper use. Her face lit up immediately, “as long as it’s free,” but she changed her mind later when she remembered Tina has grown out of diapers and she was using pull-ups instead. “Do they give away pull-ups?” she asked jokingly.

Economic difficulty is one issue that plagues many families and this family is no exception. Mother had always taken care of the family’s finance. She paid the bills and plans the monthly budget. However, there have been some months when financial constraints forced her to list priorities as to which bill had to be paid first. She was worried she would be deeper in debt as a result of interest accumulated from unpaid bills but shrugged, “What can I do? I just have to trust God.”

Mother received social welfare for her children. She used half of that to pay half of the house rent whereas her husband paid for the other half. Then she used the remainder of the money for grocery and to pay bills. One Tuesday morning, I received a phone call from Mother. I was scheduled to visit the family on Thursday but she told me to move forward my visit to the family, as she would not be driving Tina and Seth to school that day. On a usual school day, Mother would drive Seth and Tina to and from school making a total of four trips a day (see Table 3.1). On Wednesdays, she would make extra trips to the hospital for aural rehabilitation therapy after school. The drive to the hospital usually took 45 minutes to an hour, depending on the traffic on the expressway. This particular week, the children had to stayed home for two days because her car had only half a tank of gasoline left and she did not have enough money to refill it until next week. She had to conserve gasoline so that she could take Joe and Tina for aural rehabilitation the next day. It was easier to skip school than to cancel the hospital appointments, according to Mother. Her decision to keep the children at home could be perceived by the school...
as being irresponsible and indifferent to the educational well-being of her children. When I asked about it, she had no choice, she said because the children have school for five days a week, whereas the aural rehabilitation appointment is only once a week. When further asked, if the teachers might misconstrued her actions, she was aware of that. “Yes, they gonna say, now she is married and have transportation, why can’t she drive them to school? I get social security for the children and by the time I pay bills and rent, that money’s gone. They gonna say she should have money. I’d love sending my children to school but . . . . We don’t get food stamps. I use them money for food and gas is sixty dollars a week. I make four trips a day. I try to explain but. . . .”

*Mother’s Dreams and Aspiration for Herself*

Dreams, expectations and roles never stayed static. Change to accommodate transitions and new experiences were inevitable. As the end of the study was approaching, Mother became more open and revealed her intention to be an advocate for her children with deafness and create a support network for parents, especially poor African American parents with deaf children. This relatively new idea came about after she attended a parent support meeting and found a lack of support structure for parents, especially for African American families. To start off her new endeavor, she printed out new business cards identifying her as a parent of two deaf children. She offered free rides to any parents who wanted to attend church services, parent meetings or conferences related to their children and deafness. She wanted to “make sure those parents with deaf children know what is out there.” She had plans to go back to school to get a business or a social work degree when Tina begins preschool full time. In every family system, change is
inevitable and for a family with one or two deaf children, changes often occur around the issue of deafness.

Table 3.1 : Mother’s Daily Schedule From Monday to Friday

<table>
<thead>
<tr>
<th>Time</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>7:00 a.m.</td>
<td>Joe goes to school</td>
</tr>
<tr>
<td>7:00 – 8:30 a.m.</td>
<td>Gets breakfast for Tina, Seth, Jessie and Micah. Gets Tina ready for school.</td>
</tr>
<tr>
<td>8:30 a.m.</td>
<td>Drives Tina to school (with Seth, Jessie and Micah)</td>
</tr>
<tr>
<td>9:00 a.m.</td>
<td>Arrives at Tina’s school and signs her in class.</td>
</tr>
<tr>
<td>10:00 a.m.</td>
<td>Arrives home with Seth, Jessie and Micah</td>
</tr>
<tr>
<td>10:00 – 11:30 a.m.</td>
<td>Goes to the store for groceries or gets lunch ready for Seth, Jessie and Micah. Gets Seth ready for pre-school.</td>
</tr>
<tr>
<td>11.30 a.m.</td>
<td>Drives Seth to school.(with Jessie and Micah )</td>
</tr>
<tr>
<td>12.00 p.m.</td>
<td>Arrives at Seth’s school. Signs Seth in class.</td>
</tr>
<tr>
<td>12.30 p.m.</td>
<td>Goes home.</td>
</tr>
<tr>
<td>2.00 p.m.</td>
<td>Gets Tina from school (with Jessie and Micah)</td>
</tr>
<tr>
<td>2.30 p.m.</td>
<td>Arrives at Tina’s school.</td>
</tr>
<tr>
<td>2.45 p.m.</td>
<td>Gets Seth’s school. (with Tina, Jessie and Micah)</td>
</tr>
<tr>
<td>3.00 p.m.</td>
<td>Goes home.</td>
</tr>
<tr>
<td>3.30 p.m.</td>
<td>Arrives home.</td>
</tr>
<tr>
<td>4.00 p.m.</td>
<td>Joe arrives home</td>
</tr>
</tbody>
</table>
The Family and Early Intervention Support Services

The following section will describe the types of early intervention (EI) support services Tina and her family were receiving. The EI support services included parent-centered, child-centered EI support, aural rehabilitation, and a toddler program supplemented with speech/language therapy. Tina was first identified with deafness on October 20, 2000 and fitted first with binaural hearing aids. She received her first home-visit early intervention services three months later on February 8, 2001. The early intervention service, The Regional Hearing Infant Program funded by the state Department of Health, had been a parent-centered program, although the interventionist, Sally, had worked with Tina directly on several occasions. Tina was also registered in an infant program, 761-BABY, delivered by the Department of Mental Retardation and Developmental Disabilities. Maggie, the early interventionist/teacher assigned to Tina’s case was scheduled to visit the family weekly to work with her. This child-centered program focused on social, language and communication development. From her experience with Joe, Mother decided to opt for the Total Communication method. So she signed up for a six-week American Sign Language (ASL) class in which the instructor conducted the lessons one-on-one at home. When the study started, the ASL course was already into its fourth week. In addition to this, Mother and her husband attended a sign language course offered by Tina’s school. The class was held every Thursday night in the summer.

Mother registered Tina for a summer toddler program at the School for the Deaf which was scheduled to start on June 8, 2001. She planned to have Tina attend it twice a week as part of a summer camp activity as well as part of the transition process prior to going to school full-time in August.
In addition, there were weekly visits to the children’s hospital for aural rehabilitation and speech/language development. Aural rehabilitation appointments were on Wednesday afternoons and speech/language therapy on Saturdays. These weekly therapy sessions entailed work on sound recognition, sound distinction and speech production. Joe and Tina would work with two different therapists in different rooms simultaneously for an hour. The Saturday speech/language therapy was cancelled after two months because the therapist had another commitment. Extra therapy on Mondays and Thursdays were scheduled in school to replace it. Tina attended a preschool program in a school for the deaf on weekdays.

On June 15, 2001, Tina underwent cochlear implant surgery on her right ear. Two days later, Mother noticed blood oozing out from the suture. She phoned the nurse and told her what she saw. She was told that it was normal to see seeping blood but if clear fluid was seen Tina needed to come into the hospital. Later in the evening, cerebral spinal fluid was seen coming from the implanted ear. Tina was immediately rushed to the emergency unit. Mother and the children waited at the hospital for four hours while Tina received treatment. All that time, Mother was not given any updates about Tina’s condition. Since no one came to talk to her, Mother was not worried and had no idea of the seriousness of Tina’s condition. Finally a doctor came out to tell her the Tina’s ear was infected and she had meningitis. The gravity of her condition did not hit Mother until she was told that Tina could die from the infection. Luckily Mother had not waited to bring Tina into the hospital.

Tina was admitted into the hospital and administered antibiotics through an intravenous line. Mother stayed with Tina at the hospital. Her husband came and took the other children home. In desperation, her mother-in-law was asked to help take care of the older children so that her husband could go to work. After ten days, Tina was sent home with an intravenous line
attached to her arm and Mother was told to continue administering antibiotics. A nurse visited the family every other day to check on the bandage and the line.

I visited the family five weeks after the implant. Tina looked very energetic and was happy to see me. She remembered me. Toys were on the floor and she was playing with her siblings and cousins in the dining room area. While I was there, a nurse from the hospital came to check on Tina’s progress and also to take the line out from Tina’s arm. She did not require antibiotics anymore. “She is all ready to go,” said the nurse.

The month of July came and went while Tina recuperated at home. By the time she was strong enough to resume any intervention activities, the new school year was just around the corner. Plans to attend the summer pre-school program did not materialized as they were interrupted by the cochlear implant surgery and further delayed by the post-implant complications. Home visits by Sally and Maggie were cancelled several times in the summer due to Tina’s extenuating circumstances and Mother had to juggle her time between taking care of Tina at the hospital and the older children.

Unexpected incidents occurred in a family at any time and disrupted plans or changed the trajectory of a plan. Many assume, including professionals working with the families, that families are always in a period of stability, which means there are predictable and repeated patterns and rules of coping with daily events. The following event only proves the opposite. Just when everything had settled down into a mundane routine, or so it seemed, another incident occurred that jolted the family into a state of anxiety. On September 1, 2001, Mother took Joe, Seth, Jessie and Tina with her to a major supermarket to buy their weekly groceries. While browsing through the aisles, Tina slipped and hit her head on the floor. Her skull cracked near the suture of the cochlear implant. She was rushed to the emergency unit again. It was a small
but deep crack. Tina was stitched up and sent home without an magnetic resonance imaging (MRI). When Mother tried to explain to the hospital personnel about Tina’s implant and that Tina should be given an MRI, she was dismissed and told there was no need for one. Upon arrival at home, Mother immediately phoned the pediatrician/surgeon and left a message with the nurse. Her pediatrician did not return her call. So she called again two days later and finally after the third phone call the pediatrician told her to bring Tina in to his office for an MRI.

    After the incident, Mother noticed that Tina seemed to be less responsive to sounds especially to her name. “Before the accident, she turns her head when I call her. After the fall, she doesn’t turn anymore,” Mother explained. She told the audiologist, and Amy, the aural rehabilitation therapist, about the incident and Tina’s lack of response to her name. A test on the implant was conducted but nothing was wrong with it. “She should be hearing sounds,” the audiologist said. Although mother insisted that Tina was not hearing anything out of her implant, no steps were taken to remap Tina’s implant. Finally, Mother brought this up in the individualized family service plan (IFSP) meeting on November 13, 2001. A meeting with a Clarion, brand of a cochlear implant, representative was scheduled at the request of Maggie and Sally, home based early interventionist specialists. The representative remapped Tina’s implant in December, 2001. Mother was relieved, “They finally believed me. I tried telling them but they don’t believe me. It took them three months to believe me.”

    In this section, home visit sessions with Tina will be presented. It is essential to know and understand the way in which Tina interacts with the early intervention specialists and how sessions are conducted at home, at school and in a clinical setting. What will be presented are data obtained from field note observations and videotapes: descriptions of two home sessions, a day of Tina’s school captured on videotape and an aural rehabilitation session at the hospital.
Each session was chosen because it depicted the different interactional styles and experiences Tina experienced regularly with different service providers. The second reason was to examine the different interaction dynamics between the respective professionals with Tina, Mother and the siblings.

**Home-Based Early Intervention Sessions**

The child receives far more benefit of intervention when the parents are able to implement strategies to help their child develop communication and language skills. The state Department of Health Regional Hearing Infant Program for deaf or hard of hearing children has a parent education component. This program serves five counties and Sally, the only parent advisor/coordinator in the regional program, had to travel across the different counties to visit families who have children with deafness. Although she had a heavy schedule Sally visited Tina and her family once a month for an hour. Sally’s work with families of children with deafness involved conducting home visits, and holding parent conferences. She also conducted training classes for parents and professionals, and coordinated a parent support group, which holds parents’ luncheons every three months. She communicated occasionally with hospital personnel and other related services on behalf of families seeking clarification regarding support services.

The second home-based Early Intervention specialist, Maggie from the Department of Mental Retardation and Developmental Disabilities, delivered the child-centered component. Her weekly visits were usually in the late mornings or early afternoons. Although the home visits were supposed to be in a natural setting, Mother would always dress Tina up for the occasion. July 19, 2001 was Maggie’s first home visit after the cochlear implant. Tina was dressed up in a beautiful pastel floral dress. She had on white socks with lace trimmings and white sneakers. Mother was also dressed up with red blouse and white skirt. She had on a pair of black stockings.
Similarly, when Sally visited the home, Tina had on a beautiful blue and red checked dress. Her hair was braided with red, green and white beads.

