

FAMILY LANGUAGE POLICY IN AMERICAN SIGN LANGUAGE AND ENGLISH  
BILINGUAL FAMILIES

by

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Family Language Policy in American Sign Language and English Bilingual Families  
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## **DEDICATION**

This is dedicated to the love of my life, Blake, my voice of reason throughout this madness, and to my two pit bulls, Queen Kuma and Lord Rummy for they spent hours sitting at my feet. I am grateful to my family, who supported and inquired about my work constantly, pushing me forward daily. Thank you, Grandma Kite, for I know you are watching down on me, gently guiding me daily. Thank you, Grandpa Hotel, for keeping me in check. I would not be where I am today without my family, and your names deserve to be on this dissertation as much as mine. I dedicate this dissertation to you.

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## DEFINITION OF TERMS

In the interpretation of this study, the following definitions are used:

1. American Sign Language (ASL): A visual/gestural independent language that has its own grammar and syntax. Distinct from English, it is not a manual version of English (Nussbaum, 2015).
2. Bilingual: Development and use of more than one language.
3. Bimodal: Development and use of language in more than one modality (*spoken* and *signed* are the "modes" to which "bimodal" refers) (Nussbaum, Waddy-Smith, & Doyle, 2012).
4. Code-mixing: The practice of mixing two or more languages in a sentence or conversation. For example, a child may use elements from both ASL and spoken English together (Nussbaum, 2015).
5. Code-switching: The language practice of switching from one "code" or language to another within one sentence or conversation. For example, a child may use ASL with a deaf peer and then spoken English with a hearing peer (Nussbaum, 2015).
6. Communication: Expressing and receiving information through any means possible (crying, laughing, facial expressions, words, gestures, etc.).
7. Concurrent bilingual acquisition: A form of bilingualism that takes place when a child acquires two languages from birth (Nussbaum, 2015)

8. Critical period: An optimal period for learning during which stimulation produces a desired effect and after which stimulation no longer produces the same effect (Nussbaum, 2015).
9. D/deaf: There are two separate spellings of the word, “deaf.” “Deaf” (with a capitalized “D”) is used to signify identification with Deaf culture and possession of a strong deaf identity. The lowercase version (“deaf”) represents *all* deaf and hard-of-hearing people with or without cultural ties to the Deaf community. Generally, “deaf” people identify themselves with hearing people (Lane, 2005).
10. Expressive language (versus receptive language): Speaking and signing require the production of language. Using expressive language or having “active” command of the language is considered more challenging than using only receptive skills, as in the “passive” tasks of listening to spoken English and watching/attending to ASL (Nussbaum, 2015).
11. Family Language Policy: A policy that “provides an integrated overview of research on how languages are managed, learned, and negotiated within families” (King, Fogle, & Logan-Terry, 2008, p. 907).
12. Fingerspelling: The process of spelling out words by using handshapes that correspond to the letters of the word (Nussbaum, 2015).
13. Hard-of-Hearing: A person whose hearing loss ranges from mild to profound and whose usual means of communication is speech.
14. Language: A rule-governed set of arbitrary symbols that are socially shared

among people within a culture or community (i.e. ASL, English, Spanish) (Nussbaum, 2015).

15. Language access: The child's ability to "see" ASL and "hear" (if applicable) spoken English (Nussbaum, 2015).

16. Language acquisition: The process by which humans acquire the capacity to perceive and comprehend language, as well as to produce and use words/signs to communicate (Nussbaum, 2015).

17. Lipreading/speechreading: The use of vision (paired with or without hearing) to watch the movements of the face, lips, tongue, and body and to use information provided by the situation/context and language (Nussbaum, 2015).

18. Listening: The use of hearing to understand spoken English (Nussbaum, 2015).

19. Manual babbling: A stage in child development and a state in language acquisition during which an infant appears to be experimenting with using handshapes, but is not yet producing any recognizable signs (Nussbaum, 2015).

20. Mouthing: The use of lips to mouth (i.e., without voicing) words and/or sentences to communicate in various situations and for various purposes (Nussbaum, 2015).

21. Sequential bilingual acquisition: A form of bilingualism that takes place when a child acquires one language and then another (Nussbaum, 2015).

22. Signing Exact English (SEE, also sometimes Signed Exact English or Signed English): A system of manual communication that strives to be an exact representation of English vocabulary and grammar (Nussbaum, 2015).

23. Signing (expressive ASL skill): The use of hand shapes, positions, movements, facial expressions, and body movements to convey meaning (Nussbaum, 2015).
24. Simultaneous communication (SimCom): Use of spoken language and a signed system at the same time (Nussbaum, 2015).
25. Speaking: The use of spoken language to communicate in various situations and for various purposes (Nussbaum, 2015).
26. Speech: The use of vocalization to produce sounds (Nussbaum, 2015).
27. Spoken English: The English language when conveyed “through the air” via listening and speaking (not print) (Nussbaum, 2015).
28. Vocal babbling: A stage in child development and a state in language acquisition during which an infant appears to be experimenting with uttering sounds of language, but is not yet producing any recognizable words (Nussbaum, 2015).

## LIST OF ABBREVIATIONS

American Sign Language.....	ASL
Cochlear Implant.....	CI
Early Childhood Education.....	ECE
Signing Exact English.....	SEE
Simultaneous Communication.....	SimCom

## **ABSTRACT**

### **FAMILY LANGUAGE POLICY IN AMERICAN SIGN LANGUAGE AND ENGLISH BILINGUAL FAMILIES**

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George Mason University, 2017

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This study aims to examine the ways in which eight hearing families of bimodal-bilingual deaf children utilize, revise, and reflect upon their family language policy. The bimodal-bilingual is the development and use of more than one language in more than one modality. The spoken and signed are the modes to which “bimodal” refers to in this study. The family language policy is a sociolinguistic approach in examining bi/multilingualism in families (King & Fogle, 2013). This study is motivated by two factors: (a) the unique role of family language policy in deaf children's language development and (b) the need to examine early childhood bimodal-bilingual development within specific ethnolinguistic and ethnocultural contexts. The findings indicate the connection to the Deaf community and Deaf individuals through the Deaf Mentors Project is a key to providing families with support to resist various forms of oppression from the medical community. The process of the early linguistic acquisition of ASL-

English bimodal-bilingual development and its contribution to young children's linguistic outcomes as a foundation for future academic engagement and lifelong success is supported through family language policy.

## CHAPTER ONE

As a Deaf\* baby born to Deaf parents, I grew up as a part of the Deaf community as a minority culture rather than a disability group. My parents instilled a sense of pride in being Deaf, acquiring ASL as my native language then introducing English to support my reading and writing skills. We shared beliefs, languages, and cultural norms as Deaf individuals. Solomon (2012) called these traits vertical identities because they are values or customs shared by family members; therefore, being respected as a Deaf individual was a big part of my life. Perfetti and Sandak's (2000) study showed that deaf children of deaf parents fluent in ASL usually have an early and rich language environment that provides a strong foundation for reading. Parental fluency in the language of the child is critical for the deaf children's academic outcomes, especially reading (Prinz & Strong, 1997). Several studies showed most deaf children exposed to only a monolingual spoken language approach, speech language intervention programs, and hearing assistive technology, including cochlear implants and hearing aids, struggle with age-appropriate English reading and writing skills (Blamey et al., 2001; Geers, Moog, Biedenstein, Brenner, & Hayes, 2009). Evidence also demonstrates that there is a risk of a language delay if an accessible language is not introduced as early as possible to the deaf children,

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\* "Deaf" (with a capitalized "D") is used to signify identification with Deaf culture. The lowercase version ("deaf") represents *all* deaf and hard-of-hearing people with or without cultural ties to the Deaf community.

even if the deaf or hard-of-hearing children possess some access to spoken language through hearing aids or cochlear implants (Mayberry, 1993, 2007; Mayberry, Lock, & Kazmi, 2002; Shick, de Villiers, de Villiers, & Hoffmeister, 2007). Goldin-Meadow and Mayberry (2001) emphasized the importance of building an early language foundation in young deaf children:

The first step in turning deaf children into readers appears to be to make sure they have a language—any language. Deaf children who are learning ASL from their deaf parents do not need intervention at this stage of the process; they learn language naturally and at the same pace that normally hearing children acquire spoken language.... However deaf children born to hearing parents do need interventions on several fronts. Early detection of hearing loss, early entry into an educational system, and early and continuous contact with fluent signers together may go a long way toward ensuring that profoundly deaf children have access to and learn a language. (p. 226)

Evidence points to the first 3 to 5 years of life as crucial for various aspects of child development and academic achievement (Hart & Risley, 1995). Because 95% of deaf children are born to hearing parents, deaf babies may be at linguistic and educational disadvantage if their parents do not consistently sign with their deaf children (Karchmer & Mitchell, 2003). Hearing parents often do not have prior experience with American Sign Language (ASL) to communicate with their deaf babies. When a hearing loss is present, deaf children's auditory access is not comparable to their hearing peers (Goldin-Meadow & Mayberry, 2001). The hearing loss impacts their speech and listening

abilities; therefore, relying on their auditory access for language acquisition is questionable (Goldin-Meadow & Mayberry, 2001). Instead, acquiring ASL from an early age protects the Deaf child from the harm of late language acquisition (Humphries et al., 2015), by ensuring the Deaf child has access to communicate its immediate needs through a visual language that is natural, fully developed (Grosjean, 2008).

According to Prinz and Strong (1997), there is a positive relationship between ASL proficiency and English literacy abilities. Having a strong foundation in a first language is critical, and children with earlier hearing diagnosis and earlier exposure to expansive vocabulary skills tend to have better reading skills (Antia, Jones, Reed, & Kreimeyer, 2009; Kyle & Harris, 2010). Padden and Ramsey (2000) found that having an early exposure to ASL from their deaf parents, the deaf children had higher reading achievement scores. Likewise, Prinz and Strong's (2000) study determined that due to early exposure to ASL, the deaf children who were born to deaf parents outperformed the deaf children with hearing parents in English literacy skills. In addition, Hoffmeister, de Villiers, Engen, and Topol (1998) reported significant positive correlations between ASL and reading comprehension among 50 deaf students aged 8–16 years. This may be, as Prinz and Strong (1997) stated, because the relationship between ASL and English reading draws attention to characteristics of the languages:

What emerges is an interrelationship between a set of language skills, specifically fingerspelling, initialized signs, reading, and competence in remembering ASL sentences as well as knowledge of ASL morphology and syntax. Students who

perform best on tests of ASL and fingerspelling also perform well on a measure of reading comprehension. (p. 44)

The Deaf community primarily communicates using ASL and identify themselves as a minority culture, rather than as a disability group. There is language, educational, and communicational advantages for deaf and hearing children who learn ASL (Baker, 2011). The language areas of the brain have no preference for language modality and the most accessible pathway for full access to linguistic information for many deaf children is through vision (Baker, 2011). Bilinguals also have greater cognitive flexibility and increased understanding of linguistic meaning (Cummins, 2006). Petitto's (2009) study discussed that the brain is equipped to acquire two or more languages and is capable of handling languages through different modalities including spoken, visual, and written. As a language, ASL "exhibits same degree of grammatical complexity and same principles of grammatical organization of spoken language" (Meier & Newport, 1990, p. 2). The deaf children are adept of academic achievement, regardless of their differing modality pathways when compared to hearing peers (Marschark, Convertino, & LaRock, 2006).

Most deaf individuals belong to two worlds, the hearing world and the deaf world, which makes them bicultural individuals (Grosjean, 2012). Despite the rising technological development of listening devices, many deaf children do not develop spoken language sufficiently for language acquisition (Grosjean, 2012). Therefore, aiming for an oral, monolingualism approach is a form of language deprivation for deaf children (Humphries et al., 2012). This study explored the beliefs and perspectives of families with deaf children and the roles of ASL and English in their homes and the

practices families used to support their children's language development. This study also investigated families' experiences, perspectives, and beliefs from a sociocultural perspective and to evaluate the role of bilingualism in the language development of in deaf children. The goal was, and is, to showcase the benefits of being a bimodal-bilingual with the inclusion of ASL as deaf children's native language and to identify the challenges in implementing ASL as a part of family's language planning policy.

### **Perspectives on Being Deaf**

There are differing perspectives on being deaf. The medical perspective is prevalent in society: deafness is a pathological deficiency and the focus is on correcting the hearing loss (Humphries et al., 2015). Many medical professionals and families trust that cochlear implants will allow deaf children to "hear" and achieve typical language and speech development (Humphries et al., 2015). The goal is to assimilate deaf children into society by encouraging deaf children with cochlear implants to participate in only auditory-verbal therapy to acquire spoken English language (Snoddon, 2008). Lack of training and coordination among medical professionals contribute to a great deal of misinformation about the use of speech and sign language with deaf children (Humphries et al., 2012). Many medical professionals offer two options to families with a deaf newborn, the oral route (access to spoken language) or the manual route (using sign language), and leave the decision up to the families (Humphries et al., 2012). Faced with the options of teaching a familiar spoken language via amplifications or learning a new manual language for their deaf child, families may perceive signing as an inferior choice (Johnson, 2006; Petitto, 1998). The results of uninformed advice can cause unintentional

harm to the deaf child and family, who often do not know about the Deaf community or base their assumptions on stereotypes (Humphries et al., 2012). In Eleweke and Rodda's study, the medical professionals "did not believe in the signing approach because it would hinder the child in the development of language and speech" (2000, p. 377-378). Medical professionals in that study also suggested parents had unrealistic expectations about assistive listening devices for deaf children (Eleweke & Rodda, 2000). Making families choose between modalities is inadvisable when bimodalism supports the inclusion of ASL and English for optimal linguistic outcomes for deaf children (Humphries et al., 2012). Many medical professionals see the children from a clinical or pathological perspective, and they lack knowledge about the linguistic, literacy, and academic needs of the deaf children (Larwood & LaGrande, 2004).

From a cultural viewpoint, being Deaf is a lifestyle with own attitudes, beliefs, and values (Lane, 2005). Deaf bilinguals are involved in the world at large, and have learned to varying degrees to adapt while maintaining their cultural values. According to Grosjean & Ping (2012), the deaf bilinguals "adapt their attitudes, behaviors, and languages to both worlds, and they combine and blend aspects of the two" (p. 133). Grosjean and Ping (2012) emphasized the importance of deaf children being given every opportunity to learn about the cultures they belong to for personal and identity development. Early contact with both languages and cultures will give them more opportunities and guarantees in life as opposed to choosing one language and culture (Grosjean & Ping, 2012). There is no evidence to support the concern that the acquisition of ASL inhibits English speech or literacy development among children with cochlear

implants (Cummins, 2001). Studies also indicate that acquiring ASL supports the development of spoken language and reading skills in deaf children with cochlear implants (Davidson et al., 2013; Jimenez et al., 2009; Petitto et al., 2001; Yoshinaga-Itano, 2006). Access to sign language ensures language acquisition for deaf children and avoids cognitive deficits from linguistic deprivation (Kushalnagar et al., 2010; MacSweeney, 1998). The medical profession is responsible to prevent linguistic deprivation by recommending sign language to the families (Humphries et al., 2012). Deaf and hard-of-hearing children's outcomes are improved when medical professionals working with families have specialized training in supporting their visual and linguistic needs (Yoshinaga-Itano, 2003).

### **History of American Sign Language**

ASL is a visual language, used primarily in the American Deaf community. When using ASL, the brain processes linguistic information through the eyes. Like any spoken language, ASL is a language with its own unique rules of grammar and syntax and regions have their own dialects (National Association for the Deaf [NAD], 2013). Natural signed languages, such as ASL, have emerged from communities of Deaf people around the world. The usage of sign language has a long, conflict-ridden history, particularly in education.

Throughout the history of deaf education, teachers, researchers, and specialists have clashed over methods of communication for deaf children — a clash that continues to this day. Some have supported an auditory-verbal approach, and others have argued for sign language approach. As a result, both approaches have been combined, separated, and

mixed over decades in attempts to satisfy both views (Marschark, Schick, & Spencer, 2006). This combined approach is exemplified by Manually Coded English (MCE), which manipulates ASL into English-based order; an amalgamate approach is exemplified by Simultaneous Communication (SimCom), which is speaking and signing mixed without purpose at the same time.

From 1817 to 1889, sign language was the language of instruction for deaf students (Bauman, Nelson, & Rose, 2006). However, growing support for an auditory-verbal approach greatly influenced the deaf education field, and at the International Conference on the Education of the Deaf (ICED) in Milan in 1880, the 164 members (of which one was deaf) elected to “convert all deaf education to oralism” (Van Cleve & Crouch, 1989; Bauman et al., 2006, p. 243). Between 1880 and 1957, the consensus was that sign language would delay deaf children’s acquisition of spoken English; therefore, sign language was prohibited as the language of instruction in the classrooms (Baynton, 1996). Consequently, deaf children regularly had weak academic skills because they did not have access to language (Marschark et al., 2006).

Dr. William Stokoe, a hearing professor from Gallaudet University, identified ASL as a formal language and published his first research on ASL in 1960 (Baynton, 1996). Because ASL was not recognized as a language prior to Stokoe’s work, his work revolutionized the world’s perception of ASL. His work prompted the re-entry of sign language in deaf schools; however, English maintained its stronghold over ASL by “converting sign language into English-based order” (Signed Exact English) or speaking and signing at the same time (SimCom) throughout the 1970s and 1980s (Johnson,

Liddell, & Erting, 1989). Both communication methods altered ASL and its linguistic features; therefore, deaf children taught through English-based signs developed a weak language foundation, which impacted their academic skills (Johnson et al., 1989).

In the 1990s, the emergence of ASL–English bilingual-bicultural education in deaf schools offered a place for both languages instead of making families choose separate educational placements for their deaf children based on their preferred language use. The ASL-English bilingual-bicultural model utilizes ASL as the first language and the mode of instruction with English addressed primarily through reading and writing (Nover, 1995; Nover, Christensen, & Cheng, 1998). This model emphasizes the importance of including language and cultural needs of Deaf children. The ASL-English bilingual-bicultural model has faced challenges of the rising population of Deaf children with improved amplifications and wanting to acquire spoken English in addition to acquiring ASL as of late. Currently, there has been a shift in educational programs moving towards ASL-English bimodal bilingual approach which means language acquisition occurs through two modalities (e.g., auditory and visual) and two languages (e.g., ASL and English) (Bishop, 2006; Lederberg, Schick, & Spencer, 2013; Nussbaum, Scott, & Simms, 2012). The ASL-English bimodal-bilingual model serves Deaf children with a range of hearing levels, from having minimal access to those who benefit greatly from the amplifications and spoken language while acquiring ASL as a language.

In 2008, the NAD developed a position paper advocating the linguistic right to sign and the inclusion of sign language in the education of deaf children (NAD, 2008). At the 2010 ICED conference, ICED members elected to reverse all motions passed at the

1880 ICED conference that deprived deaf children of the right to use sign language in classrooms (ICED, 2010.) Despite these legal achievements, most deaf children continue to not have access to ASL. Examining the role of medical professionals and family members in deaf education may shed light on deaf children's lack of access to ASL, along with examining early childhood bimodal-bilingual development and the role of ASL in family language policy.

### **Deaf Children and Early Access to Language**

Early access to language is crucial for all children, and families play an important role in children's language acquisition and development (Hart & Risley, 1995). High levels of family involvement have been found to produce greater language development outcomes among deaf and hard-of-hearing children (Baker, 2011). Studies show that early language acquisition, whether spoken or signed, contributes to improved social, cognitive, and literacy skills (Grosjean, 2012; Humphries et al., 2012; Petitto, 2009). Whether a child's parents are hearing or deaf, signing skills consistently are the best predictor of reading skill (Hoffmeister, 2000; Padden & Ramsey, 2000; Prinz & Strong, 2000).

The additive approach of ASL and English bilingual education puts deaf children at an advantage cognitively by knowing two languages, per Petitto et al.'s (2001) work in examining the fundamentals of infants and toddlers bilingual acquisition. Petitto et al. (2001) suggested that deaf babies can acquire two languages in different modalities without adverse effects on the brain or the development of either language. Their findings also showed that that linguistic milestones of deaf bilingual learners were on par with

monolingual hearing children's first word, first two-word combinations, and first 50 words benchmarks. There was no indication of lexical confusion in young deaf bilingual babies, which supports the case of deaf babies acquiring bimodal languages without any adverse effects on the brain or the language development of either language (Petitto et al., 2001). This allows for children to develop a strong language base for pre-literacy skills. Dickinson and Tabors (2001) emphasized the importance of frequent and high quality interactions among child, teacher, and parent, which in turn lead to greater academic success. Parental influence is strong in deaf children's academic, language, and socio-emotional development (Calderon, 2000). For example, parental communication skills are a significant predictor for positive language and academic development, even greater than parental involvement in their deaf children's school-based education (Calderon, 2000).

Early language acquisition contributes positively to social, emotional, and cognitive skills (Grosjean, 2012). Despite the importance of promoting early language acquisition, the Gallaudet Research Institute's 2009-2010 Regional and National Summary survey concluded that only 23% of the families in the survey consistently sign with their deaf children (GRI, 2011). Therefore, it is important to support early access to language for deaf and hard-of-hearing children with hearing family parents and members.

The resources offered to families with deaf children often reflect a medical view, rather than a cultural perspective, of being deaf (Hyde & Power, 2006; Valente, 2011; Young & Tattersall, 2005). Because medical professionals, educators, and specialists who work with deaf and hard-of-hearing children have a strong influence on family members'

opinions, beliefs, and attitudes about deafness (Li et al., 2003), it is even more crucial to correct all misconceptions about ASL and empower families to develop a family language policy that is inclusive of the deaf and hard-of-hearing children. Families may also not be aware of critical characteristics of visual attention that comes with the language to develop visual readiness among deaf children. According to Allen's (2002) study, families reported that when information was provided from the Deaf perspective, they felt empowered with fostering their children's self-identity and providing an enriching cultural and linguistic environment for their children.

Universal newborn hearing screening has been instrumental in identifying hearing loss as early as six weeks old; however, deaf children's first exposure and introduction to ASL varies in age from birth to adult. It is likely that the first deaf person the parents meet is their own child (Bodner-Johnson & Sass-Lehrer, 2003; Grosjean, 2012). The parents may feel overwhelmed by the information shared by medical and service providers (i.e. doctors and early intervention agencies). Furthermore, most early intervention programs do not provide any information about Deaf culture (Stredler-Brown, 2010). In fact, most early intervention providers for young deaf children have a background in speech language pathology rather than deaf education (Bodner-Johnson & Sass-Lehrer, 2003; Stredler-Brown, 2010), contributing to the medical/pathological perspectives parents are given.

To gain access to the social process of learning, deaf children need a visual language such as ASL, regardless of hearing levels. Early access and exposure to ASL create a critical pathway to cognitive and literacy development for deaf children

(Humphries et al., 2015; Petitto, 2009). Babies can express themselves through sign earlier than through spoken language due to natural developmental milestones (Schick, 2003). Signed language development is comparable to spoken language development, and similarities outnumber differences (Price, Enns, & McQuarrie, 2013). There is a critical period for language learning; children who learn ASL after the age of 5 years are less fluent and make errors in language that carry on into adulthood (Price et al., 2013).

The development of visual attention is critical for deaf babies in acquiring ASL, as outlined in Crume and Singleton's (2008) study of how teacher practices promote visual engagement of deaf children in a bilingual school. Accessible and consistent ASL adult and peer language models are integral to fostering language acquisition and learning to build literacy development (Crume & Singleton, 2008). For families to acquire and extend their ASL skills, they need to interact with signing adult and peer language models on a regular basis (Allen, 2002). By interacting on a regular basis, families and children will pick up visual and social cues of typically developing ASL users (Allen, 2002).

To maximize visual learning opportunities for deaf children, families with deaf children need to offer early access and exposure to ASL and access to adult and peer language models. In addition, they need to empower families with deaf perspective insights.

### **General Statement of Problem**

Hart and Risley (1995) made the case that interactions between caregivers and their children during the first three years of life provide a critical foundation in language,

cognition, and literacy for children; foundations that are crucial for school readiness and subsequent achievement. Based on findings from a study of 43 children and their families from birth to 3, Hart and Risley further asserted that it is nearly impossible to compensate for a lack of early exposure to a variety and abundance of rich family interactions. Hearing parents do not usually think about teaching language to their hearing newborns because they generally share the same language with their newborn (Grosjean, 2012; Solomon, 2012). Hearing babies have access to language from inside the womb, by beginning to listen to the sounds around them (Young, 2010). Their language development follows a natural progression and is typically learned implicitly rather than explicitly taught (Hirst, Hannon, & Nutbrown, 2010).

Although there are differences between processing information through the eyes (visually) or the ears (auditorially), it is important to underscore that all language learning happens in the brain (Petitto, 2009; Price et al., 2013). This allows the application of shared principles of language development across languages and modalities. Therefore, the chances of deaf children growing up with delays in the linguistic, cognitive, emotional, physical, and communicative domains are higher because of the lack of early exposure to language access and input (Grosjean, 2012; Humphries et al., 2012; Petitto, 2009).

### **Background of the Problem**

The long history of linguistic oppression of ASL has severely impacted the deaf education field and contributed to language deprivation in deaf children. This is evident through recommendations by medical professionals that families not sign with their deaf

babies (Eleweke & Rodda, 2000); misinformation which contributes to language deprivation of deaf children (Humphries et al., 2012). The fact that 95% of deaf children are born to hearing parents (Karchmer & Mitchell, 2003) and 71.6% of family members in the Gallaudet Research Institute's 2009-2010 Regional and National Summary survey do not consistently sign with their deaf children shows the strong influence the medical community has on family language planning policy (GRI, 2011). Parental fluency in the child's language is critical for the deaf children's academic outcomes (Prinz & Strong, 1997). Blamey et al. (2001) and Geers et al. (2009) concluded that deaf children struggle with age-appropriate academic outcomes when exposed to only a monolingual spoken language approach.

### **Significance of Problem**

One of the biggest challenges in an ASL and English bilingual framework for families is the definition of the “home” language for their deaf children. English is currently the primary language in the United States and most deaf children's family members; whereas, ASL is the primary language of the Deaf community (Lane, 2005). This leads to a new ideology of family language policy, defined by King et al. (2008) as a policy that “provides an integrated overview of research on how languages are managed, learned and negotiated within families” (p. 910). The ideology highlights the linguistic reality of how parents face challenges of minority-majority language allocation in which deaf children grow up with the minority *or* majority language being used at home *and* both languages being used at the school. Cultural conventions dictate that literacy achievement requires proficiency in spoken language; however, studies on deaf children

suggest that development of ASL supports acquisition and learning of a written language (Hoffmeister, 2000; Padden & Ramsey, 2000; Prinz & Strong, 1997). Knowing a language—even a manual language with different structure from the language expressed in print—is better for learning to read than not knowing any language (Goldin-Meadow & Mayberry, 2001). The additive approach of ASL-English bilingual education gives deaf children the cognitive advantage of knowing two languages, per Petitto et al.’s (2001) study examining the fundamentals of infants and toddlers bilingual acquisition.

### **Rationale for the Study**

To gain access to the social process of learning, deaf children need visual access to their world; therefore, the effects of FLP in ASL-English bimodal-bilingual families needed to be examined. Deaf babies with hearing parents are often not given the same access to the world knowledge due to lack of linguistic access and input. This study intended to provide additional information and insight into family language policy of bimodal and bilingual families by examining how each family utilizes, reflects, and revises their family planning policies at home.

### **Purpose of the Study and Research Questions**

The purpose of this investigation was to examine the application of FLP in ASL and English bimodal-bilingual families to shed light on language development among deaf children in their homes using the following research questions:

1. What are families’ beliefs, ideologies, and attitudes about language development in ASL for their young children?
2. How do families perceive their child’s language abilities?

3. How do families implement bilingual development of ASL and English in their homes?
4. What are families' language policy toward bilingual development of ASL and English?

## CHAPTER TWO

The literature review, organized in five sections, provides readers with background information on key literature pertaining to the areas of families with Deaf children's beliefs on family language policy using ASL and English. The first section introduces the theoretical framework for the study. The second section addresses the unique characteristics of deaf learners. The third section shares a review of deaf and hearing families and their interactions with deaf children. The fourth section explores studies of factors that influence family language policy. The fifth section recognizes literature review gaps and addresses implications of the findings.

### **Theoretical Framework**

The theoretical framework has the purpose of better understanding the relationship between families' beliefs and their deaf children's bilingual development through four components: language ideologies on ASL and English, family language policy, theories of bilingualism, and cultural identity of Deaf gain as well as horizontal and vertical identity.

**Language ideologies on ASL and English.** An individual's (or group's) beliefs and attitudes about language comprise a language ideology (Woolard & Schieffelin, 1994). People have language ideologies that guide their decisions, choices, and uses of language in society (Reagan, 2011). These language ideologies are influential in social

relations and educational settings (Reagan, 2011). Language ideologies about ASL and English, as discussed in Chapter 1, play a prominent role in deaf education.

Ideologies about ASL and English can be examined through Ruíz's (1984) three language orientations: language as problem; language as a right; and language as a resource (Nover, 1995; Reagan, 2011). The language-as-a-problem orientation is a deficit perspective towards languages. The deficit perspective may include having accents, belonging to a minority ethnic or racial group, or not having proficiency in the dominant language (Ruíz, 1984). The language-as-a-right orientation values the individual's freedom and ability to use his or her birthright language (Ruíz, 1984). The language-as-a-resource orientation views language as an asset to society that can be utilized as social bridges across different communities (Ruíz, 1984).

Applying Ruíz's (1984) three language orientations to the Deaf community highlights language ideologies of ASL. An example of the ASL-as-a-problem orientation is educators and theories opposing the acquisition of ASL based on the belief that ASL impedes the development of spoken language. There are modern-day research studies denouncing the harmful approach of withholding ASL from young deaf children, an example of language-as-a-right. Currently, research on deaf children's sign language development provides strong evidence of the benefits of sign language. This is an example of ASL-as-a-resource. The language ideologies on ASL and English play a crucial role in families as they negotiate how to use both languages (along with other languages) in their homes as part of their family language policy.

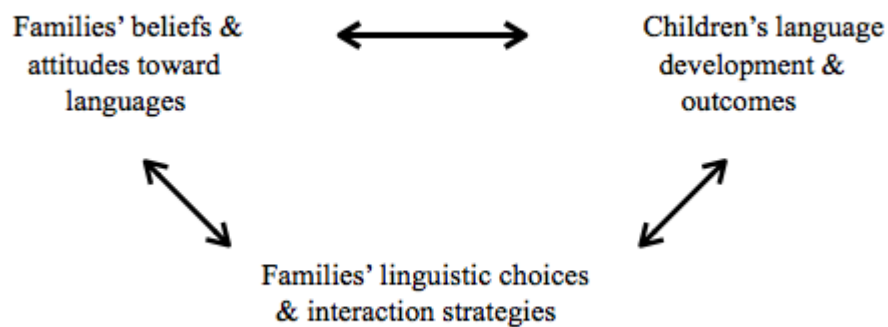
**Family language policy.** The family language policy is an explicit and comprehensive planning of language use within the home among family members (King et al., 2008). The need for a family language policy draws from language policy and child language acquisition: it is intended to support the child–caretaker interactions and child language development (De Houwer, 1999). Spolsky (2004) concluded the study of language policy should include the following: (a) analysis of language beliefs or ideologies (what people think about language); (b) language practices (what people do with language); and (c) efforts to modify or influence those practices using language intervention, planning or management (what people try to do to language). In the early stages of FLP, the primary purpose of the framework was to solve “language problems” in new nations (Berry, 1968; Fishman, 1991). The current focus has shifted to understanding the dynamic social, cultural, and ideological systems of the language policies (King et al., 2008).

In families, parents are typically the decision makers in determining language practices influencing language use within the family. Family language policy also provides insight into parental language ideologies, which reflect societal attitudes and ideologies about both languages. Families’ beliefs and ideologies about language and language use, their goals and efforts to influence language use, and what they do with language in their day-to-day interactions serve a huge role in family language policy.

Family language policy is categorized into three subgroups: status planning that focuses on functions of language, corpus planning that focuses on the forms of language, and acquisition planning that is the teaching and learning of language (Cooper, 1989;

Kloss, 1969). Decision-making and actions in these three areas must happen simultaneously. Families must decide when to use ASL or English with their children (status planning), which resource for what types of literacy activities (corpus planning), and how and when to formally or informally instruct both languages (acquisition planning).

Ideology is the basis of language practices and planning in the homes. King (2000) viewed ideology as the “mediating link between language use and social organization” (p. 169). The family may have conflicts over differing ideologies, which may compete against each other as there are contrasting cultural beliefs and communicative strategies used by family members. The FLP is perceived as a tool in the meditating ideologies between family members. De Houwer (1999) illustrated the relationship between beliefs, practices, and outcomes in bilingualism for young children as shown in Figure 1.



**Figure 1. Relationships between families' attitudes/beliefs and children's language development. Adapted from "Environmental Factors in Early Bilingual Development: The Role of Parental Beliefs and Attitudes" by A. De Houwer, 1999. In G. Extra & L. Verh**

**Families' beliefs and attitudes toward languages.** Young children may exhibit a range of active to passive bilingualism based on their parents' beliefs and attitudes (De Houwer, 1999). King and Fogle (2006) found that parents primarily relied on their own personal experiences with language learning in making decisions for their children. Parents who had negative experiences with a language would influence children in the family through their behavior (i.e., not using that language). Neutral or positive parental attitudes towards languages, bilingualism, and language choices are positively related to linguistic practices and children's language learning experiences (De Houwer, 1999). Parents' attitude towards language choice will determine their interactional strategies. Families need to determine the purpose of using their languages in various contexts, which will support bilingual development among their children. The next section explores various FLP in other bilingual families exploring various factors that influence families' ideologies, and processes.

**Families' Language Policy in other bilingual families.** The FLP reflects parental ideologies, decision-making process, and strategies including languages as well as social and cultural context of families. Fishman (1991) revolutionized the importance of intergenerational transmission for language survival through FLP. A study of bilingualism among children of US-French parents was conducted in 1965 by Metraux, which was one of the first studies examining language attitudes within the immediate and extended family members (King & Fogle, 2013). Tuominen (1999) explored the parental language practices of 18 bi- or multilingual families and concluded that community support for minority languages is key in the development of home language for the child.

Okita (2001) examined the pressures and demands experienced by Japanese mothers, who were responsible for language use and development of Japanese and English in their children. The focus on the mothers' experiences and the importance of broader cultural and social context opened a new lens in the bilingualism field attributing to the FLP (King & Fogle, 2013). Yamamoto (2001) highlighted the importance of societal values and language ideologies that may influence the language choice in Japanese-English families. The study attempted to identify factors that influence family language choices, which lead to the notion of FLP. Luykx (2003) also examined family language planning and socialization of Aymara-speaking Bolivian families. She concluded that the socialization process of family influences should be viewed through a dynamic model (Luykx, 2003).