The home-based sessions were conducted on the sitting room floor in the presence of Mother and the other children. The following are descriptions of two home-based early intervention sessions conducted by Maggie and Sally respectively. This is to allow readers to construct their own picture of what a typical early intervention session is like and the interaction patterns that transpired.

*Tina and Maggie*

On July 19, 2001, Maggie conducted her session on the floor near the couch. She brought two bags of materials and books. Mother sat in front of Maggie. Tina sat herself on Mother’s lap. Maggie brought out plastic colored rings of different sizes from one of her bags. She showed one to Tina and put it over the stick. Maggie gave one to Tina, verbalized and signed, “Tina’s turn.” Tina took it and put it round the stick. Maggie gave another ring to Mother while she signed and verbalized, “Mother’s turn” simultaneously. Mother put the ring in the stick. Maggie took a fourth ring, “My turn” while she pointed at herself. This pattern of turn taking went on until all the rings were in the stick. “Look! Look!” Maggie verbalized and signed. She pressed the rings further down the stick and then released a level. The rings popped out. Maggie laughed and clapped her hands. Tina looked around on the floor and then looked at Maggie. Her face lighted up with excitement. “More?” Maggie verbalized and signed. Tina responded by signing “More.” Maggie started the turn taking sequence again. This time Tina eagerly took the rings from Maggie and Mother and put the pieces back together for them so that she could release the lever for the rings to pop out.
Maggie ended the activity when Tina turned her attention to the contents in Maggie’s bag. Tina took out a jigsaw puzzle and some pictures of apples and oranges. Maggie immediately responded to that as an initiation on Tina’s part to change the activity. Maggie laid out the pictures of apples and oranges on the floor and Tina was given similar pictures to match. Tina matched them correctly. Again the activity ended when Tina started to look around for other toys and play materials.

Tina showed an apparent interest in books. She took one out of Maggie’s bag. There were books about babies and parts of the body, different animals and objects in the house. Tina turned the pages and pointed at the pictures. Each time she pointed at a picture, she would look at Maggie. Maggie would verbalize and sign the names of the picture objects and on occasions pointed at the authentic object in the room. For instance, Tina turned to a page about babies and parts of the human body. She pointed at a picture of two feet. Maggie pointed at Tina’s feet, signed and said, “Feet.” Tina took her shoes and socks off and pointed at her bare feet. Maggie again, pointed at Tina’s feet and verbalized, “Your feet,” and then to her own feet, “my feet,” touched mother’s feet and said “mum’s feet.” Maggie pointed at a picture of two hands. “Hands,” Maggie verbalized and signed simultaneously. Tina looked at her. Maggie wriggled her fingers and said, “Hands. My hands.” Then Tina pulled off Maggie’s right shoe and put it on. “My shoes,” said Maggie while signing. Tina got up and walked around in Maggie’s right shoe. While the session was going on, Tina’s siblings sat on the couch and watched. Occasionally, they walked to the kitchen and played among themselves. When they were bored playing, they walked back to the sitting room and watched the interaction between Maggie and Tina. Mother sat and watched the way Maggie interacted with Tina.
Tina and Sally

August 1, 2001 was Sally first home visit after Tina’s cochlear implant. Tina wore a harness for her cochlear receiver behind her. Although Sally’s responsibility was the parent component, she worked with Tina that particular day to turn on her cochlear implant for the first time. Tina burst out crying. Sally quickly distracted her by allowing her to take a peep at the toys she had in a laundry bag. There was a baby doll in the bag. Tina unzipped the bag and took the baby doll out. “Open the bag, open the bag,” Sally said and signed simultaneously. She emphasized the doll, “My baby, My baby. Look diaper!” Tina looked at the diaper, screwed up her nose and signed, “stinky.” Sally immediately responded, “Yes, stinky,” as she signed “smelly.” Tina put the baby in a bath tub that was already filled with water. Sally showed Tina how to wash a baby with a wash cloth. The older children were already seated around the tub, watching with anticipation. Mother could not find a wash cloth so she gave Tina a baby bib instead. Tina took it, opened it up and put it on the baby’s chest. “No,” said Sally as she signed. “This is to wash.” Sally took the bib and put it in the water. Tina got the idea and took the cloth and started to wash the doll’s body. She soaked the cloth in water and squeezed it on the doll’s head. “Wash the eyes,” said Sally as she pointed to the doll’s eyes and then to her own eyes. Tina held on to the cloth and looked at Joe. Joe slowly took the cloth from her and washed the doll’s eyes. “Wash the other eye,” Sally encouraged Tina. Tina took hold of the cloth again and washed the doll’s eyes and ears. “Yes, wash the ears,” said Sally. Joe pointed at the doll’s ears and helped Tina wash the doll. “Seth, can you get me a towel?” asked Sally and she signed “towel.” Seth gave her a towel and put it on her lap and watched Joe and Tina wash the doll’s hair. “She is very good at washing,” said Sally. “She helps me wash my dishes,” explained Mother. Tina took the doll out of the tub and Sally spread the towel under the doll to dry it.
Tina’s attention was distracted when she saw Seth rummaging through Sally’s bag of toys.

“Come Tina. Dry the doll,” said Sally as Tina refocused on the task. Tina took the doll and gave it to Mother. Then she went to Seth and took the bag away from him. She gave it to Sally. “I teach her to clean,” said Mother and she signed the word “clean.” Mother put the doll on the couch. Sally moved closer to Mother and helped Tina dry the baby with the towel. Sally touched the doll’s hair, simultaneously signed and verbalized “wet”. “Dry, dry, dry,” Sally verbalized and signed simultaneously several times to Tina. Mother and Tina dried the hair together. Then Sally signed “dry” in Tina’s face. Tina imitated the sign with her left hand. “Good,” praised Sally as she clapped her hands happily. “Good job, Tina,” added Mother. Tina took the used diaper, folded in with the intention of throwing it away. “She is going to get rid of it,” said Mother. “No, Tina,” said Sally. “It is not dirty. See! Nothing! It is clean. Look!” as Sally took the diaper from Tina and opened it to show the diaper was clean. “Diaper! Clean!” Sally made the clipping movements with both her pointing fingers and thumbs at the abdomen area. “Diaper!” Sally repeated. Tina looked at her, signed “more” and nodded her head. Sally took Tina’s hand away and verbalized “more.” Then Sally wrapped the diaper around the baby with Tina’s help. Tina hugged the doll and started to rock it.

“Tina, you sit here,” said Sally as she gently put her hands on Tina’s shoulders and pushed her down to the floor. Sally took the wet cloth and proceeded to wash Tina’s feet. Sally talked about Tina’s dirty feet, wet feet, and washed with water and then dried the feet. Sally playfully tickled Tina’s feet. Tina squealed with delight. She nodded her head when Sally asked if she wanted to be tickled again. Seth, who was sitting on the floor next to the tub, said, “I want to wash my feet.” The rest of the children sat and watched.
Since it was the first time Tina had her cochlear implant turned on, Sally decided to work on sound recognition with Tina. She suggested that Mother and Tina walk around, and Mother show Tina different sounds around the house. She decided on a game of catch. She showed Tina the ball and asked with simultaneous signing, “Do you want the ball?” Tina nodded her head. Before she threw the ball, she called out Tina’s name. This went on for a few exchanges. The rest of the children came back to the room. Sally invited them to join in the game. Tina who looked tired by this time, climbed up Mother’s lap and snuggled close to her. The children sat down and waited patiently for Sally to start the game. She went through the same play pattern of calling the names of each child before she threw the ball at the child. Although Tina was tired, she continued to join in the game while sitting on Mother’s lap. On one instance, she caught the ball and held on to it. She refused to throw it back to Sally. Joe, gently, touched her arm, then the ball and pointed at Sally. Tina looked at him, then at Sally and shook her head. Then Joe just took the ball from her and threw it back to Sally. Tina cried and stretched out her hands for the ball. Sally threw it back at her but this time, Tina threw the ball back. This activity went on for another five minutes. “Why don’t you try?” Sally said to Mother. So Mother took over the lead role. She adopted the same play style. She called out the child’s name and then threw the ball at each individual child. They threw it back to her. This went on for two rounds. Tina looked so tired by then that she just sat on the floor near her Mother’s feet and watched the game. Mother stopped the game and that concluded Sally’s session.

The sessions described were typical early intervention lessons with Tina and her mother (and sometimes siblings) at home. The interactions between home-based early intervention professionals and Tina/Mother were characterized by several distinct features. First, the lessons were task oriented, with specific goals to be met. In both sessions, Tina worked from one task to
the next without any opportunity to revisit the previous task once it was over. For instance, Tina worked on the popped up colored rings, then the activity changed to plastic stick-on puzzles and ended with book reading. Similarly, in the second session, Tina gave the doll a bath, moved on to the feet washing activity and finally ended with the catch-the-ball activity. Once an activity was over, the materials put away and never to be revisited. New materials were introduced and the interaction pattern would be repeated. Sometimes, the new activity was initiated by Tina and sometimes by Sally or Maggie.

Second, the interaction was initiated toward only one person, creating a conduit model of interaction. The interaction was initiated by the professionals toward Tina, and she was expected to respond in manual signs or correct communication behaviors. Every correct response was evaluated with a verbal compliment or a non-verbal gesture representing approval. The initiate-response-evaluate pattern of interaction is typical of formal classroom instruction (Cazden, 1998).

Mother’s presence did not interrupt the linear flow of the interaction. She participated only when invited. She was directed to emulate the way to implement teaching techniques and strategies with Tina. Similarly, the presence of siblings did not affect the interaction between professional and Tina. The siblings only were invited to participate and the flow of interaction was linear. However, the presence of siblings approximated a familiar play environment for Tina.

Lastly, the sessions were long and Tina stayed in the same room throughout the hour-long session. Compared with Tina’s interaction with her siblings, where interactions and play activities were always spilling over to the adjacent room, the sessions with early intervention professionals were restricted to only one physical space.
Final Parent Conference

On October 15, 2001, Sally and Maggie held their last parent conference with Mother. The meeting was pertinent for several reasons. The agenda of the meeting included Tina’s transition to pre-school, service from the 761-BABY program and the parent-centered support program. Tina would be three years old in May 2002, and would be transitioned to a formal pre-school setting. Mother wanted Tina to stay in the same school for the deaf as her older sibling, Joe. Since Tina was already enrolled in the infant/toddler program in that school, the transition was minimal. One obstacle was transportation. Mother requested bus transportation for Tina. She was told that Tina was ineligible for the service because she would be attending a private school that is located outside the school district where the family lives. Furthermore, transportation would only be provided when she turned five years old. Mother tried to explain that Tina should be eligible due to her special needs circumstances but her request was rejected. The explanation given totally flabbergasted Mother because she had arranged bus service for Joe when he was three. She could not understand why Tina was considered ineligible for the same service since the bus was already picking up Joe from their home every morning. It would not cause any inconvenience to have Tina on the same bus with Joe. Sally and Maggie promised to help.

Tina’s transition to pre-school would affect the family as far as child-centered education support was concerned. Mother voiced her disappointment when told that Maggie would not be servicing the family any more as there was duplication of service. Since Tina was in pre-school full time, she was therefore, receiving the service of an early intervention teacher. The Department of Mental Retardation and Developmental Disabilities considered the service Maggie was providing to be similar to the toddler program Tina’s was attending. Seeing
Mother’s disappointment, Maggie promised not to make an abrupt break from the family. She would give the family a phone call next month just to keep in touch.

Sally, on the other hand, would continue to provide support but not on a regular schedule. The conference was to determine the kind of support Mother needed. Sally explained the transition process would include an Multifactor evaluation followed by an individual educational plan (IEP) meeting. She further explained that the school district would conduct the evaluation and then initiate an IEP meeting for Tina. Sally would slowly exit as far as parent support was concerned. She would contact the family every five weeks but would not make any more home visits. However, she promised to keep Mother informed of the parent support group meetings and other related activities via newsletters.

I asked Mother how she felt about the transition. She laughed and shrugged her shoulders. She experienced a sense of loss and also loneliness, after the overwhelming excitement of support from various public agencies. The transition process not only affected Tina, but Mother as well; she too needed to make a transition. She had been given emotional and social support for over a year and “all of a sudden,” the support stopped at Tina’s third birthday. She had to go through another phase of adjustment and relationship building again with another set of professionals.

During my last visit, Mother was still in a dilemma as to who would initiate the IEP meeting. The public school evaluation specialist had promised the meeting would take place in April, a month before Tina’s third birthday. Regarding bus transportation, the school district had given Mother a verbal agreement that bus service would be provided. The service would commence the following school year. Mother would like to go back to work for a few hours
when the children are in school full-time. The money would supplement her husband’s income and this would alleviate some financial constraints experienced by the family.

*Tina and the Nurse*

Besides the early intervention service professionals, a nurse visited the family once a year. The visit had several purposes: to update information about the family, to check the health of Tina and the living condition of the family. I was visiting the family on October 7, 2001 when the nurse conducted her annual family visit. The visit lasted more than an hour. The nurse sat at the dining room table and talked to Mother. Joe, Seth, Jessie, Tina and TN were at home. While the nurse was getting information from Mother, the children kept themselves busy by playing in the sitting room. Occasionally, Joe walked to the nurse and asked her questions. The short conversation was carried out using manual communication. Tina happily climbed up to sit on the nurse’s lap and showed her advertisement flyers. However, the mood changed when it was time to measure Tina’s height and weight. She refused to stand against the measuring tape on the wall or step on the weighing scale. After several futile coaxing, Mother lifted her off the couch and carried her to the weighing scale. Tina screamed and wailed loudly. She clung to Mother’s legs while shaking her head. Mother forced her against the wall and on the weighing scale. Each time Mother tried put her on the weighing scale, Tina curled up her feet and screamed loudly. After several failed attempts, Tina finally calmed down and allowed Mother and the nurse to record her weight.

*Tina and School*

Tina’s school routine was not anything like the home-based early intervention sessions. She was in a classroom with nine other children. She was the only child with deafness. There
were usually about seven children present everyday. The teacher, Peggy, who was hearing, used total communication to communicate with the children, both hearing and deaf. Peggy had six years of full-time teaching experience and had spent five of the six working with two-year-old children. She received her first degree in music therapy and went back to school for her certification in deaf studies and communications. Her career in the school for the deaf began as a practicum student. Upon graduation, Peggy applied for a teaching position at the school. As there was no full-time position at that time, she started as a part-time teacher in the afternoon. The next year a position was available and she became a full-time teacher, working with one-year-old babies. In her second year as a full-time teacher, she accepted the position teaching two-year-old toddlers. She found herself enjoying it tremendously. She never looked back: “joy I find in this group is language and how it explodes between that year two to three. It’s just a real fascinating thing to be a part of it, to help develop and foster.”

Peggy was assisted by a teacher who was deaf. The teacher’s aide had also worked in the school for more than six years. She helped Peggy with classroom management, including supervision of children during play time, diaper change, lunch and afternoon naps. She signed and verbalized to all the children although she spent most of her time with Tina.

The mode of communication in the preschool program was total communication, where the teacher signed and talked simultaneously. The daily schedule of the classroom was used as a flexible guide for the teacher (see Table 3.2). It was almost impossible to follow a rigid routine with a group of two-year-old toddlers. The Early Childhood Coordinator commented, “the children are trying to express themselves, to have someone who can fill the gaps at all . . . . They are also pushing limits and they also empower themselves with the ‘NO’… they are going from
the center of the universe to having to share.” The purpose of the program was to establish an environment to facilitate socialization using sign language within social activities.

Table 3.2: Tina’s Daily Schedule in Toddler Program

<table>
<thead>
<tr>
<th>Time</th>
<th>Activities</th>
</tr>
</thead>
<tbody>
<tr>
<td>8:15</td>
<td>Transition from the LOFT building to main building</td>
</tr>
<tr>
<td>8:30</td>
<td>Dramatic Play</td>
</tr>
<tr>
<td>9:30</td>
<td>Circle Time</td>
</tr>
<tr>
<td>9:45</td>
<td>Snack</td>
</tr>
<tr>
<td>10:00</td>
<td>Watch Me Move: Gross Motor Activities</td>
</tr>
<tr>
<td>10:45</td>
<td>Discovery, Stories and More: Language/ Fine Motor/ Problem Solving</td>
</tr>
<tr>
<td>11:30</td>
<td>Lunch</td>
</tr>
<tr>
<td>12:30</td>
<td>Rest time</td>
</tr>
<tr>
<td>2:00</td>
<td>Open Play</td>
</tr>
<tr>
<td>2:30</td>
<td>Transition to LOFT building for p.m. snack and after-school care</td>
</tr>
</tbody>
</table>

Tina’s toddler room was the spacious play/activity areas. The building where the classroom was located was once a dormitory for residential deaf children. It was converted into a classroom. Built-in closets and writing desks by the windows were still there but they had been turned into storage areas for school materials and desks for the teachers. A large alcove once used as a sleeping area was turned into an activity room in the mornings and the children used it
for naps in the afternoons. A large common room became the reading area for the children, whereas a smaller one became a lunchroom.

*School Routines*

The school day began at 9:00 a.m. with attendance taken and a short show-and-tell session. The show and tell session was usually about what the children wore and then was followed by a short discussion about an object pertaining to the theme of the week. When Tina arrived shortly after 9:00 a.m., Peggy quickly checked her batteries and headpiece. Once a week, the school speech/language pathologist would come in to conduct a short speech session with the whole class, although it was mainly for Tina. Although the actual work of the session took only ten to fifteen minutes, it usually took much longer than the time allotted because time was spent getting the children transitioned into school routines. At around 9:30 a.m., the children would get ready for outdoor time. It was a chilly autumn morning the day I visited the school, although the sun was shining brightly. Before they went outside, the children were taken to the bathroom. Then they proceeded to a concrete courtyard behind the school building. The courtyard was enclosed behind a high fence. The children were given the liberty to run around, peddle on tricycles, cars and scooters that were available for them, or engage in unstructured play. Thirty to forty-five minutes was set aside for outdoor free play. It was during this free play that Peggy engaged them in conversation and modeled language use; they talked about what they were doing and what they saw. She would also mediate conflicts between individual children and explicitly talk about appropriate social rules in school. The teacher’s aide helped Peggy monitor the children playing within the courtyard to insure no one ventured out of the play parameters.

After forty-five minutes of gross motor activities, the children were brought back to the classroom. The children were led to the reading room. There was a small Native American tepee
in a corner of the room and on the opposite side of the room were two low round tables with chairs. Book shelves were filled with story books and play materials for the children to practice their fine motor skills. While the children were playing in the reading room, the teacher’s aide took the children individually to the bathroom. This was followed by lunch and nap time. After the afternoon nap, children were allowed to play until the parents came to pick them up which was usually after 2:00 p.m. Tina’s mother would usually get her at 2:00 p.m.

Learning Opportunities at School

The reason Mother registered Tina in an integrated toddler program was to provide an environment that would facilitate and support her signing skills, and that would eventually help her develop her social skills in formal situations. Since it was located in a school for the deaf, Mother assumed there would be other deaf children for Tina to socialize with, besides, the hearing children. However, the number of deaf children dropped that year and Tina was the only deaf child in the program. Peggy and the teacher’s aide paid special attention to include Tina in all teachable opportunities. For instance, during the gross motor activity at the courtyard, Tina’s peers were throwing dried leaves up in the air and watching them fall to the ground. Tina was on a scooter at that moment, scooted over to them and watched them. Peggy noticed her presence, signed and said simultaneously, “Throw them up and see them fall. I see red leaves. I see brown. I see yellow.” Then Tina picked up a bunch of leaves and threw them up in the air. She looked at the leaves fall and then scooted away. Peggy continued to sign and talk to the other children even if after Tina has left the group. In another teachable moment, the children had a chance to see a butterfly on a tree leaf. Peggy showed them the butterfly and introduced the sign “butterfly.” However, Tina was terrified of it. She cried and turned her face away.
In another example, the children were in the reading area, and Peggy saw a gaggle of geese flying in formation outside the window. She called out to the children, “Look at the geese flying.” Everyone rushed to the window. Tina looked up. Peggy quickly picked up Tina and pointed at the geese and signed, “geese flying,” while she verbalized, “The geese are flying.” After the geese flew out of sight, the children went back to what they were doing before.

The teacher aide’s communication with Tina was a one-on-one approach. She usually walked up to Tina whenever she saw Tina alone. At the courtyard, Tina, who was on a scooter by the fence, was watching the cars on the expressway. The teacher’s aide went over to her and signed, “Many cars on the road.” Tina looked at her. Then the aide asked her, ‘Do you want me to give you a push?’ Tina touched the back of the seat as a positive response. “Please”, signed the aide. Tina stared at her. “I’ll help you. Please,” signed the aide again. Tina continued to stare at her. Finally, the teacher’s aide gave Tina a push on the scooter.

Social Circle at School

Parallel play and solitaire play occurred more frequently than interactive play among all of the toddlers. The teacher mediated conversations with the children but usually they were dyadic interaction between child and teacher. The following example demonstrates one of Tina’s many play behaviors at school. Tina took out a box of colored pegs and a green board with holes from a shelf. She placed the pegs into the holes nearest to her. A classmate came over and took a peg from the box. She placed it in hole on the other side of the board. Quietly, both of them fitted the pegs into holds. When they finished, they pulled out the pegs and threw them on the floor. Then Tina turned and ran into the tepee. Peggy playfully zipped up the tepee. She put her hand under it and signed “Where is Tina?” while she verbalized. Tina playfully unzipped it and
popped her head out. She laughed. Peggy repeated the words and signs with another child who was also in the tepee with Tina.

Next, Tina ran out of the tepee and headed for the writing table. There were a box of crayons and some pieces of papers on the table. She took a crayon and drew a circle that looked like a sun on a piece of paper. Next she drew lines all over the paper. While Tina was at the writing table, the other children were sitting on some floor cushions looking at books. Two of them were looking at a book silently. When Tina had enough, she walked to a window and looked out of it. Then she walked around the room as if searching for something, but found nothing in particular.

Lunch Time

Lunch time was done in an orderly manner. The coordinator of the early childhood program, Rose, came in to help serve lunch. She and Peggy modeled the appropriate way to request food and taught vocabulary related to food to the children. The lunch room had two low yellow picnic tables. On the picnic tables were six lunch trays. On each of the tray was a hotdog. The children walked in a line and sat at assigned places. Tina pointed at the hotdog and looked at the teacher aide. The teacher aide signed, “hotdog,” twice. Tina nodded her head. She was given a hotdog. Next, the children were given beans by Rose. Tina pointed at her tray and looked up at her. “Do you want beans?” asked Rose as she signed simultaneously. Again Tina pointed at her tray. “Do you want?” Rose asked again. Then Rose signed and said simultaneously, “I want some beans.” Tina looked at her and signed “want.” “Good” said Rose as she gave Tina some beans. “Do you want juice, Tina?” asked Peggy. She shook her head to indicate no. “Milk, then?” asked Peggy as she put a cup of milk in front of Tina. Tina looked at it and continued to eat her beans and hotdog. After a while, Tina vocalized to get Peggy’s
attention. She pointed at some apples. “Do you want oranges?” asked Peggy as she cut an orange. Tina shook her head and pointed at the apples. “Oh you want apples. Apples.” Peggy verbalized and signed. Tina imitated Peggy’s sign, “Apples.” “Yes,” Peggy nodded her head. She cut an apple into small pieces and gave Tina two. Later Tina pointed at the apples again. Peggy went through the request routine again.

After lunch, the children went to the alcove to get ready for afternoon nap. The teacher’s aide took the beds out for the children. Each child had a blanket and a pillow. Peggy brought some books in and gave each child one. Some of them took their shoes off themselves while others needed help. Once they have taken off their shoes, they climbed into bed and opened the books. The teacher’s aide took off Tina’s receiver harness from behind her back and then her shoes. Tina climbed into bed and covered herself with the blanket. Next she opened the book and started to flip through the pages. The children usually slept for an hour. The children began to go home after their naps. Parents usually picked them up between 2:00 and 4:00 p.m. Mother usually picked up Tina around 2:00 p.m. every day.

Center-Based Early Intervention

The fourth early intervention service Tina received was aural rehabilitation at a medical center. Routinely on Wednesdays, Mother would take Joe and Tina to the hospital for aural rehabilitation therapy. She would drive Seth to school as usual at 11:30 a.m. She would bring Jessie and Micah along. Mother would stay in school until 1.30 p.m. Then she would pick up Tina and Joe. Next she would proceed to Seth’s school to pick him up. She would drive all the children to the hospital for the 3.00 p.m. aural rehabilitation appointment.
Aural rehabilitation involved training in auditory perception, speech production and language development. In the beginning, Tina would cry every time Amy, the aural rehabilitation specialist, led her to the therapy room. She would cry for about ten minutes or sometimes longer, before she settled down to the work planned for the session. This went on continuously for about four months. In my last interview with Mother on February 26, 2001, I was told, “She always gives Amy a hard time, even now. She goes into the room with me but she will not cooperate. She turns her face away from her. Sometimes she cries. Amy says she cries for only ten minutes but she has been seeing her all these months.”