The children's contribution and role in developing as trilingual are studied in Cruz-Ferreira (2006)'s work which had a major role in shaping FLP. The FLP values the involvement of children's thoughts, ideas, and contributions (King & Fogle, 2013). A breakthrough in FLP was conducted by King and Fogle (2006) where they examined Spanish-English bilingual families and how families' decisions reflected their identities as "good" parents. The study showed the families relied on their own personal language experiences when making decisions for their children's language learning (King & Fogle, 2006). The children's language ideologies were key in maintaining their first language while acquiring a second language as outlined in Schwartz (2008) study of Russian-Jewish immigrants in Israel.

Pizer (2013) explored FLP in families with deaf parents and hearing children in the United States, and most families are bilingual and bimodal using signed and spoken languages in their homes. The FLP in such families are influenced by contexts by signing at home and being in contact with speaking individuals outside the home (Pizer, 2013). The hearing children were continually exposed by both language models however many children did not become fluent in ASL in their adulthood. The families valued barrier-free communication at home therefore they modified internal and external language policies to ensure successful communication between family members (Pizer, 2013). FLP is still developing as a field, there has been significant shifts throughout the years as there is increased emphasis on the family as a dynamic unit, including the children's contribution and involvement.

**Families' language choices for deaf children.** Families' decisions and choices for language and communication for their deaf children are influenced by several factors. The families often require an abundance of information to make informed and effective decisions for their children (DesGeorges, 2003). Many language choices and decisions are made initially after the diagnosis of hearing loss, when families have limited information and the pressure is great to make those decisions quickly (Decker, Vallotton & Johnson, 2012). Highlighting the families' internal strengths and use of external resources for their deaf children, the 19 families from one state in the United States from the Luckner and Velaski (2004) study identified factors that supported their journey. The factors were as follows: (a) commitment to the family; (b) learning to sign with their child; (c) support from extended family, friends and community members; (d) support

from educational professionals; and (e) having high expectations for their deaf children (Luckner & Velaski, 2004). The challenges the families faced included finding an educational program, getting appropriate services, learning to sign, helping others understand the deaf being, finances, and finding peers for their deaf children (Luckner & Velaski, 2004). The families shared repeatedly that the teachers at their educational placements were supportive of their FLP while the lack of knowledge and the bias of the medical professionals in providing a comprehensive range of communication methods were harmful to their FLP (Luckner & Velaski, 2004). The families shared they felt supported from the educational professionals who actively listened and showed confidence in the family's ability to problem solve life's demands by providing tools and resources (Luckner & Velaski, 2004).

In Crowe et al., (2013) study, the female caregiver's language use and communication mode was the influencing factor of the deaf and hard-of-hearing children child's language use and communication mode. Other factors also greatly influence families' decisions and choices are their socioeconomic status and caregiver's education as they provide access to information and support (Crowe et al., 2013, Young et al., 2005). In Crowe et al, (2013) study, the relationship between female caregivers' level of education and the home communication mode with their deaf and hard-of-hearing children indicated the higher level of the female caregivers' level of education, the more likely the home communication mode is the oral approach. The female caregivers with less education experiences were likely to use oral and manual or mixed communication with their deaf and hard-of-hearing children. The early education environments were also

mostly associated with the home communication mode and language use (Crowe et al., 2013).

Crowe et al., (2014) study generated four themes that were key to the families' decision-making process about communication mode and language use for their deaf and hard-of-hearing children. The themes were (a) source of information (i.e., medical professionals, experiences with Deaf individuals and organizations), (b) the practicalities of communication (i.e., accessibility of language in their family and community), (c) their children's personal preference of communication mode and language use, and (d) the hopes and dreams for their children (Crowe et al., 2014). The families in Crowe et al. (2014) study strongly felt it was important for their children to make their own decisions about how they would communicate, which resulted in providing all communication and language options so that the child can make an informed choice later in life.

Li, Bain, & Steinberg (2003) surveyed 83 families about various factors that influenced their decision-making process, specifically in the areas of communication, modality use, attitudes and beliefs, and goals for their children who are deaf. The study identified the following factors in the decision-making process of choosing oral-only approach: hearing levels of the child, the family's belief that being deaf can and should be corrected, and family's desire to have the child speak (Li et al., 2003). The role of technology had no significant influence on their decision-making process. Many of the families in the study believed that "all deaf children could learn to speak if enough effort was expended" (Li et al., 2003, p. 167). The researchers acknowledged that many of the

beliefs and attitudes may have been influenced by the actual decisions made and addressing the relationships of these factors should have been examined (Li et al., 2003).

The following study conducted by Steinberg, Bain, Li, Delagdo, and Ruperto (2003) highlighted the decision-making process of 29 Hispanic families with deaf children in the United States after the identification of being deaf. The language and cultural barriers, limited access to resources, and lack of sharing a comprehensive range of options for their deaf children are often the roadblocks for the families in the study (Steinberg et al., 2003). The major deciding factor for the Hispanic families with deaf children is the medical professionals. The medical professionals typically recommend a combination of spoken English and sign language approach which does not reflect the families' desire for having their deaf children learn Spanish as well in the study (Steinberg et al., 2003).

A case study of two hearing families with preschool-aged deaf children in exploring the decision-making factors of choosing a communication method were conducted by Eleweke and Rodda, 2000. A qualitative approach of semi-structured questionnaires and unstructured interviews were used to collect information from the families. From the results, four themes emerged relating to the decision-making process of choosing a communication method and they are as follows: (a) the source of information provided to families, (b) the family's perceptions of assistive technology, (c) attitudes of the medical professionals, and (d) quality and abundance of support services (Eleweke & Rodda, 2000). The authors emphasized the importance of the medical professionals sharing relevant, accurate, and unbiased information to the families with

deaf children when addressing various communication methods (Eleweke & Rodda, 2000). The role of support services may empower families to revise their FLP through learning a signed language, or the management of amplification devices instead of relying solely on the medical professionals.

The families' decision-making process in Hyde and Punch's (2011) mixed-method study of using a survey with 247 families and semi-structured interviews with 27 parents and 11 children with cochlear implants from Australia showed a range of sources of information. The primary influence in the decision-making process from the study was the cochlear implant programs and audiologists (Hyde & Punch, 2011). From the interviews, many parents indicated, in hindsight, they wished for a broader range of information from other entities such as education programs, families support groups, and other social organizations (Hyde & Punch, 2011). The decision-making process of obtaining a cochlear implant for their deaf children was quick, less than three months for 60% of the families, and 48% of the families reported the decision-making process as extremely stressful (Hyde & Punch, 2011). Many families felt receiving the cochlear implant was the only option for their deaf children to gain access to communication based on the information provided by the cochlear implant programs and audiologists (Hyde & Punch, 2011).

The decision-making process with obtaining cochlear implants for the deaf children continues with Meadow-Orlans, Mertens, and Sass-Lehrer's (2003) study of 404 families through a nationwide survey. The factors contributing to the families' decision-making process include having their children meet general eligibility for surgery (i.e., at

least 2-years-old, profoundly deaf, and no other disabilities), the availability of insurance coverage (i.e., high cost for the initial surgery, paying for habilitation therapy), and own beliefs and values for surgery (i.e., oral language development, safety/environmental awareness, functioning as a hearing person, and pursuing every opportunity for the deaf child) (Meadow-Orlans et al., 2003). The study also examined two families who initially considered the surgery, then decided against the process based on their belief that their child is already whole and viewing the cochlear implantation to “fix” the child (Meadow-Orlans et al., 2003). The other family shared that the hearing levels would not be like typically developing hearing children and decided that the surgery would not benefit their deaf child (Meadow-Orlans et al., 2003).

In Watson, Hardie, Archbold, and Wheeler ‘s (2008) study of surveying 142 families in the United Kingdom whose deaf children have cochlear implants, the families stated they changed their communication approach after their child received cochlear implants. The 113 families chose the spoken language exclusively, while six families chose the sign language avenue after the implantation (Watson et al., 2008). The findings indicated that the spoken language option was based on child’s preference (Watson et al., 2008). Half of the families in the study disagreed with the statement that using sign language interfered with the development of spoken language (Watson et al., 2008). This reflects with the FLP of being inclusive of the child’s decision-making process.

Building off the previous study with Watson et al., (2008), the following study examined the 12 families and deaf children with cochlear implants from United Kingdom pursuing their communication mode choices (Wheeler, Archbold, Hardie, & Watson,

2009). The findings revealed that the parents believed they chose the most effective communication mode with their deaf children while maintaining their goal of developing oral communication skills (Wheeler et al., 2009). The 10 families shared they used either entirely sign or a combination of sign and speech with their deaf children before the implantation however the remaining two families also used gestures to communicate with their deaf child (Wheeler et al., 2009). The families agreed that having their deaf child learn how to talk was an important component towards the decision-making process of receiving a cochlear implant (Wheeler et al., 2009). While the families continue to maintain expectations of using oral communication approach with their deaf children with cochlear implants, many families are also comfortable with use of sign as a second language (Wheeler et al., 2009). The families also indicated they are aware that the child may grow up wanting to know its Deaf identity; therefore, they value sign language to allow flexibility for the child to use both languages (Wheeler et al., 2009).

Regarding the communication choices, the families felt they received partial or biased information from the medical professionals and based their crucial decision-making process based on limited information (Young, 2002). One possible cause for the lack of transparency is the attitudes and values of the medical professional pertaining comprehensive communication options (Young, 2002). Another cause is the systematic structure of our early intervention services where resources are not equally allocated for all approaches however families reported feeling angry and frustrated when they discovered there were other choices available (Young, 2002). The transparency of

information, expectation and identity of raising a deaf child needs to be made explicit to each family (Young, 2002).

In Young and Tattersall's (2007) qualitative study of interviews with 27 hearing families with deaf children, the families discussed how the early identification process positively influenced their grieving process by the reassurance of taking early actions quickly to support their deaf children. The families felt hampered with the lack of support and action from medical professionals, such as receiving services or delays in getting resources, that families perceived as serious deficit perspective towards their child's developmental stages (Young & Tattersall, 2007). However, the families' expectations of what is "normal" for their deaf children greatly mirrors what is shared by the medical professionals (Young & Tattersall, 2007). The families shared goals and hopes of their deaf children "functioning" like hearing children. Young and Tattersall (2007) argue that it is a dangerous notion because the comparison of deaf and hearing children should not happen. The medical professionals have a responsibility to provide direction about the development of deaf children (Young & Tattersall, 2007).

Another study conducted by Young, Carr, Hunt, McCracken, Skipp and Tattersall (2006) examined an electronic search of "informed choice" in articles addressing communication options for deaf children using 10 databases to evaluate whether the literature is comprehensive, meaningful, relevant and unbiased. After an independent review of 927 articles, the 152 articles were split into eight thematic groupings. The results show that shifting focus from communication options approach to an emphasis on

informed choices for the deaf child enhance professional-parent relationship (Young et al., 2006).

In summary, the factors that influence families' decisions are as follows: (a) the influence of medical professionals; (b) abundance and availability of comprehensive information; (c) hearing levels of the children; (d) female caregiver's education level; (e) female caregiver's language use; (f) socioeconomic status, attitudes, beliefs and expectations of the families; (g) ease of communication; (h) children's personal preference of communication mode and language use; and (i) the families' hopes and dreams for their children. Understanding these decision factors may better support the hearing families through this complicated and multi-layered FLP journey with deaf children. Their deaf child is often the family's first experience with a deaf individual, therefore they benefit from informed choices and guidance from unbiased professionals with realistic expectations, and acknowledgement that deaf children are "normal" on their own terms.

### **Language Development and Educational Approaches for Deaf Children**

Language development and educational approaches have a major role in the viability of ASL and English. Attitudes and perspectives towards both languages are strongly influenced by current educational practices for deaf and hard-of-hearing children. Most families' experiences with Deaf community and culture are shaped by their educational options and approaches. To understand the complexity of the Deaf community, one must be familiar with language ideologies and educational approaches.

**Language development.** Although ASL-English bilingualism is the focus of this study, there may be other languages used in the home (spoken and/or signed languages). ASL is a full, natural language with a developed grammatical system that is signed. There is no written or spoken version of ASL. It is not the same as using signs as a support to spoken English. It is also not the same as using a signed system, which is based on spoken English grammar and syntax.

A signed language is a fully accessible language option for all deaf and hard-of-hearing children because of its visual-spatial characteristics (Humphries et al., 2012). Even without exposure to formal language, deaf and hard-of-hearing children develop their own gestures that have characteristics consistent with the forms and functions of visual languages (Goldin-Meadow, 2005). Deaf and hard-of-hearing children who acquire a signed language become bilingual when they also learn the print and/or spoken form of the majority language (Marschark & Lee, 2014; Schick, Williams, & Kupermintz, 2005). Currently, bilingualism in deaf children also includes oracy or oral language development and use (Knoors et al., 2012). Signed language provides deaf or hard-of-hearing children with a fully accessible first language, ideally from birth (Humphries et al., 2012; Mayberry, 2007) and allows for the children to develop language to their fullest potential, parallel to their hearing peers (Lederberg et al., 2013; Reagan, 2011).

**Educational approaches.** The current educational placements for deaf and hard-of-hearing students fall into three categories: special schools, mainstreaming, and inclusion. Special schools are schools for deaf people, either residential or day schools. In

the United States, most of these schools use ASL as the medium of instruction.

Mainstreamed placements include resource rooms and self-contained classes within public schools. Students typically spend portions or all their days mainstreamed into general education classes whether at public, private, or charter schools. Inclusion refers to general education settings where typically only one deaf or hard-of-hearing student is placed in a class with hearing students. Support services within any of these settings may include speech and hearing services, tutoring, interpreters and transliterators, therapists, and/or itinerant support from a deaf education teacher.

Within these settings, there are three educational approaches used to educate deaf and hard-of-hearing students. Educational approaches are classified based on the languages and communication method selected to provide access to academic content. Oral education provides all instruction and interactions in the spoken language. Total communication provides instruction via the simultaneous use of the spoken language and a sign system created to emulate the syntactic and semantic structure of the spoken language (i.e., Signed Exact English). Bilingual education provides instruction and interactions in the natural signed language of the Deaf community and the spoken and written form of the dominant language.

***Oral education.*** Oral education is also known as the oral method, auditory-oral, and auditory-verbal therapy, which is also known as the Listening and Spoken Language approach. Oral education is based on the principle that children who are deaf or hard-of-hearing can develop listening and speaking language skills that will support literacy

development like that of hearing children when appropriate early intervention services, hearing technology, and consistent training are provided.

***Total communication.*** Total communication was initially conceptualized in the 1970s as a philosophy promoting the use of various methods of communication, including manual, oral, and written modalities, so that educators could meet the individual needs of students and students could choose the modality that worked best for them. Total communication gained support because of the dissatisfaction with the achievement levels of deaf students resulting from oral education. It was also the first approach to (re)incorporate signs into instruction. Total communication became the most widespread educational approach for more than three decades. In practice, total communication became synonymous with the simultaneous use of a spoken language and an invented sign system, a practice known as simultaneous communication, SimCom, or sign-supported-speech.

***Bilingual deaf education.*** Bilingual deaf education, also known as the bilingual-bicultural approach and the ASL-English bilingual approach, is based on the same premises as general bilingual education and adheres to the principles of additive bilingualism, which aims to support, develop, and maintain the child's first language as they develop a second language (Baker, 2011). The development of two natural languages, in this case one spoken and one signed, is supported by the interdependence hypothesis which asserts that proficiency in one language promotes proficiency in the other (Cummins, 2006). ASL serves to develop age-appropriate language and cognition and provides the foundation for the simultaneous or sequential development of spoken

and written skills in the majority language. Cummins (2006) reviewed the evidence on the relationship between ASL and English proficiency, concluding that it supports the viability and benefits of bilingual education for deaf children regardless of the auditory access they may receive from hearing technologies. The framework for bilingual deaf education expects students to achieve social and academic proficiencies as well as signacy, literacy, and oracy skills in the two languages of their environment (Gárate, 2011).

Monolingual development is the knowledge and use of one language, and is usually the norm, while the term bilingual refers to the development and use of more than one language. There are two approaches related to the bilingual development: the additive approach and the subtractive approach. The additive approach of the bilingualism is when the learning of a second (or more) language does not interfere with the development of the first language (Baker, 2011). The subtractive approach takes on the opposing viewpoint, with the goal of replacing the first language with a second language (i.e., learning English to replace Spanish) (Baker, 2011).

The use of the bilingual approach, which addresses the acquisition and use of both ASL and English, emerged in the 1980s. Now referred to as the bilingual/bicultural (“bi-bi”) approach, this model reflects the importance of including the language accessibility needs as well as the cultural and identity needs of deaf students. It recommends ASL as a first language and major medium of communication, with English addressed primarily through reading and writing (Nover, 1995; Nover, Christensen, & Chen, 1998; Vernon & Koh, 1970). A framework later emerged emphasizing the development of ASL and

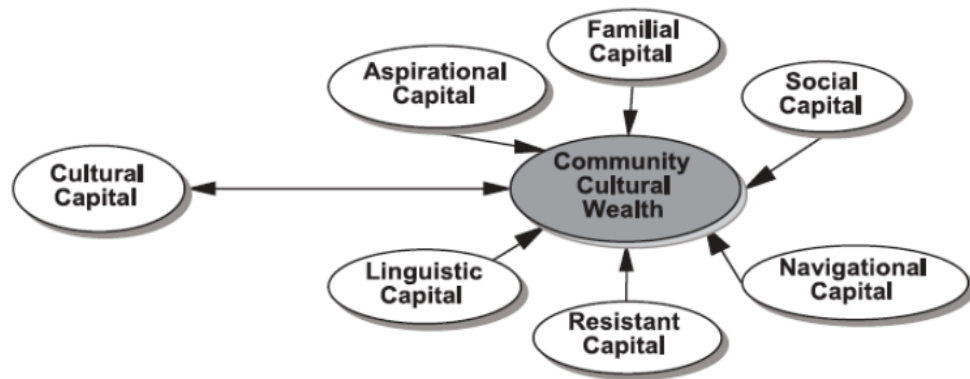
English, including the development of spoken English within a child's potential for oral development (Gárate, 2011; Nover et al., 1998). As growing numbers of children demonstrate the potential to access language and learning through the auditory channel via improved digital hearing aids and cochlear implants, increasing numbers of educational programs have moved towards designing and implementing an ASL and English bilingual program that is also bimodal. A bimodal-bilingual approach facilitates language acquisition in both languages separately through visual access. The next section discusses the importance of community wealth from schools and families.

### **Families, Culture, and Identity**

**Community wealth.** The funds of knowledge framework by Moll, Amanti, Neff, and Gonzalez (1992) examines families' social networks and the resources the families utilize including knowledge, skills, and labor that influences the families' ability to survive or thrive. Learning is a social process within larger contextual, historical, political, and ideological frameworks that affect students' lives (Gonzales, Moll, & Amati, 2005). Because the first five years of children's lives are critical to developing language foundation (Hart & Risely, 1995), it is imperative that parents with deaf children acquire ASL to use the language as the child's primary language to access world knowledge (Humphries et al., 2015; Humphries et al., 2012; Kushalnagar et al., 2010). By bridging ASL with families' funds of knowledge in deaf children's early years and developing linguistic foundation in ASL, deaf children are primed for ASL-English bimodal-bilingualism (Humphries et al., 2015; Humphries et al., 2012; Kushalnagar et al., 2010).

However, the medical perspective has greatly influenced mainstream perspectives, evident in the rapidly increasing number of deaf children receiving cochlear implants (Decker et al., 2012; Hyde & Punch, 2011; Meadow-Orlans et al., 2003; Spencer & Harris, 2005; Young, 2002). The Deaf community views itself as possessing *community cultural wealth*, a term coined by Yosso (2005) in the field of critical race theory. Yosso stated, “The community cultural wealth is an array of knowledge, skills, abilities, and contacts possessed and utilized by Communities of Color to survive and resist the macro and micro-forms of oppression” (p. 77). Applied to the Deaf community, the lens has been shifting from the deficient model of the medical community to a community filled with cultural knowledge, skills, abilities and contacts from socially marginalized groups (Yosso, 2005). By bringing in the Deaf community’s knowledge, approaches, and methodologies, the lens is transformed to a new set of knowledges. The theory of community cultural wealth was originally tied to racism; however, this study explored the oppression of a linguistic minority. This oppression of linguistic minority in the Deaf community was defined by Humphries (1977) as audism, or the “notion that one is superior based on one’s ability to hear or behave in the manner of one who hears” (p. 12). Audism is also “the bias and prejudice of hearing people against deaf people (Humphries, 1977, p. 13). There are countless studies that showcase the benefits of learning ASL for hearing children, yet those benefits have not been recognized for deaf children (Daniels, 2001, 2004). Daniels (2004) investigated the effect of ASL instruction on typical hearing kindergarten children. Daniels (2004) stated, “...when both sides of the brain are operating, students have more ways to make connections for learning. If we

link the written word with sign, it will increase students' chances of success in reading" (p. 12). ASL is used as an intervention to develop larger vocabularies, better phonemic awareness, knowledge of letter-sound relationships, and enhanced spelling skills (Prevatte, 2005). Daniels (2001) concluded that "all languages, whether spoken or signed, are categorically coded and housed in distinct memory stores even in the earliest stages of their acquisition" (p. 12). This supports the importance of being bilingual. Daniels (2001) explained, "As a result of the way the human brain stores all languages, the young student learning a new language has two places to look for information" (p. 12). As a result, "using sign language and English in tandem provides a much richer language base of brain activity and brain growth and development" in hearing children (Daniels, 2001, p. 12). Children's motor skills develop before their oral skills, making ASL a natural language for young children to be taught (Lawrence, 2001). In addition, their motor skills are adaptable to signing before writing, making it beneficial to learn how to use ASL fingerspelling (Daniels, 2001; Lawrence, 2001). Based on research studies with hearing kindergarten children, knowing two languages puts deaf children at a cognitive advantage, which then better prepares them for pre-literacy skills (Grosjean, 2001).



*Figure 2.* A model of community cultural wealth. From “Whose Culture has Capital? A Critical Race Theory Discussion of Community Cultural Wealth,” by T. J. Yosso, 2005, *Race, Ethnicity, and Education* 8(1), p. 78. Copyright 2005 by Taylor & Francis Group.

**Cultural identity.** Another component of the community cultural wealth framework is cultural capital, which contains cultural identity, as shown in Figure 2. There are two primary perspectives on being deaf: the medical perspective and the cultural perspective. The medical community (doctors, audiologists, speech pathologists, etc.) refers to the varying levels of hearing access as a hearing impairment that falls under sensory disabilities, whether genetic or acquired. The varying levels of auditory access are further used to categorize the level of “loss” an individual has. From this view, referred to as the medical model, the goal is to fix deafness and help deaf and hard-of-hearing children fit into mainstreamed society as much as possible using assistive hearing devices such as cochlear implants, hearing aids, and speech therapy. However, the varying levels of access become irrelevant when viewed from a cultural perspective where this “loss” is viewed as a Deaf Gain (Bauman & Murray, 2009). From a cultural perspective, deaf individuals view themselves as a minority group with their own beliefs, values, and ways of being.

Bat-Chava's (1994) study in the diversity of deaf identities was elaborated in her study which examined 267 deaf and hard-of-hearing individuals' cultural identity as deaf, hearing, or both. Bat-Chava (1994) found that those who have dual identities typically have positive attitudes about being deaf. In this study, deaf individuals who grew up in environments that included other deaf people at home and at school and used sign language developed greater sense of group identification and had higher self-esteem (Bat-Chava, 1994). Their identity and self-esteem equipped them to handle experiences outside the deaf world (Bat-Chava, 1994).

***The culturally deaf perspective.*** Language and culture are intertwined in the Deaf community. Deaf culture values ASL as the primary language of communication in their everyday lives. Padden and Humphries (2005) discussed the near-extinction of ASL because of the ICED conference in Milan in 1880, among other historical events. There are examples of this minority culture thriving in pockets of society, regardless of controversial technologies (i.e., cochlear implants) that challenge the existence of Deaf culture (Padden & Humphries, 2005). Ladd (2003) coined the term *Deafhood* to provide a positive framing for the journey that entails identifying with Deaf culture and as a way of being a community member. Ladd (2003) also analyzed minority cultures and multilingual discourses, drew parallels to Deaf culture, and explored ethical aspects of language minorities and the impact that society has on the signed languages of deaf people when they are viewed as a disability group.

***The bicultural perspective.*** The deaf world is complex, often divided by fidelity to either the Deaf community or the hearing community. This divide is often primarily

based on the individual's communication preference, along with other factors. The cultural perspective emphasizes signed language use as the primary means of communication while the medical perspective emphasizes spoken language as the primary means of communication. Because of improved hearing technologies there is a growing group of deaf individuals who can use both languages (ASL and English) bimodally and are members in both worlds, rather than choosing one over the other. Being bimodal-bilingual means they associate with and claim membership in both communities. Factors influencing cultural association and identity formation include when individuals became deaf, their parents' hearing status, the educational setting they attended, and their social experiences. Jones (2002) presented a neutral perspective on how the disability identity evolves into cultural identity for people who are deaf. Using psychosocial theories, Jones (2002) explored the process of transformation from stigma to identity and identified the elements (stigma, language, and prejudice) contributing to formation of the Deaf community as a minority group. Grosjean (2008) argued that establishing a cultural identity is a crucial developmental process for deaf children. The opportunity to do so is typically missing from programs that do not see the child as a member of two communities. When deaf children have that opportunity, studies have shown that bicultural identity is also correlated with positive attitudes about the use of a cochlear implant, reflecting the bicultural individual's ability to navigate aspects of both the deaf and hearing worlds (Most, Wiesel, & Blitzer, 2007).

***The culturally hearing perspective.*** Audiologically deaf and hard-of-hearing individuals whose identities do not seem to include being deaf may be described as

having a culturally hearing perspective of their identity. They may not share the values of the Deaf community nor its culture due to a lack of opportunities in participating in the Deaf community or not having an interest in associating with this group. There is little research on the identity of this particular group, many of whom grew up in adaptive-based settings and have only associated with hearing individuals. Instead, research has focused on factors that influence self-perception based on interactions with others, school settings, and life experiences. Kemmery and Compton's (2014) study examined how four mainstreamed deaf and hard-of-hearing students perceived and identified themselves. Kemmery and Compton discussed their self-determined identity type(s), fluidity in both communities, and management and resiliency. Reisler (2002) interviewed 14 deaf individuals and then shared their experiences of growing up oral to showcase not only their abilities, but also their struggles to be fully integrated in the hearing world. Also, a hard-of-hearing identity may exist separately from the culturally deaf identity according to Israelite, Ower, and Goldstein's 2002 study. Their findings imply that hard-of-hearing students need to connect with other hard-of-hearing individuals whether assimilating into the hearing world or deciding to be bicultural and participate in both the hearing and Deaf worlds (Israelite, Ower, & Goldstein, 2002). Such identities differ from components of identity typically passed down from parent to child, such as race and religion. This is particularly true for deaf children of hearing parents.

**Vertical and horizontal identities.** Religion, race, and language are the customary vertical identities directly passed down from parent to child, while horizontal identities are independent traits that are foreign to the parents. Solomon (2012) stated,

“Families tend to reinforce vertical identities from earliest childhood, many will oppose horizontal ones. Vertical identities are usually respected as identities, while horizontal identities are often viewed as flaws” (p. 4). Vertical identities are transmitted through generations, as most children will share at least some traits with their parents through shared cultural norms. Ethnicity is a vertical identity, and so is language. Language is usually passed through generations, even if the values have changed through learning another language or using the language minimally.

Horizontal identities are acquired traits from another group and are values or identities that are not shared by the family. For example, being gay is a horizontal identity and a subculture outside of the family if the child is born to heterosexual parents. Being deaf falls into the horizontal identity category because most deaf children are born to hearing parents, with many of those parents not consistently signing. Deaf children will develop horizontal identities due to different linguistic needs of ASL and cultural beliefs. One of the foundations of sociolinguistics is that language determines the way one understands the world (Solomon, 2012). Solomon (2012) argued that many parents perceive their child’s horizontal identity as a problem to be fixed or a personal failure. This affects the attitudes and beliefs of families with deaf and hard-of-hearing children in terms of raising them with the deaf culture lens, educational approaches and options, and most importantly, the decision of including ASL and English.

**Deaf Gain.** Society perceives people with disabilities as outliers. Bauman and Murray (2009) stated, “The frame of normalcy has shaped the Deaf community’s fraught relationships with the field of education, with the medical profession, and with

mainstream society” (p. 1). Being deaf, or having a hearing loss, puts individuals outside of what society considers normal. Deaf Gain reframes “deaf” as a form of sensory and cognitive diversity that has the potential to contribute to the greater good of humanity (Bauman & Murray, 2009). It conveys the opposite of “hearing loss,” meaning deaf people have something of importance; there is a benefit to being deaf; and recognizes all the ways that deaf people contribute to humankind (Bauman & Murray, 2009). By rejecting the disability lens and constructing a new paradigm of Deaf Gain, individuals who are deaf are complete and full being deaf. Baumann and Murray (200) then discussed three diversity types through Deaf Gain: cognitive, cultural, and creativity.

Cognitive diversity recognizes that there is a direct benefit (i.e., Deaf Gain) of using a visual-based language such as ASL. Skills include well-developed peripheral vision, a greater ability to form quick mental images, and excellent facial recognition (Bauman & Murray, 2009). Cultural diversity can be seen in how eye contact is maintained or how taking turns in a conversation contributes to a sense of collectivism (Bauman & Murray, 2009). Creative diversity of Deaf space benefits the human way of coexisting by examining the ways of deaf people (Bauman & Murray, 2009). For example, ensuring tables are round so that everyone can see and interact with each other, and adequate lighting — both confirming visual access — are of utmost importance in Deaf culture (Baumann & Murray, 2009). Another approach is to recognize the contributions deaf people have made to society and humankind. With the outdated medical perspective, having a deaf baby often generates anxiety, fears about limited

communication, and other challenges. Deaf babies, viewed from a Deaf Gain perspective, are recognized as assets to society.

### **Summary of Theoretical Framework**

The theoretical framework in this study examined the language ideologies of ASL and English, attitudes and the influence on children's language outcomes, and explored the interactions between families and children regarding language use. The framework aimed to identify factors that influence family language policy in families with deaf and hard-of-hearing children. The role of horizontal and vertical identities was also explored through a sociolinguistic lens. The shift from a deficit medical identity of "hearing loss" to focus on the advantageous and unique contributions of culturally deaf identity, including the Deaf Gain perspective, has confirmed the positive attributes of Deaf culture.

### **Characteristics of Deaf Learners**

The following literature review discusses deaf learners and their unique characteristics in areas of language acquisition, linguistic milestones, and literacy development, as well as the devastating effects of language deprivation resulting from choosing English over ASL. The similarities and differences of deaf families and hearing families with deaf children are examined through the lens of early intervention, family involvement and interactions, and the definition of home language. The benefits of early access to bilingualism through neurological studies are explored. The factors that influence family language policy, including heritage language, language role and status, beliefs and attitudes about languages, societal forces, cultural experiences, language

ideologies and the implementation of family language plan are also discussed further in this literature review.

As bilingual learners, deaf children process language acquisition differently than a typical developing hearing child because ASL is a visual language (Easterbrooks & Baker, 2002; Meier & Newport, 1990). ASL is usually a new language for most families with deaf and hard-of-hearing children, so the families often grapple with learning a new language (Bodner-Johnson & Sass-Lehrer, 2003). However, a literature review of language acquisition, linguistic milestones, and literacy development will show that once deaf children have access to a language, their language will develop typically.

**Modalities of ASL and English.** The brain has the capacity to acquire both visual and spoken language (Kovelman et al., 2009; Petitto et al., 2001; Petitto & Kovelman, 2003). The language aspects of the brain have no preference for language input: visual, auditory, or written (Meir, 1991; Pettito, 2000). Brain imaging suggests that the brain can readily handle dual language development bimodally without detriment to the development of language through either modality (Kovelman et al., 2009; Petitto et al., 2001). Kovelman and Petitto's (2003) study showed that exposing children to two languages from birth, specifically signed and spoken languages, does not result in language delay or confusion. The bilingual advantage supports the development of higher cognitive skills, executive functioning and literacy, and cognitive and communicative flexibility (Easterbrooks & Baker, 2002; Marschark, Lang, & Albertini, 2002; Petitto & Kovelman, 2003). The most accessible passageway for full access to language for many deaf children is visual (Humphries et al., 2012; Kushalnagar et al., 2010). The visual

language is ASL, a fully developed language. ASL is sometimes withheld from deaf children due to the mistaken belief that it interferes with English speech development; however, there is no evidence that using a signed language impedes spoken language development (Marschark & Hauser, 2008; Snodden, 2008). A strong language foundation, regardless of modality, is important for reading success (Prinz & Strong, 1997). Proficiency in each language will depend on how and when the language was learned and the level of proficiency needed in each context of use (Mayberry, 2007; Petitto et al., 2001).

**Language acquisition.** All children are born ready to acquire and use a language. For that to happen, the language must be accessible to the child. Like all other children, deaf and hard-of-hearing children have a critical need for early exposure to accessible language, but this access is far too often unrealized (Humphries et al., 2012; Kushalnagar et al., 2010; Petitto et al., 2001). For more than 200 years, the controversy regarding language acquisition has revolved around what deaf children should be exposed to spoken language, signed language, or both. When children have early access, it leads to acquisition and fluency at a very young age, which is critical for brain development (Mayberry, 2007). Signed languages are visual languages, making them accessible without relying on hearing (Humphries et al., 2012). However, most deaf children are born to hearing families who do not know a signed language (Bodner-Johnson & Sass-Lehrer, 2003; Karchmer & Mitchell, 2003). The average hearing two-year-old has a vocabulary of 300 words, while the average deaf two-year-old of hearing parents has a vocabulary of 30 words (Solomon, 2012). Many of these families wish for the child to

achieve spoken language skills (Bodner-Johnson & Sass-Lehrer, 2003; Snoddon, 2008). With advances in hearing technologies, such as digital hearing aids and cochlear implants, many young deaf and hard-of-hearing children are able to access spoken language at a much younger age (Spencer & Harris, 2005). However, despite amplification devices, some children are still not able to access spoken language at a level that results in typical language acquisition (Lederberg et al., 2013). Though research has stated otherwise, some professionals still caution parents that exposure to a signed language hinders spoken language development (Eleweke & Rodda, 2000; Larwood & LaGrande, 2004). There is a correlation between proficiency in ASL and the development of spoken language and English literacy skills (Goldin-Meadow & Mayberry, 2001; Padden & Ramsey, 1998, 2000). Spoken language skills increase when children also use ASL (Crittenden, Ritterman, & Wilcox, 1986; Volterra, Iverson, & Castrataro, 2006). As Yoshinago-Itano and Sedey (2000) asserted, it is the language that facilitates spoken language, not the mode of communication. Withholding a language can lead to children missing out on early language exposure during the critical period of language acquisition with devastating results for the child's overall future development (Humphries et al., 2012; Lederberg et al., 2013).

**Language milestones.** Despite increased awareness of bilingualism, parents may worry that exposing their child at an early age to two languages will be confusing and cause linguistic and cognitive delays (Evans, 1987; Li, Bain, & Steinberg, 2003; King, 2000). Studies of bilingual children, however, consistently report that the acquisition of multiple languages is a seamless process that unfolds naturally and without complications

(Petitto, 2000; Petitto et al., 2001; Sebastián-Gallés & Bosch, 2009) and bilingual children achieve language milestones at similar ages as monolingual children (Conboy & Thal, 2006; Sebastián-Gallés & Bosch, 2009). Petitto et al.'s (2001) study of hearing children with deaf parents attest that children acquiring both a signed language and a spoken language achieve milestones in the same time-frame as bilinguals with two spoken languages. The study examined three children acquiring *Langues des Signes Québécoise* (French Sign Language) and French, and three children acquiring French and English for over a year through video data collection. They discovered the signing-speaking bilinguals mixed their languages in semantically structured ways (Petitto et al., 2001). Most importantly, these studies showed that when hearing children combine signs and spoken words in a single utterance, it is not an indication of language confusion (Petitto et al., 2001). The children had the capacity to differentiate between two languages based in early phonological representations (Petitto et al., 2001). The act of combining words and signs is code-switching, which is typical of fluent bilingual adults. This happens when young bilinguals are learning the grammatical structure of each language and figuring out how and when to use the language in various contexts (Petitto et al., 2001). Deaf children's vocabulary knowledge in each language is based on the contexts where the two languages are used (Fish & Morford, 2012). For example, the ASL vocabulary will reflect the contexts where ASL is most accessible to the deaf children. If discussing dinosaurs only in ASL without English reference at school, deaf children will develop vocabulary related to dinosaurs in ASL, but are less likely to develop vocabulary on dinosaurs in English (Fish & Morford, 2012). It is imperative that

the deaf bilingual learners receive content in both languages in various contexts using ASL and English. Vocabulary size is an important predictor of language learning in all children (Daniels, 2001, 2004; Solomon, 2012). Children who know more words are better at learning new words (Daniels, 2001, 2004).

**Linguistic benefits of early access to language.** Grosjean (2001) considered the future of deaf children as bilingual and bicultural individuals and maximizing their potential cognitively, linguistically and socially. The author stated that it is better to provide deaf children with two languages than to bet on one language based on technology (e.g. cochlear implants and hearing aids). Deaf children should have access to language to communicate with families, develop cognitive abilities, and gain knowledge of the world (Humphries et al., 2012; Kushalnagar et al., 2010). Children with competence in a first language can use this to reinforce acquisition of a second language (Easterbrooks & Baker, 2002; Meier, 1991). Based on the principle of interdependence between first and second languages, developing proficiency in the first language is effective in transferring skills learned to the second language (Cummins, 2006). Knowing two languages puts the Deaf children at a cognitive advantage, which better prepares them for academics (Grosjean, 2001). Further, Petitto et al.'s (2001) work examining the fundamentals of infants' and toddlers' bilingual acquisition showed no indication of lexical confusion among young Deaf bilingual babies, which further supports the case of deaf babies acquiring two-language bimodality without any adverse effects on the brain or language development in either language. This allows for the children to develop a strong language base to develop pre-literacy skills, rather than the subtractive approach as

promoted by medical professionals advocating the exclusive use of cochlear implants without sign language (Eleweke & Rodda, 2000; Larwood & LaGranda, 2004; Stredler-Brown, 2010). Research shows benefits of ASL–English bilingualism for typically developing hearing children, yet the same kind of regard is not shown to the Deaf children (Daniels, 2001 & 2004; Prevatte, 2005). However, hearing babies are encouraged to learn sign language, yet deaf children with hearing parents are not encouraged to sign (Eleweke & Rodda, 2000; Prevantte, 2005).

**Literacy development.** Literacy development among deaf children has long been a critical issue in deaf education. Deaf and hard-of-hearing children tend to score much lower than their hearing peers in literacy skills: the average for the past 50 years has been a third- to fourth-grade reading level by 18-years-old (Holt, 1993; Karchmer & Mitchell, 2003; Moores, 2009; Traxler, 2000). Learning to write a language without hearing the language adds challenges, particularly in an era where phonics-based literacy learning is the dominant approach to teaching literacy skills.

With the advancement of hearing technologies, some deaf children use a phonics-based learning approach to literacy (Robertson, 2013). Literacy learning is directly related to having a foundation in a first language. Deaf and hard-of-hearing children are often delayed in accessing a language, which impacts their ability to fully develop it before they enter a school where they will be expected to begin reading and writing instruction (Nussbaum & Scott, 2011). Evans (1987) examined how deaf children learn literacy through ASL as the language of instruction. Her findings indicate that making the language transition to conceptual leads to higher learning achievement. Perfetti and

Sandak (2000) showed that deaf children of deaf parents who are fluent in ASL usually have an early and rich language environment, and this environment provides a foundation for reading with understanding that deaf children from deaf families consistently outperform their deaf peers of hearing non-signing parents. The two main factors in why deaf children of deaf parents achieve higher reading success are the acquisition of phonology in reading and mastery of a primary language (ASL), which translate to early language access (Perfetti & Sandak, 2000). Despite early exposure to hearing parents' spoken language (English), speech intervention programs, and hearing technology (cochlear implants and hearing aids), many deaf children continue to struggle with age-appropriate English skills (Blamey et al., 2001; Geers et al., 2009). However, Prinz and Strong (1997) concluded deaf children of hearing parents who attend sign-based schools and had early access to ASL as a language had comparable reading skills to deaf children of deaf parents. Their study examined the relationship between ASL skills and English literacy of 160 deaf children, and the results showed that deaf children who attained the two top levels on ASL tests consistently outperformed deaf children at the lowest ASL ability level in English literacy (Prinz & Strong, 1997). Specifically, on both ASL and English literacy tests, deaf children of deaf mothers consistently outperformed deaf children of hearing mothers (Prinz & Strong, 1997). Parental fluency in the child's language is critical for deaf children's academic outcomes, especially reading (Prinz & Strong, 1997). Deaf children's acquisition of English literacy skills depends on the acquisition and fluency in ASL (Prinz & Strong, 1997).

**Language deprivation and delays.** Early accessible communication between the infant and parent is necessary for the child to acquire language (Bodner-Johnson & Sass-Lehrer, 2003; Meadow-Orlans et al., 2003; Snoddon, 2008). Visual input assures the child's early accessibility to communication and language. The delay of full language access can have a negative impact on not only cognition and academic achievement, but also on social and emotional health (Humphries et al., 2012, Kushalnagar et al., 2010). There is a risk in language delay if an accessible language is not used as early as possible (Mayberry, 1993 & 2007; Mayberry, Lock, & Kazmi, 2002; Shick, de Villiers, de Villiers, & Hoffmeister, 2007).

Knowing the critical period for language development in the first years of life, newborns' brains are designed for language and will acquire accessible language(s) when exposed frequently and used by people in context (Humphries et al., 2012). Children may experience harm from linguistic deprivation, which diminishes their educational opportunities because language is connected to literacy (Humphries et al., 2012). Humphries et al. (2012) stated sign language acquisition at an early age leads to typical language acquisition; therefore, "every deaf child should be raised with sign language as protection against the harm of late first language acquisition" (p. 7). Additionally, high levels of family involvement have been found to produce greater language development outcomes in deaf and hard-of-hearing children (Baker, 2011).

### **Deaf Families and Hearing Families**

The roles of early intervention and family involvement is essential in deaf families and hearing families raising deaf children, along with family interactions within

deaf and hearing families. Also crucial is the definition of “home” language in bilingual families and the importance of motherese. Finally, the roles that medical professionals and the deaf mentor project play for families with deaf children are of paramount importance.

**Early intervention.** Starting a partnership between families and professionals at an early stage of the child’s life between birth to age three helps the child, family, and community (Bodner-Johnson & Sass-Lehrer, 2003; Li et al., 2003; Turnbull, Turnbull, Erwin, Soodak, & Shogren, 2011). Early intervention services provide information and support on the use of assistive technology, audiological services, family training, and speech-language pathology to meet the unique needs of the child (Bodner-Johnson & Sass-Lehrer, 2003). Deaf and hard-of-hearing infants whose hearing abilities are assessed within the first few months of life and have family involvement and support from early intervention programs are more likely to experience age-appropriate growth in language, communication, and social-emotional development than those who do not receive similar support (Bodner-Johnson & Sass-Lehrer, 2003; Li et al., 2003). Research shows that the age of identification and initiation to early intervention services are positively and significantly related to language, speech, and social-emotional development (Yoshinaga-Itano, 2003). Although all infants receive hearing screenings, many still do not receive early intervention services in a timely manner (Moeller, 2000). There are several factors that contribute to the challenges of providing quality services, including professionals who are not prepared to work with are deaf and hard-of-hearing infants (Moeller, 2000). While state agencies are expected to offer comprehensive resources available for

professionals and families, many states are still developing those resources (Moeller, 2000). One of the primary goals for early intervention is to support parent-child communication (Moeller, 2000). In Swedish and Danish bilingual schools, parents are given paid release time from employment to learn a new language for their deaf children (Mahshie, 1995). Upon discovering that a child is deaf or hard-of-hearing, families are often offered an either-or choice between an oral pathway and a signing pathway, but they also need support that goes beyond that initial decision (Humphries et al., 2012). They need guidance regarding the linguistic and educational aspects of their child's future. Early interventionists whose practices are research-based and who respect family values offer optimal experiences for infants who are deaf and hard-of-hearing and their families (Moeller, Carr, Seaver, Stredler-Brown, & Holzinger, 2013). Snoddon (2008) suggested that a visual language is critical for deaf and hard-of-hearing infants to acquire a foundation in language, especially when hearing is not accessible to all infants even with hearing technologies.

**Medical professionals.** The widespread availability of newborn hearing screening programs means that almost all deaf and hard-of-hearing infants and toddlers will be identified early and receive early intervention services. The increase in early intervention services is the result of aggressive efforts to implement newborn hearing screening programs throughout the country (JCIH, 2013). All 50 states have established newborn hearing screening programs; however, resources vary from state to state. Hearing parents usually know very little about deafness or sign language and typically

rely on their primary care physicians as a source of information, support, and referrals (Kushalnagar et al., 2010).

Eleweke and Rodda's (2000) case study of two families with deaf children examined their decisions in choosing a communication mode with their deaf children, and found that decision-making greatly depended on information provided to them by medical professionals. The medical professionals in their study recommended "amplification of sound using hearing aids" and "did not believe in the signing approach," therefore; they did not recommend ASL "because it would hinder the child in the development of language and speech" (Eleweke & Rodda, 2000, pp. 377-378). According to Eleweke and Rodda, medical professionals also suggested unrealistic expectations from the assistive devices for the deaf children (2000). A more recent study by Geers et al (2017) examined the acquisition of spoken language in deaf children with cochlear implants. Her results showed that the group without any exposure to sign language developed better spoken language skills. However, the study did not address the severe language delays of deaf children with cochlear implants when compared to typically developing hearing children (Geers, 2017).

Turnbull et al.'s (2011) findings indicate that families from diverse cultural backgrounds tend to be less satisfied with early intervention services than those from mainstream backgrounds. This is echoed in Calderon's (2000) findings that a parent-professional relationship is often marked with distrust and disillusionment. In other words, parents and professionals may view each other as hostile, indifferent, and unable to help. Most professionals in the medical field see deaf children from a clinical or

pathological perspective and lack knowledge about the linguistic, literacy, and academic needs of the deaf child (Larwood & LaGrande, 2004). When using the cultural and linguistic framework to view the children and to support and guide the selection and design of early intervention services, the experiences and outcomes for the families and children are enhanced (Bodner-Johnson & Sass-Lehrer, 2003). Deaf and hard-of-hearing children's outcomes are improved when professionals working with them have specialized training in supporting their visual and linguistic needs (Yoshinaga-Itano, 2003). Li, Bain, and Steinberg (2003) surveyed 83 parents about their decision factors that influenced their choice of communication modality for their deaf child. The recommendation of a professional was the most important factor identified by 90% of the survey respondents (Li et al., 2003).

Additional factors were services provided closest to home, services provided by the local school district, recommendation of a friend, and the cost of services (Li et al., 2003). The degree of the child's hearing loss was the most influential factor for parents, and the parental cognitive-attitudinal factors favored the oral approach (Li et al., 2003). They believed deafness could and should be corrected and that the child should be able to speak (Li et al., 2003). Because of the survey, the researchers concluded that medical professionals who work with deaf children should recognize the relevant issues beyond the child's hearing loss (Li et al., 2003). Interventions are most effective when balancing parental beliefs, and audiological considerations.

**Deaf mentors.** The Deaf Mentor Project is a national early intervention service for deaf and hard-of-hearing children and their families (Larwood & LaGrande, 2004).

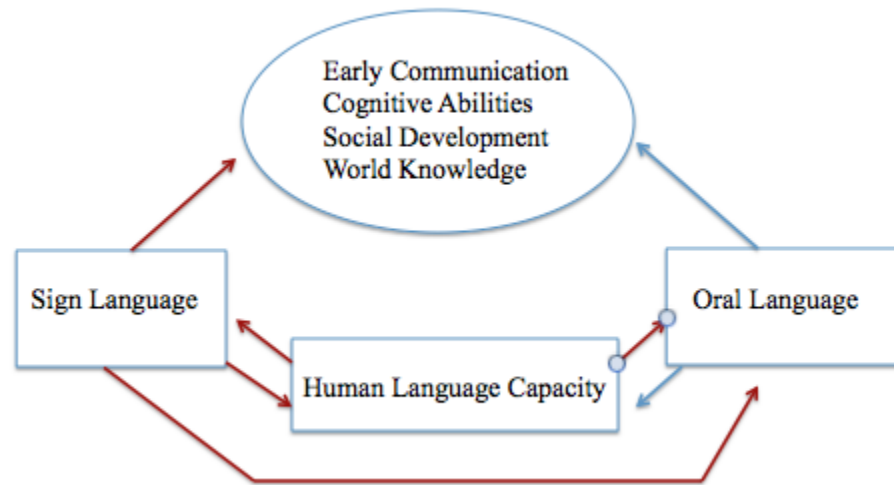
Established in 1991 at the SKI-HI Institute at Utah State University, the program connects to state agencies, state deaf schools, national or regional organizations, or public schools (Larwood & LaGrande, 2004). The Deaf Mentor Project offers families opportunities to interact with deaf adult mentors in their homes while learning ASL and deaf culture, building positive identity, and pride in being deaf (Larwood & LaGrande, 2004). Watkins, Pittman, and Walden (1998) conducted a study examining the efficacy of deaf mentor programming for young children who are deaf and hard-of-hearing and their families. The study compared two groups of families: one received English-only advisors and the other received native ASL deaf mentors. The results showed children with Deaf mentors had greater gains in both receptive and expressive language by approximately 6 months, increased vocabulary use, and had increased communication with their families (Watkins, Pittman, & Walden, 1998). Families who had a Deaf mentor also reported fewer behavioral issues with their deaf and hard-of-hearing children. Families' attitudes and perceptions of the deaf culture were comparable to current beliefs of the Deaf community when compared to families with English only mentors (Watkins et al., 1998). The results of the study showed a bilingual home environment for the families who had Deaf mentors. Larwood and LaGrande (2004) showed early intervention programs that include Deaf role models are critical to families in communicating with their deaf or hard-of-hearing children and empowers families in making their children's world more accessible with the support of a Deaf role model. Including a Deaf mentor in the families' lives reduced the time spent in the grief cycle over their children's hearing loss and

increased time focused on building language for communication (Larwood & LaGrande, 2004).

**The linguistic rights of a bilingual deaf child.** Depending on the child, the two languages will play different roles: some children will be dominant in ASL, others will be dominant in spoken English, and some will be balanced in the two languages (Grosjean, 2001). The provision of two languages and cultures allows for the child's choice. There are advantages to the ASL-English bimodal-bilingual approach in providing early accessible language to deaf children by following the additive bilingual approach (Grosjean, 2008). It is through language that children develop social, emotional and cognitive abilities that are critical to timely development in all areas (Humphries et al., 2012; Kushalnagar et al., 2010). The outcomes of each child related to spoken English for learning, despite improved technology through hearing aids and cochlear implants are not known (Humphries et al., 2012). There are well documented benefits of learning a signed language and no evidence of negative consequences (Daniels, 2004; Petitto et al., 2001; Prevatte, 2005).

To satisfy a child's need for language development, the environmental linguistic input must meet specific requirements. According to linguist Dan Slobin (2005, 2008), language must be clear, humanely processible in real time, quick and easy, and expressive. Grosjean (2008) emphasized the importance of acquiring ASL solely because it triggers the human language capacity, which supports oral language development. Fischer (1998) stated our "capacity for language is innate but it must be triggered by

exposure to actual language early” (p. 234). Figure 3 describes how sign language triggers oral language development in deaf children.



*Figure 3.* The role of sign language. The red arrows indicate how sign language triggers human language capacity to gain early communication skills, cognitive abilities, social development and world knowledge. Adapted from “The Biculturalism and Bilingualism of the Deaf” by F. Grosjean, 2008, *Studying Bilinguals*, p. 234. Copyright 2008 by Oxford University Press.

Bimodal-bilingual development includes code-mixing, code-switching, and the emergence of communication preferences. Depending on who the children are communicating with, the children may code-switch, meaning they may use sign language with deaf peers and adults and spoken English with hearing peers and adults. Code-mixing is common among young bilingual learners as they learn patterns of ASL and English, often mixing them together (Grosjean, 2008). Children may show communication preferences when they feel more proficient or have more access to one or the other language (Schick, 2003).

**Family involvement and interactions.** Family involvement is vital to deaf and hard-of-hearing children's overall development, but specifically in the language and communication aspects. Families need opportunities to develop the necessary skills for fostering effective early communication. The benefits of early identification and early intervention have exceeded expectations and have positively changed the outlook for children who are deaf and hard-of-hearing and their families. Bodner-Johnson and Sass-Lehrer (2003) discussed unique characteristics of early intervention programs and models that support families with deaf and hard-of-hearing children. The characteristics include being family-centered, collaborative, interdisciplinary, high-quality service providers, and use of assessment based on culturally responsiveness and community needs. Simply participating in an early intervention program is not sufficient for successful language development; professionals and family members should also establish high expectations for their children's development and receive inclusive and specialized programming to support the children's development (Young & Tattersall, 2005). Families often do not realize the extent of the powerful influence they have over their children's development and their role as partners in early intervention services (Meadow-Orlans, Mertens, & Sass-Lehrer, 2003). The survey shared responses about deaf children's behaviors and language uses, how family members seek support, and minority group families were the most overlooked population (Meadow-Orlans et al., 2003). The maternal relationship and communication skills with infants are a crucial part of language development (Calderon, 2000). Calderon (2000) examined the relationships between language development, early reading skills, and social emotional development outcomes along with parental

involvement in education programs with 28 deaf children in a birth-to-3 early intervention program. The parental involvement in school-based education is a significant predictor to pre-literacy skills; however, when coupled with the mother's communication skills, the language development outcome was stronger (Calderon, 2000).

Neese-Bailes et al. (2009) identified mechanics of Deaf parent-deaf child interactions in her study, such as getting the deaf child's eyes in gear, parental responsiveness, and viewing the child as a member of a cultural group with people who share a common language rather than as a "defective hearing person" (Neese-Bailes et al., 2009, p. 448). Identifying the mechanics of Deaf parent-deaf child interactions can help develop interaction skills between both the parent and the child, giving the deaf child necessary skills to be on par with a bilingual child (Neese-Bailes et al., 2009).

**Definition of home language for deaf children.** For most bilingual families in other linguistic groups, children are exposed to their home language from birth and then acquire English as their second language. This is often not the case for hearing parents with deaf children (Karchmer & Mitchell, 2003). When deaf children are born to deaf parents, they are more likely to be exposed to ASL as their primary language while acquiring English as their second language (Karchmer & Mitchell, 2003). However, when deaf children are born to hearing parents, the parents are often shocked and contend with multiple stress factors in deciding options for their deaf babies (Humphries et al., 2012; Kushalnagar et al., 2010). Although the importance of children's first five years in acquiring sociolinguistic skills has been documented (Hart & Risely, 1995), medical professionals prioritize English over ASL, which means deaf babies are frequently not

exposed to accessible language during this optimal period. As a result, deaf babies with hearing parents are often not given the same access to world knowledge due to lack of linguistic access and input (Humphries et al., 2012; Karchmer & Mitchell, 2003; Kushalnagar et al., 2010).

One of the biggest challenges in an ASL-English bilingual framework for families is the definition of home language for deaf children. To some families, that is ASL, and to others, that means English. Grosjean (2008) stated the linguistic rights of deaf children are to acquire ASL as their home or primary language. Calderon's (2000) study of 28 deaf children ranging from 9- to 53-months-old identified the factor of parental involvement, especially maternal communication, as a positive predictor for strong reading skills and language development. This supports Fishman's (2000) statement that mothers are the key players in transferring first language to babies as the family and community maintain the home languages.

Studies consistently show relationships between early language access and maternal communication positively influence deaf children's language development and academic outcomes. Deaf children who are raised bilingually ideally become members of both the Deaf and hearing communities in which they live, which emphasizes the importance of considering the allocation of both languages in each family's language policy. Furthermore, mothers serve an integral role in language acquisition.

**Motherese.** Motherese is a linguistic feature of exaggerated speech, using fewer words per utterance and more word repetitions (Masataka, 1992). Adults often address young children using motherese in spoken language. A major benefit of motherese is that

it clarifies linguistic boundaries for young children (Masataka, 1992); this applies to sign language as well. Masataka (1992) observed eight deaf mothers using their first language, Japanese Sign Language (JSL), in interactions with their deaf infants. The mothers used signs at a relatively slower tempo, used sign repetitions, exaggerated their signs, and stayed at their young deaf children's eye levels (Masataka, 1992). He concluded that the features of signed motherese "evoked more robust responses (visual) from the infant" (Masataka, 1992, p. 459). Mothers were observed continually monitoring their young deaf children's attention and modifying their signing to maintain the young deaf children's responsiveness (Masataka, 1992; Swisher, 2000). The young children responded positively to patterns in language, signed or spoken, and enhanced their language acquisition (Masataka, 1992; Swisher, 2000). Also, the progression from simple signs to more complex signs may facilitate language acquisition for deaf infants (Masataka, 1992).

### **Factors That Influence Family Language Policy**

Seven factors directly influence family language policy when a bilingual family decides to include more than one language to their home: the heritage language, language role and status, beliefs and attitudes about languages, societal forces, cultural experiences, language ideologies, and the implementation of a family language policy.

**Heritage language.** A heritage language is the minority language a child learns at home. Because the majority language is learned outside of home and the child becomes accustomed to using the majority language, maintaining a heritage language may be challenging (Splosky, 2012). Grosjean (2008) argued that establishing a cultural identity

is a crucial developmental process for deaf children. Grosjean asserted that deaf children have a linguistic right to acquire ASL as their home or primary language.

***Parents with deaf children.*** Parental communication skills are a significant predictor for positive language and academic development, even greater than parental involvement in their deaf child's school-based education (Calderon, 2000). Whether a child's parents are hearing or deaf, the child's signing skills turn out to be the best predictors of reading skill (Hoffmeister, 2000; Padden & Ramsey, 2000; Prinz & Strong, 2000). Knowing a language, including a manual language with a different structure from the language captured in print, is better for learning to read than not knowing any language (Goldin-Meadow & Mayberry, 2001).

***Deaf parents with children who have cochlear implants.*** In the recent years, the population of deaf children with Deaf parents receiving cochlear implants is increasing (Hassanzadeh, 2012; Hardock et al., 2011; Hyde et al., 2010). Due to shared language of ASL, deaf children of deaf parents typically do not receive cochlear implants; therefore, the rising trend is curious. Contributing factors include wanting the child to have more opportunities through interacting and participating in both Deaf and hearing communities as well as developing proficiency in social and academic languages in several modalities (i.e., reading, writing, signing, speaking) (Hyde et al., 2010). Some Deaf families felt offended by the medical professionals' advice of cochlear implant because they felt it denied their Deaf identity (Hardock et al., 2011). Although Deaf families explored the cochlear implant option for their Deaf children, they felt strongly about their Deaf culture and identity and did not view cochlear implants as a threat (Hardock et al., 2011).

However, Hassanzadeh (2012) emphasized in her study that deaf children who signed before receiving their cochlear implants showed an improvement in their ability to learn spoken language after cochlear implants.

Mitchiner's (2014) study portrayed the beliefs and perspectives of Deaf families with children who have cochlear implants and ASL-English bimodal-bilingualism. The parents in the study were Deaf and bilingual, which Mitchiner concluded gave their children confidence in using their implants to develop fluency in two bimodal languages. Most families were proud of their language (ASL); however, they wanted their children to also be fluent in English given its position as the majority language in the United States (Mitchiner, 2014). Many families believed that their children needed to be competent in English to succeed and thrive. Some of the families' challenges included maintaining a balance in exposing their children to both languages at home, providing support for spoken English, finding appropriate educational placement, and dealing with disagreements within the deaf and hearing communities about cochlear implantation and language use (Mitchiner, 2014).

***Hearing adults with deaf parents.*** Pizer, Walters, and Meier (2012) studied language choice patterns among American hearing adults who had deaf parents. Their findings revealed that the hearing adults had a sizeable range of skills in both languages, from basic facilitation of communication to competent bilingual users (some even became ASL interpreters). According to Pizer et al. (2012), family communication frequently includes both modalities, especially the day-to-day communications with Deaf family members. In conclusion, the findings reflected the great emphasis of majority

language being used in the minority language households (Pizer et al., 2012). This places a burden on hearing children of deaf parents in mediating communications and reducing communication barriers with the society (Pizer et al., 2012).

### **Language Role and Status**

ASL's role and status as a language is often fraught with challenges in society, largely because it does not include spoken or written aspects. According to the Ethnologue Languages of the World website, ASL is used by approximately 250,000 individuals in the United States and is widely used by many hearing children of deaf parents and as a second language by many hearing individuals. Its language status is labeled as "developing" which means the language is in use, although it is not widespread (Ethnologue, 2017). English is labeled as "international," which means "the language is widely used between nations in trade, knowledge exchange, and international policy" (para. 56). The large status gap between both languages contributes to the power struggle regarding the role of ASL in the lives of deaf children.

**ASL and English in deaf education.** Nover (1995) examined the language power of ASL and English in the field of deaf education using Ruíz's (1984) language as a problem, language as right, and language as resource framework. English-only educators, as defined by Nover (1995), advocate the use of English as the only language to educate deaf and hard-of-hearing students regardless of their hearing levels. English-only educators view ASL as "a crutch" and problematic, and, therefore, discourage the use of ASL (Lane, 2005). These attitudes and beliefs have locked deaf and hard-of-hearing children into an auditory-based language and cultural system that devalues ASL and

frames deaf individuals as deficient if they do not speak English (Lane, 2005). The hold of English-only beliefs has been steadfast since the 1880 Milan conference that still profoundly affects deaf education even 137 years later.

**Ideology of American Sign Language.** Recognition of ASL as a language has made significant strides in the United States, yet there are still discussions as to whether ASL is a “real” language. Reagan (2011) stated that misunderstanding of the nature of human language has greatly impacted ASL. Reagan utilized the language-as-problem orientation from Ruíz (1984) to identify four major ideological barriers of the status of ASL: (a) the official recognition of ASL as a language on a federal level; (b) the early identification of hearing levels; (c) the use of ASL as the language of instruction in deaf education; and (d) the context of secondary schools, colleges and universities in granting foreign language credit for ASL courses taught by instructors who are not qualified to teach ASL (Reagan, 2011). Reagan addressed the “linguistic legitimacy” which implies that some languages are more “legitimate” than others based on social status. When paired with English as our parallel language, English naturally has more power and status in the United States. Despite these barriers, Reagan pointed out that as of 2006, ASL had been officially recognized as a language or as a foreign language in more than 40 states and the District of Columbia.

### **Beliefs and Attitudes about Languages**

The study of family language policy is relatively new with the emergence of complex sociolinguistic domains in our multilingual societies (Spolsky, 2012). Spolsky (2012) discussed varying domains within our society, variation in language policy, and

how each domain influences and is influenced by other domains. Each domain is complex and exists in a chaotic non-hierarchical system; therefore, there are no domains superior to others when exploring family language policy (Spolsky, 2012). Family members will have different language practices and beliefs, and continue to influence each other's language practices and beliefs (Spolsky, 2012). There are several familial domains as identified by Spolsky: neighborhood, workplace, parental misconceptions about language, home-school differences, economic success, and cultural patterns. Familial attitudes towards language rely on their observations and assessments of their children's language situation. Myths such as the problem of bilingualism or the value of knowing specific languages drive most of family language policy (Spolsky, 2012). Families often experience both external (societal forces) and internal pressures (family beliefs and values). When discussing language use for their deaf children, families are often caught up in an either-or dilemma between ASL or English, rather than considering both languages (Humphries et al., 2012). These families often are grieving the loss of a "normal" hearing baby, fearing what the future may hold for their child who cannot speak like a hearing child (Humphries et al., 2012). For hearing family members, there are many unknown factors facing them: the misconception that signing is inferior (or a last choice), stigmatization from the medical profession if they sign, or learning a new language at their age (Humphries et al., 2012).

Without understanding the risk of linguistic deprivation of not signing with their deaf infants, hearing family members may opt for a speech-only approach due to familiarity, attitudes, and beliefs of the spoken language (Humphries et al., 2012). Li,

Bain, and Steinberg (2003) surveyed 83 parents about factors that influenced their choice of communication modality for their deaf child. Li et al. (2003) found that parental decisions were associated with the extent of the child's hearing loss. In the study, out of 18 children identified with moderate to moderately severe hearing losses, 14 chose the oral-only approach; and of 50 children with profound hearing loss, 10 families chose oral-only (Li et al., 2003). Parents who chose an oral-only approach agreed with the following statement: "Although sign language may be useful, it is not really a proper language" (Li et al., 2003, p. 165). Parents who rated speech as most desirable and the sign language the least were 40 times more likely to choose oral communication only compared to families who rate both speech and sign as equally desirable (Li et al., 2003). In all, the survey supports the findings that families' choices are based on their beliefs and attitudes about being deaf, perceptions of the Deaf community, and parental valuation of the child's ability to speak (Li et al., 2003).

### **Societal Forces**

Family language policy sets the frame for child-caretaker interactions and language development and provides insight into parental language ideologies that reflect societal attitudes and ideologies about both languages and parenting (De Houwer, 1999; King et al., 2008). The patterns of family language use and acquisition are reflective of societal patterns. For example, the American cultural values of assimilation and one-nation, one-language are replicated in bilingual families, meaning more bilingual families are dropping their heritage languages (Tuominen, 1999). Piller (2001) inferred that family discourse on bilingual childrearing is not being included in bilingual literature

(i.e., books, websites, and training) and that the perspectives are limited to professionals and researchers. King and Fogle's (2006) work concluded that families drew on other sources, such as their own past language experiences and other family members, for explaining their family language policies. Families also viewed language policy as a coping mechanism in addressing their heritage language and new language (King & Fogle, 2006).

Eleweke and Rodda's (2000) case study of two families with deaf children found that parents' decisions in choosing a communication mode for their deaf children greatly depended on information provided to them by medical professionals. Again, most professionals in the medical field see the child from a clinical or pathological perspective, and they lack knowledge about the linguistic, literacy, and academic needs of the child (Larwood & LaGrande, 2004). The linguistic, literacy, cultural, and academic needs of the deaf child should be considered when implementing a family language policy.

### **Cultural Experiences**

In Schwartz's (2010) study, children's preferences for languages were related to environmental contexts in which parents set up language use in their homes versus what is used at the school. Family language policy includes "efforts to control the language of family members, especially children" (Spolsky, 2007, p. 430). Families' decisions about which languages to include with their children play an important factor in preserving language in their homes (Schwartz, 2010). King and Fogle (2006) found that bilingual families were motivated by their personal experiences with languages that shaped their attitudes and beliefs towards languages. Many families felt they missed out on benefits of

being bilingual, which influenced their decision to raise their children as bilinguals. Additional factors also influence families' bilingual values, including the number of children in the family, the parents' relationship with their culture, and the children's general well-being (Schwartz, 2010). Caldas and Caron-Caldas (2002) suggested a gap in parents' role as language facilitators of a minority language as children enter adolescence due to pressure of English dominance in our society.

**Perspectives about being deaf.** Nover (1995) emphasized the importance of ASL and English bilingual educators in Deaf education to foster understanding of social issues and language needs. All deaf children deserve direct experiences and access to the world, which can be achieved through competent and knowledgeable ASL-English bilingual individuals, specifically teachers (Nover, 1995). Perspectives about being deaf from English-only educators are mostly focused on language-as-a-problem as characterized by Ruíz (1984). The promotion of English-only language planning has perpetuated an ASL-as-problem orientation in a mostly auditory-based society (Nover, 1995). English-only educators often define, take control, and manipulate the realities of deaf individuals, using their power over deaf education to benefit the dominant society (Nover, 1995). As the result of this dominance, educators may have “unconsciously internalized the attitude of English-only superiority” (Nover, 1995, p. 117) and seek to mold deaf children into hearing children. This has occurred because audiologists, speech therapists, doctors, and special educators knew very little about being deaf and the beliefs, experiences, and values of Deaf culture (Nover, 1995). The deeply held assumptions of ASL-as-problem has continuously been challenged by bilingual advocates, educators, and individuals who

view language as a natural, human, moral, and legal right for deaf children (Nover, 1995). Nover suggested ASL be viewed as heritage language for deaf children and English as a second language through various modalities such as speaking, and listening (when appropriate), and reading and writing for deaf children.