Tina and Amy

The following is an excerpt of an aural rehabilitation therapy with Tina which I observed on August 9, 2001. Mother and the children arrived at the center at 3:05 p.m. She went to the receptionist who was already expecting them. She went through the usual greetings and routines with the receptionist and Micah got his usual “cute baby” greeting. Then Mother pushed him into the waiting room. By this time, Joe, Seth, and Tina were already playing hide and seek, running in and out of the house. We waited about five minutes before Joan and Amy came out. I was introduced to Joan and Amy. Then all of us were taken to the therapy rooms. Joe went into Joan’s room and Amy held Tina’s hand and led her into the next room. The therapy room was approximately eight feet by eight feet with white walls. The room had built in cupboards and cabinets. There was writing desk against the wall with a telephone. Upon entering the room, one would see a low round table and two low chairs at the corner of the room. An open shelf stacked with toys was placed next to the table.

Mother, Micah and Seth waited in a smaller room situated between the therapy rooms. When Tina entered the room, she started to cry. I followed them in and Amy closed the door.
Tina cried louder when she saw the door closed. She struggled to get out of the room. Amy lifted her up and held her close to comfort her. Tina kept turning her head and stretched her hand toward the door as an indication she wanted her mother and wanted to leave the room.

“Do you want to play?” asked Amy while she signed “pla.” Tina shook her head. She stood near the table and continued to cry. While Tina was crying, Amy adjusted her harness. Tina continued to cry. Amy picked her up and let Tina’s head rest on her shoulder. As Tina calmed down, Amy turned on the volume of her cochlear implant. “Do you want to play?” Amy asked again. “Do you want to play?” she asked again and signed “play.” Amy took a bus and banged it lightly on the table. “Pap, pap, pap, pap” said Amy. Then Amy turned Tina around to sit the child on her lap. Tina started to cry again. Amy tried to distract her with a pink plastic ring. Tina looked at ring and ignored it. Amy blew bubbles into the air. “Bub – bles, bub – bles.” That caught Tina’s attention. She took the bubbles from Amy and she tried blowing it herself. “Good blowing! Bub- bles! Bub-bles!” praised Amy. Then Tina touched Barney’s bus. “Oh you want Barney’s bus?” asked Amy. She rolled the bus to the far end of the table and then released a button on the roof of the bus. It moved on its own toward Tina. Tina caught it and rolled the bus on the table for a short distance. Then she turned her attention to the bubbles bottle again. Amy gave her the ring attached to the lid of the bottle and Tina gave a big blow. Nothing happened. Amy blew it for her.

“Okay Tina, it’s time to work,” said Amy. She put the bubbles bottle back on the shelf and brought out plastic rings. Tina took the rings out from the stick and laid them on the table. Amy held on to the stick. “Let’s take red,” said Amy as she signed “red.” Tina took the red ring from the table and she was about to put it in the stick when Amy shook her head and placed the stick out of Tina’s reach. Amy pointed to her own left ear and said, “Listen!” Then she said,
‘PAP PAP PAP!’ Amy nodded her head and took her hand away from the stick. Tina put the ring in the stick. “Orange!” Amy said and signed. Tina took the big and small orange rings and showed them to Amy. “The big one,” said Amy while she looked at the big ring. As Tina was about to put the ring in, Amy shook her head. She put her finger near her left ear and said, “Listen.” She waited a while and then whistled. She nodded her head and signed “yes.” Tina put it on. Amy repeated this play pattern seven times until all the rings were stacked up in the stick. A different sound was made for every ring as a signal to Tina that she could put the ring on. Although the sounds were loud, Tina did not give any indication she heard the sounds. She seemed to receive her cues from Amy’s head nodding, facial expressions and/or hand movements.

The session lasted one hour but the interaction dynamics did not change in the other activities that followed the one described above. The interaction was in a linear fashion where the therapist initiated a directive and Tina had to respond. If it was correct, the activity would proceed to the next step. In an incorrect response situation, the step would be repeated until a correct response was obtained. The activities were structured and generally focused on speech and sound recognition.

I could not help but wonder what Tina’s thoughts were about the session as Amy considered it to be work. At the end of the session, Amy briefly explained the manual signing would eventually be reduced as Tina began to use her hearing more. Since Tina was at the early stages of post-cochlear implant, Amy would continue to prompt Tina with manual signs.


**Relationships between Family and Support Service Providers**

What do we want for our child and family? What do we want for Tina and her family? Those are the questions printed on top of the Individualized Family Service Plan (IFSP) form. The IFSP was reviewed every three months, and all decisions and outcome of the meetings were documented and copies were given to all concerned parties. Mother kept her copy neatly in a three-ring-binder with the rest of the letters and documentation related to Tina.

The planning and implementation of an IFSP is to promote extensive family involvement in language development and education related to early intervention. The success of the plan depends on the relationships established between support service providers and the family. The aim of this section is to explore the relationship between the family and support service professionals.

To understand further about the provision of support services to Tina and her family, it is essential to know the goals and expectations of all concerned parties, and the strategies utilized to achieve them. The goals and expectations determined the strategies and support needed. The IFSP, which is mandated, was a collaborative effort between Mother and home-based early intervention professionals. The meetings were conducted at home. The presentation of these data is also to provide a better understanding between the activities conducted by professionals and the IFSP goals (Further information see Appendix C). The IFSP goals and expectations and participating members for the year 2001 will be presented in chronological order.
**Individualized Family Service Plan for Tina**

Table 3.3 IFSP March 27, 2001

<table>
<thead>
<tr>
<th>Goals/Expectations</th>
<th>Strategies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Find a summer program for Joe</td>
<td>Locate camp options for deaf children.</td>
</tr>
<tr>
<td></td>
<td>Complete Stepping Stones application and financial aid application for Joe.</td>
</tr>
<tr>
<td>Talk to another mum with deaf children</td>
<td>Locate another mum with deaf children.</td>
</tr>
<tr>
<td></td>
<td>Set up a time and place for Mother to make contact with another mum.</td>
</tr>
<tr>
<td>Getting a smoke detector for hearing impaired people.</td>
<td>Contact fire department to locate a smoke detector.</td>
</tr>
<tr>
<td></td>
<td>Make arrangements to pick up or accept smoke detector.</td>
</tr>
<tr>
<td>Tina will identify environmental sounds by pointing or</td>
<td>Play games to match environmental sounds with their source.</td>
</tr>
<tr>
<td>going towards source of sound</td>
<td>Take Tina to source of the sound or point out source of environmental</td>
</tr>
<tr>
<td></td>
<td>sounds when they occur in the home or in the community.</td>
</tr>
</tbody>
</table>
Table 3.4: IFSP May 30, 2001

<table>
<thead>
<tr>
<th>Present: Not documented</th>
</tr>
</thead>
<tbody>
<tr>
<td>Goals/Expectations</td>
</tr>
<tr>
<td>We want Tina to increase her sign vocabulary</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>We want Tina to get her cochlear implant</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Tina and her family will participate in EI services with a certified EI specialist</td>
</tr>
</tbody>
</table>
Table 3.5: IFSP August 14, 2001

<table>
<thead>
<tr>
<th>Goals/Expectations</th>
<th>Strategies</th>
</tr>
</thead>
<tbody>
<tr>
<td>We want Tina to use the potty so we can stop using diapers</td>
<td>Tina brings mum a diaper and wipes when she is soiled. She has gone on the potty one time. Try to put Tina on the potty every hour. (Currently Tina sits on the potty without going)</td>
</tr>
<tr>
<td>We want Tina to start using her voice to tell us things.</td>
<td>Currently, Tina has said “ma” for mum. Continue aural rehabilitation with children’s hospital and school. Goes to toddler program Monday to Friday all day starting next week. Transition is an issue. Family wants school district to provide transport at age three.</td>
</tr>
</tbody>
</table>
### Table 3.6: IFSP November 13, 2001

Present: Mother, EI Parent coordinator, Sally; EI Service coordinator, Ruby; school SLP, Primary teacher/Sign language instructor.

<table>
<thead>
<tr>
<th>Goals/Expectations</th>
<th>Strategies</th>
</tr>
</thead>
<tbody>
<tr>
<td>We want to find out if Tina’s implant is working.</td>
<td>Request a meeting with someone from Clarion to do a mapping for Tina’s implant.</td>
</tr>
<tr>
<td>We want to begin discussing preschool services for Tina.</td>
<td>Meet to discuss preschool transition process.</td>
</tr>
<tr>
<td></td>
<td>Complete Preschool Request for Assistance for District Schools.</td>
</tr>
<tr>
<td>We want Tina to respond to sounds, including our voices</td>
<td>Ask audiology staff about getting another aural rehabilitation therapist.</td>
</tr>
<tr>
<td></td>
<td>Ask audiology staff about sending an aural rehabilitation therapist to satellite hospital to work with Tina.</td>
</tr>
<tr>
<td></td>
<td>Attend weekly aural rehabilitation.</td>
</tr>
<tr>
<td>We want Tina to use voice to communicate in addition to her signs</td>
<td>Continue speech therapy at school.</td>
</tr>
<tr>
<td></td>
<td>Contact satellite hospital to sign up Tina for speech therapy.</td>
</tr>
<tr>
<td></td>
<td>Model signs and oral communication in daily routines and activities.</td>
</tr>
<tr>
<td></td>
<td>Use speech viewer computer program to stimulate speech sounds for Tina.</td>
</tr>
</tbody>
</table>
Table 3.7: IFSP February 21, 2002

<table>
<thead>
<tr>
<th>Goals/Expectations</th>
<th>Strategies</th>
</tr>
</thead>
<tbody>
<tr>
<td>We want Tina to attend preschool at the same school with transportation from school district</td>
<td>Complete school district registration form and return to the diagnostic team. Schedule MFEE with school district. Attend IEP with family.</td>
</tr>
</tbody>
</table>

**Mother- Member of the Collaboration Team**

The members who participating in the planning and implementation of the IFSP consisted of Mother and the home-based Early Intervention professionals. These professionals acknowledged that Mother was overwhelmed by the task of taking care of all the children’s needs. Some of the concerns might seem trivial to an outsider but they were driven by the needs in the immediate environment and circumstances surrounding the family. For instance, one of Mother’s main concerns was the safety of her children. She stressed that many times when I visited the family and that was observed in her actions and words. She wanted a smoke detector for hearing-impaired people, because she did not want her children to be trapped in a situation if the house or neighboring houses caught fire. Concerns such as these were genuine to the family and were addressed by the team.

Some goals took longer than others to achieve, and there were some that were on-going goals for the entire year. For instance, one of the goals set up on March 17, 2001 was Tina would be able to identify environmental sounds by pointing or going towards source of sounds. By March when the IFSP was reviewed for the first time, Sally was still working on the goal. Again
in August, for the second IFSP review, Sally was still working on common sounds such as phone ringing and door knocking, although Tina responded to her name.

Mother loved working with the home-based early intervention specialists, Sally and Maggie. The service was family focused, which meant the parents were consulted with relation to their concerns and goals for the child and family. The IFSP (mentioned earlier) was driven by the family’s concerns and the concerns included aspects of toilet training and home safety, that were immediate needs that needed to be addressed before the language and cognitive aspects. Mother played an active part as she was consulted at every step of the family focused early intervention program. She contributed in planning as well as implementing it. She sat in with Tina at every home session and her observations of Tina were considered valid and used as data for the next progressive plan of development. The philosophy of home based early intervention is parents know what is best for their children.

However, in aural rehabilitation, Mother was rarely asked for feedback or given a checklist to help her organize her observations of her children. Tina’s communication competence or language development was measured at the weekly sessions and Mother was told to talk more to Tina, “insinuating I don’t talk to her at home,” said Mother. This lack of parental consultation and ownership was evident in the treatment goals mapped out by the speech/language pathologist (SLP) at the hospital on August 25, 2001. According to the SLP, the treatment goals were “established to improve the necessary performance components required for functional skills typical of Tina’s age or developmental level.” The goals were set up not according to Tina’s abilities or interests with input from Mother, but to the necessary skills required of any child that was of Tina’s age. The SLP presented the goals to Mother when she brought Tina in for speech therapy one day and requested her signature on the form. Mother
described this relationship as “stressful and harassment,” but she could not turn to any another alternative agency to provide this particular service. She continued driving Joe and Tina (with the rest of the children) for their weekly aural rehabilitation therapy but the experience has left her wary of the professionals’ intentions and actions.