### **Language Ideologies**

Family language policy is an explicit and overt planning of language use within the family's home (King et al., 2008). It sets the stage for children's language development (De Houwer, 1999) and showcases family's language ideologies (King et al., 2008). Family language policy was originated to address language-as-a-problem orientation (Ruíz, 1984), but has expanded to "understanding shifting language policies as a part of dynamic social, cultural, and ideological systems" (King et al., 2008, p. 908). Policies play a large role in supporting minority languages in society, therefore influencing schools, and homes of families that do not use English primarily. King et al. (2008) stated, "Language policy is often most effective when planning and implementation occurs on multiple levels simultaneously" (p. 909), which means families need to make decisions and take actions simultaneously, such as when to use which languages with their children, and how and when to formally or informally instruct the language, and in what context the language will be used and supported. Parental language ideologies are speculated to influence language outcomes in bilingual children (King et al., 2008). A factor that may play a role in bilingual families is the "impact beliefs," defined by De Houwer (1999) as how parents view themselves as capable language models in their homes. Parental language ideologies are also linked to other parts of

parenthood, including what makes a “good” or “bad” parent. Okita (2001) shared findings of how “good mother” identities of Japanese women carried burdens of maternal guilt, stress, and trauma from unrelenting advice from the public about bilingualism.

Language plays an important role in the society, and yet there is often misinformation about language (Reagan, 2011). There are many discussions about whether ASL is a real or an appropriate language, and ASL continues to carry a deficit stigma even though it is recognized as an official language in 40 states (Reagan, 2011). Currently ASL is considered an acceptable alternative as a foreign language but not as a right for deaf people (Reagan, 2011). It is likely that ASL is perceived differently because the identification of hearing loss often leads individual to learning this language, which gives the language a controversial perspective (Reagan, 2011). ASL is less likely a heritage language for most hearing families with deaf children (Karchmer & Mitchell, 2003). In thinking that their children will need to overcome their “deafness,” as opposed to accepting their deaf being, many families take the advice of hearing, English-centric professionals (Reagan, 2011). This correlates with earlier arguments made by Nover (1995) that hearization, “a process where deaf children are forced to imitate and directed to repeat unnatural language behaviors, preferences, expectations, values, perspectives, ethos, and characteristics of an auditory-based culture through spoken English” (p. 123), is the language ideology framework prevalent among deaf children.

**Own language experiences.** There are four types of parental ideologies that influence linguistic practices in bilingual families, according to De Houwer (1999). First, there is a clear purpose of language use in their homes (De Houwer, 1999). The second

ideology is the parents' attitudes towards types of bilingual interactions in multiple contexts (De Houwer, 1999). Third is the parents' attitudes and values toward learning and bilingualism in their homes. For example, valuing one language over the other at home can cause imbalance in learning two languages (De Houwer, 1999). Fourth, how parents view themselves as language models for their children greatly influence linguistic practices in bilingual homes (De Houwer, 1999). Tuominen (1999), who studied bilingual child-rearing in the United States, learned that bilingual parenting decisions were often affected when their children started school. In that study, the children's attitudes and practices shifted to "socializing their parents instead of being socialized by them" (Tuominen, 1999, p. 73), as children began teaching their parents to "speak the same language as the rest of America" (p. 73).

### **Implementation of Family Language Policy**

What families do with languages in day-to-day interactions with their children draws upon the implementation of family language policy (King et al., 2008). Family language ideologies inform the application and negotiation of family language policies and children's language outcomes (King et al., 2008). Family language ideologies are the underlying force in language planning and are used to "mediate between language use and social organization" (King, 2000, p. 169). The visible and invisible ideologies (King, 2000) can compete with one another and create conflicts in families' language policy. Pillar (2001) stated there is lack of research focusing on family discourse on bilingual childrearing. Parents used different sources to explain their family language planning based largely on examples from their family members and their own language learning

experiences (King & Fogle, 2006). Often there are variables to family language policy that make it difficult to identify optimal outcomes (King et al., 2008). General factors such as parents' consistency of language choice, age of child, and context may contribute to successful bilingual child development (King et al., 2008).

## **Conclusion**

If a deaf child is born to a hearing family and only 23% of parents in the survey regularly sign (GRI, 2011) with their deaf child, there is a greater likelihood that deaf children will experience delays in linguistic, cognitive, emotional, physical, and communicative domains due to linguistic barriers (Grosjean, 2008; Humphries et al., 2012; Kushalnagar et al., 2010). Fishman (2000) identified the most important point where language transfer occurs is at home from mothers to their children, as the family and community are critical for the maintenance of home languages. The parents' initial decision on language maintenance or shift strongly correlates with their child's overall achievement and the first step of developing FLP (Schwartz, 2010). The common issues in the families' decision-making process through communication options for their deaf children are the biases of medical professionals, beliefs, attitudes, and expectations of the families, and lack abundance and availability of comprehensive information. De Houwer (1999) stresses children's linguistic environments are shaped by the parents' beliefs and attitudes. The FLP is fluid, flexible, and varies from family to family, due to various factors in families including structure and function.

This literature review explored several areas regarding language ideologies of ASL and English, the role of bilingualism for deaf children, the framework of family

language policy, and factors that influence family language policy. The literature indicates issues of conflicting perspectives of the linguistic rights of deaf children to acquire ASL as their heritage language versus the hegemony of the English-only auditory-based society. The literature addresses challenges bilingual (or multilingual) families may face maintaining their heritage language in the home. Families with deaf children experience a different challenge of having to acquire a new language to communicate with their deaf children and must address different questions and thoughts about the linguistic needs of deaf children. Individuals' perspectives towards bilingualism may shape their own language ideologies of ASL and English. According to Ruíz's (1984) language orientations, language can be viewed as a problem, as a resource, or as a right. The dominant society tends to view deafness as a disability; therefore, ASL is seen from a language-as-a-problem orientation. The Deaf community disputes this perception from their socio-cultural lens as a minority-language group, and view ASL as their linguistic right. Research also gives evidence for the advantages of sign language for the linguistic, communicative, cognitive, academic, literacy, and psycho-social development of deaf children.

As indicated from family language policy perspective, families' decisions and choices about language use with their children are influenced by external and internal forces. Families' experiences and beliefs may influence their language management. Families may also rely on other sources or be influenced by societal forces to make decisions about language use within their homes.

Most research emerges from medical perspectives and rarely focuses on socio-cultural perspectives. This study aimed to include cultural perspectives toward ASL as a language-of-right for deaf children with hearing family members. The literature review and preliminary study validated the need for a more in-depth study on families with deaf children and their beliefs and attitudes about bilingualism in ASL and English.

## **CHAPTER THREE**

This chapter examines the methods used in this study to address the research questions. The chapter begins with an introduction to the study methodology. A description of my identity as a researcher and my interest in conducting this study are included. The characteristics of the participants and the research design are elaborated in-depth. The chapter concludes with a discussion of the data collection and analysis.

### **Methodology**

This study investigated families' beliefs, perspectives, and decision-making about their deaf children's bilingualism in ASL and English using the family language policy framework. The goal of this study was to learn more about families' beliefs, values, and decision-making processes for their deaf children in fostering and maintaining bilingualism in ASL and English. A qualitative approach to data collection and analysis of the research questions yielded in-depth information. This study utilized qualitative methods because the research questions supported the understanding of phenomenological notions with emphasis on values, process, context and interpretation of meaning and concepts (Goodwin & Goodwin, 1996). The exploratory approach allows for the indication of why, how, and when social phenomena occur (Shields & Rangarjan, 2013). This is especially critical when a topic is new and data may be difficult to collect (Shields & Rangarjan, 2013). An exploratory approach, which is emic in design, to

family decision-making processes and beliefs about ASL-English bilingualism offered rich description of this specific sub-culture and collection of in-depth, open-ended interviews with families to explain, extend, and elaborate on the research questions (Shields & Rangarjan, 2013). The study used a two-part interview structure: (a) an initial interview to collect demographic information and (b) an in-depth, open-ended interview to collect information.

### **Research Questions**

The study investigated the following research questions:

1. What are families' beliefs, ideologies, and attitudes about language development in ASL for their young children?
2. How do families perceive their child's language abilities?
3. How do families implement bilingual development of ASL and English in their homes?
4. What are families' language policies toward bilingual development of ASL and English?

### **Researcher Identity**

It is critical to divulge who I am as a researcher, as I acknowledge my bias and assumptions in this study. I was born into a second-generation Deaf family, and ASL is my first language. My family includes my mother, father, and younger brother. I am a Deaf, White, female, middle-class researcher who is passionate about early language access for deaf children. I firmly believe deaf children should have access to ASL from birth and that all deaf children have the right to learn ASL. That belief is backed by

research on language deprivation in deaf children. I attended a residential school for the Deaf from age 3. Upon graduating from the residential school, I attended Gallaudet University, the only liberal arts university for deaf people in the world. I have always had a strong Deaf identity fueled by the fact that I was bilingual from birth. I do not rely on amplifications to gain access to spoken language. My family has instilled a strong sense of pride in being who I am and emphasized the value of knowing two languages. I graduated with a Bachelor of Arts degree in early childhood education and received two teaching licenses. I also completed a Master of Arts degree in Deaf education. I taught in pre-kindergarten through first-grade classrooms for six years before I enrolled at George Mason University to pursue a doctoral degree. The decision to attend a predominantly hearing university was daunting because I never had barriers to direct communication growing up in a Deaf family, along with attending a Deaf residential school and Deaf university. I rarely had to struggle to gain access to information in an academic setting until I arrived at George Mason University. I had two highly qualified and skilled sign language interpreters. Even with their qualifications and expertise, I still missed out on side conversations and critical information shared amongst students if I arrived to class before the interpreters and worried about whether my thoughts were being clearly expressed in English interpretation. This experience strengthened my belief that deaf children have a linguistic right to acquire ASL. The feeling of being isolated from others and not being able to fully express myself stuck with me in contrast to my experience of having access to the world through ASL. I recognize and acknowledge that my attitudes,

beliefs, upbringing, cultural background, and educational background about ASL are all variables that may influence my research.

As a second-generation member of Deaf culture, I had ASL as my first language and means of access to most of my world, including my relationships and work environment, so it was critical to establish trust with hearing family members with deaf children as my participants. There is a great divide between the Deaf and hearing communities when it comes to deaf children. The hearing community is the dominant culture with the ability and access to spoken language and they often impose that thinking onto deaf children. The signing Deaf community cherishes ASL as its primary (or native) language. I acknowledge that there was a possibility that the hearing family members would distrust me because of our differing views on language rights for deaf children.

As a Deaf researcher exploring family language planning and families' beliefs regarding bilingualism with their deaf children, it is my goal to shift research from a deficit perspective of deaf children to a more positive sociocultural perspective (Harris, Holmes, & Mertens, 2009). Following culturally appropriate research guidelines, cultural competency was a critical disposition of my ability to conduct and represent reality in a culturally complex community (Mertens, 2005). As a member of the community, I have come to understand differential access to power and privilege through self-reflection and interactions with members of the community (Sue & Sue, 2013). Through building rapport, gaining the trust of community members, and reflecting on my own biases (Edno, Joh, & Yu, 2013), this study fills a gap in the literature on family language policies of hearing families with deaf children.

## **Setting**

A recruitment flyer for this study was posted nationwide on the following listservs: (a) American Society for Deaf Children, (b) Hands and Voices Organization, and (c) National American Sign Language and English Bilingual Consortium for Early Childhood Education. The American Society for Deaf Children is a non-profit advocacy organization for families with deaf children. Hands and Voices is a non-profit organization that provides support for families with deaf and hard-of-hearing children. The National American Sign Language and English Bilingual Consortium for Early Childhood Education is a non-profit organization for professionals in the field of early childhood education for deaf and hard-of-hearing children and their families. All organizations posted my recruitment flyer through their listserv via an email to the members. When potential participants contacted me, I set up an initial interview to collect demographic information, then we scheduled a semi-structured formal interview. The interviews were conducted via videophone calls.

## **Participants**

Hearing caregivers using ASL who lived with deaf and hard-of-hearing children under the age of five were the intended participants of this study. Families with one deaf parent were also considered eligible to participate. Finding participants required snowballing sampling (Goodwin & Goodwin, 1996) as well as purposive sampling due to the small population of deaf and hard-of-hearing children under the age of five. Snowball sampling is when a subject nominates additional persons for the researcher to use as subjects in the study (Goodwin & Goodwin, 1996). Snowball sampling was chosen

because I was seeking participants with certain criteria for my study. This use of snowballing is a type of purposive sampling, and is recommended as a strategy to gain access to a particular subset of participants. It is also subject to bias.

Selection of participants to interview was done via purposive sampling with two criteria: (a) the participants were hearing primary caregivers with deaf and hard-of-hearing child(ren) under the age of five and (b) ASL was one of the languages used in the home. The interview setting was dependent on the family's preference and convenience. All of them requested to interview via videophone since their locations varied. Once the recruitment flyers went nationwide, I received 18 initial contacts across the nation in three months. Initially, the location was focused in the northeastern region of the country; however, I received responses from the south, northwest, west, northeast and north areas. Eight families completed the initial interview and the semi-structured formal interviews during the three months of this study.

There were 18 interested participants, but eight participants from the initial interview continued with the semi-structured formal interview. All the interviewees were mothers, hearing and white. Seven participants were married to husbands. One participant, a single mother, was raising two adopted African American sons. All participants graduated with a high school degree and went on to higher education. Two graduated with an associate's degree, four received bachelor of arts/science degrees, and two graduated with a master's degree. Seven participants acquired English as their primary language first, then ASL as their second language. One participant was a multilingual acquiring English, Spanish, French, and then ASL. Seven participants had

one Deaf child, and one participant had two Deaf daughters. Most of their deaf children were identified deaf at birth; however, three deaf children experienced various health challenges that delayed early hearing identification and early language acquisition. Two children had Usher Syndrome, and one had auditory neuropathy, making the identification of hearing loss challenging. The children's ages ranged from 14-months-old to 5-years-old. All participants were from the United States, with three participants from the south, two participants from the northeast, and one participant from each of the following regions: northwest, north and west. Only two participants were from the same state. I chose the age range of birth to 5-years-old as I wanted to talk to the families while they were still learning ASL and potentially still processing how ASL fit in their families. While the sample size was relatively small, it allowed me to gain insight into their experiences as bilingual families navigating our society. Each family had unique stories and contributions tied to their beliefs and values.

Table 1

*Demographics of Participants*

Family	Age of Deaf Child(ren)	Age of Identification	Amplification
Adams	5 years	Initially at birth but due to A.N., formally diagnosed at 2 years old.	C.I.
Baker	3 years	1 year old	Hearing aids
Clark	4 years	9 months old	C.I.
Davis	3 years 1 year	At birth. Usher. 4-5 months old. Usher.	C.I. Hearing aids, will receive C.I. soon

Evans	4 years	At birth	Hearing aids
Fisher	2 years	At birth	N/A
Gray	14 months	At birth, due to CMV	N/A
Hill	3 years	At birth	N/A

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Note. A.N.= Auditory Neuropathy, C.I. = Cochlear Implants, CMV = Cytomegalovirus, Usher = Usher Syndrome.

This study follows the parameters set forth by the university's Institutional Review Board for research. Participants were notified about the risks and benefits of my study. There was no more than minimal risk to individuals who participated in my research study. There were no direct benefits to the participants; however, there may be benefits from contributing to the general knowledge about hearing family members with deaf child(ren) and their perspectives on ASL and English languages in their homes. The participants were encouraged to share the recruitment flyer with other families outside the listservs. The participants were compensated with a \$25 Amazon gift card for participating in my study.

### **Data Collection**

This study used a two-part interview process. The first part was the initial interview to collect demographic information from the participants to ensure they met the criteria for the interview and to develop a trusting relationship. In the initial interview, in addition to engaging in the interview questions, the participants were asked to bring any

artifacts that supported their family language policy. The second part involved informal, in-depth, open-ended questions for the data collection. The interview questions were tested with the researcher's friends and family members to ensure that the information collected would be helpful for this study.

**Qualitative data sources.** Understanding families' beliefs, attitudes, perspectives, and experiences is complex and multi-layered; therefore, a qualitative design was determined the most effective way to collect data for this study. Qualitative research seeks to provide an in-depth understanding of a problem through the experiences of individuals (Bourke, 2014). Interviews provided the qualitative data needed to gain a deeper understanding of family members' attitudes and beliefs about ASL–English bilingualism and family language planning. The first interested eight families who met the criteria for the initial interview continued in the study for the semi-structured formal interview. Participants contacted me through email, confirming their interest in participating in the study. After the initial interviews, the semi-structured formal interviews were scheduled with each participant via videophone. The possible risks and benefits of the study were shared with the participants, and the consent forms were signed and electronically sent to me. Each participant also received a \$25 gift card to Amazon for participation in this study.

Observation documented through field notes by the researcher during the interviews was used as a data source for this study. Field notes can be descriptions or reflections by the researcher to assess their thoughts, beliefs, and feelings about the subjects (Goodwin & Goodwin, 1996). As an active member of the Deaf community, my

role as a researcher shifted depending on the participant. As stated by Glesne and Peshkin (1992), “Participant observation ranges across a continuum from mostly observation to mostly participation” (p. 40). There are benefits to both roles. As an observer, I am more objective. As a participant, I may gain access to information that would otherwise be inaccessible, having meaningful and significant interactions as trust is developed between the researcher and subjects (Goodwin & Goodwin, 1996). Throughout the semi-structured informal interviews, I kept notes of my thoughts and reactions to families’ interviews.

**Initial interviews.** The purpose of initial interviews was to collect demographic information about the participants before moving forward with the semi-structured formal interview. Since I, as a deaf researcher, interviewed hearing family caregivers, it was beneficial to develop a trusting relationship by meeting prior to the formal interview to learn about each other and the study. Because language choices are personal and sometimes controversial in the Deaf community, it was crucial that the participants felt comfortable with me as a deaf individual so they would be willing to share their beliefs, experiences, and values about ASL and their family language policy. The initial interviews had three sections: background information, child information, and ASL information.

1. The first section addressed the participant’s background information, with brief questions such as the following: (a) Tell me about your family. Who is in your family? (b) What is your relationship with the deaf child? (c) Who lives in your home? Several demographic questions were also asked, including (a)

ethnic background, (b) education level, (c) identity, (d) language background, and (e) family's language use at home.

2. The second section gathered information about the child, including (a) date of birth, (b) birth history, (c) age of identification, and (d) amplification use.
3. In the third section, participants were asked to share their experiences with ASL, including (a) when did ASL emerge in your family, (b) how did your language abilities emerge, and (c) how did the child's language abilities in ASL emerge? This section allowed me to gauge their perspectives and experiences about ASL before delving into the next stage of the method.

If the participant did not have any ASL experiences, they were screened out for the semi-structured formal interview since the purpose of this study was to learn about ASL and English language experiences in their families.

**Semi-structured formal family interviews.** Interviews are used in this study as a means of accessing and presenting participants' beliefs, attitudes, perceptions, and experiences; therefore, the interview questions were shared via ASL and English with all families. A set of open-ended questions was established before the interview, and follow-up questions were added during the interviews for clarification or to gain deeper understanding. This ensured some uniformity from one interview to another (Goodwin & Goodwin, 1996). My goal as a researcher was to establish an informal conversation with my subjects. Each interview lasted between 45 minutes to an hour, collecting their perspectives about family language policy on ASL and English in their homes. The interviews were conducted in ASL and the families had access to the questions in written

English via email. The interviews were video-recorded and the data translated and transcribed from ASL to English. The transcriptions were sent to the participants to review for accuracy. My notes and comments throughout the transcriptions (“interview elaborations”) as defined by McMillan and Schumacher (1993) to “self-reflect on his or her role and rapport, interviewee’s reactions, additional information, and extensions of interview meanings” (p. 433) were included. The interview sample size was eight families.

**Data collection procedures.** Obtaining permission from Gallaudet University’s Institutional Review Board (IRB) was the first step in the data collection. The purpose of obtaining permission from Gallaudet’s IRB was because they are familiar with conducting research with the Deaf population. I also proceeded with obtaining permission from the Human Subject Review Board at George Mason University. My study was designated as exempt by both universities. I then distributed recruitment flyers and a brief introduction of my study to the aforementioned listservs.

### **Data Analysis**

**Qualitative data analysis.** The video-recorded interviews were translated and transcribed from ASL to written English. The participants were given the option to respond using either ASL or English. Seven participants out of eight chose to respond in English, so a sign language interpreter was necessary during the interviews. The remaining participant (Hill) used ASL throughout the interview. The interview data were coded for major and sub-themes using HyperResearch, qualitative data analysis software. The interview elaborations as well as any memos reflecting the researcher’s thoughts,

feelings, and ideas, were included in data analysis. The data analysis began immediately after each interview and again after all interviews were completed. This included coding for emergent themes. Strauss and Corbin (1990) stated, “Coding represents the operations by which data are broken down, conceptualized, and put back together in new ways. It is the central process by which theories are built from data” (p. 57). Coding included data from all data sources, from the field notes to the video files. The themes were then organized into meaningful categories (Goodwin & Goodwin, 1996). In this study, open coding was utilized to break down, examine, compare, and categorize the data (Goodwin & Goodwin, 1996). A constant comparison was conducted with all data sources to allow and identify new themes as they emerged across data sources (Glaser & Strauss, 1967). The constant comparison process analyzes similarities and differences in data sources in a study (Goodwin & Goodwin, 1996). The second level of category development and sub-categories are shown in Table 2.

Table 2

*Second Level of Category Development*

<b>Question</b>	<b>Categories</b>	<b>Sub-Categories</b>
1: Beliefs, ideologies, and attitudes about language development	Beliefs about bilingualism Benefits of ASL Becoming a source of support for other families Amplification decision-making process Challenges for the families	Benefits of ASL to support the development of second language The medical community The extended family members
2: Perceive their child’s language abilities	My deaf child is bilingual	Happy, whole child
3: Implementing	Language use at home	Intentional use of ASL

bilingual development in their homes	Resources to support language development of ASL Challenges with implementing bilingual development of ASL Advocating for their deaf child	English as a second language Following the child's lead Being language models Deaf role models and mentors ASL resources & materials ASL classes Barriers to receiving ASL services Challenges in working with medical professionals
4: Families' language policy	Recognizing themselves as bilingual Learning ASL as a new language ASL as a primary household language Being a part of the Deaf community Relocating for educational opportunities	The role of extended family members within the FLP Schools for the deaf

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## Reliability

Data-collection reliability ensures there is an agreement between researchers and participants on the interpretation of what is observed and described during interviews or analysis (Goodwin & Goodwin, 1996). The use of technological devices such as video cameras helped reduce threats to data-collection internal reliability. The recording devices strengthened reliability by providing accurate data. The use of field notes and interview elaborations supported findings throughout data collection (Goodwin & Goodwin, 1996). Another strategy was to check with participants during and again after data collection to seek clarification and accuracy as well as asking participants to review transcribed interviews (Goodwin & Goodwin, 1996).

## Validity Threats

There are possible validity threats to this study. The validity is the extent of accuracy of findings (Goodwin & Goodwin, 1996). Any threats to the reliability of the data collection are a threat to validity. The internal validity of this study may be influenced by maturation threats, which includes the natural changes in the phenomenon (beliefs, attitudes, and values of ASL) and established definitions of bimodal-bilingualism of Deaf children. I sought to minimize these threats by “careful recording of the data about events, individuals, situations, and contexts” (Goodwin & Goodwin, 1996, p. 140). Another internal validity threat is the observer’s effect, in which my personal subjectivity and being a native of the population being studied, as outlined in the section on Researcher Identity, may influence the data collection (Goodwin & Goodwin, 1996). These are minimized by extensive data collection and use of multiple data collection methods (Goodwin & Goodwin, 1996).

Specific internal validity threats were addressed through various factors, such as the interviews. The interviews were conducted in ASL and spoken English through an interpreter then translated and transcribed to written English. It was challenging to translate and transcribe word for word from ASL to English, especially as ASL does not have a written form. As the transcriber, I had to be mindful of my bias when translating and transcribing the interview contents. Member checking with the participants was necessary to review the written transcripts to ensure that their message was delivered as accurately as possible.

Another possible validity threat throughout the study was my researcher bias (Maxwell, 2005). I tried to be conscious of my own bias about ASL-English bilingualism.

By using the comparative approach constantly, I hoped to reduce my bias through triangulation using multiple data sources from the interview transcriptions. Keeping complete descriptions, corroborating data collection with the participants and contrasting findings with other research studies are strategies used to address external validity threats (Goodwin & Goodwin, 1996). Because this is a qualitative study, the external validity threats are not as critical as internal validity threats due to lack of generalizability of the study.

### **Limitations**

A limitation for this study was the size of the sample being examined. The families who fit the research criteria were all over the nation. I was not able to travel to conduct face-to-face interviews; therefore, I was limited to videophone interviews. In a qualitative study, it is critical to develop and build a relationship with the participants to establish trust. This was not a longitudinal study, so my time with each family was limited to less than an hour and a half. I hoped to interview as many families as possible in a three-month period, and that did not happen. While I received 18 responses to my recruitment flyers, only eight families could complete both the initial interview and semi-structured formal interview.

Another limitation was that seven of my participants chose to speak English for their interviews, which meant an interpreter was present for our interviews. Because translation is an interpretative effort, meaning may get lost in the process. I transcribed all the interviews, and watched the videos again to ensure my accuracy in capturing the interview data. When necessary, I followed up with clarification during the interviews to

ensure I did not misunderstand participants' messages. I sent the transcripts to each participant asking for their verification and asked for their feedback. Six participants verified the transcripts.

The participant demographics also posed a limitation in my study. All of them were white, highly educated with at least 2-year college degrees, acquired English as their first language, and married to a male partner, except for one family. They are not true representatives of the unique population found within the world. They clearly had privilege to seek resources, and support from others. My recruitment flyer was sent via three organizations, which I acknowledge missed out on families that do not utilize these organizations. Joining a listserv is an act of privilege and requires access to resources that many families do not have. However, it is hoped that this study shows what could be available to all families if we had access to resources, networking, information, and advocacy skills regardless of socio-economic status.

## **CHAPTER FOUR: FINDINGS**

This study examined families' beliefs about language development in ASL and English in their homes. Specifically, I wanted to know how the families perceived their child's language abilities and how they implement bilingual development of ASL and English. In addition, I explored the families' language policy toward bilingual development of ASL and English. This was accomplished by examining the emergent themes of how families developed a framework of language planning as they share their journey from learning that their child is deaf, to navigating services and support, to being a bilingual family. Being a bilingual family, according to the families in the study, meant using ASL and English in varying degrees of proficiency and varying modalities of English. The individual stories individually and collectively shed light on the experiences of hearing family members with their deaf child(ren) and how they develop and manage language policy explicitly.

In this chapter, I first introduce each of the eight families interviewed to provide a context for the findings that follow. I then examine what the families shared regarding their beliefs, ideologies, and attitudes about ASL and English. Next, I analyze what families shared about how they implemented bilingual development of ASL and English in their homes. Finally, I provide an analysis of what families shared about their language policies.

### **The Families**

All the families shared their experiences and perspectives of the transformation to an ASL-English bilingual family and presented a clear stance that they are bilingual families. The data revealed that many commonalities existed across the eight families. Those interviewed were mothers who could hear, identified as White, possessed higher education degrees, and were learning ASL as a second language. Although the families appeared similar demographically, each family brought a unique perspective to the study through their beliefs, ideologies, and values. The families' stories were varied, but included raw and emotional moments. Many also shared proud and determined experiences. As their stories unfolded, they shared insights and information about who they are as a family and how communication is very important to each family. The interviews also indicated that the mothers valued the socio-emotional development of their deaf children and that they viewed being happy and whole as being very important for their deaf children. The families shared that they valued the inclusion of ASL because their deaf children could communicate with them, thus strengthening the relationships between family members. The families in the study are introduced as follows: Adams, Baker, Clark, Davis, Evans, Fisher, Gray, and Hill.

The first family was the Adams family from the South, whose deaf daughter was the middle child between two other girls. The daughter had auditory neuropathy, a rare hearing disorder. The mother, Ms. Adams, indicated that the auditory neuropathy diagnosis had a great influence on the decision-making options because she felt she could not get a clear answer from the audiologist and doctors on her daughter's hearing levels. Ms. Adams explained that the doctors could not agree on how much auditory access her

daughter had and that the hearing test results were varied. She shared that when her daughter was 2-years-old, the doctors recommended the oral-only approach for their daughter, and the family decided not to use signing at all. The daughter went to an oral school for 6 months. Ms. Adams indicated that the experience was awful for her daughter, and that they could tell she did not feel successful. Her daughter's hearing levels were confirmed at age 4; however, she also shared that they changed doctors and moved to a local deaf school to find resources supporting their family language policy.

The Baker family was from the South and was a White, single mother with two adopted African American sons. The mother, Ms. Baker, was a multilingual individual who spoke French and Spanish in addition to English. She believed that "everyone should learn a new language to gain appreciation of our world." Ms. Baker learned her son was deaf after the adoption process and proceeded to learn ASL as soon as she found out he was deaf. Her deaf son was the youngest child in the family and was identified as deaf at 1-year-old.

The Clark family included an elementary school teacher, a military husband who was often deployed, and their deaf son. The mother, Ms. Clark, had children who were deaf and hard-of-hearing in her classroom prior to having her deaf son. Ms. Clark shared that they moved often and sought ASL-English bimodal-bilingual resources and schools each time for their son. At the time of the interview, their son was in a bilingual preschool in the northwest.

Next, the Davis family included two deaf daughters who also have Usher Syndrome, an eye disorder that causes night-blindness, loss of peripheral vision and

affects hearing (National Institutes on Deafness and Other Communication Disorders [NIDCD], 2008). The daughters were 1- and 3-years-old. The mother, Ms. Davis, shared the urgency of ensuring her daughters had both languages as early as possible because the impact of Usher Syndrome can be so great. Ms. Davis explained that the family moved closer to a local deaf school to receive services for their daughters in the northeast area.

The Evans family had a deaf son enrolled in a regular classroom. The mother, Ms. Evans, believed that because he was the only deaf student, he struggled socially and academically. Ms. Evans shared that the family moved closer to a local deaf school in the South and his language skills blossomed. Ms. Evans shared her doubts of being a first-time mother to her deaf son, explaining she did not have a chance to “practice being a typical first-time mom.”

Next, the Fisher family consisted of five people, including an older deaf daughter. The mother, Ms. Fisher, indicated her daughter was identified deaf about a month after her birth. Ms. Fisher shared her husband also searched online and found a local deaf school. They went the next day after the identification and connected with the outreach services themselves. Growing up, Ms. Fisher had a younger sister with Down Syndrome, so she felt she had previous knowledge of non-verbal communication and gestures. At the time of the interview, Ms. Fisher explained the family was planning to move to another state so their daughter could attend a bilingual deaf school.

The Gray family included a father, a mother, two daughters, and a son. The mother, Ms. Gray, shared that their deaf daughter was the last child in her family and contracted cytomegalovirus (CMV) during pregnancy. Ms. Gray felt the family was

already prepared for some type of hearing loss. She mentioned all the family members enrolled in ASL classes at a local deaf school in the northeast region when their daughter was 6-weeks-old. Their two older children were still young; therefore, Ms. Gray believed that ASL was truly a language for everyone in the household.

The Hill family was a unique family in this study because the parents were certified sign language interpreters in the West. The mother, Ms. Hill, shared she learned ASL when she was 9-years-old due to a deaf friend in her neighborhood and completed an interpreting degree. Her husband was also in the interpreting field. Ms. Hill shared that their son was born prematurely and his auditory nerve did not fully develop in his left ear. This was the only family fluent in ASL before the arrival of their son; therefore, their experiences differed slightly from other families' in this study. Most of the families in the study had to learn ASL as a language after the birth of their deaf children. Ms. Hill identified her family as a "true bilingual family because we are passing on two languages to our son fluently, as opposed to learning a new language alongside with a deaf child." Table 3 below highlights the timeline of when the families in the study decided to add ASL in their family language policy with their Deaf child.

Table 3

*Child's Age of ASL being introduced to the Family*

Family	Age of Deaf Child(ren)	Age of Identification	Amplification	Child's Age of ASL Acquisition
Adams	5 years	Initially at birth but due to A.N., formally diagnosed at 2 -years-old.	C.I.	2-years-old

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Baker	3 years	1 year old	Hearing aids	1-year-old
Clark	4 years	9 months old	C.I.	2 -years-old
Davis	3 years 1 year	At birth. Usher. 4-5 months old. Usher.	C.I. Hearing aids, will receive C.I. soon	1 month old 4 months old
Evans	4 years	At birth	Hearing aids	2-years-old
Fisher	2 years	At birth	N/A	1 month old
Gray	14 months	At birth, due to CMV	N/A	6 weeks old
Hill	3 years	At birth	N/A	At birth

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Note. A.N.= Auditory Neuropathy, C.I. = Cochlear Implants, CMV = Cytomegalovirus, Usher = Usher Syndrome.

### **Families' Beliefs, Ideologies, and Attitudes about ASL-English Bilingualism**

Analysis of the interviews showed that all eight mothers discussed their beliefs, ideologies, and attitudes about language development in ASL and English for their young deaf children. Their discussions focused on their experiences with ASL-English bilingualism and included their perspectives on both languages. Overall, the data suggest that the families perceive the importance of embracing bilingualism for their deaf children. Specifically, the data reveal that the families believe there are benefits to their children learning ASL and that their beliefs about spoken language influence their views on amplification devices. Analysis also revealed their perceptions of how misconceptions outside their family and from the medical community continue to challenge and shape their family language policy.

**Beliefs about bilingualism.** All families in the study repeatedly stated they valued ASL and English and wanted to offer the best for their deaf children. From the interviews, that meant learning ASL as a second language for the families. All the families acquired English as their first language; therefore, they valued English because it is the majority language in their lives as suggested in their interviews. For the families, having deaf children and learning a new language (ASL) to facilitate communication added a greater value to their lives. For example, Ms. Adams explained, “English is the language I know and use. I mean, everyone I know speaks English. I can’t say the same about ASL.” Ms. Baker shared, “English is my first language so I am very comfortable. It is also my other son’s first language as well.” The families repeatedly used the word, “value,” when discussing ASL and English languages. Ms. Davis shared her perspective:

Well, I’m a hearing parent. My family is all hearing. I grew up with English. It is our primary language. You know, that saying when you don’t know ASL until you have your own children. That is true for us. The first deaf person we ever met is our daughter. Yeah, she is the first deaf person I’ve ever met in my life. English is what I know. I feel I am doing what I can to the best of my ability, this is my approach to try to expose them to ASL as much as possible. So yes, I value both languages. They are important to me.