*Expectations and Goals for the Children*

“I just want them to have a wonderful life and the best they can have,” Mother said, referring to her three children, in our first meeting on June 12, 2001. “Just that don’t be held back. Some people are. I have one person who just can’t do this and they can’t do that. They just kept from doing what they want to do. Imagine, they just do it. I don’t want anybody to stop them. I want to let them know they can just go ahead. If they want to be a painter or a truck driver, or a construction worker or a teacher . . . . anything. I want them to know they can just do anything they want. They don’t get to just sit in a corner just because they are deaf.” This ideal did not change when I met her again on February 26, 2002. When she was told to write what her concerns were and what she was interested in for her child, Mother wrote, “Getting all the help she can receive, . . . it’s sign language, speech, cognitive skills, motor skills, connection with sounds,” on the IFSP form on May 24, 2001. She wanted her children to receive as much support as possible. She accepted all kinds of help and support from various public and private agencies, which she felt would benefit Tina. She was in contact with a non-profit church organization that offered various services including a reading program for young deaf children. A deaf adult would visit the home and read to Tina and Joe. This went on throughout the summer months.

She wanted Joe to be involved in a summer camp, to be exposed to similar experiences normal children have. The only drawback was financial availability. Information about summer
camps for the deaf was obtained and application for financial aid was forwarded to various agencies. However, the plans were cancelled by the end of May as the camp was located 30 miles away and transportation was problem. However, Joe managed to attend field trips organized by the church organization and family groups.

When this study began in June 2001, the provision of support services included the surgeon, who later performed the cochlear implant, a sign language instructor who came to the house, an aural rehabilitation therapist, a speech/language pathologist, an audiologist, an Early Intervention coordinator, an Early Interventionist specialist from the Department of Mental Retardation and Developmental Disabilities, and a parent coordinator from the state Department of Health. In addition, there were sign language classes in the summer, and a summer toddler program. By August 2001, when school started for Tina, the sign language classes both at home and at school ended. Speech/language therapy moved to Saturdays but was later cancelled. Audiology sessions were reduced after the cochlear implant. Mapping appointments were scheduled only when needed. The services that resumed as usual were aural rehabilitation, the EI child and parent services and toddler program.

Coping with Challenges

Working with professionals from different agencies can be challenging. Mother, realized she had to adjust and be wary of professionals who were supposedly helping her. She received a letter from the hospital in November 2001 that left her in a state of shock for several days. The letter was delivered to her home by a courier service on Thursday, the day after Joe’s and Tina’s aural rehabilitation therapy. The content of the letter admonished the parents for failure to adhere to the guidelines set by the hospital on regular attendance at speech and aural rehabilitation
sessions, and regular device use. The number of therapy sessions Joe and Tina attended, cancelled, and were late for were highlighted, but Mother questioned its accuracy. “What about the sessions cancelled by the therapist herself?” asked Mother angrily and she later added, “I can’t control the traffic on the expressway.” The letter further stated that the hospital was concerned the “children have come to appointments very late, without devices operational, without their communication notebooks and not properly fed.” An alternative arrangement was suggested in which Joe and Tina could attend increased speech therapy at school but aural rehabilitation at the hospital was “not negotiable.” Eight new regulations (effective the following week upon receipt of the letter) were laid down for the family, which the cochlear implant team felt very strongly were “essential for the children to be successful.” The regulations were the following (as stated verbatim in the letter):

1) speech therapy: either in an increased amount at school or once a week at the hospital and school.

2) Aural Rehabilitation: once a week at the hospital with home exercises completed weekly.

3) Of the next 8 Speech Therapy sessions, 7 must be attended. The missed appointment must be for an emergency.

4) Of the next 8 Aural Rehabilitation sessions, 7 must be attended. The missed appointment must be for an emergency.

5) Any “homework” assigned by a therapist must be completed.

6) Devices must be worn during all waking hours (unless danger or damage would occur) and operational.

7) Communication notebooks must be at each session for each child.
8) Must arrive for appointments on time. If arrival more than 10 minutes after appointment time, no session will be held and it will be considered a non-attended session. Habitual lateness will not be allowed.

The letter ended with “if you choose not to do so and no valid reasons are given to us, we are required by law to make a report to 241-KIDS.” Mother was in a state of shock, which eventually changed to anger when she later found out that the hospital personnel, the speech/language pathologists from the school, and the nurse met in school a week prior to the letter to discuss about the Joe and Tina, without Mother being present at the meeting. “The purpose of the meeting was to file a whole bunch. . . . . instead of writing down the positive, they want to write down all the negative so that they can have proof , Oh you see how horrible she is. It wasn’t for to help me or my children. It was to see how they can make me look bad. That’s all it was,” said Mother, several days after the letter. I left repeated messages with Tina’s aural rehabilitation therapist to set up meetings with the intention to understand her work with Tina and if possible a response to this incident but I never heard from her. The letter was the height of a rising tension between the family and hospital personnel. This incident created a chain of events that eventually died down but left a bad taste in Mother’s mouth.

A strained relationship with the hospital started in 1999 when Mother’s first request for a cochlear implant for Joe was denied by the cochlear implant team. The family was not viewed as being a supportive family, and this was measured by the many appointments they had missed, Joe’s age, and the fact that he did not pass the screening tests. Lastly, the socio-economic status of the family was a major factor that categorized them ineligible. The relationship became further strained in January 2001, several months after Tina was identified with a hearing loss, when Mother again requested a cochlear implant for Joe and one for Tina. The second time she
met a pediatrician who was relatively new to the hospital and he was willing to help with her request. Another screening test was administered to Joe and he passed it. So through another center affiliated with the hospital, Joe received his cochlear implant in May 2001 and Tina in June 2001.

Two weeks after the letter incident, Mother decided to take her children to another aural rehabilitation service provider. She made a few phone calls to a few centers and was told that another hospital, nearer to her house, was willing to provide that particular service. Mother was exhilarated by the idea of not having to deal with the previous hospital. She notified Sally of her plans and with Sally’s support, Mother made a formal request for a transfer to another medical center and eagerly awaited a reply. Her happiness was short lived because the medical center was a satellite branch of the original hospital and the same therapists serviced both places. So Tina and Joe would still be under the same therapists and Mother would still have to deal with them.

This incident is presented for the purpose of describing the family’s experiences with service providers and the roles Mother played in the child-professional subsystem. The impact service providers have on families when rapport is established or a lack of it can have emotional and social repercussion on the child receiving support. The rigid hierarchies and structures of a traditional institution have a predetermined set of skills and regulations that didn’t have room to accommodate complex family structure. It didn’t allow Tina and her family to become actively involved in the planning process to help shape the implementation of therapy. Mother was never consulted and was never given a chance to have shared ownership. Instead, the family was reduced to just being followers of regulations and guidelines governed by the service professionals.
Treatment and IFSP goals are not binding regulations to which the family and professionals have to adhere. Rather, they are working guidelines to help achieve a certain set of expectations. The expectations between Mother and professionals differed in several aspects. The differences came about from two different perceptions: from the parent and professionals.

For instance, Tina’s schoolteachers had seen signs of frustrations in her and it was attributed to her inability to “communicate with the world.” “She struggles with the fact that she can’t effectively get out and get in what she needs to get in and out,” said Peggy. There was an urgent need to help her establish a communication method that would focus on a “more solid formal language foundation” which would enhance her communication competence. The teachers’ goal was ‘to get a more formal language base with her’ before she entered preschool. They felt the urgency to do this because there was not much time left before she went into a preschool setting. The urgent need was driven by Tina’s age; there were standards that she had to achieve before she entered preschool. The mother, on the other hand was pleased with Tina’s oral language development, considering her age, the “adventures” she experienced from the implant to the head accident and her failure to respond to sounds after that.

The school teachers felt the urgency to capture that “window of opportunity” and help Tina build up her language and communication competence as Tina was still in the mimicking and imitation stage. Tina was expected to produce some manual signs for object words as an indication to request or to initiate topics. Pointing was not accepted as each time Tina pointed at objects she would be taught the manual signs for the objects. Many times the objects requested would not be given until she could produce the manual signs for them. Whereas, Mother was more concerned if Tina was saying words such as “Ma Ma” or “’ye bye” in different social
contexts such as the school because she has heard Tina verbalized those words at home. Sometimes, she felt they were too critical of Tina’s communication abilities.

Obviously, Mother and the school teachers did not have the same agenda as far as Tina’s language and communication development were concerned. Tina’s communication performance differed in school and at home. The physical setting definitely was a significant factor to consider when measuring Tina’s communication competency. The school environment and activities were two contexts that were different from the physical context at home. The children were never allowed to play outside in the home setting and were never given an opportunity to talk about leaves and moths. The home environment was a smaller physical space where the children were constantly finding ways to entertain themselves. They engaged in interactive play.

This brings us to the next point where the social context was another factor that determined Tina’s behavior. She had two older brothers and two older cousins at home who were always initiating interactive play. In many play instances, Tina was seen as the follower and not an initiator. Although she contributed her share as a member of the social group, there were older siblings to guide her, for her to imitate and follow. At school she was with her age peers who were beginning to learn to construct joint play activities. She was seen engaged in solitary activities as she explored and manipulated the play objects. Assuming once she has good control and manipulation of the play materials, she would then move out of that area and engage in more sociable behaviors with her peers. Further observation would be needed.

Once Mother told me that “taking care of children is easy.” She added, “we take it one day at a time.” She knew whatever her goals were for her children, they had to be short term goals because they change frequently. This came about from her experience with Tina, the head accident at the supermarket, financial situation at home and daily routine of the other children.
She lived her life from one day to another with the children. She was asked if she knew how to help Tina to be successful. Her response was she did not know what Tina’s future would be like but she knew Tina has to be given as much support as possible. Hence Mother’s decision to accept as much support as possible from various early intervention agencies because “everybody don’t see stuff like I see stuff.” Furthermore, she attributed her enthusiasm and optimism about her children’s future and welfare to her faith and trust in God.

The professionals were governed by the treatment and IFSP goals established at the beginning of the year. The goals were the cornerstone of early intervention for a deaf child and her family. Although they were reviewed every three or four months, some of the goals would seem unrealistic due to the changes that had occurred in the family recently. To wait for the next review would make the early intervention services ineffective, for instance, the accident that led to Tina’s non-responsiveness to sounds. While waiting for the IFSP goals to be reviewed, one can’t help but to question how much Tina benefited from the aural rehabilitation and speech/language therapies. The family and professionals are definitely operating from two conflicting dimensions.

Postscript

After I exited from the research site, Mother and I continued to keep in contact. She would keep me updated with the progress of the children, especially Tina. The school speech/language pathologist and school noticed Tina was still not responding to loud sounds and to her name. Upon their advice, Mother took her to the audiologist again. Tina’s lack of response was a result of a malfunctioning cochlear implant. The recommendation was to perform another
corrective surgery. Mother refused to consent to another surgery because she was concerned about post-surgery complications. “Tina will be a signing child.”
CHAPTER IV

SUMMARY AND DISCUSSION

This chapter summarizes the findings of this study and discusses the results as they relate to the current literature. The implications of study in both theoretical and practical context and the limitations of the study also will be discussed. The chapter concludes with implications for future research.

Summary

The purpose of the study was to describe the interactions and social contexts of a family with three children, two of whom are deaf, and the family’s relationships with early intervention professionals – from a family systems theory perspective. An qualitative approach was used.

The family consisted of a father, a mother, two older boys and a girl. Mother was the primary caregiver and in addition to taking care of her children, she baby-sat extended family members, two young female cousins, a young niece and a nephew, who effectively became part of the family. This family was selected to participate in this study on the basis of their social status – a working class African American family.

The initial focus of the study was on the youngest child of the family, Tina. She was 25 months of age when the study began. She was identified with bilateral severe to profound sensorineural hearing loss when she was seventeen months old. She was fitted with binaural hearing aids when she was eighteen months old. Although Tina’s oldest
brother also had bilateral sensorineural hearing loss, Tina was the focus of the study because she was receiving early intervention support services. However, the focus shifted to the family as a whole, and its interaction with early intervention professionals.

The data were collected over a period of nine months – June 2001 to February 2002. These included field notes, videotapes of the family members’ interaction among themselves and with early intervention professionals, and audiotaped interviews with the Mother and early intervention professionals. Additional knowledge about the family came about by being a participant observer at the home and at the centers where early intervention services were provided. Repeated viewing revealed typical interaction dynamics within the familial subsystems, parent-children and sibling subsystem.

Research Question Revisited

1. What do we know about the social interactions of two deaf children and their family from a family systems perspective?

There were obviously two subsystems in the family: the sibling subsystem and parent-child/children subsystem. The sibling system was observed engaging in a variety of social activities. Like every family with more than one child, sibling influence is relevant to help scaffold a child’s social competence. With help from older siblings, younger siblings respond more positively to prosocial behavior and have a larger repertoire of social skills (Pepler, Abramovitch & Corter, 1981). This reinforces the suggestion that siblings play an important role in one another’s social lives. The Linford children were engaged in perpetual interaction. In fact, they created their own social environment at home. The interaction was characterized by 1)
common play activity, 2) adherence to social rules, 3) maintenance of membership in the social group and 4) communication strategies.

The children’s play activities were unstructured and without fixed scripts. The children just made up the script as the activity evolved to accommodate younger children. The play activities were so simple that anybody could initiate play, regardless of age, birth order, gender and size. In addition, the activities of the children were action-oriented, which required very little verbal language to be understood. Tina was obviously a participant and member of this intricate social network. She displayed social competence by using communicative strategies to gain entry into play activities, despite the large membership in the play group, both in numbers and variation in the ages of the members, by imitating play behavior (Corsaro, 1994) and using similar objects (Elgas et al., 1988). For instance, the summer afternoon the children were playing in the basement, she imitated the other children’s play behavior. She also used drawing to gain entry into the children’s social activity.

The social rules in the household were implicitly laid out by Mother, when she laid down the ground rules for appropriate play behaviors. For instance, she reprimanded Seth for playing rough, sending a message that rough play was not allowed in the household and that should become a rule among the children. Disruptive members of the group knew when to excuse himself or herself for a short period of time to chill out before he or she could rejoin the group later. It appeared the children would rather self-initiate time out than to be ordered out of the group. Outcomes of conflicts were never questioned or challenged by any member of the group, indicating an understanding of the hierarchical power in the sibling subsystem. The children were given opportunities to resolve their own conflicts and disagreements among themselves. However, conflicts that were volatile were subject to intervention from Mother. Tina understood
the pecking order of the social group and knew when not to challenge the ‘authority’ of the older group member. This was documented when Tina tried to retrieve the toy vehicle from Joe after Seth took it from her at the kitchen during meal time. She was engaged in disputes and squabbles with her siblings and even attempted to manipulate Mother’s decision when it went against her wishes. In all the documented observations and interviews, Tina as one of the youngest member of the social group, rarely initiated any play activities with her siblings. She was a follower and she received visual and tactile cues from her siblings. She looked to her siblings for instructions.

Interactions with older siblings provided Tina the experience and skills to be competence as a communicator despite her limited language abilities. The communication modes across the group appeared to be verbal accompanied by gestures, pointing, facial expressions and tapping on the shoulder to get attention. Special treatment was never an issue as everybody was treated equally. Although Tina’s signs were still at the one-word stage or even gesture stage, she competently used her facial expressions, body language and gestures to communicate her needs and intentions. Her siblings provided enough visual cues for her to understand the social dynamics and to be a member of the social group. She imitated their play behaviors and followed the lead of the older children. As a result, she showed accurate interpretations of the given cues. Her play behaviors were the outcomes of what she already knew about the social rules in a familiar environment resulting from sibling modeling.

Membership in the social group was the utmost important aspect of the social experience. To be in the midst of the action, to read the rules of the physical settings and to situate physically within the play vicinity were some of the strategies to be a part of the membership and to maintain membership. Tina was seen using the strategies consistently to gain membership.
Tina’s attempts to be a member in every social scenario suggested that membership was a priority for her.

The children were often seen engaged in reading and writing activities. They were done as a group and in solitary play. Tina was seen looking/reading a book alone on several occasions. As a group, reading and writing were social activities in which the children could share a common activity in close proximity with one another. Mother encouraged the activities as a learning practice for Tina to reinforce her pre-literacy skills, such as page turning, pencil manipulation, eye-hand coordination or just to instill the habit of reading and writing. The children, especially Tina, used reading and writing practices as a tool to gain entry and initiate interaction. It was observed, she invited Jessie to interact with her around a book. To the children, reading and writing were social tools to be used to initiate and maintain membership of the social group.

*Mother’s Roles*

Mother’s multiple social roles at home were structured to accommodate the social experiences of the children. The pertinent roles were usually identified with labels used to designate various social positions in a (home) culture (Bronfenbrenner, 1979). Basically, the multiple roles Mother adopted pertained to two categories: roles determined by the content of the activities and roles outlined by her relations with her children. In the first category, she adopted roles such as a caregiver, a supervisor, a protector, a spectator and a disciplinarian. She demonstrated these roles with the children when they were in large social groups. However, when there were fewer children, her relationship with her children changed to include roles such as a teacher, a mediator, a communicator and an interpreter.
Apart from her responsibilities in the presence of the children, she was also the decision maker as far as educational and medical decisions for her children. Frequently, her decisions were based on her values, belief system and her expectations of her children. Her values were not aligned with those of the professionals; she wanted to provide all possible opportunities for her children to attain a wonderful life but the professionals’ goals were to work on verbal communication and literacy skills. As a result, the professionals perceived Mother as overwhelmed with responsibilities she could not fulfill. Because Tina was not making significant progress in auditory and speech performance, the professionals, especially centered-based professionals, assumed she was not spending enough time with her deaf children.

Although professionals claimed to support the family, the question remained how much of the support was based on shared responsibility. The intervention professionals supposedly facilitated and supported Mother in making informed decisions, but in several cases the amount of information Mother had with which to make decisions was questionable. Calderon, Bargones and Sidman (1998) claim that too frequently parents of deaf children are placed in the position to make decisions for their children based on the information or opinion presented as dogma. It may be too difficult for parents to become full participating partners in the process of teaching their children communicating skills due to time limitation and the controversy surrounding deafness.

*The Open Concept in Family System.*

Families have long term and short term goals in place to guide them through the stream of live. To accomplish these goals, families need to monitor progress to ensure they are on the planned trajectory. Goals are more prominent in families with deaf children as early intervention professionals together with parents should generate and document the Individualized Family Service Plans (IFSP). The plan is revisited every three months to update the needs of the family.
and to rework the goals if needed. Although three months seem to be a short and reasonable period of time, for working class families who operate within tight financial constraints, such goals may be challenging. As seen in this family, economic difficulties determined the family’s priorities. For instance, the lack of money for the week to purchase gasoline for the family car, affected Tina’s and Seth’s school attendance for the week. Events similar to this are a reality for working class families. Unfortunately, professionals or even outsiders did not seem understand this aspect or empathize with the families over the predicament. Instead, the mother was perceived as lacking in commitment, being irresponsible and negligent at worst.

In the short period of five months, several major events occurred that proved the open nature of the family: Tina’s cochlear implant surgery (Joe went for his a month prior to the study); ten days of hospitalization from post-surgery complications; transition for Tina into a toddler pre-school program and driving Tina and Seth to school; regular home-based early intervention specialists, speech/language pathologist and aural rehabilitation appointments; escalation of tension between Mother (family) and aural rehabilitation service; Tina’s head accident; Tina’s several appointments with the pediatrician as a result of the accident; difficulty in getting Tina’s cochlear implant remapped; transition training for Mother and Tina to pre-school program and termination of early intervention service; Tina’s bus transportation and IEP meeting arrangements.

The children’s interaction pattern, prosocial, aggression and antagonistic behaviors as discussed, confirm the findings of previous studies on sibling relationship conducted by Abramovitch et al (1982), Dunn and Kendriks (1979, 1982), Lamb (1982), Teti, Bond and Gibbs (1986) to name a few. The capabilities of siblings in exhibiting these behaviors are well documented. However, the context in which these behaviors occur must be described, in which
this study has provided. In addition, the context of the family interaction is dictated by the values, home culture and belief system of the parent(s) or primary caregiver. As the evidence indicates, Mother’s belief system and values implicitly established the rules, regulations and the appropriate ways to interact by setting up the play parameters, encouraging positive behaviors, and reprimanding inappropriate behaviors. The primary caregiver structured the sibling subsystem based on her interpretation of the expectations of her culture. To understand families, factors pertaining to home culture, values and belief systems should not be ignored.

The structure of the sibling subsystem, which is dictated by the parent(s) or caregiver, seems to indicate it is a subset of the larger parental subsystem, as oppose to being a separate entity with overlapping boundaries with the other subsystems within the family as suggested by family system theorists (Bowen, 1988; Minuchin, 1974). As the sibling subsystem is embedded in the parental subsystem, appropriate early intervention services should be provided to the whole family. The approach to the provision of early intervention should very much be guided by factors pertaining to family belief structures, and cultural values.

Mother – child joint activities in which mother spent more time with younger children with disabilities was not observed in this family. The number of children in the household did not permit frequent mother – single child joint activities. Mother appeared to spend more time with the children in smaller social groups, where she was able to adopt multiple roles that were different than when she was with the children in larger social groups.
2. What can we learn about the relationships between a family with two deaf children and early intervention professionals?

Home-based service is the core of any early intervention program, to work with families and equip them with feasible strategies and techniques to support their deaf children. Home-based service consists of two components: parent-centered and child-centered. In a survey on early intervention programs conducted by Stredler-Brown and Arehart (2000), 91% of the 500 surveys received reported a parent-centered component in their programs and 93% reported child-centered component.

The family system consists of subsystems that are interconnected and interdependent on each other, and nested in an arrangement of concentric structures. These subsystems in the “microsystem is a pattern of activities, roles, and interpersonal relations experienced by the developing person in a given setting with particular physical and material characteristics” (Bronfenbrenner, 1979, p.22). However, the child/family-professional subsystem which is in the mesosystem might attempt to take precedent over many of the functions of the microsystem. The child-professional subsystem had a prominent position in the family system, although it was an extension of the microsystems. Obviously, in this family with deaf children, the parental and sibling subsystems revolved around the child-professional subsystem. It was evident in the schedule of this family; home-based early intervention sessions, school and. weekly aural rehabilitation therapy and speech language therapy.

The home-based intervention services, delivered by the Department of Health and the Department of Mental Retardation and Developmental Disabilities, attempted to tailor the services to the unique needs of the family. Mother was a member of the team and was actively
involved in the development of the Individualized Family Service Plan (IFSP). Since the IFSP was based on the philosophy of family empowerment, Mother was supported as major decision maker and better controller of her child’s home-based early intervention program. She sat with Tina when the professionals worked with her. However, her level of involvement seemed to suggest that she was following the professionals’ lead and not showing high level of confidence or independent knowledge (Calderon et al., 1998), which seemed to indicate that Mother might have been provided with inadequate information regarding key issues.

This issue was addressed in a study of families’ perception on early intervention services conducted by Harrison, Dannhardt and Roush (1996). They reported when parents were asked about information regarding the effects of deafness on speech and oral language development, one–fifth of them reported they had not been provided with the information. So although Mother was an active member of the IFSP team and she did receive support in making decisions from the home-based service providers, her decisions might have been based on inadequate information regarding language and communication development, cultural aspects of deafness and other omissions.

Mother’s relationships with home–based early intervention specialists were at a more personal level as opposed to the relationship with center-based early intervention service providers. Home–based interactions were less stressful for Tina as she was in a familiar environment and she was able to receive support or cues from her mother and siblings from the periphery. On the other hand, she did not receive any support or cues during clinical therapies. The results from the study showed that early intervention professionals who worked with Tina situated themselves in a particular space and time. They created the space and time, either at the center or at home, to accomplish the agreed treatment goals or family plan, which were task
oriented. Tina’s prior experience was not acknowledged or recognized and supported with new experiences as the focus was on the planned goals for the session.

The home-based specialists had the opportunity to witness the home environment and they understood Mother’s circumstances and efforts; hence, they were less critical of her. In addition, their expectations and standards for Mother and Tina were not demanding or unrealistic. However, the situated space and time of early intervention services, for instance, limited visits of one to two hours, both at home and at the center, prohibited the professionals from fully understanding the family’s lifestyle in reality, the support of Tina’s siblings gave to her, and the multiple roles Mother adopted at home. It was almost like a “performance” set up for that block of time as in the evidence that Tina was always dressed up to work with the professionals. So in that restricted environment, Mother’s roles were reduced to just being a spectator and an imitator.