Ms. Evans elaborates, “Our daughter is a bilingual individual, and we are becoming a bilingual family. I value ASL very much because it is our daughter’s language.” For all the families, except the Hill family, having a deaf child added ASL to their lives. Their language ideologies were clear, and the families valued English because it is their

language and other family members' language, as well. In addition, they value ASL because they use it to communicate with their deaf children. For example, Ms. Fisher explained:

My house, my husband, my two other hearing children, we are a bilingual family because we all are learning ASL together. We also use English. The goal is to have everyone bilingual in ASL and English.

The Clark family shared their perception that being bilingual has a positive influence on brain development, as shared by Ms. Clark:

I believe everyone should learn a language to gain appreciation of our world. He is a bilingual child, and I know that has a positive influence on his brain, being able to use two languages. The ability to communicate with others, not just vocabulary based, but sharing thoughts, and ideas.

Being able to interact with both deaf and hearing people was important to the families in this study as perceived by the families in the interviews. All families explained that being bilingual enabled their children to be fully successful individuals fully involved in both worlds based on their preferences. The modality of acquiring English can occur through multiple pathways, including listening, speaking, reading, and writing. The Gray family provided an example of providing access to spoken English following their daughter's language choice and preference. Ms. Gray noted:

We have hearing aids for [child] to access spoken English, but she does not like them so we are not forcing them on her right now. We are still unsure what to do with spoken English, but we are not worried because we know she is building a

language foundation in ASL. She will be able to acquire reading and writing skills in English using ASL.

Like the Gray family, the Fisher family shared similar thoughts about wanting their daughter to be bilingual, but leaving the choice of modality for English to their daughter.

Ms. Fisher stated:

I value English because it is my language. My hearing children use English. I want my deaf daughter to develop strong reading and writing skills in English as her second language. I know that skill will be beneficial for her to function in the real world. Ultimately, my goal for her is to be fluent in ASL primarily.

While some families emphasized the importance of acquiring English through reading, and writing and leaving the decision of listening and speaking to their deaf children, three families in this study (Adams, Clark, and Davis) pursued cochlear implants for their deaf children to gain access to spoken language. The Baker and Evans families opted for hearing aids as an amplification tool to gain access to spoken language. All the families believed that their children should be exposed to both languages; however, five families expressed interest in ensuring that their children also acquired spoken English skills. For example, Ms. Adams shared that it was important for their daughter to speak to access both worlds:

Being a bilingual means to be able to speak and sign, to understand receptively of her world and to express herself. For example, I want her to be able to interact in both worlds without barriers. It is clear she benefits from ASL to access her environment, and I want her to develop her spoken English skills because English

is the majority language. Everyone we know speaks English. I want her to have both languages and I believe she can have both languages.

Clark elaborated further, explaining the role being bilingual plays in communicating with others and providing opportunity for her son to access to information. She stated:

I think my son needs both languages for full success and full understanding of what is happening in his environment. He depends on ASL and English for all information. Yes, he is a bilingual individual. Bilingual person... I believe that means someone that can use both languages, understand both languages. They can switch over whenever. My son was assessed around 9-months-old with a hearing loss. My husband and I discussed what we needed to do, and we decided to get him cochlear implants but at the same time, we wanted him to know his culture, understand his culture, and to be able to communicate in that world. We know that since he is still very young, he may refuse to wear his cochlear implants or that the technology breaks often. Or that it gets lost (laughs). We just wanted to make sure that he could still fully communicate anything he wants or needs regardless of the cochlear implants. Communication is very important to us. We do not want him to become frustrated or upset.

Like the Clark family, knowing two languages was advantageous to the Davis family, and it allowed their deaf daughter to communicate her needs with and without the use of her cochlear implants. They respect her language preference, and the following vignette as shared by Ms. Davis:

I've noticed about 6 to 7 months ago, the oldest started a daycare program, a regular local daycare program. We noticed that she reduced and actually stopped talking because she felt afraid and unsure in that environment, and as a result, she used ASL exclusively. She signed, with her voice off all the time in the daycare. That was odd because there were no adults signing. The staff there were unsure what to do, and she was signing a lot, asking for stuff. She refused to talk at all at the daycare. So, we weren't sure why that was happening. So, the staff decided to learn some sign language to communicate with her. As a result, she felt comfortable and started to speak again.

From the family interviews, giving their deaf children full access and understanding of their world was very important through the bilingualism approach. There are some varying perspectives on the role of spoken language in their family language policy; however, all families stated they valued English. All the families stated they valued ASL because of their deaf children. They also shared that because of their language ideology of ASL, their language practices are explicit by using ASL in their families. The Hill family, with the parents being ASL interpreters, valued the inclusion of the Deaf community and ASL as a language before the arrival of their deaf son. They embraced the strong, loving relationship they had with each other, citing open communication:

He signs with us all the time. He will speak with his brother during play, I've noticed that. His language skills are developing normally. That often depends on who he is speaking with. But if it is in a large group, he gets lost since he can't

follow conversations. But if it is a one-on-one situation, he will use either ASL or English or a mix of both. I do not have any concerns about his language skills and know that ASL has set him up for success long term. Since he has a strong first language foundation, he is acquiring English easily. I love ASL. It has been one of my languages a long time before he arrived, and I truly feel blessed we can communicate directly with him without having to go through the process many hearing families do. I know many hearing families are shocked, saddened, or struggling with navigating a new world, while we are fortunate to be in the world already. Having a Deaf son is a huge blessing for us. I love that we are even more connected to the Deaf community. Our family is truly bilingual, and I love that we have a very strong, loving relationship with each other. I love that we are embraced by the Deaf community, that feels like an extended family. I'm truly grateful.

While the families shared many experiences when being bilingual benefitted their deaf children and their families, the following section highlights the benefits of including ASL in the families' language policy. The families explored their amplification decision-making process as well as the misconceptions from the medical community and their extended family members.

**Benefits of ASL.** All the families shared they valued ASL and that they would have not known ASL if it was not for their deaf children, except for the Hill family who already knew ASL. Six families had not met a deaf individual or known about ASL

before having their deaf children. The families, except the Hill family, were learning ASL as a new language in their households.

Ms. Baker is a multilingual in English, French, and Spanish, shared, “I find ASL very fascinating because it is my first visual and manual language. I have to say ASL is the hardest language of them all.” Many of the families echoed the same sentiments of learning a new language, much less a visual and manual language. Most of the mothers in the family took on the role of learning ASL, and some of the fathers are also actively taking ASL classes. Most of the fathers in this study worked outside of the home, and the mothers stayed home to care for their children.

While learning ASL was challenging for most of the adults in the study as they revealed in the interviews, Ms. Fisher elaborated on how ASL showcased the communication skills of their 14-month-old daughter:

Oh, she signs. She is signing. She has great facial expressions. She is moving around, using her body. She is learning and acquiring so much from her environment. I mean, it is really amazing and fascinating to watch her absorb everything. My other hearing children are learning some signs, like animal signs, food signs, but she is so much smarter. She visualizes and can elaborate more than just signing signs. I mean, at 13-months-old, she was already asking us to please turn on the lights, or turn off the lights. Now she’s telling us when to brush our teeth or asking to FaceTime with her grandma by bringing the iPad to us. She is an amazing communicator. Her needs are being met and her receptive skills are

off the charts. It is an absolute shock to me. She understands so much regardless of her age. It's really so cool.

The Fisher family illustrated the benefits of early language acquisition in ASL as their daughter is sharing concepts through facial expressions, body movements, and signing, which are the components of ASL. Their daughter is not simply learning signs, but using her environment to communicate her needs with her family.

The Evans family shared similar experience of how easy their son acquired ASL, with the following statement from Ms. Evans:

He is blooming daily. He is signing more and more. I have to work hard at keeping up with him. It is frustrating for me, but not for him. He is figuring out how to communicate his needs with me. Learning ASL is hard for me; it is not easy. It is not natural to me at all. I have to accept that I may never be as good as he is, but he seems to understand that I am trying. We really try to sign always but again, it is hard because we don't know signs for everything yet. We are getting there.

Most of the mothers shared they are trying their best and that they seek a lot of resources and support. However, they noted that ASL seems to be natural and easy for deaf children to acquire. The Evans family also recognized the ease of ASL for their son, and Ms. Evans narrated:

ASL is much more accessible for my son. It is easier for him. For my husband and I, we use English everyday so I value both languages. My son has found his home within the Deaf community. ASL will always be my second language. He lights

up when he's signing and that makes me happy. I want him to be happy so yes, we embrace both languages although ASL is very hard for us.

The families acknowledged and recognized that ASL provides the easiest and most natural pathway for their Deaf children to acquire and access their world. ASL is a visual and manual language, and deaf children are naturally visual which makes ASL accessible. The mothers recognize that the English language is the easiest for them; therefore, they support the ease of acquiring ASL for their deaf children, even when it is challenging for them.

***Benefits of ASL to support the development of second language.*** The families in this study noticed the role of ASL as it supports the development of English as a second language, in the modality of speaking and listening. The Davis family has two deaf daughters, and the oldest has bilateral cochlear implants as she acquires both languages. Ms. Davis shared the process of watching her daughter acquire ASL and English:

We started with ASL right away. When they [the doctors] told us she was deaf, well, severe to profoundly deaf. We started with ASL for a while, started with signing the basics such as milk, juice, more, mom, and so forth. So, when she was implanted at 14-months-old, she started to talk more words. Her English was catching up to her ASL vocabulary. Then it became equal in both languages, English and ASL. Sometimes she would sign and speak at the same time. So right now, ASL is very important because with my oldest, I pushed for ASL with her and she is very advanced right now. She has a strong language foundation from ASL.

Ms. Davis stated acquiring ASL as the child's first language was beneficial. The family focused on establishing communication with their daughter, starting with basic signs to meet her needs. After the cochlear implant surgery, the daughter started to acquire English based on her foundation in ASL. This is an example of having a language foundation to support the acquisition of a second language, even in a different modality. Ms. Davis recognized the value and benefit of early exposure and acquisition of ASL. In addition, Ms. Davis also emphasized the importance of her oldest daughter acquiring ASL to support English language acquisition:

Knowing ASL really helped her communicate and reduced her frustrations. She could let us know what she wanted or needed. We felt comfortable communicating with her. So, ASL for my oldest is so important in terms of her learning English. Yeah.

The reduction of frustration in communicating her needs was a direct benefit from ASL for the Davis family.

The Adams family shared a similar experience of noticing the parallel of their daughter's acquisition of ASL and the reduction of frustrations. Ms. Adams shares a vignette:

So we tried different things, when she was 2-years-old, we tried not to use signing at all. Keep her hands away and focus on speaking only. We took her to an oral school for 6 months. It was awful for her. She felt awful. She was not successful. She was always frustrated. I was truly happy to find ASL as an option, and she is

thriving in a bilingual classroom. She is such a happy kid now. I don't want to take that away from her ever again.

The last statement shows how the Adams family perceived the importance of the role of ASL in their language policy and their belief that ASL has had a positive influence ASL has on their daughter's socio-emotional development. Ms. Adams believes her daughter is thriving and happy after learning ASL to communicate her needs.

The Adams family also noticed how the acquisition of ASL supported the development of spoken language in their daughter. Ms. Adams explained:

We thought if she was immersed in only ASL that would limit her ability to acquire spoken English as a language. But we were wrong. That did not happen.

The opposite happened. Actually...ASL is supporting her English. We are amazed.

The Adams and Davis families believe in the benefit of acquiring ASL which supports the development of spoken language. The families believe the importance of early and accessible language input for their deaf children, and for the deaf children in this study that language is ASL.

The benefit of having ASL does not only directly impact the families with deaf children, but it opens personal connections by supporting other families as demonstrated by Ms. Baker:

I've mentioned this earlier but ASL is one of our family's languages because of my son. If it wasn't for him, I wouldn't have known about this language and the wonderful community within the Deaf culture. Knowing ASL has enriched our

lives because now we are more aware of others and we are more able to support others. For example, a family down the street has an autistic child and the mother asked me if I could help her learn ASL. That is the relationships I am forming with others if I did not learn ASL. It gave me my son as well.

In addition to learning ASL for her deaf son, Ms. Baker is supporting another family in developing communication with their autistic child. She recognizes that knowing another language is not a deficit and provides for opportunities to connect with other families. The families may become a source of resource for other families, like the Baker family did.

**Amplification Decision-Making Process.** The families shared their beliefs of preserving spoken English influenced the amplification decision-making process for their deaf children. Six families clarified that deciding to either have cochlear implants or hearing aids did not mean to them that their children were any less deaf. Rather, they were interested in giving their deaf children opportunities to acquire English through the avenues of both speaking and listening. Ms. Davis shared her insights:

My daughters being deaf is not a problem for me...I know I am 'fixing with cochlear implants' but I also agree that if they want ASL, if they decide not to use their voice and to exclusively sign, if they decide to remove their cochlear implant devices when they're older...sure, that's fine with me. That's their decision. Go ahead. It's your life. I'm not opposed but...I also feel as a hearing parent, and because I went ahead with cochlear implants, I am criticized for that decision.

That's so hard because I am really trying to give them all access and opportunities then they can decide when they're older.

The term, "fixing with cochlear implants," implies that Ms. Davis may have held a perspective that is aligned to the medical view of fixing deaf being. Ms. Davis provided insight into her language ideology about ASL when she stated explicitly that she wants her daughters to speak English like "the rest of the family." Although Ms. Davis has stated she values ASL and will respect her daughters' decision if they chose to sign over speak as adults, implicit messages like above shows her values and beliefs of English.

Having access to sound was also important to the Baker family. Their desire was for their son to have access to environmental sounds rather than using amplifications to acquire spoken English:

I guess because I love languages, I was familiar with ASL and how important having a language is for children in general. I felt it was important for him to have some access to sounds, so I am opting for hearing aids now. I do not expect him to speak English or to be fluent in speaking the language. I want him to have access to his environmental sounds. This is why I got him hearing aids. He can decide to get cochlear implants if he wants to when he's older but the most important thing right now is him having a language foundation. ASL is the easiest route for him.

The Gray family discussed about the role of spoken English for their daughter and opted for hearing aids to gain access to environmental sounds. However, they shared they are

following her lead at 14-months-old if she wants to wear her hearing aids. Having a natural approach to language acquisition was important to Ms. Gray:

My husband and I have been talking about spoken English at length, and because she is still very young, we do not want to set her up in an artificial situation where she must learn how to acquire spoken language yet. There are many hearing babies that have learned ASL, and they turned out normal.

Their family language ideology is to approach language acquisition as natural as possible, while empowering their daughter to decide if she is interested in learning spoken language. Ms. Gray shared earlier that she offers hearing aids for her daughter, and currently she does not like them. The comparison to hearing babies learning ASL is a reference to the popularity of hearing families learning signs with their hearing babies before they learn how to speak. Ms. Gray's point of view is learning ASL while her daughter is still young at 14-months-old and not acquiring spoken English is not harmful to her language development.

Another deciding factor is the procedure of a major surgery of cochlear implants that has some families worried about the implications. The Evans family explained they chose hearing aids as an amplification tool over cochlear implants instead, citing "because it was such a major surgery for a baby." Their son was identified deaf at birth, and the family "agreed hearing aids would be a good option for our son." The Evans family felt cochlear implant surgery was not a right choice for their son, which reflects their family language ideology.

In the amplification decision-making process, the Fisher family focused on providing language foundation to their 2-year-old daughter as a part of their family planning management. To the Fisher family, ASL is accessible and provides an avenue for language foundation while acquiring a spoken language using the amplification tools are not guaranteed. Ms. Fisher shared the glimpse of their thought process:

Really, we have never questioned giving her ASL as her first language. The question was whether to have her get cochlear implants. Yes or no... Right now, the answer is no. I know, that cochlear implants may give her access to spoken English as her second language but...right now, we are sticking with ASL. We have not wavered with that decision. We know it is important to her to have a language and that is ASL. It is very important to us that she is raised using ASL as her first language so we are focusing on that. To us, ASL is her natural language.

The Hill family echoed a similar approach towards natural language acquisition within their family language management. Their son was born with a typical hearing in his right ear and a hearing loss in the other ear; therefore, Ms. Hill explained:

We decided not to pursue amplifications for [child] at this point. He is functioning in both worlds; however, you can tell he is much more comfortable using ASL because he has 100% access to information when he uses ASL.

While amplifications may be a tool to access spoken English, the families in this study are making decisions based on their comfort level of having surgery, providing an accessible language foundation, providing all options and opportunities for their deaf child to make decisions in later life, empowering their deaf child to make decisions now,

and the importance of having access to environmental sounds. All the families agree that ASL is the most accessible for their children regardless of the amplifications. Those are external and internal factors that influence their family language ideology regarding amplification decision-making process.

### **Challenges for the Families**

The families' struggles with misconceptions, misinformation, and biases about their family language management of the bilingual approach continued to challenge them to revisit and revise their beliefs, ideologies, and attitudes. The Davis family highlighted the oxymoron in society that teaching hearing babies sign language is strongly encouraged, but the same recommendation is not applied towards deaf babies:

There are a lot of teachers in our family. They all have used baby signs with their own hearing children to reduce frustrations, temper tantrums, whatever. You know, to provide some communication before they start speaking. So...that was the initial interest. When we were expecting, we thought it would be fun to include signing to communicate with our baby. But, honestly, we were not expecting to use it extensively; but now, we have two deaf daughters.

It is apparent that the Davis family believe there are misconceptions, misinformation, and bias towards ASL. This is especially apparent when Ms. Davis pointed out that society encourages hearing babies to learn ASL to communicate earlier with their caretakers, however, the same principle is not being applied towards deaf babies as evidenced through the families' stories in this study.

Many families take pride in knowing that they reached their decision about their own family language policy based on their own research, beliefs, and attitudes. For example, four families shared they researched online first before meeting with anyone from the medical community and drew their own conclusions as a family about what they wanted for their deaf children. The Davis family outlined several factors that guided their family language ideology, including the medical professionals, a television show, and their own values:

For sure the audiologists, the ear, nose, and throat specialist, those specialists who are affiliated with hearing loss, they all mentioned maybe it would good to use some kind of signing, but not too much because that could interfere with her speaking skills. Really, there were no other influences that made my decision to have both languages, no. Ohhh...recently, you know the *Switched at Birth* TV show? We've been really fascinated with the show. We work on catching signs on the TV to see what they're saying before the captions inform us. We learned a lot through that show, but they speak and sign [SimCom] at the same time anyway. So, that was one interesting experience. But, no one else really influenced us. We made our own decisions based on our beliefs.

The visibility of ASL in the media has influenced this family in raising awareness about ASL and deaf families in general. As noted by the Davis family, the medical professionals recommended "some kind of signing, but not too much."

**The medical community.** Six families started by following their medical professionals' advice and indicated that they watched their deaf children struggle based

on that advice before revising their family language policy to safeguard both languages without excluding one or the other language. The Evans family realized the pressure and power the English language had on their son and their family:

Speaking English is very difficult for my son, and it diminished his spirit. I saw that happen, and I realized that process is very negative for my son. There is a power of being able to speak and knowing English. There is a lot of pressure to speak and sometimes, I feel I have failed in that area because he is not speaking. [Interview clarification: Pressure from whom?] Oh, from everyone: the doctors, the audiologist, the early interventionists, our family members, ourselves only because it is what we know. But...this journey has opened my eyes to the beauty of knowing another language. I...want my son to be happy and to be successful. I want him to be him, so yes, we embrace both languages although ASL is very hard for me.

The families in this study perceived the medical professionals constantly challenged their beliefs and values in choosing the bilingual approach. The Davis family described their frustration with the team of doctors when her oldest daughter needed hearing aids at 5-months-old. The doctors told Ms. Davis, “no, she is not that deaf” and delayed the process of getting hearing aids for 4 more months until her oldest was 9-months-old. Ms. Davis revealed that the audiologist was confused whether her daughter was really deaf and if she really needed hearing aids. Ms. Davis described the experience:

I knew. I knew she was deaf. I knew she needed that extra support. I know her. I know she is not responding to environmental sounds. She is not talking. I knew

she was deaf but the doctors and the audiologists, oh boy... they really held up the process. It was a major struggle. I've talked with other parents about my experience and so many of them shared similar frustrations. The delay, the struggle of getting support. Now with my youngest daughter, it has been such a struggle. I am still struggling today. We just want to set up a surgery for her to get her cochlear implants so that she can start having access to the sounds and to learn English. It is frustrating. My main concern right now is the Usher Syndrome for the girls. They will begin to have night vision issues around 4- to 5-years-old and by 12, they are expected to go fully blind. I am really concerned that both senses will decline, like her vision and hearing will decline at the same time. So, I want the cochlear implants to be set in place so that we can move forward with language development.

Other medical professionals will outline resources, but are unable to provide ASL resources due to lack of knowledge as indicated by the Fisher family who had an audiologist provide three language options for their deaf daughter:

The audiologist who did the ABR test, she told us about our options...they were (a) cochlear implants with spoken language only, (b) the Deaf community meaning use ASL only, and (c) the less popular option, which was to get cochlear implants and learn ASL and English. She called that option something in the middle. She was supportive. She didn't pressure me into making a choice. She gave me resources for each option. There were challenges still because she did not have families to mentor us if we opted for ASL. She had families who chose the

cochlear implants route but they do not use ASL. Really, in our area...it is divided. The families usually choose either cochlear implants or ASL only—those two options only. The option of having both was not readily available. It would seem there are less resources for that option. She was honest about that. She knew resources and options for cochlear implants mainly. She was good and very supportive of our decisions.

The Adams family shared that they believed that the misconceptions of a medical team did not allow for the family to acquire ASL as a language until their deaf daughter was 2-years-old:

My daughter experienced a stroke in my belly when I was pregnant with her. The fluid got in the hearing part of her brain so she may never speak. Because of the complications from the stroke, the doctor told us she would never speak, walk, and will have intellectual disability. When the doctor told us that, we decided we needed a new doctor. The new doctor told us, “We will work together. She will walk. She will talk.” We told the doctor we will do anything to maximize her success however we will follow her pace, her timing. We finally found a doctor that was willing to work with us. We have a good team now, working together for her. That is why we recently moved so that she could go to a deaf school to acquire ASL.

Ms. Evans perceived that the misinformation of an audiologist and speech language pathologist greatly impacted her family as they struggled with their son to acquire spoken English. The process was frustrating because Ms. Evans saw her son

babbling or making noises but it was not clear. Ms. Evans indicated that after practicing nearly daily with their son on speech, following the instructions of the speech language pathologist, and following up with the audiologists on a regular basis with tweaking of his hearing aids for two years, their son began to become increasingly frustrated and having a lot of temper tantrums. Ms. Evans described that her son would cry often. She noted that because of his behavior issues, the speech language pathologist referred the family to an early interventionist to support the family with his behavior issues. Ms. Evans shared that the early interventionist recommended ASL, and she wondered what ASL was. Ms. Evans expressed her shock to learn that she had to learn a new language and it was not verbal. Ms. Evans shared that it was a lot of information to process at that time.

The Evans family shared that not once did the audiologist or the speech language pathologist recommend ASL for their family over the span of 2 years. She noted that it took an early interventionist to recommend ASL as a communication tool for their son. The early interventionist provided support to the family by recommending ASL as it was a “language the deaf people used” as shared by Ms. Evans. Ms. Evans shared that the early interventionist had the knowledge and could reduce their son’s behavior issues stemming from his frustration as he started to acquire ASL and communicated his needs with his family.

Other families, like the Gray family who revealed they chose to do their own research, look at each option and talk to different people to learn more about why people felt so strongly about cochlear implants. They shared they wanted to know all the good

and bad things about cochlear implants. Based on their research online, they came to their own conclusion, and that learning ASL was the vision of their family. They indicated they feel very confident with their decision of not pursuing cochlear implants before they even met their audiologist, or anyone from the medical community. By doing their own research, they believed it solidified their family's language policy and stated they feel empowered when they meet with the medical professionals.

Having a background in understanding ASL as a language and Deaf culture can offer a positive perspective, as it did for the Fisher family. The Fisher family was the only one in this study with a positive, Deaf-centric medical professional who could offer resources about ASL, as the Ms. Fisher remembered:

Yes, I was very lucky. Our audiologist is a young professional who just graduated from Gallaudet University maybe 2 years ago. She has been very open with us, sharing information with us about everything, especially acquiring ASL and using that to teach her information visually.

Six families in the study did not have positive experiences with their medical professionals regarding ASL-English bilingualism resources. The Adams and Fisher families changed doctors because the doctors did not align with their family language ideologies. The families believed that misinformation about using one language at a time, the misconception of the medical professionals about not using "too much ASL," or medical professionals' biases that resulted in not offering ASL resources led to challenges for the families and their language policies.

**Extended family members.** Two families shared various experiences with trying to explain their family language policy to extended family members, who did not understand and clashed with their beliefs. The Clark family shared challenges:

One thing I want to add is that we haven't met many other hearing family members who have chosen ASL. We all share similar struggles that is also happening in my family. Other family members would inquire, "So your child has a cochlear implant, so why is he learning ASL, too? He has cochlear implants; therefore, he should be speaking, not signing." Family support is so important and it feels almost like they are ignorant. We have to explain repeatedly but they don't get it. They don't understand. They don't understand how both languages can coexist in our lives. And that being deaf, regardless of cochlear implants, ASL is a part of their culture, they will always be a part of the Deaf community. The hearing people are really clueless [about] the importance of including that culture in deaf children's lives. For example, last Monday at ASL class, we had a new family joining us and they were upset because their family members do not understand why they are using sign language with their child who has cochlear implants. Why not just speak? We all hearing parents nodded and understood her frustration. We all experienced that same frustration in trying to communicate our family life with other family members. I think that a major challenge right now for our family is that there is frustration from family members questioning our decision, our choice of having both languages for our son.

On the other side, Ms. Fisher shared how her family background supported her family language policy:

I have 13 brothers and sisters. I have four younger sisters; they are adopted and one has Down Syndrome. So, we've been using sign language. It is not ASL, but signs that the special education class shared with us. So that experience has taught my parents a lot about...using signs or gestures to communicate, yeah.

The take away of the narrative is that families believe there are other ways to communicate with each other and that speaking is not the only avenue. Being open minded to ways of communicating will support families with ASL and English language policy.

### **Child's Language Abilities as Perceived by Families**

The analyses of interview data showcased how the families re-affirmed that their children were bilingual through language choices and decisions. The recurring themes of deaf children being happy and whole are reflected throughout the interview data.

**My deaf child is bilingual.** All children in this study were acquiring ASL. Four children were exposed to ASL early from at birth to 6-weeks-old, and five children were introduced to ASL between the ages of 1 to 4. The families shared their perspectives and professional assessment results of their deaf child's language abilities in ASL and English. The families recognized and affirmed that their deaf child is bilingual through their language choices and decisions. The families acknowledged there are varying language skills due to different external factors. For example, the families shared their definitions of being bilingual as the children acquiring ASL, and the mothers are learning

alongside the children, except for the Hill family. Six families chose to have amplification tools to support the access of spoken language, and three of those families chose cochlear implants for their four children to acquire spoken English skills. All the families asserted throughout the interviews that they are bilingual families based on their language ideologies and management.

When the Ms. Baker was in process of adopting her son through the foster system, she shared that she noticed he was not as responsive to the environmental sounds as her older son was. She felt instinctually he was deaf and made an appointment with an audiologist. The audiologist confirmed he was deaf, and that was when he was one year old. Ms. Baker immediately thought of ASL classes at the community college where she taught. She signed up right away for ASL classes and began signing with him. The language practices of the family are showcased through ASL classes, use of hearing aids, and empowering her son to decide if he wants cochlear implants when he's older to access spoken language. Ms. Baker also shared that they use ASL all the time and that he communicates his thoughts with her all the time. She believes he is close to where he is with other children language wise:

I am a single parent so I take on the responsibility for both languages. My oldest son is hearing, so I speak with him. I sign with my youngest son. ASL is his primary language, and he has hearing aids right now. That is introducing him to environmental sounds.

The statement of re-evaluating the speech services shows the language ideology of the Baker family by valuing natural and fun learning experience with language acquisition.

The language choice and decision of speaking with one child and signing with another child reflects the mother's language ideology of valuing both languages in her home.

The Evans family consists of a 4-year-old deaf son with hearing aids. During the interview, Ms. Evans revealed she felt overwhelmed and unsure when her son was younger. When I asked what her thoughts about her son's language progress were, she described her experience:

I guess, he is very delayed from what we've been told by the specialists. He is our only child so we really did not know what to expect with him other than what we were told. He was born with a hearing loss, and I did not know what to expect or what to do because I've not met anyone else who was Deaf ever. My husband and I were shocked, so we really did not know what to expect. He started wearing hearing aids at 6 months, and we started speaking with him all the time until he turned 1-year-old and we realized he was not speaking yet.

After two years, the Evans family's language use changed from spoken English to ASL, based on an early interventionist's recommendation when their son began to exhibit behavior issues, which Ms. Evans believed resulted from inability to communicate in spoken English. The family shared they enrolled him at a preschool, but it was very challenging because he was the only deaf student. There was an interpreter available for him' however it was a frustrating process because Ms. Evans believed he couldn't communicate and wanted to communicate with his new friends. The family decided to move closer to a school for the deaf, and enrolled him last Fall at age 4. Ms. Evans states, "I realized he was struggling, and we were not meeting his needs as a deaf individual,"

Currently, the family is acquiring ASL together. At the school of the deaf, the son has speech classes but Ms. Evans clarified it is for general language skills.

The Evans family's language ideologies have evolved based on their experiences with their son's challenges. Due to his late start at acquiring an accessible language and choosing on oral-only approach for the first 2 years of his life, the son is delayed in both languages. The Evans family shared they are committed to ensuring he has an accessible language, even when it is hard for the parents.

The two deaf daughters within the Davis family had very different experiences when identified as deaf. The oldest was identified at birth and received cochlear implants around 9 months old. The youngest was identified late at 4- to 5-months-old, and at the time of the interview, was still waiting for her amplifications. The family shared their verbal skills, but did not mention their signing skills.

The oldest, her verbal English skills she tested to 4- to 5½-years-old. Her receptive skills are in that range. That is more advanced than her age. She is 3-years-old now. The baby, the 1-year-old...because of the late notification of her hearing loss, late amplifications...I would say she is 6 to 9 months delayed verbally.

The Davis family language ideology is highlighted here since they shared their daughters' spoken English skills but did not mention their ASL skills. However, Ms. Davis acknowledged earlier that ASL played a crucial role in her oldest daughter's spoken language development. Ms. Davis shared that she immediately enrolled in a beginner sign language class at a local organization upon the identification of her oldest daughter's

hearing levels. The Gray family proudly shared that their daughter was meeting expected milestones:

My daughter was born deaf, and she is the only deaf member in our family. She had CMV [Cytomegalovirus] during my pregnancy so we were prepared for some type of hearing loss. When she was born, she failed the newborn screening and was identified deaf. We started planning for ASL when she was 6-week-old, she is now 14-months-old. Because of our early identification and planning, her language development is age appropriate. She is meeting expected milestones in ASL and is babbling vocally.

The Gray family's language ideology shows they value early and accessible language for their daughter though their language practices of receiving ASL services and support. They believe that, as of the result, their daughter is acquiring language at age-appropriate milestones in both modality. The Gray family shared they are not pushing for spoken language now and only offering her hearing aids if she is interested.

As mentioned earlier, the Adams family shared frustration about not having access to ASL, based on the recommendation of their medical professionals, until their daughter was 2-years-old. Ms. Adams believes that, as a result, her daughter's language development in both languages was delayed. Ms. Adams continued to be amazed that her daughter was acquiring English skills as she used ASL more and more:

Surprisingly she is also learning new words in spoken English at the deaf school. Before, she could only speak one word, Bubba, which is her name for the baby. Now, at the deaf school, she can speak more words; Bubba, uh-oh, dad, and two

more words, I can't recall right now. And she is signing more and more. I know ASL is responsible for why she is speaking more now. She understands her world. The Adams family tried an oral approach before learning ASL, and now their daughter is acquiring some spoken language with the use of cochlear implants. The family language management evolved over time after what they believed was an unsuccessful experience with the oral-only approach to a bimodal bilingual approach.

Like the Adams family, the Clark family shared that their deaf son, who was identified as deaf at 9-months-old, was delayed verbally and slightly delayed in ASL. In 6 months of using ASL, he absorbed a year's worth of spoken language, according to Ms. Clark's sharing of the audiologist's assessment:

Well...I know for a fact that he is behind in his language verbally. I know because he has cochlear implants now. He has had it for two years now. He is on target for 2-years-old verbally so he is behind since he is 4-years-old now. As for ASL, he is closer to 3-years-old. That is based on my guess. I know that since he started the bilingual pre-kindergarten class, he definitely blossomed in both languages. Definitely. When he went to see the audiologist, last time was back in September, and she told me the last time she saw him was 6 months prior to the appointment and he really grew so much. He grew one year's worth of spoken language in six months. I mean, that is amazing. And I know why, he loves connecting both languages, ASL and English. That has helped him develop his language skills. He loves learning new words. His ASL skills has developed so fast. But I think, if he

did not have both languages, if he had to choose one language, oh my gosh, he would be so behind, very, very behind, you know?

Ms. Clark credited the bilingual approach of her son's school for the blossoming of both languages. Ms. Clark acknowledged if her son had oral only approach, he would be very delayed linguistically. Though the language management, the Clark family ensures that their son is a bilingual, using ASL and spoken English.

Because their daughter is still young at 14-months-old, the Fisher family shared how their language choices and decisions influenced their child's early and accessible language acquisition and development. Ultimately, they stated that they believed their language choices and decision had a great impact on their daughter's language outcomes. The day after the family learned their daughter was deaf at one-month-old, they contacted their local deaf school for resources:

The outreach coordinator was deaf, and she worked with us immediately, teaching us ASL vocabulary and practicing signs. When she was 2-months-old, the family started shared reading project, and at 5-months-old, a deaf teacher started to come and work with us on a weekly basis. She advised us not to use our voice and we understood by not voicing, ASL was a language of its own.

As of the result, the family explained their daughter is meeting expected ASL milestones equivalent to a typical deaf child from deaf family, which means the child is acquiring ASL that is comparable to a native Deaf baby. The Fisher family describe their daughter as "very, very visual" and Ms. Fisher is eager to carry over that skill to her second language, English, through reading and writing avenues. The Fisher family

language ideology supports the language practices and management. They believe the importance of ASL, provided an early and accessible language experience and utilized ASL services from their local school for the deaf.

The Hill family, as the only family in the study that acquired ASL before the birth of their deaf son, shared that “language development should be easy, accessible and fun, especially for young children.” Ms. Hill shared that her son’s language skills are on level, in ASL and English. Her son has a typical hearing in one ear, and is profoundly deaf in another ear. Ms. Hill believed that her son is meeting language milestones:

By having fun with languages, he is playing with signs, being silly with signs, and teasing us. That is what I believe language development should be all about.