Of all the early intervention professionals serving the family, the relationship between the family and the center-based service providers was the most strained. This is caused by obvious misconnections between the delivery of service by professionals and the perception of the service by the family. The mismatches were caused by 1) different interaction structure between home and institutions, 2) indifference to the family cultural and belief structures, 3) different expectations/standards and 4) lack of collaboration and genuine communication.

The most obvious mismatch was the difference in interaction structures. The results from the study indicated that interaction dynamics in the family, between Tina and her family members differ from interactions between her and the early intervention professionals. The mother-child interaction or sibling-child interactions occurred with the presence of one or more siblings. The second order effect was extremely high in this family. Hence, Tina had never been
involved in dyadic interactions. Tina’s behaviors were related to interactive situations with her siblings, created from an outcome of a previous interaction. For instance, Tina’s attempt to engage Joe in a game of catch was initiated by an earlier interaction between Joe and T.N. in the sitting room. Thus the interactions were circular in nature. However, Tina’s interaction experiences with early intervention professionals had been in dyadic situations. Although the home–based intervention services were conducted in the presence of the mother and sometimes the siblings, the interactions were linear and emulate a conduit model; the service providers initiated the interactions and Tina responded. Tina’s responses were evaluated and would be rewarded with either a verbal or non-verbal gesture of approval. The professionals and Tina would repeat the interaction exchange several times before they shift to another activity. Mother and siblings participated at a minimal level, either upon invitation or often acted as spectators. The communication styles between Tina and her Mother and Tina and her siblings that occurred at home did not fit the communication styles between Tina and the early intervention professionals. The home situation made it impossible for Mother work with Tina on a one-on-one basis, a model favored by the professionals.

The second reason for the mismatch is cultural routines and belief structures influence social and communicative development. Tina’s understanding of the social environment was obtained by imitating and following the behaviors of her older siblings. The familiar physical setting, routines and the people in her immediate environment created a sense of security for her to focus on learning. When the personal security elements were missing in the environment, her learning was affected. When she was taken into an unfamiliar setting alone with a professional, and asked to engage in a dyadic interaction, she became lost, uncooperative and refused to engage in any activities. As a result, she was perceived as lacking in progress.
Third, the family’s expectations from the service provided were different from professionals. Mother’s perception of Tina’s development was based on intimate knowledge of her actual development as opposed to the professionals’ expectations based on her chronological age. The results showed a lack of shared information or parental involvement. This frequently created misunderstanding by the center-based professionals. Mother expected Tina’s development to be progressive, and since she has seen Tina’s communication abilities in a variety of settings, she was confident Tina would go through the milestones when she was ready. However, the professionals’ expectations of Tina’s development were based on her chronological age. Since Tina appeared not to have reached the developmental milestones, Mother was judged as not putting enough effort into teaching Tina manual signs and not engaging her in verbal interaction. It appeared the professionals’ were attempting to create a “typical profile” of a child with deafness, and this became a source of estrangement.

Furthermore, the clinic professionals ignorance of the family’s home environment, economic challenges, and the lack of cultural sensitivity created conflicts that dampened Mother’s enthusiastic participation. At worse, Mother’s role in this relationship was reduced to just being a chauffer. The suggestions and demands put on Mother seemed unrealistic and unfeasible. For instance, the weekly homework assignments given by the aural rehabilitation therapists or the sound recognition exercise at home. Home assignments do not relate to higher outcomes (Martineau et al., 2001) and the sound recognition activity as suggested would be highly impossible to conduct in relation to the home social situations. Sensitivity and appreciation of diversity in families are important, as early intervention services must be shaped to the child and family’s profile (Calderon, Bargones & Sidman, 1998).
Finally, the study clearly showed there was a lack of interagency collaborative planning of services among early intervention professionals from the different disciplines. It was obvious each professional was “on a different page” with Tina and seemed oblivious to what others were doing. For example, the child-centered early intervention service terminated its service because of duplication of services. Theoretically, Tina’s toddler pre-school provided her with the teacher component of early intervention. As Tina was at school full-time, it was impossible to schedule home visits. If there had been interagency collaboration, or even communication between the respective professionals, it would be clear, as shown in the results, that the area of expertise and approach used by both professionals were vastly different but complementary. The home –based early intervention professional could change her delivery approach by helping Tina make connections between home and school activities at the school level. The Early Intervention Services Assessment Scale (EISAS), developed by Frank Porter Graham Child Development Center (2001), suggests collaborative work by the early intervention team members representing different disciplines and integration of activities to fit into the lives of the child and family are two characteristics defining high quality early intervention practices.

The professionals failed to view early intervention as a long term process in which a huge amount of family effort, time, money and emotion were invested. The effects of how the other family subsystems interplay in the process were ignored, which was a process that equipped the family with strategies and techniques to live with its deaf members. Furthermore, the academic training and the working experience of early intervention professionals were based on a traditional Western medical perspective, which looks at deafness as an ailment that needs to be treated. The lack of knowledge about home interactions, and culture, the strengths and needs of the family or family values and aspirations created a gulf in the provision of services and
hence a mismatch in communication with the family. Cultural variation may influence the effect that social development has on communicative development (Yoder, Warren, McCathren, & Leew, 1998). This was more apparent in the family’s relationship with the center-based professionals. Two glaring examples of communication mismatch were the lack of knowledge of the impact Tina’s siblings have on her and how meal time was carried out at home. First, if the aural rehabilitation specialist had known about her interaction styles of imitating and relying on visual cues from her siblings, she could have used an approach that approximated Tina’s interaction and learning styles as opposed to one that was stressful to both of them. The second example, meal time at home and at school were very different. Tina’s request for apples during lunch time at school was to meet her immediate need – to eat the apples. However, the teachers’ intent was to model language use and to teach new vocabulary. Due to a mismatch in communication intent, how much did Tina learn from the teacher? In addition, the professional system was a structure in which change was influenced by bureaucratic policy, and often politically motivated. So, change or the propensity to change was slow in comparison to the family system. Thus, the characteristics of both systems were at odds with each other from the onset.

The study shows that the rules and regulations in the child/family-professionals subsystem were structured by a rigid framework, resulting in a tense and stressful relationship. This subsystem dominated telling Mother what was required to communicate verbally with her deaf children or to state that Tina was not receiving ample verbal communication from her mother. She was expected to emulate the interactions between the professionals and her children when interacting with her children at home. When Mother was perceived as attempting to
deviate or refusing to adhere to the rules, she was reprimanded and threatened, as shown, in the incident with the letter.

Early intervention professionals need to make a serious commitment to adopt an ecological perspective that incorporates the child’s family, extended family and network of caregivers (Harrison et al, 1996). In addition, professionals have to be aware of the other issues related to families such as cultural and belief structures, parenting philosophy, socio-economic factors, finances and other factors. Clearly, there is a need to provide a environment that is conducive for parent-professional and inter-professional collaborations and strategies to resolve conflicts if they arise.

**Implications for Practitioners**

Results from the study have several implications. First, descriptive data indicated that the deaf toddler’s communicative and interactive behaviors vary in different settings. Familiar setting(s) and communication partners motivate higher level of response and communicative behaviors. Therefore, exploring communicative and interactive behaviors of the child in different social settings to gain a better understanding of child’s communication repertoire and to examine the impact of different social settings on behaviors are recommended. Accommodations to approximate environments familiar to a deaf child are also recommended. The environment entails physical set-up, materials and communication partners. Integrating home activities with activities at the center, such as reading, drawing and involving a sibling in the center-based therapy sessions, would be beneficial.

While several researchers acknowledged the effect home culture and practices have on learning and communication skills for school age children, less has been done to understand the
child and home cultures or home dynamics of mother-child and sibling-child in early intervention programs (Calderon et al., 1998; Guralnick, 1997). Results in this study suggest home cultures, values and family beliefs are essential factors since the family operates as a unit, and these factors all influence decision-making. Thus, understanding the individual family beliefs, values, priorities and cultural differences is a show of respect toward parental input and necessitates the delivery of services to the family as a whole unit rather than only to the child as a separate entity (Paget, 1991). As the population of children with deafness from minority groups increases, professionals should be aware of the cultural diversity in individual families, and utilize their strengths to build mutual trust and a sense of partnership with families.

The results indicate that early intervention programs were developed based on a static premise. The parent-centered program was designed to prepare parents to be fluent in the law pertaining to education, child development, different communication modes, deafness, hearing aids and/or cochlear implants, parenting skills and advocacy, all in less than three years. If early intervention programs should be a process, as suggested by Guralnick (1997), then parent education program should go through a process of transition, in which parents are guided, facilitated and supported into the roles expected of them. To include the transition component, both child and parent, early intervention should not terminate abruptly at the child’s third birthday, rather it should transition to the fourth birthday. The last year should be a transition period for both child and parent, in which early intervention professionals’ support and guide parents to working with school professionals.

Parents have a significant role in their child’s education and they have the knowledge and insights about their child’s strengths and abilities as well as knowing the child’s weaknesses and fears. Hence, parents are in a good position to judge the appropriateness of interventions and to
provide feedback on the outcomes of interventions. Professionals and practitioners have to open their ears and learn to listen to the voices of parents. They have to recognize that parents’ observations of their child are accurate most of the time. In addition, parents’ perception and philosophy might be different from that of the professionals. By listening and embracing the contributions of parents in their children’s education, miscommunication and mismatch as far as parents’ belief and aspiration are concerned can be minimized (Nicholson, Evans, Tellier-Robinson, & Aviles, 2001).

Early intervention programs should be tailored to meet the unique needs of individual families with deaf children or any child with disabilities. The results of this study suggest that professionals need to redefined the content of early intervention services and the provision of services in relation to family lifestyles, cultural differences, parenting styles, communication styles and family constellation. Intervention therapy should be done in a variety of settings with the child and family/parent, including, formal and informal settings to prepare the child and mother to make adaptations and accommodations as the child develops.

Implications for Future Research

The results in this study demonstrate the advantages of pursuing research using an ethnographic approach as it characteristically yields multifaceted findings that help discover unanticipated strengths, abilities, and coping strategies in the participants (Anzul, Evans, King & Tellier-Robinson, 2001). The ‘second generation’ research, as suggested by Guralnick (1997), that emphasizes going beyond discrete program factors, shows that systemic investigation can determine how early intervention can be beneficial to children with deafness and their families with regard to patterns of communication within the family, parenting philosophy, and other
factors. This approach reveals the complex human characteristics of family members, both as a unit as well as individual members with a genuine interest to find out “What’s going on here?” without any preconceived themes or categories. This opens up the unexpected.

Researchers and practitioners can gain much from reading qualitative studies. Narratives from such studies invite readers to experience the worlds of the participants, especially have an in-depth understanding of families from a family perspective (Evans, 1995). Through reading case studies of families, practitioners and educators may gain insights into the homes of children and their families and help them to redefine their own working situations. Although such studies do not permit generalization to the wider population, they can influence and guide practitioners toward developing educational programs based on the strengths of families and the knowledge children bring to the learning process, as suggested by Anzul et al; Gonzalez, Moll, Tenery, Rivera, Rendon, Gonzalez and Amanti (1995); Moll, Amanti, Neff and Gonzalez (1992).

Limitations of the Study

This study has been a description of an African American working class family with two deaf children, their parent/children relationships and their relationships with early intervention professionals. The descriptive accounts involved only the communication and interaction behaviors between mother and the children and among the children themselves. While this study was explored from a family systems perspective, descriptions of the father-children interactions and father-mother dyad interaction were not available. Another limitation was that I never had the opportunity to observe the core family, the communication behaviors of the parent and children without the presence of the cousins and extended family. Although the study was done using a family systems framework, further interviews with the center-based aural rehabilitation
therapist were not available. Further attempts to observe Tina with the aural rehabilitation therapist were not successful due to technical problems with Tina’s cochlear implant and unforeseen circumstances such as the escalation of the already tense relationship with Tina’s mother.

The time span of this research was not sufficient for true ethnographic study. A longer period of time is needed to examine the communication competence and language development of children with disabilities. Further, more time is needed to explore the children’s developmental stages, from the onset of development to acquisition stage. The conduciveness of a variety of social settings that encourage learning could be an area to be researched. The fluid nature of a family system, especially a family with children with disabilities, creates a high degree of unpredictability in family routines. The family could be overwhelmed by commitments related to early intervention and medical services and that could affect the data collection process, which I experienced with the Linford family. Data collection was interrupted when Tina was hospitalized and when it resumed five weeks later, I had to begin the entry process all over again. Longer time span and a consistent data collection routine should be considered in future studies.

There were other social settings that were not observed and documented such as the church, and extra curricular activities the children were involved in the summer. Future research could explore the communication patterns in social settings outside the home, where the activities were conducted by a person unfamiliar to the family. The coping strategies of the children as a group and individually could be examined in those settings.
REFERENCES


APPENDIX A

Sue Fan Foo  
Department of Special Education  
University of Cincinnati  
Cincinnati, Ohio 45221-0002

Interaction Behaviors Between Deaf Children and Their Siblings

Informed Consent

1. INTRODUCTION

Before agreeing to participate in this research study, it is important that the following explanation of the proposed project be read and understood. It describes the purpose, procedures, benefits, risks and discomforts and precautions of the study. It also describes the right to withdraw from the study at any time. It is important to understand that no guarantee or assurance can be made as to the results of the study.

2. PURPOSE OF THE STUDY

The purpose of this study is to describe the types of interaction that take place between older and younger siblings engaged in play. The study will also focus on the role of mother in the interaction. I, ______________________ agree to participate in this study and as the legal guardian of my children, ______________________, age ______, ______________________, age ______ and ______________________, age _______. I allow them to participate in the same study. I agree to be observed with my children.
3. METHOD

I understand that this study will include observations recorded on video-tape and in written field notes, and also audio-tape interviews with me and my children. The study will be conducted in my home, and I understand that the research will last for several months and that each observation will last from 1 to two hours. Scheduling will be flexible and will be at my convenience. No medical procedures will be used in this research. There are no foreseeable side effects, risks or discomfort involved in the investigating procedures. There will be no unnecessary interruptions in the daily routine of the children.

4. CONFIDENTIALITY

I understand that the information from the audio recorded interview is considered data for the study. The real names of the subjects in this study will be removed and will not be used in the reports, publications or in any discussions. Pseudonyms will be used instead. Only the principal researcher and the advisor will have access to the video and audiotapes. Excerpts of the videotape and interview will be transcribed and may be used to support study findings. The data and tapes will be kept by the principal investigator at the conclusion of the study and used in the investigator’s dissertation. In addition, I understand that I can have access to the data, video and audio tapes upon request.

Should there be any questions concerning any aspects of the study, I can direct the questions to the principal researcher, Sue Fan Foo (241-3996) or Dr. Richard Kretschmer, (556-4547) at Teachers College, University of Cincinnati.
5. POTENTIAL RISK AND BENEFITS

I understand that possible discomfort may result from discussing my thoughts and feelings regarding my participation in this study. This study might disrupt the routine of my children at home. Therefore, there is a risk involved with participation in this study. However, should this discomfort occur, I will have the right to determine whether I will continue to participate. With concerns regarding my interview, I also have the right to discuss my discomfort with the principal investigator.

6. COMPENSATION

The University of Cincinnati or the researcher will not compensate the participants in case of injury, provide any financial aid or stipend to the participants. I understand that my children and I will not be paid for participation in this study. My children and I agree to participate in this study on a voluntary basis.

7. THE RIGHT TO WITHDRAW

I understand that the participation of my children and I in this study is on a voluntary basis. I understand that data collection may be stopped at any time at my request and it can resume when circumstances allow my children and I to participate again. We are free to withdraw from this study at any time without undue embarrassment or difficulty and the data collected will not be used for any further study.
8. WITNESSES AND SIGNATURE

I, the undersigned, have understood the above explanation and given consent to my voluntary participation in the study mentioned above.

_______________________________________  ________________________
Signature of Participant      Date

_______________________________________  _______________________
Signature of Principal Investigator     Date
APPENDIX B

TINA’S WRITING AND DRAWING
Tina’s drawing of the sun
Tina’s name
Tina’s drawing of people
APPENDIX C

INDIVIDUALIZED FAMILY SERVICE PLAN
<table>
<thead>
<tr>
<th>What do we want for our child &amp; family?</th>
<th>Getting a smoke detector for hearing-impaired people</th>
</tr>
</thead>
<tbody>
<tr>
<td>(unknown) Date: 3/27/01</td>
<td></td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>What will we do to get there?</th>
<th>(strategies/activities)</th>
<th>Who will do it?</th>
<th>Payment Arrangements</th>
<th>When will we start?</th>
<th>How long will it take?</th>
<th>How are we doing? (progress report)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Contact fire department</td>
<td></td>
<td>R</td>
<td></td>
<td>3/27/01</td>
<td>2 weeks</td>
<td>5/3/01</td>
</tr>
<tr>
<td>to locate a smoke detector</td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td>5/3/01</td>
</tr>
<tr>
<td>Make arrangements to pick up or accept smoke detectors</td>
<td>R and mother</td>
<td></td>
<td></td>
<td>3/27/01</td>
<td>1 month</td>
<td>5/14/01</td>
</tr>
<tr>
<td>What do we want for our child &amp; family?</td>
<td>How will we identify environmental sounds by pointing or going towards source of sound?</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>What will we do to get there? (steps/goals/activities)</th>
<th>Who will do it? (services/supports/resources)</th>
<th>Payment Arrangement</th>
<th>When will we start?</th>
<th>How long will it take?</th>
<th>How are we doing? (progress notes)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Play games to match environmental sounds with their source</td>
<td>Parents</td>
<td>-</td>
<td>3/27/01</td>
<td>3 months</td>
<td>5/3/01</td>
</tr>
<tr>
<td>Take time to source of the sound or point out source of environmental sounds when they occur in the home or in the community.</td>
<td>Parents</td>
<td>-</td>
<td>3/27/01</td>
<td>ongoing</td>
<td>5/3/01</td>
</tr>
</tbody>
</table>

5% addressing this goal, she is still working on this goal.

[Signature]

She just had her implant turned on on 1/15/01 and is able to hear such sounds as such. She can hear people talking, children talking, and other common sounds such as the phone & door.

She responded to her name!!
<table>
<thead>
<tr>
<th>What do we want for Tina &amp; family?</th>
<th>Who will do it? (services/support/resources)</th>
<th>Payment Arrangement</th>
<th>When will we start? How often? Where? How long will it take?</th>
<th>How are we doing? (progress review)</th>
</tr>
</thead>
<tbody>
<tr>
<td>we want Tina to get her cochlear implant</td>
<td>Tina is scheduled for her cochlear implant Aug 4th</td>
<td>medical card</td>
<td>Aug 4th CTMC per surgery</td>
<td>Aug 19, 2018: Tina got her cochlear implant at the end of June but has had complications in the form of cerebrospinal fluid leakage. She will be in the hospital for ten days then home on a post op diet. 8/4/18: Tina is now using her implant and tolerating it being turned on.</td>
</tr>
</tbody>
</table>

**Natural environment(s):** Home, CTMC
What do we want for Tina & family? **We want Tina to increase her sign vocabulary.**

<table>
<thead>
<tr>
<th>What will we do to get there? (strategies/activities)</th>
<th>Who will do it? (services/supports/resources)</th>
<th>Payment Arrangement</th>
<th>When will we start? How often? Where? How long will it take?</th>
<th>How are we doing? (progress review)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Currently signing &quot;eat drink, more &amp; ball&quot; Family is learning sign Various activities will be explored during visits offer choices using sign Assist her to do the sign if needed</td>
<td>Family Family &amp; EI</td>
<td>MRRBB already started throughout the day will Family turned environment updated in 90 days</td>
<td>8/14/201</td>
<td>Tina is really using her sign to ask for help, sit, no, more, bird, green, low, red, yes, orange, she's often cheesing, gives, more books, book involving most signs she is doing great</td>
</tr>
</tbody>
</table>

Natural environment(s): **Home**
<table>
<thead>
<tr>
<th>What do we want for Tina &amp; family?</th>
<th>We want Tina to start using her voice to tell us things</th>
</tr>
</thead>
<tbody>
<tr>
<td>What will we do to get there?</td>
<td>Who will do it?</td>
</tr>
<tr>
<td>(strategies/activities)</td>
<td>(services/supports/resources)</td>
</tr>
<tr>
<td></td>
<td>Payment Arrangement</td>
</tr>
<tr>
<td></td>
<td>Where will we start?</td>
</tr>
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<td></td>
<td>How often? Where?</td>
</tr>
<tr>
<td></td>
<td>How long will it take?</td>
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<tr>
<td></td>
<td>How are we doing? (progress review)</td>
</tr>
</tbody>
</table>

Currently, Tina has said "no" for Mom

Continue Aural Rehab with Citron and School (lost one program)

goes to lost m-f all day starting next week.

Trans. is an issue,
Family wants SD to transport into Public schools.

Aural rehabilitation: SLP Teacher

1/13/01
Attending LORR: M-F 9-4 gluthire
Currently not attending Aural Rehab due to difficulty in scheduling

Received Speech Therapy, 2x week for 30 min at School
<table>
<thead>
<tr>
<th>What do we want for</th>
<th>Who will do it?</th>
<th>Payment Arrangement</th>
<th>When will we start?</th>
<th>How often? Where?</th>
<th>How long will it take?</th>
<th>How are we doing?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Family? We want him to respond to sounds</td>
<td>- mom</td>
<td>insurance</td>
<td>11/15/2021 Begin</td>
<td>Home at Clinic (Wednesdays)</td>
<td></td>
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</tr>
<tr>
<td>What will we do to get there?</td>
<td>CHMC-Audio</td>
<td></td>
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<tr>
<td>(strategies/activities)</td>
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</tr>
<tr>
<td>Ask Audiology staff about</td>
<td>- mom</td>
<td>insurance</td>
<td>11/15/2021 Begin</td>
<td>Home at Clinic (Wednesdays)</td>
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<tr>
<td>getting another audural rehab</td>
<td>Audiology</td>
<td></td>
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<tr>
<td>therapist</td>
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<tr>
<td>Ask Audiology staff about</td>
<td>- mom</td>
<td>insurance</td>
<td>11/15/2021 Begin</td>
<td>Home at Clinic (Wednesdays)</td>
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<tr>
<td>sending an audural rehab</td>
<td>Audiologist</td>
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<td>therapist to</td>
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<td>Set/limit to work with</td>
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<tr>
<td>Attend weekly audural rehab</td>
<td>- mom</td>
<td>insurance</td>
<td>11/3/01 Weekly on Wednesdays at CHMC</td>
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<td>8/11/02</td>
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<td></td>
<td>Audial rehab therapist</td>
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<td>Natural environment(s)</td>
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<td>Outcome Page</td>
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<tr>
<td>What do we want for</td>
<td>Liy周り</td>
<td>&amp; family?</td>
<td>We work in</td>
<td>Liy周り</td>
<td>to learn</td>
<td>Liy周り</td>
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<td>Do this</td>
<td>Or not</td>
<td>are we</td>
<td>What will we do to get there?</td>
<td>Get</td>
<td>(depends on resources)</td>
<td>What will it cost?</td>
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<tr>
<td>Continue Speech Therapy at School</td>
<td></td>
<td></td>
<td>Get help with</td>
<td>Get help with</td>
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<tr>
<td>Continue</td>
<td>Speech Therapy at School</td>
<td></td>
<td>Help with Home</td>
<td>Help with Home</td>
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<tr>
<td>Continue to use</td>
<td>Speech Therapy at School</td>
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<td>Help with Home</td>
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<td>Speech Therapy at School</td>
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<td>Speech Therapy at School</td>
<td></td>
<td>Help with Home</td>
<td>Help with Home</td>
<td></td>
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</tr>
<tr>
<td>What do we want for</td>
<td>frog &amp; family?</td>
<td>We want to find out if frog implant is working</td>
<td></td>
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<td>Date:</td>
<td>11/13/01</td>
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<table>
<thead>
<tr>
<th>What will we do to get there? (strategies/activities)</th>
<th>Who will do it? (services/supports/resources)</th>
<th>Payment Arrangement</th>
<th>When will we start? How often? Where? How long will it take?</th>
<th>How are we doing? (progress review)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Request 2 meeting with someone from Clarion to map implant</td>
<td>mom</td>
<td>insurance</td>
<td>11/21/01 Begin request at time of next visit</td>
<td>01/12/02 Clarion mapped</td>
</tr>
</tbody>
</table>

Natural environment(s):

- Clinic to utilize mapping equipment

Outcome Page