[Child] can do that because he has been exposed to ASL since birth. Language should also be interactive, meaning we are able to converse.

Ms. Hill believes her son is acquiring ASL and English at age appropriate milestones due to having two strong language models since birth. Ms. Hill shared that her son signed his first word at 9-months-old before he spoke his first word, and that happened much later. The parents admit to falling to “hearing tendencies, of listening to sounds automatically, and that they are still hearing individuals.” Therefore, they elaborated on the importance of being “much more aware and present in using ASL in their home.” Their son is 3-year-old, and the family currently follows his language preference with speaking or signing at home. The Hill family perceives their language ideology supports the development of ASL and English by being language models and empowering their son to choose which language to use.

With the addition of ASL, and the inclusion of the Deaf community, the families in the study also shared the positive identity their Deaf children were developing by having both languages in their lives. From the interview data analysis, behavioral issues appeared to decrease once ASL was introduced to the families and that having ASL as the foundation does not hinder the acquisition of spoken language. The children could communicate, strengthening the relationships between family members. This leads to the next theme in the study.

**My child is happy and whole.** Throughout the study, families referred to their children as happy, blossoming, thriving, and whole, as a result of the inclusion of ASL in the families' language policy. The Adams family pointed out that ASL

saved my daughter...I believe that because now she is a happy little girl and I know that is because she can be herself. She can be a child, and just enjoy life.

She is thriving and I don't want to take that away from her ever again.

The Adams family had initially followed the medical professionals' recommendation for the oral-only approach for 6 months before adding ASL to their family language policy.

Meanwhile, the Evans family saw the same happy, confident spirit in their son emerge once ASL entered the picture. Although their son was delayed in both languages due to late language exposure because of the imprudent advice by medical professionals to on an oral-only approach for two years, the Evans family saw an almost immediate change with ASL. Their son previously experienced severe temper tantrums and crying on a daily basis:

I'm still very new to ASL and I'm amazed by it. I see the transformation in my son and he is so happy, and blooming every day. It is a very different, yet interesting language. It's a lot of fun and very important to my family because it builds relationships between my son, my husband, and myself.

Ms. Clark believed that since the addition of ASL to their family language management, her son developed his ASL skills quickly. He blossomed in the classroom, and the teacher shared with the family that he is very expressive, pays attention in class, and focuses on this task. Ms. Clark shared that he also loves interacting with people who sign. For example, he will search for people who are signing and come up to them even in the mall. Ms. Clark noticed the change in her son almost immediately after ASL was introduced, and she noted an increase in his spoken language development, as well.

**Summary.** Four children who had been acquiring ASL since birth or before 6 weeks old demonstrated typical and expected language development milestones while the four children who were introduced to ASL later were delayed in both languages. The families in this study acknowledged that the late inclusion of ASL contributed to the language delays in the child's life, and they remained committed to continuing ASL development in their family planning policy. Their deaf children were often described by their families as happy and whole once ASL was included because the families revealed it provided their deaf children an outlet to communicate their ideas, feelings, and thoughts.

### **Implementing Bilingual Development in their Homes**

Analysis of the interviews showed that as all eight families discussed their experiences and perspectives on the implementation of ASL-English bilingual development, they also shared resources to support their family language policies and shared their frustrations about receiving inadequate ASL and English bilingual resources from medical professionals. Because ASL was new to all families except the Hill family, they shared how trying to balance ASL and English in their homes while juggling other hearing children, learning a new language, and recognizing that ASL is in a different modality made the implementation of family language policy challenging.

**Language use at home.** Each family's language use varied based on different factors. Most of the mothers discussed trying to balance both languages at home, mainly because English had been the primary language of their lives prior to having a deaf child. The families in the study often discussed not having enough access to ASL for their deaf children. Ms. Baker summed up the importance of providing equal access in ASL for her deaf son to compensate for the disparities between ASL and English in their lives:

English is everywhere. On TV, radio, computers, etc. I know my oldest son has access to that, and I want to make sure my deaf son has access to that information too so I sign frequently with my son.

The families explained as the result of living in a monolingual society, all families in the study mentioned they were responsible for being the language models for their deaf children, even if they were still learning and acquiring ASL themselves. Some families shared how they continued to work on their ASL skills as their deaf children outperformed their ASL skills. For example, Ms. Baker stated:

He uses ASL with me all the time. ASL is the language of our household. He communicates his thoughts with me all times. We use ASL in our household daily. I will continue working on myself and with him to learn ASL. Sometimes, he will vocalize to get what he wants but it is not to have an interactive communication with him in English. It is more for him to get what he wants [laughs].

The Evans family echoed similar sentiments, acknowledging that they have had to work hard on developing their ASL skills. They also recognized that the process of learning ASL was frustrating for them as adults, while their son was acquiring the language easily. However, their relationships remained open as they figured out how to handle daily life challenges together. Ms. Evans shared:

He is blooming daily. He is signing more and more. I have to work hard at keeping up with him. It is frustrating for me, but not for him. He is figuring out how to communicate his needs with me. Sometimes he will just grab my hand and show me what he wants (laughs). Sometimes, he will vocalize words and I know what he wants. He is blooming into a happy child and I am so happy.

Other families shared the importance of ensuring that incidental learning happens with their deaf child as well. To gain access to incidental learning, ASL is the natural language for the deaf child as demonstrated by the Hill family. The Hill family emphasized the importance of making learning language fun, easy and accessible for their deaf son:

Language development should be easy, accessible, and fun, especially for young children. My child's language skills are on level. He is acquiring language easily and having fun with it. By having fun...he is playing with signs, being silly with signs and teasing us. That is what I believe language development should be all about. My son can do that because he has been exposed to ASL since birth.

Language should also be interactive, meaning we are able to converse. I can converse with my son about what he wants, what he saw, what he needs, what he experienced. You know? It should not be fake or difficult for the child. We were already signing before he arrived in our lives and that became more structured now.

The Hill family showcased their language ideologies through viewing language development as “fun, easy, and accessible” for their deaf son that leads to language play. They also shared that language should be natural and interactive, meaning the child is able to share his thoughts and ideas. However, they acknowledged even though the parents knew ASL before their deaf child, their language practices have shifted to more structured and with purpose.

Although the Hill family knew ASL before the arrival of their deaf son, the Baker family did not and were learning alongside their son. However, Ms. Baker shared a concern about ensuring their son's inclusion in a natural learning environment:

I do not want to exclude him from incidental learning so I make sure to use ASL most of the time. If he is napping or playing in another room, then I will speak. I will SimCom if I find it challenging to separate languages in my house. I view

that as a communication tool. ASL is used more in our household with our son because it is his language and he does not have as much access to ASL as others do with English.

Ms. Baker acknowledged ASL is not as widespread as English therefore ASL is used more in her house including her hearing son, and that sometimes Ms. Baker uses SimCom as a communication tool to use both languages at the same time because she also has another older hearing son. Ms. Baker shared how she considers her deaf son's accessibility by speaking with her older son when he is napping as not to exclude him.

In this study, families with hearing children in addition to their deaf children expressed increased struggles with balancing both languages in the homes. They explained that ASL is a visual, manual language while English is a spoken, written language. They shared that different modalities of both languages bring an extra layer of challenges to the families that also have hearing children. Like the Baker family, the Adams family found balancing both languages in different modalities to be challenging:

I would say the languages used are balanced because I have two hearing daughters as well. One is older, and the other is younger. That can be challenging, but we all are trying our best. We use ASL whenever possible but yes, I admit I yell for my oldest and...she helps with taking care of [our deaf daughter]. They play together. They sign together. Sometimes, she is frustrated because she doesn't understand them.

The families' experiences are varied, yet they all reported sharing a common goal: wanting the best for their children. They noted that the complexity of ASL and English

modalities provided language challenges. Three families mentioned they knew the use of SimCom was not right due to linguistic differences between ASL and English, but SimCom was often used as a communication tool. The data suggest that the families in this study valued providing accessibility, connections, and communication opportunities to their deaf children. The families consistently reflected on their trying their best, focusing on learning ASL, and balancing both languages in the homes.

***Intentional use of ASL.*** All families shared experiences of being intentional about using ASL because it was not their first language and they were still learning about ASL. The theme of being intentional with using ASL was found throughout several families' comments. For example, Ms. Adams said,

I take on the responsibility because my husband works long hours. So, maybe we are using English more now that I think about it. It is hard having two different languages at home and it is not natural to me so I must always think about using signs all the time. I must be intentional about using ASL. My goal is to use both languages equally. Are we there yet? No, but I will keep reaching for that goal for my family.

Ms. Adams realized during the interview that maybe her family was using English more although they value ASL and try to be intentional about using ASL. Ms. Adams recognized during the interview that their language ideology is explicit; however, their language practices may not be as aligned to their beliefs. Most of the families in the study shared they are determined to continue to try to use both languages equally is stated clearly in the Adams family, and most of the families in the study.

The families stated they were monolinguals until their deaf children became a part of their lives, which in turn may have caused the families to be more conscious about intentional ASL usage to foster language development. The struggle of balancing both languages was also reflected in several of the families, as evidenced in the Clark family interview. The Clark father was in the military, so he was away often with Ms. Clark carrying the responsibility of language use at home. Ms. Clark shared:

Right now, my husband is deployed in the military so right now it is just me handling both languages at home. I switch back and forth between both languages. I often speak and sign at the same time [SimCom] with him. I know that is not right and not grammatically correct but I really want to show him the connection between both languages. Often, he will try to SimCom and I will not understand him. So when he signs only, I understand what he wants. Or it is sometimes the other way, I don't know the sign he is trying to express so he speaks and signs at the same time and I understand what he wants. [Clarification: so, your son separates both languages with you at home?] He can separate both languages. He usually separates both languages. It depends on the environment, who he is with. For example, if he is with other deaf children or adults, he will not use his voice. He will sign only. When he is in the hearing world, he usually SimComs. He will sign and speak at the same time. I have to be more intentional about using ASL with him because I know he gets more out of his world using ASL. It's hard.

The language ideology and practices shared by Ms. Clark suggests that the family values both ASL and English. Ms. Clark indicated that her son understands more using ASL and he can speak and sign based on his preference. Ms. Clark states, she thought SimCom showed connections between ASL and English language, which is a common misconception.

The Clark family was not alone in experiencing struggles with balanced language use. Many families expressed that being intentional and applying those beliefs and values outside of the family can be difficult if they are not as fluent in ASL as in English. However, the Fisher family provided an example of how they were intentional about using ASL with the whole family in the community:

When my family is out on the town, running errands, or going to the church together, we sign all the time. We do not speak with each other. We want other people in our community to notice and acknowledge that we are using ASL. Now they will wave “hi” instead of speaking hi to us. That also encourages people to ask us how to sign specific words so that they can communicate with her directly, too. This creates an openness with the community, in a way that is accessible for my daughter.

They are committed to providing an accessible community for their daughter by educating their neighbors through their example. They value ASL, which shows through their language practice of informing others about ASL and using ASL exclusively in public to educate others and to provide an accessible environment for their daughter.

Another way to be intentional about using ASL is to utilize a language separation technique like the Fisher family. The Gray family used the “voice-off” technique in their home to promote the intentionality of using ASL only with their young daughter and to develop clear language separation. Ms. Gray believes that because ASL does not have a spoken component, so implementing a voice-off policy creates a focus on signing:

She is still so young at 14 months so her language development is still quite limited. However, she communicates with us using ASL, gesturing and pointing. We are frequently voice-off in our house. We use that technique to focus solely on ASL and I feel that helps our daughter understand that ASL does not have a voice. ASL is a manual language, so I hope by reinforcing voice-off, we are showing clear separation of two languages. We are mostly ASL at this point because our daughter is still very young. I want to expose her to as many signs as possible so that she develops a strong language foundation.

Being intentional with their language practices of focusing on ASL only with their daughter, the Gray family utilize a “voice-off” policy in their house. The family feels that this practice helps their daughter understand ASL does not have a voice and that it is a manual language.

The Hill family provided additional insights. Although Ms. Hill had been a certified ASL interpreter for 12 years, she recognized the need to be much more intentional about using only ASL in their household:

We are more aware of using ASL all the time and it has made us more aware about visual attention for our son and how important it is to ensure that he has

access to information. I mean, we are still hearing individuals and have hearing tendencies of listening to sounds automatically. So, having our deaf son has made us much more aware and present in using ASL. Both of us take on the responsibility of ASL and English. We try to model appropriate language separation to avoid sim-com or mixing languages, you know? SimCom is so bad because then information is missed in either language. I do not want that to happen to him so we are clear about when to use which language in our household. It is mostly ASL, with English at times.

The Hill family also provided another example of language separation and their reason for not using SimCom as a communication tool. This is also supported by the Gray family who utilize the voice-off approach to reinforce their language separation practices.

Most of the families in the study agreed that English served as a second language for their deaf children. English in this study could be accessed in two ways: through listening and speaking, or through reading and writing. If families considered the spoken English avenue, they believed it was beneficial to consider amplifications for the deaf child. For example, three of the families included English as a spoken language through the use of cochlear implants and learning ASL simultaneously.

***English as a second language.*** The data also revealed that six families were focused on acquiring English as a second language, leaving the option for spoken language development up to the child at a much later age. All families were exposing their child to English through reading and writing. The Gray family discussed how

English was around them every day, so it was much more accessible for their family while ASL was not as accessible:

We have so much exposure to English around us every day so I am not really worried about the acquisition of English for my older children as we focus on ASL in our home. I really want to develop a safe space for my daughter to express herself freely in our house. The English language is the language of [the] US and everyone uses it. ASL is not as popular or widespread, so I feel there is more urgency in ensuring ASL has a place in our home.

The Gray family included a father, a mother, two daughters, and a son. The deaf daughter was the last child in the family, and Ms. Gray shared that they are not worried about the acquisition of English for their older hearing children because English is readily available in society; therefore, the family focuses on ASL in their household. ASL is a minority language so by creating a safe space for her deaf daughter in their household to acquire ASL, the Gray family is implementing their family ideology into practice.

Having access to spoken English is dependent on whether the deaf child has auditory access, through amplifications. However, the Hill family had an exception. Their son was born with a typical hearing in the right ear and the auditory nerves did not fully develop in the left ear. The Hill family echoed the Gray family's decision, but with a slight variation:

Because he had typical hearing in his right ear, he could still access spoken language, but I did not want to focus too much on developing English. It is around

us every day. It was important to us that he has a strong language foundation using ASL.

The Hill and Gray families provided interesting insight on how English was the dominant language of their worlds and why they felt less urgency to focus on English as opposed to ASL. They recognized and valued English in their families and felt opportunities were plentiful to acquire English in their families.

*Following the child's lead.* Echoing the earlier sentiments of creating a fun, accessible learning environment for their deaf children, all the families mentioned the importance of following the child's lead and interest in learning language, specifically English, as the most natural approach to acquiring language. The families discussed how they were monitoring their deaf children's preferences for introducing spoken English. For example, Ms. Baker said,

I do not speak English with my son but...that's because that is not my focus right now. ASL is his primary language and I will use spoken English when he's older and if he is interested. He has hearing aids right now and that is introducing him to environmental sounds. He has speech classes at the school focusing on lip reading skills as well as sounds. He is having fun and that's important to me.

When it is not fun anymore, I will re-evaluate the services.

The Baker family language ideology is that language should be enjoyable and accessible for her son. The family values English, and Ms. Baker indicates she is following his lead on when spoken English is introduced by stating "if he is interested" and re-evaluating his speech services if it is not "fun anymore" for her son. Ms. Baker is introducing

environmental sounds by using his hearing aids. Ms. Baker shared that the lip-reading skill does not usually rely on auditory sounds, but visual cues.

Like the Baker family, the Gray family touched upon the importance of providing a natural environment for language acquisition. They indicated that they modeled their beliefs based on the popular trend of hearing babies learning sign language, applying this approach in terms of language development for their deaf daughter. Ms. Gray shared:

There are many hearing babies that have learned ASL and they turned out normal.

We have hearing aids for our daughter to access spoken English but she does not like them so we are not forcing them on her right now.

Ms. Davis also mentioned that she believed there was an irony of the double standard for hearing babies versus deaf babies learning sign language, saying that this is harmful for deaf babies as it prevents them from easily acquiring language.

Continuing with the theme of following the child's lead, all families shared that they were planning to modify their family language policy, specifically practices, as their children grew older, giving the children more autonomy over what language they want to use. That was the case for the Hill child, according to his mother:

Now that our son is 3-years-old, we follow his lead. Sometimes, he will want to speak English, and we will follow his preference. I suppose we are following his guidance, while providing language [modeling].

The autonomy of choosing which language to use based on the child's preference is an indication of family's language practices and ideology. The Hill family supports ASL and English and that is explicit in their practice of empowering their son to make decisions.

The Clark family shared that their deaf son is vocalizing and having fun, aspects they identified as important to their family's language policy:

I notice our son will vocalize to get our attention or to get what he wants but it is not clear. So, English is not being used directly with him, at the school, he has speech classes and the emphasis is not on vocalizing but more about language skills. They are focusing on lip-reading. That's fine with me if he is having fun.

The Clark family shared they wanted their son to develop language skills over learning speech skills, which may focus on sound productions while language skills generally focuses on social cues such as requesting for food. The Baker family also shared similar beliefs with supporting lip-reading skills for her son.

Ms. Davis was the only mother who emphasized the importance of spoken English skills for her daughters and that is reflected in her language ideology and practice. Ms. Davis shared:

My goal is to place my girls in a mainstreamed program with other hearing children as much as possible, as long as possible. The deaf school is nearby and available to us as a resource. But, I hope to have them mainstreamed for a while.

The language ideology is explicit with the Davis family through the interview. Most of the families in the study have transitioned to a deaf school or a signing program.

However, Ms. Davis preferred to send her daughters to a typical hearing school with other hearing children. A factor to consider is that the daughters have bilateral cochlear implants and are acquiring spoken English. They also have Usher Syndrome therefore

their vision and hearing will decline over time. The Davis family is making decisions about language practices based on several internal factors.

The families in this study expressed that they valued literacy and were introducing reading and writing through explicit language plans. The Fisher family believed in allowing their daughter to communicate her language needs:

I value [English] because it is my language. My hearing children use English. I want my deaf daughter to develop strong reading and writing skills in English as her second language. I know that skill will be beneficial for her to function in the real world. I'm working with a reading specialist right now because I feel that is very important for her especially because she has a strong first language foundation. She is very visual, and I want her to develop skills to carry over that to her second language. For now, no. There are no plans for introducing spoken English to her. We really do not want cochlear implants for her. We don't. She does not have access to spoken language through her hearing aids either. So currently, she does not have any amplifications. We are purposefully excluding English from our family right now. We are focusing on ensuring she has access to written English by reading books with her. Then when she grows up, she can then let us know if she wants the speech classes or not. I will let her decide.

The Fisher family value ASL and English through reading and writing. They believe ASL provides the language foundation needed to acquire reading and writing skills in English as a second language. The Fisher family's language ideology is influencing their language practices by working with a reading specialist when their daughter is 2-year-

olds. The family is also purposefully excluding spoken English, to focus on ASL and English through reading.

The fact that English is the majority language in the United States may have played a role in family language policy for the families in this study. One family emphasized the importance of spoken English development and is following their ideology of English through cochlear implants and placing their daughters in a mainstreamed program. Most of the families mentioned purposefully excluding or minimizing English as their deaf children acquired ASL to develop a strong first language foundation.

***Being language models.*** Another key factor in implementing family language policy appeared to be the inclusion of language models in the Deaf child's life. The families shared the importance of including language models by either becoming language models themselves or bringing in Deaf individuals from the community to support language development. Being language models, however, meant that the adults had to learn a new language. Ms. Baker decided:

I wanted to be as fluent as possible in ASL so I enrolled in ASL and English interpreting program at my community college. Having access to that resource was truly helpful for me as a single mother raising my two sons because I am his language model. He is learning ASL from me, and I am teaching him and my older son ASL, as well.

Ms. Baker acted on her language ideology by enrolling in ASL and English interpreting program which is different than signing up for ASL classes. Ms. Baker shared that the

ASL and English interpreting program requires ASL classes as well as linguistic courses and internship hours. She believed that the language practice of being certified in ASL and English exemplified her dedication to the language ideology of providing the best language model possible for her son.

The Adams family believed that including other family members also improves the family's likelihood of acquiring ASL; therefore, Ms. Adams signed up for ASL classes:

I knew there were ASL classes being offered at the community college. I signed up for a class right away. I did my own research. I told the audiologist I was going to teach my child ASL and that we would be learning it together.

Ms. Adams shared that learning a new language is challenging; however, the act of learning a new language with her child gives it a greater purpose. It reflects her language ideology of being a language model.

The Hill family emphasized the importance of interacting with other native or fluent peer and adult ASL users to support a family language policy even though they were ASL interpreters:

We are not just learning [ASL] alongside our son, but we can be his language models. I have deaf adults, deaf friends with deaf children so we are well connected to the Deaf community due to our work so thankfully, our son is exposed to a wide variety of deaf individuals. He has deaf friends, and he interacts with them often.

It is apparent that the Hill family perceives repeated interactions with a variety of native language users are a necessary component of ASL and English bilingual families.

### **Resources to Support Language Development of ASL**

Because ASL is not as widespread as English, many families receive ASL resources through early intervention services. The families shared in the interviews how they implemented ASL-English bilingualism in their homes using various resources. As the families talked, it was evident that resources varied greatly from state to state, but what stood out in this study was that having a deaf role model or mentor greatly influenced the family's language policy for ASL and English.

**Deaf role models and mentors.** As soon as the child was identified as deaf, many families in this study were assigned to either a Deaf role model or Deaf mentor to start creating a language plan for ASL in their homes. This included learning basic signs, visual attention-getting techniques, and ASL structure; connecting to other resources; and strategies for learning ASL through various resources. The process of finding ASL early intervention services also varies greatly from state to state. The Davis family (from the northeast area) was fortunately paired with a deaf teacher:

So, with my oldest, through her early intervention agency, she was paired with a teacher who taught me and her separately how to use ASL. She would teach me how to communicate with her and teach her vocabulary. The teacher was deaf so that was very helpful.

Some families believed that working with a native language user may provide support for families in navigating the Deaf world. The deaf teacher in the Davis interview worked

with the mother and child separately, tailoring to their unique learning needs. The deaf teacher focused on communication based techniques with Ms. Davis, while teaching the deaf daughter ASL signs.

Other families worked with a deaf role model or mentor during the first year of their deaf children's lives. For example, the Fisher family contacted a local school for the deaf and received services right away:

When my daughter was identified deaf at birth, a deaf mentor was assigned to us and she taught us signs immediately. We started signing to our daughter when she was 6 weeks old. I was lucky to have her come to my house two times a week so that I could learn everything and I was fascinated by the new information. The importance of visual attention, the tapping of her shoulders, the signing to her, and just...that was a new world for us.

The Fisher family emphasized the importance of early and frequent contact with their deaf mentor. They learned signs when the daughter was 6-weeks-old. They believed that having a deaf mentor work with families in their homes empowered them with techniques and resources that are unique to raising a deaf child.

The Clark family believed that being in the military presented challenges in maintaining their ASL and English values and beliefs. They found the Deaf Mentor Program to be readily accessible and supportive. Ms. Clark shared how important the ASL language immersive experience was for her family:

As soon as we found out he was deaf, we reached out to get services. We reached out to an organization in [city]. They set us up with a deaf family mentor. We

started their Deaf Mentor Program and started going to different events with the family. They were helpful and guided us, like almost forcing us but not in a negative way, to use ASL in real places. I really liked this program, and being a military family means we move often. We have moved a lot, but every time, we move, I seek out services and advocate for my son's needs, making sure that his needs are being met by the services in the area.

By receiving a mentor to support and guide the family through the steps of figuring out their family language practices, Ms. Clark shared her family feels empowered. Being a military family adds another layer of complexity to maintaining ASL-English bilingualism, as demonstrated by the Clark family in continually seeking services and resources to support their family language ideology.

Like the Clark family, the Adams family continued to work on their ASL skills by utilizing the Deaf Mentor Program, acknowledging that having a deaf mentor provided an ASL language model in a language-rich environment. Ms. Adams found the collaboration very beneficial:

I also have a Deaf mentor coming to my house to work with us as a family. That has been helpful having a deaf adult come to our house because what she can offer is something I cannot offer right now. That's fine. I feel lucky we have that resource because it is hard trying to find other Deaf role models.

Ms. Adams recognized having a deaf mentor supports her in providing an ASL language model for her family as they continue their ASL-English bilingualism journey as a

family. Ms. Adams acknowledged she is not a language model yet; however, she is grateful for the resource and collaboration.

The Baker family also found the in-home tutoring sessions with a Deaf mentor very helpful to their family language policy. Their Deaf mentor provided resources to support their language needs.

The Baker family share that another helpful aspect was connecting with other families with deaf children for support and to offer peer language models for the deaf children:

He also received ASL tutoring from a Deaf mentor once a week for 2 years before he started the Total Communication program last fall. We don't get that service anymore, but that was also helpful to have the tutor come to our house. That felt like a personalized tutoring experience because she helped me with creating connections to other families. She also developed personalized signing books for our routines and for him to refer to.

Ms. Baker shared that having a deaf mentor goes beyond teaching ASL, but also creating personalized tutoring services and materials. In addition, the deaf mentor also connected the Baker family to other families to enrich their support system. Ms. Baker indicated that ASL is an interactive language and opportunities to use the language are critical to develop and strengthen various language skills so by connecting with other family members and children, the opportunities to interact are increased.

Yet another resource supporting ASL-English bilingualism among families was the Shared Reading Project, a nationwide program providing positive read-aloud

experiences for families with deaf children. In this program, a Deaf coach comes to a family's home and models in ASL how to read books. The Fisher family credited their successful family language practices to their first meeting with a Deaf professional. The Deaf professional helped them create a clear, positive, and successful framework, incorporating Deaf Gain for their deaf daughter, which helped create a clear family language ideology. By creating connections to the Deaf community through the Deaf professional, the Grays attended a national Deaf-centric family learning weekend. Ms. Gray recalled:

She was identified deaf about a month after her birth. The next day after we learned she was deaf, we contacted our local deaf school for resources, but sadly it is no longer in operations. It closed down. But still, the outreach services were still open so we contacted them for resources. They had family activities and the person who replied to my email. She was the outreach coordinator, and she was deaf. She started to come to my house for home visits. So, a couple of times after her visits—she was really the first person that exposed our family to ASL—we started signing and practicing our ASL vocabulary first. We were exposed so much, with ASL. So, when she was 6-months-old, my husband and I, we went to Baltimore to American Society for Deaf Children event. They had a weekend event where families would be focused on ASL only with their children. That was a fantastic experience.

Ms. Gray believed that connecting with a Deaf professional, mentor, or coach provided a gateway to the Deaf community where the families could seek additional resources by

attending events or connecting with other families. Ms. Gray shared that the family stopped by Gallaudet University, the first, and only, liberal arts university for the Deaf, with her daughter after the conference. The family toured the campus, and Ms. Gray shared she proclaimed her daughter will attend Gallaudet. Ms. Gray shared the act of visiting and visualizing what the future looks like for their daughter supports their language ideology and practice.

In this study, six of the eight families were partnered with a Deaf role model or Deaf mentor during the first year of their deaf children's lives. They indicated that having that experience positively influenced them as they revised and reshaped their family language policies. They noted that learning a new language requires frequent interactions and real-life applications. Some families shared that successful language development, language exposure must take place in person by utilizing Deaf role models, Deaf mentors, and/or Deaf professionals.

**ASL resources and materials.** While having person-to-person interactions was cited by the participating families as the best way to acquire and learn a language, learning from video resources are a secondary option because ASL is a visual language.

The families shared artifacts on how they implemented bilingual language use in their homes. Note that these resources were respective and limited and were often used with other hearing children in the household to promote inclusivity and to develop relationships. The Hill family utilized various resources to support their family language policy:

[My son] enjoys ASL stories very much and dislikes the *Signing Time* DVD (laughs). His brother loves them, but I understand that because it is geared for hearing children with singing and signing at the same time. That is not what happens in our household. My deaf son is bored with that series, so he has taken on watching you know, Gallaudet University's [Visual Language Visual Learning (VL2)] ASL Storybook apps, some Scholastic videos of signing read-aloud and whatever we find on Facebook—oh, ASL Nook is a great resource for us. He really enjoys watching the deaf sisters in the video. I wish there were more resources for him to enjoy ASL stories without so much emphasis on English like *Signing Time*. There needs to be resources for deaf children with just ASL. You know, fun stories that is just purely ASL.

The ASL resources shared by the Hill family reflects the family's language ideology of including ASL and English in their household, and respecting each child's preference with either language. For example, their deaf son found *Signing Times* DVD series boring, but their hearing son liked it. Ms. Hill's perception that the inclusion of singing on *Signing Times* DVD series appear to be geared for hearing children. She also shared it does not reflect the language ideology in her home. The family shared earlier that they practice language separation to showcase different qualities about each language.

The Gray family shared similar sentiments regarding DVDs and apps for their deaf daughter, who also expressed boredom with the *Signing Time* music and singing. The inclusion of deaf actors in other resources increased interest, and Deaf culture played a strong role in the Gray family language policy:

Sometimes my other hearing children put on *Signing Time* DVDs. They really enjoy that series. My daughter, the deaf one, is bored with *Signing Time*. She is not interested. There's not a lot of signing, but singing. She's not interested. But my hearing children like it very much. We also have *Once Upon a Sign* series, you know? All the actors are deaf and use ASL. That is my daughter's favorite DVD series. And also the *Signed Story* app, an iPad app. There are about 30 stories on that app. We also have the *ASL Storybook* apps from Gallaudet (VL2).

My hearing children love the signing apps. They're all wonderful resources.

Like the Hill family, the Gray family noticed the lack of interest in *Signing Time* from their deaf daughter, but their hearing children enjoyed the series. Ms. Gray attributed the lack of interest to a lot of singing, which is auditory based. Their daughter preferred resources with Deaf-centric storyline with deaf actors. Having a strong language model and Deaf-centric plot contributes to the language management of the Gray family.

Ms. Davis discussed their family technique of incorporating the *Signing Time* DVDs during their meals. They viewed the DVDs, which are especially liked by the hearing family members, to encourage language interaction and to develop their ASL skills:

I also bought the *Baby Signing Time* DVD series. She loves that. She is so fascinated with the DVD. So, we do that. We play around with *Signing Time* on TV. So, while we eat, we have the *Signing Time* to learn, so that's how we learned signing.

The Davis family enjoys the *Signing Time* DVD series and use it to learn signing. It should be noted that the Davis daughters have cochlear implants and can access spoken

language. The Gray and Hill children do not wear amplifications and that may influence their preferences towards ASL materials without music or spoken English.

The Clark family also utilized the *Signing Time* DVD series as well as apps for both the mother's and the son's learning, along with the Internet. The ease and accessibility of the resources were important to the family:

We do a lot of *Signing Time* DVD together at home. My son likes that very much. We also use lifeprint.com for vocabulary words. We use the *Signed Stories* app, too. There is a new app that we like, *ASL with Care Bears*. He likes that very much. I use the ASL app that has Nyle [DiMarco]. I use it a lot. It is very easy to use and very informative.

The Clark family enjoys *Signing Time* DVD series and their son has a cochlear implant to access spoken language, as well. The resources reflect the families' language ideology. While the Hill, Gray, Davis, and Clark families utilized DVDs, apps, websites, and Facebook to include ASL in their homes, the Fisher family preferred the low technology approach of actual interactions. Their daughter went from being nonverbal to signing 60 words in a year-and-half once ASL was introduced to the family. As Ms. Fisher said, "We no longer have a communication barrier at home." She continued:

We have signing books. We are low technology, so we try to avoid the computers and tablets. We are using books and actual interactions to develop her language. There are some signing books that we like, and she loves them. Again, that may change. I know the school for the deaf has a lot of DVDs, and that may be introduced later.

The ASL resources come in a variety of forms to best fit each family's interests and needs. The Fisher family has access to DVDs from the school of the deaf. Utilizing organizations or schools to receive materials and support in ASL also helped the Baker family's language ideology.

The Baker family provided another resource, developed by an area deaf school, useful for implementing the ASL aspect of their family language policy:

He loves YouTube videos, so we have been fortunate to use the Educational Resource Center on Deafness channel [ERCOD]. They have "ASL Storytelling" online and we watch that together.

In addition to these resources, six families are also enrolled in ASL classes through their early intervention agencies, local schools for the deaf, or community colleges. These classes were opportunities to connect with other families with deaf children as shared by the six families.

***ASL classes.*** The families believed that engaging in face-to-face interactions and ASL lessons is a crucial step in supporting their family language policy. Many of the participating families mentioned they appreciated when the ASL classes also offered childcare, so that they could focus on learning ASL. Some childcare programs also taught ASL to the hearing siblings. Ms. Clark shared that her family really appreciated the support group experience they received prior to ASL classes, when families came together to talk about specific topics, along with childcare:

[The early intervention agency] provides signing classes every Monday from 6:30 p.m. to 8:30 p.m. The first hour is like parent information class, a lot of round

table discussion about specific topics. And the second hour is the ASL class. I love the class because it is for me but it also provides child are for my son to play with other deaf children. It has been truly helpful with having childcare so that I can focus on learning ASL.

The families believed that seeking support from other families and giving their child an opportunity to interact with other deaf children are two ways ASL classes may provide as a resource to the families' language practices. The Bakers took sign language classes at their church and attended ASL-related events in their geographical area:

As a family, we signed up for Family Signs where we go to classes or social events together and use ASL. We have been going for a year-and-a-half. It has been very beneficial exposing my son to other children who are also deaf. Our local church has started sign language classes as well, and we have about five signing church members that interact with him. Their children are also learning ASL so they can communicate with him directly.

Having a source of support in the form of a religious institute appeared to provide the Baker family external support sharing similar beliefs. Ms. Baker believes that the community is contributing to their family language ideology by learning ASL and interacting with their son. Attending other social events with other deaf children allows for peer language development.

The Gray family considered ASL classes a family event and saw the benefits of early ASL acquisition for their young deaf daughter. With the ASL class organizers providing

childcare for their older children, their family language policy was supported and encouraged:

Within two months, we all were enrolled in family sign classes at the school for the deaf. They provided daycare for my oldest children and taught them ASL as well. After family sign classes, my husband and I were ready for ASL Level One class at the local community college when our daughter was 6-months-old. We are starting ASL Level Three class now and our daughter is 14-months-old. We are very proud of our progress and see the positive impact it has made in our lives. She signed her first word, milk, at 9-months-old. She signs daddy, mommy, more, crackers, and dog. She points a lot for information. The Deaf mentor and deaf outreach coordinator have told us she is progressing as expected for a deaf child at 14-months-old.

The Gray family shared that they feel empowered by their family language ideology because they have resources, and support from their community and Deaf professionals on the progress and growth of ASL development in their daughter.

Taking ASL classes can be a family affair in which the entire family benefits from and can continue their journey as a bilingual family according to their family language policy. Receiving external, and additional, support from the community gives a family the tools for acquisition of a new language. Learning a new language also came with challenges, such as limited or poor-quality resources, for the participating families

### **Challenges with implementing bilingual development of ASL and English.**

While the families in this study shared many positives about their experiences, there were

also several negative experiences with trying to receive services for their deaf children. Seven families wanted bilingual resources, but were given resources only for developing spoken English skills. Some families also shared they did not expect to advocate so much for their deaf children's rights to access to information in public spaces as they developed ASL skills themselves.

***Barriers to receiving ASL services.*** Families spent time and energy trying to get resources for their Deaf children as young as possible to capitalize on the benefits of early language acquisition. Many families had to rely on their own navigation skills such as searching online for further resources or searching for a new medical professional who matched their values of being bilingual. The journey of finding or receiving services were often difficult for families. Ms. Adams recounted:

Well, we had a difficult time with finding services to teach us ASL when our daughter was born. We looked and asked for help. We had to fight with our school district where we lived for 2 years trying to find a deaf and hard-of-hearing classroom. It was a huge struggle. She was having a hard time expanding her vocabulary, her language. We watched DVDs, *Signing Time*, at home. We were trying to learn as much as possible as parents to teach our daughter ASL. Well, after the oral school approach recommended by the audiologist, we decided it was not the best option for our daughter. I researched options online and came across ASL classes and we thought to give it a try. We went to classes at a local community college. Now we are getting college credits for our ASL classes, I am

now in Level Three, and my husband is in Level One. He works long hours so I have to learn ASL in order to communicate with our daughter.

Ms. Adams indicated that the external factors of finding education programming and misinformation from the medical professional contributed to the stress factors in her family. Ms. Adams resorted to searching for information online in order to advocate for the family's language ideology.

Along with challenges in finding ASL classes, the Clark family struggled to find educational programming that supported their family language policy of bilingualism.

Ms. Clark stated:

Oh my. There are so many challenges to list. First, when we moved to [state]. We found a program, which I thought would be perfect for my son. I contacted them to inquire about enrolling my son and the man over there...he had no idea what I was talking about, what bilingual program? No, we do not sign here, we only speak here. I became very frustrated and very upset. I tried to talk with him, and it turns out that he was very new to the school and did not understand the program.

So...my son is not enrolled there.

Ms. Clark shared that finding an educational programming that offers ASL-English bilingualism is challenging since the resources are limited. The school in Ms. Clark's interview did not understand ASL and English bilingualism; however, they presented themselves as a bilingual school. They do not use signing, but only one modality through speaking.

Most families shared that they believed finding ASL-English bilingual resources, including educational programming, continues to be a challenge for families who want both ASL and English for their deaf children. The families shared that the resources vary greatly from state to state and can be limited depending on location.

***Challenges in working with medical professionals.*** Medical professionals include pediatricians, audiologists, speech language pathologists, and early interventionists in this study. Families shared that they perceived that often the medical professionals had no idea what families mean when they wanted to pursue both languages. They found that the medical professionals often operated in the either–or framework, choosing one language over the other, while the families want to have both languages in their deaf children’s lives. As a military family, the Clark family encountered challenges especially in their moving to different states, trying to satisfy their family language policy. From their experiences, they concluded that early intervention agencies were often clueless about ASL-English bilingualism, but the Clark family found solace in the Deaf Mentor Project:

Every time we move, it is interesting, I meet people in early intervention agencies and they often have no idea what I am talking about, about wanting to have both languages for my son. I want him to sign and speak, but not at the same time, not together. I want them to understand my family’s needs and for them to meet them. I am not having much luck, but I must say I’ve had positive experiences with deaf mentoring programs. Even after I’ve moved, I’m still in contact with my mentors

from other states. They've been so supportive and helpful. Making sure I have resources, connecting me to the right people in my state.

Ms. Clark shares that finding an organization or program that supports your family language ideology is crucial for the development of ASL and English bilingualism. The Clark family revealed they remain in contact with their Deaf mentors from other states, and they provided external support by finding local resources for the Clark family.

Another aspect to the family language policy is ensuring that spoken English is supported through amplifications, if appropriate. Ms. Davis expressed frustration with the medical community for delays in fitting her second daughter with amplifications:

We asked for hearing aids, and we struggled with the audiologists about getting hearing aids. They had a lot of questions about why she passed two hearing tests prior, so that was a major delay in getting the hearing aids we needed. The doctors told us, "no, she is not that deaf" and we knew she needed hearing aids regardless. Yes, she is that deaf. That was such a chaotic time, and finally she got her hearing aids at 9 months old. 4 months later. The audiologist was confused, "Is she deaf or hard-of-hearing?" That really delayed the process. I knew. I knew she was deaf. I knew she needed extra support, and it didn't matter how much hearing loss she had. I knew it. I knew she was not responding to environmental sounds. She was not talking. I knew she was deaf but the doctors and the audiologist... oh boy, they held up the process. It was a major struggle. I've talked with other parents about my experiences and so many of them shared similar frustrations: the delay, the struggle of getting support for our deaf children.

Mrs. Davis shared that the medical professional's lack of understanding the crucial role early access to language has been difficult for her family. Although the Davis family uses ASL with their deaf children, they also value spoken English, and are worried about the opportunities to develop spoken language. As perceived by Ms. Davis, the delays caused by the medical community can adversely impact the language development in deaf children. Another recurring theme is not including ASL as a language resource when recommending early intervention services to the families. The Adams family shared their challenging journey with medical professionals, who had an either-or approach, recommending oralism.

Due to auditory neuropathy, her results varied. Some doctors said, she can hear. Some doctors said, no. Some said she had some hearing. It was so varied. It was not clear; the diagnosis did not happen. So, we tried different things, when she was 2-years-old, we tried not to use signing at all. We kept her hands away and focused on speaking only. We took her to an oral school for 6 months. It was awful for her. She felt awful. She was not successful. No one told us about including ASL in our family. I found that information online by researching options for my daughter. There were other health issues to consider so language wasn't a primary factor also there was a lot of confusion as to whether she could hear or not. Once her hearing loss was confirmed, and her negative experience with the oral approach, I was truly happy to find ASL as another option for my daughter.

The Adams family shared experience similar to those with the Davis family in trying to find information about their deaf children's hearing levels and how to support their language development. Ms. Adams believed the either-or approach is a subtractive approach, and did not provide her family the support they needed to provide for their deaf daughter. After researching for options, the Adams family discovered ASL and moved to a deaf school to enroll their daughter in a bilingual program. The Adams family utilized their language ideologies by enrolling their deaf daughter in a bilingual program and assertively searching for resources online.

The Evans family shared how the either-or approach also affected their deaf son. They struggled as first-time parents dealing with the oral-only approach and meeting a deaf individual for the first time. Based on their son's behavioral issues, an early interventionist was brought in who recommended ASL. Ms. Evans shared:

Our audiologist recommended a speech language pathologist so she came to our house once a week. We focused on speech skills and it was frustrating because he was not speaking. He would babble or make noises but it was not clear. We kept pushing forward and trying to practice with him every day. We did everything the speech language pathologist told us. After two years of trying the oral approach, and our son was becoming increasingly frustrated. There were a lot of temper tantrums. He would cry often. Because of his behavior issues, we added an early interventionist to help support us with his behavior. She recommended ASL. And I thought what is that? She explained it was a language that the deaf people used, and I didn't know anything about it. I was angry and confused. I did not want to

learn a new language. Who does that? I mean, that is the opposite of what other families do. They pass down their own language to their children and I... it was shocking that we had to learn a new language, and it was not verbal. That was a lot of information to process at that time. I was extremely upset because it was two years of frustration when ASL was finally offered as an option. Now, my son is communicating using ASL and he is thriving. And as for the behavioral issues, they're gone. He was trying to communicate with us for so long.

The either-or approach greatly impacted the Evans family as demonstrated through their son's behavioral issues, trying one approach for a long period of time, and lack of information or resources of alternatives. Ms. Evans shared she was "extremely upset because it was two years of frustration when ASL was finally offered as an option." Ms. Evans believed that the lack of information contributed to language delays in both languages of her son. Ms. Evans shared that the family is working on ASL and English bilingualism ideology currently and their son is communicating and his behavioral issues has reduced as of the result.

The interviewed families reported wishing they knew of ASL sooner so that their children could have been set up for success earlier. Throughout this study, families reported not realizing they had to become advocates for their deaf children, which often included fighting for access, fighting for information, and fighting for resources.

**Advocating for their deaf child.** Two families shared experiences of having to advocate for their bilingual families. Ms. Clark recounted an experience where she advocated for her son's language access at a museum:

I had to fight with one woman over the phone for a week-and-a-half because she refused to provide an interpreter for my son who is three-years-old. Yeah, so and after a week-and-a-half of fighting, calling back repeatedly, I finally told her, “you know on that day we are showing up at the museum, we are showing up at that time.” I told her directly, “you tell me where to meet the interpreter, period.” It is his right to have access to incidental learning. Maybe they are lazy and don’t want to go the extra mile or because my son was only three-years-old. They kept telling me that they would provide an interpreter for the story time only, and that he would love it. I told her, “No, he needs FULL access to the information being shared at the museum.” But, I’m not sure how much further I should fight for my son? Like should I accept that the interpreters only interpreted for 2 hours? They were wonderful, nice, and very helpful with translating information from English to ASL. That constant fighting for his rights, always advocating for his rights—that’s the worst part of this journey. Umm, I do a lot of self-advocacy; I fight for information, I seek information, I ask a lot of questions, I educate others every day. I want the best for my son.

The Clark family’s language ideology also includes advocating for language access for their son. Ms. Clark shared that often includes asking for interpreters for public places such as the museum, and when the family is also learning ASL, they may not have enough language to expand on the information being shared in the museum as shared by Ms. Clark. Ms. Clark believed the importance of having access to incidental learning.

The Clark family presented a complicated, and multi-layered challenge for families with ASL and English bilingual language ideologies.

The Fisher family shared an experience of being surprised by the scarcity of families with similar values and how advocacy played a role:

I know when my daughter was born, we searched for families that used ASL primarily regardless of cochlear implants, and I was really surprised to find there were none in my area. My husband and I, we made the decision—really, we thought, okay, when she was born, and she failed the newborn hearing screening—right there, we began discussing what we needed to do. What she needed? Before we talked with anyone, even with the audiologist. We searched for information on our own and made our own decisions before we talked to anyone. Based on our research, we came to our own conclusion, and that was our vision of our family. We feel very confident with our decision. We would learn ASL because that was what our daughter needed. We realized we have to learn something different now because of our daughter. So, our own research really solidified our decision of being a bilingual family before we even met the audiologist or anyone else in that case.

The Fisher family presented a challenge that is like other families in the study, of where to find other families who use ASL in their family language practices.

A valuable resource for the families in this study was the Internet, which helped validate their beliefs or search for resources. Even so, the families identified a desire for

more opportunities to support their family language policy by connecting to like-minded families.

**Summary.** This section addressed the themes found in families implementing the bilingual development of ASL and English in their homes. Families discussed the roles of ASL and English and how they followed their children's lead in which languages to use. Resources for supporting language development falls mainly on having access to Deaf role models or Deaf mentors, then ASL resources and materials, including ASL classes for the family. While the resources may be plentiful for some families, some families experienced challenges in receiving ASL services and struggled with finding and working with medical professionals that supported their family language policy. Many families inadvertently became advocates for their deaf children through research and wanting to ensure their deaf children had equal access to incidental learning opportunities outside their homes.

### **Family Language Policy Toward Bilingual Development**

The analysis of interview data showcased how the families implemented the language ideologies regarding the bilingual development of ASL and English in their homes. All eight families discussed their experiences and perspectives of the transformation to an ASL-English bilingual family and presented clear stances that they are now a bilingual family. In this section, I explore how families recognized themselves as ASL-English bilingual families and the challenges of learning a new language, figuring out how to incorporate ASL and English with other children or family members, and relocating for better educational placement.

**Family language policy.** All the families talked about becoming bilingual with the arrival of their deaf children, which often included learning ASL as a language. Although the journey was different for each family, each family recognized the value of including ASL in their homes to facilitate communication and strengthen relationships. The majority of families in this study learned ASL as a new language, which had a great influence on the families identifying themselves as bilingual, except for the Hill parents, who already were fluent in ASL before the arrival of their deaf child. The themes within family language ideologies included recognizing they were bilingual families, which meant the inclusion of their extended family, intentional language planning of ASL as a primary language, and relocating for better educational opportunities for their deaf children.

***Recognizing themselves as bilingual.*** All the families interviewed shared that because their deaf children were a part of their families, they considered themselves bilingual. A major theme throughout the interviews was that the family adapted, some sooner than later, to the deaf child's arrival by embracing ASL as a language. All the families with additional children shared they were learning ASL together to develop relationships with the deaf children.

Most families expressed that the arrival of their deaf child changed the language structure of their family from monolingual to bilingual, except for the already fluent Hill family. Ms. Hill shared:

He had access to language through ASL from day one. We already signed with our first son, and ASL was his first language then he switched over to speaking

mostly English. I'm grateful that we can easily communicate with each other. We are a bilingual family because we can model ASL as well.

The Hill family perceived themselves as a bilingual family because they were fluent in ASL before their deaf son was born. They used ASL with their hearing son, then with their deaf son. Their household uses both languages and because of the early exposure to ASL, Ms. Hill believes they can easily communicate with each other.

Seven families learned ASL after the arrival of their deaf children. The learning of a new language is a family effort as indicated repeatedly throughout the study. For example, Ms. Gray stated,

My daughter is a bilingual child and we are becoming a bilingual family. Our two older children are still young, so we are all learning ASL together. I value ASL very much because it is our language.

The Fisher family echoed the Gray family saying,

Yes, she is bilingual and...my husband, my two other hearing children...we are a bilingual family because we all are learning ASL together. We also speak English. Our goal is to have everyone bilingual in ASL and English.

The Gray and Fisher families shared that having a deaf child transformed the family into a bilingual family. They viewed themselves a bilingual family, while learning ASL as a language to support their deaf children. Their language practices support the family language ideologies.

Seven out of eight families mentioned that learning a new language for their deaf children was their responsibility. As Ms. Baker said,

It is my responsibility as a mother of my son to provide him what he needs and if that meant I had to learn another language, so be it. And English...it is my first language so I am very comfortable. It is also my other son's first language as well. I really do not have any opinion about English, other than the fact it is my first language and most people know it. ASL is the opposite. It is a hard language, but the rewards are so great. I keep reminding myself that my son is thriving because I am honoring his first language. That is something you just do as a parent.

Viewing the act of learning a new language for her deaf son indicates her language ideology for the family by valuing ASL although Ms. Baker and her hearing son acquired English first. Ms. Baker stated they are honoring her deaf son by learning ASL and that responsibility comes with being a parent.

The Evans family emphasized the importance of providing accessibility for their son. They also accepted the possibility of their son not developing spoken English. Ms. Evans said:

I love both languages. I use English everyday with many people. I really don't have anything to add about English. For my son, it is not accessible. He does not benefit hearing it, and it is a barrier for him. I've learned to accept that he will not speak and that is okay. He will learn to read and write [English] using ASL. That is a new thing for me, and I will learn because I want him to be successful. I am trying my best. I want my son to know that I love him and that I am doing this for us.

The Evans family recognized that learning spoken language for their son was difficult and not accessible. They shared they learned ASL after trying an oral-only approach for 2 years and recognize that ASL provides access to the world for her son. Ms. Evans views learning ASL is an act of love for her son and for her family. This also reflects the Baker family's belief that providing what the child needs is a responsibility as a parent.

The Gray family also emphasized the importance of learning a new language for their deaf daughter because ASL is the most accessible language. They were content with their family language policy, with the support of the Deaf community, but the whole process was still new to them:

Both languages are important to us, especially ASL for our daughter, otherwise we would have not learned ASL. This is a new experience for us as a family acquiring a new language for our daughter. We are happy with our decision and have received so much support from the Deaf community and the local school for the deaf. I'm very excited to see what the future holds for our daughter.

Ms. Gray shared that the learning process of acquiring a new language requires being immersed in the language and having as much support as possible. The families emphasized that support can come in different ways: internal support through immediate family members, and external support through extended family members and the Deaf community. For some families, this meant extended family members also learned ASL to support the family's language policy.

***The role of extended family members within the family language policy.*** Ms. Fisher shared her experiences of growing up with a sister with Down Syndrome, which

“taught my parents a lot about communicating other than being verbal so yeah, they sign and gesture with my daughter.” The grandparents enrolled in sign language classes at a local community college, and her husband’s family also enrolled in an online sign language class. Having extended family members learn sign language fosters deeper relationships, as Ms. Fisher described:

So, my parents use signs to interact with my daughter. They gesture on FaceTime, for example. My mom will sign, “Hello, [name]. You are a beautiful girl.

Grandma loves you.” My daughter loves it. She wants to call her grandma all the time so clearly signing is connecting them, bridging a relationship.

Ms. Fisher acknowledged that her extended family members might not be expert signers, but she wants their ASL “to be enough that my daughter can have a relationship with each family member.” Ms. Fisher believes this reflects another aspect of change in structure in bilingualism within a family.

Six families expressed that they had only known English their entire lives before their deaf child and shared their thoughts about being a bilingual family. Seven out of eight families identified the challenges of learning a new, visual and manual language like ASL. Six families shared that their deaf child was the very first deaf individual they had ever met.

***Learning ASL as a new language.*** Many families shared the challenges of learning an entirely new language for their deaf child, recognizing and acknowledging that this process was a necessary part of having a deaf child in the family. Ms. Evans shared,

Oh gosh... hmm, ASL. I value ASL because my son uses it. He needs it. It is his language so I value it as a part of our lives. ASL is so beautiful and so complicated. I am still learning and making lots of mistakes.

The Evans family revealed they value ASL because their son needs it; therefore, it becomes a part of the family's language ideology. Ms. Fisher shared that her family, too, made mistakes, acknowledging that ASL is a hard language. They both were doing this for their deaf children and acknowledged that their deaf children need ASL. Ms. Evans said,

Learning ASL is hard for me; it's not easy. It is not natural to me at all. I have to accept that I may never be as good as my son is, but he seems to understand that I am trying. He is overall so much happier (smiles). We've been working hard, developing our ASL skills, and now we are taking ASL Level Three class. It's like we've continually found ASL in our lives from many different experiences. A little there, there and there...and we've collected all we've learned and taking that with us in our family. I do feel we are doing all we can, to ensure he gets a lot of ASL exposure.

Learning a new language as an adult is difficult and challenging according to Ms. Evans and Ms. Adams. Ms. Adams stated, "I value both languages very much. ASL is hard, but so worth it when I see my daughter happy." Ms. Davis added in regards to her family language policy,

Well, personally, I'm a hearing parent. My family is all hearing. I grew up with English. It is our primary language. You know, that saying when you don't know

ASL until you have your own children. That is true for us. The first deaf person we ever met is our daughter. Yeah, she is the first deaf person I've ever met in my life. So, zero exposure to the deaf world, Deaf community, the whole hearing loss journey. Nothing. No exposure. So, English. English is what I know. It's my life. So, ASL...hmm...I think it's fun. I think it's neat. It's fun to learn any new languages, really. But...ASL is very different because it has its own structure, its own grammar, and everything. But...you use your hands. I'm having a hard time. You know, I'm a hearing parent with two deaf children. I love them. I am not trying to fix them, to change my children, to make them perfect. I have [the most] awesome children in the world. I mean, I wouldn't mind having 100 deaf babies if that's the only thing but it is not for me. They also have the Usher Syndrome.

ASL is an important part of who they are, because they're deaf, you know?

Ms. Davis elaborated about balancing what she knew as an individual using English and having babies who need a different language. Ms. Davis shared her difficulty with learning a manual language as opposed to speaking English. The family's language ideology is also added with the challenges of Usher Syndrome, so Ms. Davis perceived that the family is experiencing additional urgency of acquiring languages before the vision and hearing loss happens in their daughters.

***ASL as the primary household language.*** Families in this study discussed why they chose ASL as the primary household language. Ms. Fisher explained, "Ultimately, my goal for [my daughter] is to be fluent in ASL primarily, so we have to use ASL

exclusively in our family.” Ms. Gray indicated that her families’ language policy was fluid and changed based on who has access:

I speak with my older children when my daughter is not around. So, right now, ASL is the primary language of our household. It will evolve when my daughter grows older and if she gets amplifications, then that may change. My husband and I, we both currently sign with voices off at home so that the focus is on ASL development only.

Ms. Gray stated that the family language ideology may evolve over time if their daughter receives amplifications. The family language policy does not stay static, and they evolve over time due to language preference, opportunities, and accessibility as well as resources.

The difficulty of acquiring ASL as a second language was apparent among the families who grappled with the idea of learning a visual and manual language during adulthood. They mentioned they believed in the importance of learning ASL for their deaf children and that it is their responsibility to ensure that their deaf children have access to ASL. They believe that being a bilingual family holds the responsibility of ensuring that the language development of ASL belongs to the families as well.

**Being a part of the Deaf community.** Many of the families mentioned the warm and welcoming Deaf community embracing them as they navigated becoming a bilingual family. A recurring theme was the recognition of their deaf children’s discovery of identity in the Deaf community. Ms. Adams said, “It is a learning experience and everyone I’ve met have been so kind and helpful within the Deaf community. It’s a whole

new world for us.” Seven families commented that being a part of the Deaf community played an important role in developing Deaf identity in their deaf children’s lives, as Ms. Evans said:

With ASL, I found a nice community of people who are happy to support us. The Deaf community here is amazing. There are a lot of events so I am meeting many other families. In a way, ASL has brought more people in our lives, and I value that because ASL will always be my second language but my son has found his home within the community. He lights up when he’s signing and that makes me happy.

The Evans family noticed how ASL has “brought more people in their lives” and that their son has “found his home within the Deaf community.” Ms. Evans indicated she views that as an added value to her family language practices.

The Clark family, being in the military, moves often. Even so, they share that regardless of where they move, they are often embraced by the Deaf community. The family embraces Deaf culture because it has an important role in their son’s life. Ms. Clark stated:

I cherish ASL because it is a warm, open, wonderful experience when I meet people who use ASL. They are the nicest people. They often are willing to help us. I have heard before that the Deaf community can be judgmental if you chose the cochlear implant route for your children. I was very nervous about that. But when I met many people from the Deaf community, and they’re so warm. Every time I moved to a new place, I would worry about this. What if they don’t have

nice people like the other place? But you know, every time we moved to a new place, we've met nice people from the Deaf community. They're so nice. I'm so happy ASL is in our lives. The Deaf community is a part of his culture. It is so important to me that he has access to the Deaf community, that he can participate in Deaf culture.

The Clark family decided on cochlear implants for their son, and they were worried if the either-or approach effects would negatively impact their son's involvement with the Deaf community. However, she shared she found that to be the opposite. Having her son participate in the Deaf culture was important to Ms. Clark.

The Fisher family shared in depth how important the Deaf community was to the family. Ms. Fisher acknowledged that the community provided her daughter with a sense of identity and a place of belonging, something that she could not personally provide to her daughter. Ms. Fisher does not view the Deaf community as a threatening entity, but rather as a resource for her family language policy. She stated:

I value [ASL] because it is the language of the Deaf community. I feel proud. I am proud. It is inclusive of culture, community, and...gives her a place of belonging, ASL, and deaf identity. That is more than I can ever give her. It is such a different world. I know we have a strong relationship, too. I also notice when she sees other deaf children or adults, she connects with them so quickly. I feel that connection too. Last month, we went to Disney and we were watching a show with interpreters. There was a deaf couple sitting behind us. My daughter kept turning around and wanting to sit with them. She was reaching out her arms to sit

in their laps. My daughter is a shy individual but there's that connection she has with the Deaf community. So, she sat on their lap and signed with the deaf couple during the entire show. That was truly amazing to see. ASL is a beautiful language. The Deaf community is so close-knit. We feel very honored to be part of the community as we learn alongside our daughter. Our experiences with the Deaf community have been positive. There's always someone happy to teach us ASL. Just wow.

Like the Evans and Clark families, the Fisher family viewed the Deaf community as an added value to their family language ideology. They mentioned they felt honored to be a part of the community and that they embrace the role of Deaf community with the development of Deaf identity in their daughter which is something Ms. Fisher shared she cannot contribute as a hearing individual.

However, the Davis family expressed frustration with finding an in-state Deaf community and expressed interest in having a connection to the Deaf community. It should also be noted that the Davis family had just moved to a new town and had plans to visit the local school for the deaf a week after the interview. Ms. Davis said:

I really want to expose them to everything then they can decide based on what they feel. If they rather to go for big D, ASL only, that's fine. I will support that. I think...what I can do as a hearing parent to try to encourage and expose our children to the Deaf community as much as possible. We live in a very small town so I have no idea if there are any other deaf people here. I don't know if they live here. I don't know. I don't know how to expose them to other deaf people. So, I

feel I am doing what I can, to the best of my ability, this is my approach to try to expose them to ASL as much as possible. So yes, I value both languages. They are important to me.

Despite the Davis family's struggles, most families shared that they had access and connections to the Deaf community.

**Relocating for educational opportunities.** Although finding a Deaf community is beneficial, finding a good, high-quality educational program that supports ASL and English bilingual development in Deaf children can be difficult. Half the families in this study had relocated so their children could attend a local school for deaf students. It also should be noted that most states in the nation have only one deaf school, so the magnitude of parental decisions regarding their deaf children's educational placements is immense. Most schools for the deaf support ASL-English bilingual development, but like many other schools, they vary greatly in their bilingual approaches.

***Schools for the deaf.*** Four out of eight families moved to pursue bilingual education for their children at local schools for deaf students. The Baker family, at the time of the interview, was on the fence about moving due to the father's employment situation. Ms. Adams shared:

We just moved to [city]. She just started a local school for the deaf last September. She is now thriving, being in a signing environment. She is learning and signing more every day. She is really thriving, absorbing her new environment and acquiring ASL. The school follows a Total Communication

philosophy so she is also exposed to spoken language, too. She is learning through speaking and signing in her classroom.

The Davis family moved to be close to the new school, but the family's goal was to place their daughters in a mainstreamed program with the local deaf school's support. The Davis family also had to consider their daughters' visual needs because of their Usher Syndrome:

Where we used to live, the deaf programs were weak and it wasn't great. We didn't want to put our girls there...it didn't work for us and we just moved. So, next week on her birthday, she is visiting the local school for the deaf for the first time. So, she will be enrolled at the school and receive services, and the goal is to transition her over to a mainstreamed kindergarten program. So, I want her mainstreamed for as long as possible since she already has bilateral cochlear implants. But, I also have to consider the future impact of Usher Syndrome and what my girls will need to be prepared to live with Usher, so the bonus is having a deaf school right there if we need to use it.

The Davis family revealed they must consider their daughter's Usher Syndrome and its future impact in addition to being deaf, and learning ASL and acquiring spoken English. Ms. Davis indicated those considerations influenced the family's decision to enroll in a mainstreamed program and to move closer to a school for the deaf.

The Fisher family valued ASL and wanted to find the right support service specialists that support their family language policy. At the time of the interview, their

daughter was fully immersed in ASL, and the family wanted to introduce spoken English when appropriate:

It is so important to me that I find the right speech language pathologist who also uses ASL. Right now, there are no speech language pathologists in my area that signs. We are planning on moving to a different state to get that resource and to place her in a school for the deaf.

The Fisher family also proactively reached out a local school for the deaf upon learning of their daughter's identification. The school for the deaf offered outreach services but was unable to provide educational placement because its academic program had closed.

We will be moving out of the state because the school of the deaf here is closed.

We are looking at [state] because they have two strong schools of the deaf there and they have a strong bilingual philosophy. In fact, we have a tour set up for next Monday.

Ms. Fisher stated that they are looking at a school for the deaf with a strong bilingual philosophy that aligns with their family language ideology.

Other external factors for families also included considering employment opportunities. Job opportunities have greatly influenced the Baker family's ability to move to where better educational programming was available:

I wish he could go to the [local] school for the Deaf but it is too far away. I don't know what the future will hold for us but right now, I am happy with our set up. He is only 3-years-old and is doing very well. We will see.

Moving to a local school for the deaf often means making major decisions that include examining external and internal factors for the whole family. The families indicated that decision was not made lightly, even if half of them did move.

**Summary.** Analyses revealed that most families identified themselves as bilingual families and supporting both languages in their homes, with an emphasis on ASL because of its accessibility for their deaf child. Most families felt it was their responsibility to provide ASL, even if they struggled in learning a new language. Half of the families in the study have relocated to be closer to a school for the deaf and included finding the best educational placement for their deaf child as a part of their family language policy.

### **Summary of Findings**

The interview analysis of eight families who participated in my study revealed the families' beliefs, ideologies and attitudes about language development in ASL and English. Most families cited being a bilingual family as the guiding force for their family language ideology. Next, the analyses showcased how families perceived their child's language abilities. The findings analyses indicated that the families proudly framed their child as a bilingual individual. It was very important to the families that their deaf children were happy and felt whole. In addition, the analyses of interview data examined how families implemented bilingual development of ASL and English in their homes. The findings analyses also indicated that the families were intentional in their use of ASL as the primary language, and English as the second language. Following the child's lead in formulating their family language ideology played a critical part. The families relied

heavily on resources and felt most successful when paired with a Deaf role model or Deaf mentor. All families, except the Hill family, enrolled in ASL classes to improve their ASL skills so that they could be language models for their Deaf children. There continued to be challenges with implementing bilingual development of ASL and English particularly regarding receiving ASL services and working with medical professionals. Lastly, the analyses explored the families' language policy towards bilingual development of ASL and English. The findings indicated that the families re-identified themselves as bilingual families and learned ASL as a new language. They recognized ASL as a primary language for the family. Many families relocated for better educational opportunities that aligned with their beliefs.

## CHAPTER FIVE

The aim of this study was to investigate how families utilized, reflected on, and considered their approach to ASL and English languages in homes with hearing family members and young deaf children. The following research questions were addressed:

1. What were families' beliefs, ideologies, and attitudes about language development in ASL and English for their young children?
2. How did families perceive their child's language abilities?
3. How did families implement bilingual development of ASL and English in their homes?
4. What are families' language policies towards bilingual development of ASL and English?

In this chapter, I discuss the findings related to each research question, identify limitations, share implications, and present my conclusions. Central to the discussion are the insights that emerged through the stories shared by the mothers of the Adams, Baker, Clark, Davis, Evans, Fisher, Gray, and Hill families. Although there are many commonalities in their stories, there are also differences that highlight the individuality of each family. Six of the families (Adams, Baker, Clark, Evans, Fisher, and Gray) acquired ASL as their primary family language upon learning that their children were deaf. The Hill family members were already fluent in ASL and began signing to their son at birth.

Collectively, these stories reveal the families' attitudes, beliefs, experiences, and ideologies about ASL and English. Most families cited being a bilingual family as the guiding force for their family language ideology. The families shared how they utilized, reflected on, and considered their approach to ASL and English languages in homes with hearing family members and young deaf children. However, the individual stories also show the nuanced differences among families that provide insight into the varied journeys families take as they navigate unfamiliar contexts.

### **Families' Beliefs, Ideologies, and Attitudes About Language Development in ASL and English**

Overall, the families in this study have a desire for their children to be happy and successful, which led them to embrace ASL and English and both hearing and Deaf cultures. The families sought to infuse ASL even though many families articulated learning ASL was difficult. Prior to the birth of their deaf child, all families had grown up monolingual, except for Ms. Baker who learned two additional languages as an adult. Four families initially chose the oral-only approach with their children, and the Davis family continued to follow the approach with the support of ASL. The other six families (Adams, Baker, Clark, Evans, Fisher, and Gray) changed their family language practices and chose ASL as the primary language for their Deaf children. The Hill family knew ASL prior to the birth of their Deaf child, and their family language practices already incorporated ASL.

As revealed in these families' stories and in previous studies, making decisions about language use for deaf children can be challenging when families are caught in an "either-or" dilemma between ASL or English, rather than considering both languages. One contributing factor is the "either-or" recommendations made by the medical professionals (Humphries et al., 2012; Kushalnagar et al., 2010; Snoddon, 2008). Hearing family members are faced with obstacles such as (a) grappling with learning ASL, as a new language, as an adult with competing demands and linguistic challenges; (b) the misconception that signing is inferior (or is a last choice); and/or (c) the stigmatization by the medical profession if they elect to embrace sign as an important aspect of their family language policies (Humphries et al., 2012). However, after families experience their deaf child's struggles with attempting to acquire English through an oral-only approach, as was found in this study, their resolve to learn ASL may be strengthened and they may more readily add ASL to their family language policy. Parents in this study also recognized the importance of the additive bilingual approach in empowering their children to communicate their feelings, thoughts, and ideas. For example, in the Davis family, the deaf daughter stopped talking in English to her daycare providers because her mother shared she felt shy in a new place. The family was worried, but because their daughter knew ASL, she started signing instead. The staff accommodated her preference, and she resumed using both languages. All the families shared they valued ASL and that they would have not known ASL if it was not for their Deaf children, except for the Hill family who already knew ASL.

**Challenges of acquiring a new language.** Learning a new language into the adulthood is challenging when people's brains are not as flexible. While learning ASL was challenging for most of the adults in the study, the families noted that ASL seemed to be natural and easy for their Deaf children. Most of the mothers shared they are trying their best and that they seek a lot of resources and support, through the Deaf Mentor Project and ASL classes. Families make decisions and choices about language use with their children through external and internal forces (Splosky, 2012). ASL is usually a new language for most families with deaf and hard-of-hearing children, and family members grapple with learning new language to communicate with their deaf child (Bodner-Johnson & Sass-Lehrer, 2003). The families shared they continued to be frustrated and confused, yet they remained patient and resilient because they saw the great changes in their deaf children after having ASL as a language. Families viewed language policy as a coping mechanism in addressing their heritage language and new language.

**Misconceptions of the status of ASL.** Two families' narratives showcased a stark reality in modern-day society that teaching hearing babies sign language is encouraged and accepted, but not for deaf babies. Several research studies have showed the benefits of ASL-English bilingualism for typically developing hearing children, yet parents of deaf children are usually encouraged not sign with their deaf babies (Prevatte, 2005; Daniels, 2001 & 2004; Eleweke & Rodda, 2000). Families in this study also often experienced challenges from both external (societal forces) and internal pressures (family beliefs and values). The family language ideologies are used to "mediate between language use and social organization" (King, 2000, p. 169), and the external factors for

the families in this study include finding support for ASL, abundance and availability of comprehensive information, being in a monolingual dominant English society, finding appropriate educational placement, and working with medical professionals and external family members. The families are working within a monolingual dominant English-speaking society to support their bilingual Deaf children also acquiring ASL, a visual and manual language.

The internal pressures include acquiring a new, manual language, finding a balance in exposing their children to both languages in different modalities at home, child's personal preference of communication mode and language use, their hopes and dreams for their children, and their values of both languages. The families' own language ideologies of what makes a "good" parent, which correlates with Okita (2001) study of Japanese women carrying guilt, and stress from advice about bilingualism. Two families mentioned learning ASL for their Deaf children is doing the "right thing."

**Misconceptions from medical professionals.** Misconceptions about the language development often challenged the families to revisit their family language policies based on their beliefs and values. The biggest external influence, articulated by the families, proved to be the medical professionals questioning families' decisions to embrace a bilingual approach. The medical professionals with whom the families in this study worked included doctors, audiologists, speech language pathologists, and early interventionists. The families indicated these professionals consistently recommended the oral-only approach and encouraged minimal signing until the child acquired spoken

English. This either-or framework reflects a lack of cultural understanding and utilization of current research by today's medical community in developing recommendations.

The literature review documented that medical professionals historically direct families to focus only oral-only approaches for their deaf children (Eleweke & Rodda, 2000; Larwood & LaGrande, 2004; Stredler-Brown 2010). However, the additive benefits of promoting and embracing ASL into family structures are supported through positive relationships between ASL and English (Hoffmeister, 2002; Strong & Prinz, 1997), increased families' interactions and relationships (Bailes et al., 2009), and the importance of quantity and quality of early interactions with family members (Hart & Risley, 1995). Misinformation and lack of training for the medical community continue to contribute to the language deprivation among deaf children (Eleweke & Rodda, 2000; Humphries, et al., 2012). The language deprivation is the deficits experienced by Deaf children who are not fully immersed in ASL, using oral-only approach, or within a bilingual context. The findings in this study also suggest that medical professionals may be inadvertently perpetuating erroneous information about language acquisition, warning families that ASL would impede their children's development of English, or waiting for a long period of time before sharing information or resources about ASL. This is also supported by the findings in Young (2002), the families felt they received partial or biased information from the medical professionals and based their crucial decision-making processes on limited information. Young (2002) stated one possible cause for the lack of transparency is the attitudes and values of the medical professionals. There is no evidence that using a signed language impedes spoken language development (Kovelman

& Petitto, 2003; Marschark & Hauser, 2008; Snoddon, 2008). Accordingly, previous research advocates for the transparency of information (Young, 2002), in support of bilingual family language plans that infuse ASL and oral language, explicit instruction was also lacking for most of the families in my study.

The differing cultural and medical perspectives about the deaf population (Lane, 2005; Larwood & LaGrande, 2004) as well as language ideologies about ASL and English (King, 2000) continue to perpetuate misconceptions about the Deaf community. Hearing parents usually know very little about deafness or sign language and rely on their primary care physicians as their main source of information, support, and referrals (Kushalnagar et al., 2010; Lin et al., 2003). Many families in this study initially took the advice of their medical professionals, but changed course after watching their Deaf children struggle with acquiring English through the oral-only approach. Many of them discovered ASL through researching alternatives online or from early intervention services such as the Deaf Mentor Project. There were two exceptions where medical professionals did not hinder families wishing to use a bilingual approach. One family's audiologist recommended the bilingual approach, yet admitted she did not have resources on managing both languages or connecting the family with other Deaf families and Deaf children. Another family's audiologist was a recent graduate from Gallaudet University and supported the family's journey in becoming a bilingual family. Young and Tattersall's (2007) findings of shifting focus from communication options to an emphasis of informed choices for deaf child enhance professional-parent relationship.

Using the cultural and linguistic framework to view the children, and to support and guide the selection and design of early intervention services, enhances the experiences and outcomes for families and children (Bodner-Johnson & Sass-Lehrer, 2003). Deaf children's outcomes are improved when professionals working with them have specialized training in supporting their visual and linguistic needs (Yoshinaga-Itano, 2003). That was validated in this study, as families reported that when they received support from knowledgeable medical professional supporting their values and beliefs, they were empowered to learn a new language and their child benefits.

This study's findings also supported Larwood and LaGrande's (2004) assertion that most professionals in the medical field view the deaf children from a clinical or pathological perspective and lack knowledge about the linguistic, literacy, and academic needs of deaf children. If medical professionals are educated about the linguistic, literacy, and academic needs of the Deaf child, like the audiologist from Gallaudet University, the family and child are more likely supported and ultimately successful. Medical professionals can greatly influence the external forces of the family language policies for families with Deaf children.

Early interventionists whose practices are research based and who respect family values can offer optimal experiences for deaf or hard-of-hearing infants and their families (Moeller et al., 2013). Upon discovering that a child is deaf or hard-of-hearing, families are often offered an either-or choice between an oral pathway and a signing pathway, but they also need support that goes beyond their initial decisions (Humphries et al., 2012). They need guidance regarding the linguistic and educational aspects of their child's

future. The families in this study shared struggles with finding early intervention services that supported their beliefs and values of having ASL and English in their family language policy. The families in the study also articulated beliefs that support Snoddon's (2008) suggestion that a visual language is critical for deaf infants to acquire a foundation in language, especially when hearing is not accessible to all infants even with hearing technologies. Several families repeated that even when they chose to pursue amplifications for their deaf child, amplification was viewed as an additional resource, and the families still considered ASL their child's primary language.

Additionally, the children's contribution and role in developing as bilinguals shaped the families' family language policy which is also supported by Cruz-Ferreira's study (2006). The families in the study value the involvement of children's thoughts, ideas, and contributions, which is also highlighted in the King and Fogle's study (2013). My findings did not support the Crowe et al. (2013) study, that found the female caregiver's language use and communication mode was the influencing factor of the deaf child's language use and communication mode. In the Crowe et al. (2013) study all the mothers in the study spoke English and learned ASL to support their Deaf children. Conversely, the families in my study strongly felt it was important for their children to make their own decisions about how they would communicate, which supports the findings in Crowe et al. (2014) study.

### **How Families Perceive Their Child's Language Abilities**

Another strong assurance throughout this study was the families' proud and clear recognition that their Deaf children were bilingual. All families identified their children

as bilingual in ASL and English, regardless of the family's ASL acquisition experiences. Being a bilingual learner, the deaf child processes language acquisition differently from a typical developing hearing child because ASL is a visual language (Easterbrooks & Baker, 2002; Meier, 1991).

Some of the families' beliefs about preserving and developing spoken English influenced their amplification decision-making process. They clarified that pursuing cochlear implants or hearing aids did not mean the child was no longer deaf. Even with amplification, the child still benefited from ASL. The families shared that the purpose of amplification was about giving the children all types of access and opportunities so that they could decide later in life about their language and amplification preferences.

By supporting their bilingual children, the families valued and perceived themselves from a bicultural perspective. Using Yosso's (2005) framework, the linguistic capital of the Deaf community, especially with ASL as the primary language, has greatly influenced families' beliefs and values regarding ASL and English in their homes. Grosjean (2008) identified the crucial role having a cultural identity plays in the developmental process for Deaf children. The opportunity to develop a cultural identity is typically missing from families and educational programs that do not see the deaf child as a member of two communities. When Deaf children have that opportunity, that bicultural identity is also correlated with positive attitudes about the use of cochlear implants, reflecting the bicultural individual's ability to navigate aspects of both the deaf and hearing worlds (Most, Wiesel, & Blitzer, 2007). In this study, families identified and acknowledged that their children were bicultural and bilingual. To fill in the gap of

developing a deaf identity in the Deaf children's lives, the families sought support from the Deaf Mentor Project and the Deaf community. This supports Bat-Chava's (1994) study, which examined deaf and hard-of-hearing individuals' cultural identity as being deaf, hearing, or both, and found that those who had dual identities typically had positive attitudes about being deaf. Deaf individuals who grew up in environments that included other deaf people and sign language at home and at school developed a greater sense of group identification and had higher self-esteem (Bat-Chava, 1994). Their identity and self-esteem equipped them to handle experiences outside the Deaf world (Bat-Chava, 1994). Another example mentioned by several families was that after struggling with the oral-only approach and incorporating ASL into their lives, the Deaf children were happier, sillier, and more confident. Their personalities shone through, and they appeared whole to their families.

Most families in this study acknowledged and valued the support from the Deaf community as they raised children with a strong Deaf identity. The connection to the Deaf community provides families with an array of knowledge, skills, support, and abilities to support their Deaf children. The funds of knowledge framework, by Moll (1992), is a particularly relevant theoretical lens for examining families' social networks and resources. The framework has a specific focus on the knowledge, skills, and labors that influence the families' ability to survive or thrive. Deaf culture values ASL as the primary language of communication in their everyday lives; language and culture are intertwined in the Deaf community. Padden and Humphries (1988) provided the insiders' perspective on being Deaf, Deaf culture, and language in America and emphasized the

significance of signed language as a rich cultural heritage that provides a distinctive perspective of the world. Ladd (2003) coined the term *Deafhood* to provide a positive framing for the journey that entails being and becoming part of Deaf culture, and as a way of being a member of the community.

Most families in this study talked about the connection to the Deaf community and how they recognized and acknowledged that their Deaf children were instantly connected to other Deaf adults and children through the community. The families in this study repeatedly referred to seeing their Deaf children instantly recognize and connect to other Deaf individuals in the community. Families shared stories about their Deaf children walking up to complete strangers who were Deaf and striking up conversations. One family had a Deaf family mentor, an experience that greatly opened their eyes to other nuances Deaf families naturally possess, such as always ensuring the deaf child has visual access, tapping the child on the shoulders, pointing or tracking the child's attention, and interacting with child using ASL. One family said they felt "forced" in a positive way to be fully immersed in ASL with their deaf child while observing a deaf family in action. Several families in the study discussed embracing their Deaf children as they are, and viewing them as gains to their families, a term coined by Bauman and Murray (2009) as the Deaf Gain. It reframes "deaf" from the disability lens to a new paradigm of complete and full individuals who are deaf. Neese-Bailes et al. (2009) also supports the paradigm shift of viewing the Deaf child as a member of a cultural group with people who share a common language rather than as a "defective hearing person" (p. 448).

Three families were surprised to find, after struggling with the oral-only approach and adding ASL to their family language policy, how much the child's spoken language skills increased as supported by Crittenden et al. (1986) and Volterra et al.'s (2006) studies. Yoshinago-Itano and Sedey (2000) asserted, it is the language that facilitates spoken language not the mode of communication and the findings in this study draw the same conclusion. The findings also coincide with Hassanzadeh's (2012) study of deaf children who signed before receiving their cochlear implants showed an improved ability to acquire spoken English.

### **How Families Implement Bilingual Development of ASL and English in their Homes**

The families in this study repeatedly emphasized they understood the brain has the capacity to acquire both a visual and spoken language, as discussed by Kovelman et al. (2009), Petitto et al. (2001), and Petitto and Kovelman (2003). Families who decided to focus primarily on ASL to develop a strong language foundation for their Deaf children and to "hold off" the acquisition of English (except for deaf children who had amplifications) reinforced the work of Meir (1991) and Petitto (2000), who identified that the language aspects of the brain have no preference for language input, visual, auditory, or written. The families' decision about language use in their homes supports the additive bilingual approach explained by Cummins (2006), which encourages the addition of a second language to the first language as both are developed. It is crucial for deaf children to have complete access to language as early as possible. The families acknowledged that children develop social, emotional, and cognitive abilities that are critical to timely development in all areas and is learned through language (Humphries et al., 2012;

Kushalnagar et al., 2010). By continuing to prioritize ASL in their homes, the families supported the findings from Humphries et al. (2012) that the outcomes for each deaf child related to spoken English for learning, are still not known, despite improved technology through hearing aids and cochlear implants. Having ASL in their homes supported well-documented benefits of learning a signed language with no evidence of negative consequences (Daniels, 2004; Petitto et al., 2001; Prevatte, 2005).

All the interviews took place with mothers, affirming Fishman's (2000) statement that mothers are the "key players" in transferring first language to babies as the family and community maintain the home languages. This shows that relationships between early language access and maternal communication positively influence deaf children's language development and academic outcomes. Repeatedly, throughout the interviews, the mothers asserted they came to conclusion of having ASL and English in their homes in collaboration with their husbands and other family members. Most of them took pride in researching ASL and English bilingualism online without input from medical professionals, except for Deaf mentors when applicable. Most families reached out to their local schools for the deaf to receive services and resources independently.

**Resources to support ASL language development.** The Deaf Mentor Project is an early intervention service for deaf and hard-of-hearing children and their families (Larwood & LaGrande, 2004). The Deaf Mentor Project offers families opportunities to interact with Deaf adult mentors in their homes while learning ASL and Deaf culture, including having positive identity, and pride in being deaf (Larwood & LaGrande, 2004). In this study, seven out of eight families utilized the Deaf Mentor Project and they

credited their success in learning ASL, Deaf culture, and Deaf-centric perspectives to the Deaf mentors. All families in this study wanted and valued both languages and felt supported by the Deaf mentors in providing guidance and resources. Families' attitudes and perceptions of Deaf culture were comparable to current beliefs of the Deaf community when compared to families with English-only mentors (Watkins et al., 1998).

Starting a partnership between families and professionals at an early stage helps the child, family, and community (Bodner-Johnson & Sass-Lehrer, 2003; Li et al., 2003; Turnbull et al., 2011). Deaf infants whose hearing abilities are assessed within the first few months of life and have family involvement and support from early intervention programs are more likely to experience age-appropriate growth in language, communication, and social-emotional development than those who do not receive similar support (Bodner-Johnson & Sass-Lehrer, 2003; Li et al., 2003). That finding is supported in this study through the experiences of the interviewed families who worked with the Deaf Mentor Project as an early intervention program. Conversely, the families whose Deaf children initially relied on an oral-only approach shared negative communication and developmental experiences for their children. Although all infants receive hearing screenings, many do not receive early intervention services in a timely manner (Moeller, 2000). One family in this study shared struggles in receiving hearing aids because the audiologist felt their child wasn't "that deaf," meaning she did not require or benefit from hearing aids. The mother indicated that audiologist's decision directly delayed the child's access to spoken language by five months and negatively impacted the family's language policy by devaluing their beliefs and values. She felt fortunate that the child acquired

ASL during that timeframe so her language development was safeguarded. The family was worried about her spoken language development because English remained a big part of their lives with other extended family members and community members.

Several factors contribute to the challenges of providing quality services, including professionals unprepared to work with infants who are deaf and hard-of-hearing (Moeller, 2000). While state agencies are expected to have comprehensive resources available for professionals and families, many states are developing those resources (Moeller, 2000). A family in this study confirmed this work-in-progress status by many states through sharing a story about their audiologist who did not have any bilingual resources. This audiologist also did not know or have connections to Deaf-related resources including ASL classes, ASL acquisition, or playgroups for signing children.

The work of Larwood and LaGrande (2004) showed how early intervention programs incorporating Deaf role models are critical to families in communicating with their deaf or hard-of-hearing children and empowering families to make their children's world more accessible. Including a Deaf mentor in the families' lives reduces the time spent in the grief cycle over their children's hearing loss and gives more time focused on building language for communication (Larwood & LaGrande, 2004). The families in this study did not mention grieving for their children's hearing loss; instead they used positive framing such as comparing the hearing levels to the colors of their eyes, and viewing being deaf as a gain to their family. All were focused on building a strong language foundation for communication and cognitive development.

### **Challenges with implementing bilingual development of ASL and English.**

All children are born ready to acquire and use a language. For that to successfully happen, the language must be accessible to the child. When children have early access, it leads to acquisition and fluency at a very young age, which is critical for brain development (Mayberry, 2007). For more than 200 years, the controversy regarding language acquisition for deaf children has revolved around which language they should be exposed to: spoken, signed, or both. Most deaf children are born to hearing families who do not know a signed language (Bodner-Johnson & Sass-Lehrer, 2003; Karchmer & Mitchell, 2003), and most families in my study stated that their deaf child was the first deaf individual they have ever met. In this study, most families had their children identified as deaf at birth and all were identified by 1 year if other health issues were present. Welcoming a deaf child into a hearing family adds layers of complexity as families process new information about having a deaf child, acquire a new language, and experience a change their family dynamics. The challenges the families faced in my study also mirrored the findings in Luckner and Velaski (2004) included finding an educational program, getting appropriate services, learning to sign, helping others understand the deaf being, and finding peers for their deaf children.

Another challenge to family dynamics, especially with other hearing siblings, several families mentioned was the use of SimCom as a communication tool because they were unsure how to juggle both languages in their homes. Many families acknowledged that they should not be mixing languages, yet they have for the convenience of communicating with everyone at once. The families shared they found it hard to fully

express themselves in a new language (ASL) they are still learning, and that the growth process varies with each member. Most of the mothers have taken on the role of learning ASL and taking classes: most mothers in the study were in Level Three ASL classes, while the fathers were usually in Level One classes due to work or availability. The mothers often taught their hearing children ASL, and the birth order and age of the hearing siblings also seemed to play a role in acquiring ASL. For example, a family had three children, the deaf child being the youngest. The mother shared that she usually used SimCom because her older, hearing children help babysit her deaf daughter and that it made for easier communication.

Another challenge is finding a self-paced, web-based ASL resource for families to sit together and learn ASL, a resource families shared that they would love to share with their neighbors and extended family members. Many families shared that their Deaf children did not like ASL resources that involved music or singing. Moreover, several families inquired why such types of resources promoted SimCom when the languages should be separate. The ASL resources the families in this study used included DVDs, YouTube, apps, iTunes, Facebook, and books. This critical piece of feedback shows a continued need for higher quality ASL resources that supports and respects ASL as a stand-alone language.

### **Families' Language Policies Towards Bilingual Development of ASL and English**

The families in the study shared they were most surprised by the enormous task of advocating for their deaf children's rights. Families' language ideologies were constantly challenged by the hegemony of the English-only and auditory-based society. Three

language orientations — language as problem; language as a right; and language as a resource — frame the ideologies about ASL and English (Nover, 1995; Reagan, 2011, Ruíz, 1984). All the families in this study viewed ASL from the framework of language as a right (Ruíz, 1984). Language as a right is a reaction to the language as a problem orientation, opposing the degradation of the language and recognizing language as a human right. Language as a resource perceives language as a cultural and social resource that contributes to our society. There are current research studies denouncing the harmful approach of withholding ASL from young Deaf children, which is an example of language as a right. Currently, research on Deaf children's sign language development has provided strong evidence of the benefits of sign language. By adopting ASL and English bilingual beliefs and values in their homes, the families in this study viewed ASL from the language as a right perspective. De Houwer (1999) suggested that “impact beliefs” play a critical role in how parents in bilingual view themselves as capable language models in their homes. In this study, families shared they felt it was important to be language models for their Deaf children even though some were struggling to learn ASL. All of them were enrolled in ASL classes, supporting ASL as the primary language in their homes and learning from other native language models. Interestingly, parental language ideologies also played a role in what makes a “good” or “bad” parent. Families in this study said the act of learning ASL was something parents should just “do,” suggesting “good” parents would learn ASL, and those who pursue amplifications and English-only approaches are “bad” parents for wanting their children to have access to spoken language.

**Being a bilingual family.** One of the biggest challenges in an ASL and English bilingual framework for families is the definition of the “home” language for their deaf children. Families have different language practices and beliefs that influence language choices (Spolsky, 2012). Through the interview data, the themes of valuing both languages, respecting both languages, and wanting the ASL-English bilingualism for their families were clear. Seven out of eight families recognized their backgrounds as monolingual and that they were changing what they knew to something new by including ASL. The families’ attitudes, beliefs, and ideologies identified ASL and English as their “home” languages. They acknowledged all of them were learning ASL as the new normal.

Many stated that this was an asset to the family, reflecting the concept of Deaf Gain where “deaf” is reframed as a form of sensory and cognitive diversity that has the potential to contribute to the greater good of humanity (Bauman & Murray, 2009). With the outdated perspective of “hearing loss,” having a deaf baby brought anxiety, limited communication, and other challenges to mind; however, within the Deaf Gain frame, deaf babies are viewed as assets to society (Bauman & Murray, 2009). It was particularly clear throughout the study that the families viewed their deaf children in a positive light. Family language policy is an explicit and overt planning of language use within a family’s home (King et al., 2008). It sets the stage for a child’s language development (De Houwer, 1999) and showcases the family’s language ideologies (King et al., 2008). Families repeatedly referred to themselves as bilingual families when their deaf children were born. They altered their family identity to include their deaf children and create a

new family culture. The interview data reflected a mix of horizontal (creating new culture) and vertical (passing down English as a language) identities (Solomon, 2012). Having a deaf child falls within the horizontal identity category, yet families are changing and learning a new language to accommodate their deaf children, falling within the vertical identity category (Solomon, 2012).

One of the foundations of sociolinguistics is that language determines the way people understand the world (Solomon, 2012). Solomon (2012) argued that many parents perceive their child's horizontal identity as a problem to be fixed or as a personal failure. This was not the case with the families in this study; most of the families embraced the addition of their deaf children to their lives. This influenced their attitudes and beliefs in terms of raising their Deaf children through the Deaf culture lens, educational approaches and options, and most importantly, the decision of including both ASL and English.

The study of family language policy is relatively new with the emerging complex sociolinguistic domains of our multilingual societies (Spolsky, 2012); ASL is still a relatively new language when compared to other languages, especially with its unique manual and visual aspects. Another factor was how religious institutions also offer external support in enhancing home language and identity (Schwartz, 2010), as shared by two families in my study. Both religious institutions embraced their Deaf children by offering ASL classes at the venue and learning ASL to communicate with the Deaf children.

Being a bilingual family can also mean relocating for better educational opportunities for the deaf child. Half of the families in this study moved to a local school

for the deaf. One family was interested in moving closer to a school for deaf students, but was also weighing her husband's current employment situation. Most states have at least one school for the deaf, so that sacrifice in uprooting the whole family considering employment opportunities, extended family support, community, and lifestyle preference is enormous. This ties in with the parental ideologies of being a good parent by making these types of decisions to support their family, especially the deaf child. Luckner and Velaski (2004) also included the challenge of finding appropriate educational placements for the 19 families with Deaf children in their study.

All families in the study supported ASL-English bilingualism for their Deaf children, but they did not procure visible language planning. They used resources and became inclusive of the Deaf community to develop family language policy, although their policies remained invisible. The families mentioned several times that they are being intentional with ASL as the language in their home, but admit to struggling with SimCom, or figuring out how to use two different modalities and languages in the same household.

The benefits of visible language planning include ensuring that the child's language development is safeguarded, supporting the development of family competence, and strengthening the relationship between beliefs and actions. Family Language Policy also establishes clear expectations to respect language and culture and encourages the continued development of the family's bilingual needs (King & Fogle, 2013). The families in the study showed strong understanding of their Deaf child's abilities and interests, and they would benefit from having a clear, visible FLP to be support their

beliefs and actions. Tuominen (1999) concluded that community support for minority languages is key for the family language planning for bi- or multilingual families and my findings echo the same sentiments. The children's contribution and role in Cruz-Ferreira (2006) study shaped the trilingual family language policy, and the families in this study also valued and followed their Deaf children's lead. The deaf parents and hearing children in Pizer (2013)'s study valued barrier free communication at home therefore they modified their language policies to ensure successful communication between family members. The families in my study shared various communication strategies between family members to improve and strengthen their family language policy.

Specifically, for families with deaf children, DesGeorges (2003) asserts that families require an abundance of information to make informed and effective decisions regarding family language policy for their children and that findings is mirrored in this study. Luckner and Velaski (2004) outlined factors that supported families with deaf children and their family language policy. The factors were as follows: (a) commitment to the family, (b) learning to sign with their child, (c) support from extended family, friends and community members, (d) support from educational professionals, and (e) having high expectations for their deaf children (Luckner & Velaski, 2004). Those factors were also highlighted in my findings through interview data of families exhibiting commitment to their family, learning to sign with their child, receiving support from some extended family members and educational professionals (i.e., Deaf Mentors), and having high expectations for their deaf children. The challenges the families experienced in my study were also similar to Luckner and Velaski (2004)'s study. The challenges

included finding an appropriate educational placement, getting appropriate services, learning to sign, help others understand the deaf being, and finding peers for their deaf children (Luckner & Velaski, 2004). Families in my study did not mention finances as a challenge as mentioned in Luckner and Velaski (2004). Mitchiner (2014) outlined some of the challenges including balancing languages in the homes, and finding appropriate educational placement in the deaf families with children who have cochlear implants. Those factors are similar to my findings from the families in this study. The following study did not explore the socioeconomic status of the families; however, the caregiver's education and language use were shared. Crowe et al. (2013) and Young et al. (2005) indicated that the female caregiver's language use, socioeconomic status, and education factors greatly influenced the family's decisions and choices relating to the family language policy. Their findings indicated that the higher level of the female caregivers' education, the more likely the home communication mode is the oral approach. My findings did not support the research, as the female caregivers' education background in my study were 2- to 4-year college degrees; however, they chose to learn ASL to support their Deaf children. However, Crowe et al.'s (2014) study of families empowering their deaf and hard-of-hearing children to make decisions about their communication and language options mirrored the families in my study. The findings in Meadow-Orlans (2003) of two families, who decided against the cochlear implant process based on their belief that their child is already whole and viewing the cochlear implantation to "fix" the child, reflects similar beliefs and thought process from some families in my study. Two families felt their child was whole, and one family raised the issue of others perceiving

her going ahead with the cochlear implants for her daughters as “fixing them.” In Watson et al. (2008) study, half of the family disagreed with the statement that using sign language impedes the development of spoken language. The families in this study also supported the statement and saw the spoken language development improve after acquiring ASL and receiving cochlear implants. In Young and Tattersall (2007) qualitative study, the families felt the early identification process positively influenced their grieving process, yet the families felt hampered with lack of support and action from the medical professionals. I found similar results within this study from the families, sharing that the support of Deaf Mentors helped their family language policy and several families were frustrated with the lack of support from the medical professionals. However, the families in this study did not “mirror” the medical professionals thinking that their deaf children should “function” like hearing children (Young & Tattersall, 2007).

### **Limitations of the Study**

This study showed insights and gathered deeper information about families with young Deaf children in developing ASL and English family language policy in their homes. The goal of this study was to learn more about family language policy of families with Deaf children using ASL and English. However, it is critical to acknowledge and examine the limitations of this study.

First, finding participants for this study required snowballing sampling (Goodwin & Goodwin, 1996) as well as purposive sampling due to the small population of deaf and hard-of-hearing children under the age of five. I was seeking families with deaf children

using ASL and English in their homes. It is possible that those who responded to the recruitment materials had different ideologies than those who chose not to respond. This could have attributed to some of the unique factors in this study.

Second, seven out of eight interviews were conducted in spoken English, which is not my language. There were interpreters translating English to ASL and vice versa. I used triangulation to ensure accuracy of the data collected by asking for clarifications during the interview, sharing the transcriptions and asking the families questions, and re-watching the interviews. However, there is still a possibility that some information was lost in translation. The interpreters may have influenced data with their own perspectives, and word choices since both languages are different. There are several English words for one ASL sign so how the interpreters decided to choose an English word may influence the meaning of the interview data. This is the nature of languages that is beyond our control. The transcriptions were sent to families for their review to ensure accuracy.

Third, each interview was 1 hour long, which did not allow a lot of time to develop a trusting relationship with each participant. Fortunately, I could establish a casual rapport with each participant through the initial interview process. The participants seemed at ease with me throughout the semi-structured interviews and I reminded myself to maintain neutral mannerisms and facial expressions throughout the interviews as not to influence the participants and their responses. I also acknowledge that as a Deaf researcher, I may have an impact on the families' responses. As a second-generation member of Deaf culture, I had ASL as my first language and there was a possibility that the hearing family members would distrust me because of our potentially differing views

on language rights for deaf children. I recognize and acknowledge that my attitudes, beliefs, upbringing, cultural background, and educational background about ASL are variables that may influence my research.

Fourth, the setting of the data collection was not ideal as it was through a videophone. I wanted to meet with families face-to-face to develop closer relationships and make this a personal experience. Despite that, the videophone allowed for me to see families' nuances, mannerisms and being able to see each other allowed us to connect. There were challenges with the data collection because the families often had young children with them. The young children would interrupt the interview, or the families were distracted by other situations in their house. Ideally, I would have liked to meet in their houses to observe their living environment, as that could have contributed to my study. I asked each family to share an artifact of family language policy during our interviews, but none did because they were not sure what to share. If I had the opportunity to meet at their houses, I might have been able to point out artifacts. This also tells me that the families were not clear or did not use visible artifacts to support the family language policy in their homes.

Finally, the demographics of the participating families were white, highly educated, married (except for one participant), and heterosexual. Their children received early intervention services, amplifications (when applicable), and lived with their parents (and siblings when applicable). While the interview data were rich and showed what could be possible for families pursuing ASL and English bilingualism in their homes, families with diverse backgrounds are equally important and should be included in future

studies. Such families' unique perspectives, backgrounds and experiences are vital to the field of ASL and English bilingualism and family language policy.

### **Implications and Recommendations for Families**

Families with deaf children have the unique and challenging experience of learning a new language, culture, and community to support their deaf children. Although families in this study were clear about their ideologies regarding language development and perceptions of ASL, all families with Deaf children are encouraged to examine their own ideologies as the driving force for family language policy. Families need to identify external and internal factors that support their beliefs and values, such as inclusion of Deaf people, which are identified as crucial to the overall well-being of Deaf children in supporting their deaf identity (Bat-Chava, 2000; Grosjean, 2008).

Families with Deaf children then need to seek early intervention programs and medical professionals that support healthy and positive images of Deaf children, through programs such as the Deaf Mentor Project, bilingual resources, and natural language opportunities using language models. Larwood and La Grande (2004) found that the time spent in the grief cycle over the child's hearing loss via the deficit model was greatly reduced when families were exposed to such resources; instead, families felt empowered and focused on building language for successful outcomes for their deaf children. If the deaf child benefits from auditory access, ASL can continue to play a crucial role in creating a healthy identity, developing language foundation, and gaining access to world knowledge.

Families also need support to continue providing rich language experiences in each language, as children learn best through everyday experiences and interactions with familiar people in familiar contexts. To do this, a visible language plan is needed to carry out their beliefs and values (Splosky, 2012) and develop strategies for using both languages with hearing siblings and family members.

### **Implications and Recommendations for Medical Professionals**

The biggest external factor impacting the ASL and English family language policy with Deaf children is the medical professionals. Based on the findings of this study, medical professionals with limited knowledge of ASL and Deaf culture are recommended to enroll in ASL-English bilingual workshops or training programs to learn about the linguistic and cultural needs of Deaf children. Medical professionals would benefit from a basic language development course to understand bilingualism and the positive impact acquiring two languages (or more) has on brain development. The critical role of early and accessible language is essential for deaf children to acquire world knowledge. With a greater understanding of the research on language development, medical professionals will then be able to promote an additive bilingualism framework with families with deaf children. The medical professionals are encouraged to learn about and associate with ASL and deaf-centric resources and organizations, that they can offer resources to families. Understanding and valuing families' beliefs and ideologies will lead to a collaborative effort in supporting the positive development of Deaf children's identity, and socio-emotional skills.

### **Implications and Recommendations for Policy**

The recommendations for policy is to ensure that the Deaf Mentor Project is available in each state and is equipped with Deaf mentors to provide support, guidance and connection to the Deaf community that is so desperately needed for the Deaf children and their families. Languages are not learned in isolation; therefore, families need to be set up for success by interacting with other language models and learning social cues of other deaf families and adults.

Families with deaf children also should enrich and expand their bilingual resources. Some states did not have any connections to ASL resources, and the families were left to figure out alternatives online. One family reached out to a now-closed local school for deaf students to tap into its outreach services and planned to move out of state so their child could attend another school for deaf students. Every effort needs to ensure that local deaf schools are funded for families to reach out to for support and guidance. Early intervention services associated with schools for the deaf are ideal since they are generally the experts in deaf education, including modeling language acquisition, providing resources and developing language models.

The early intervention agencies and Early Hearing Detection and Intervention organization should require each state to include Deaf Mentors and ASL specialists as a part of their early intervention initiatives for the families. The inclusion of Deaf mentors and ASL specialists should mirror the level of current involvement from speech language pathologists and audiologists. The evaluation of ASL skills of Deaf children should be supported by early intervention agencies and be led by a native or highly skilled Deaf

individual providing ASL assessments. Families will benefit from meeting a professional who is also deaf, to learn more about Deaf culture, identity, and community.

### **Summary of Recommendations**

The findings of this study demand several recommendations for families, medical professionals, and policy to enrich practices supporting ASL-English bilingual families with Deaf children. The recommendations include:

- Families and medical professionals need to examine their own beliefs and ideologies about ASL and how their own beliefs may influence the family's language policy.
- Families and medical professionals will benefit from having a collaboration with the Deaf Mentor Project or local school for the deaf for resources to develop their ASL and English bilingual skills.
- Medical professionals will benefit from having professional development training on bilingualism and brain development, the harm and risk of language deprivation with the either-or approach with deaf children, and benefits of additive bilingualism regardless of amplifications.
- Medical professionals must be respectful and sensitive towards families' language policy and reduce the pressure of a single approach on families. Instead, medical professionals can support the acquisition and development of ASL and English bilingualism for Deaf children using research-backed resources. There is no harm in learning ASL while acquiring English, and vice versa.

- Support for ASL-English bilingual resources such as the Deaf Mentor Project and local schools for the deaf need to be backed by stronger policy. The support in centralizing early intervention services at local schools would provide families a one-stop resource center for ASL and English bilingualism.

### **Future Research Possibilities**

This study shows a great need for more research in the field of ASL and English bilingualism and families. The concept of learning a new language for a child is rare and unique. Most bilingual families pass on their heritage language(s), but that is not the case for families with young Deaf children. This presents a very different type of challenge and a pressing need for support for families.

Future research should include more families from diverse backgrounds sharing their beliefs, ideologies, and attitude about family language policy in ASL and English with young Deaf children. Families from diverse backgrounds may bring unique perspectives to the process of formulating their own family language policy. An area of interest would be to include Deaf parents in a future study to explore their beliefs, ideologies, and attitude about family language policy in ASL and English.

Several families in this study struggled with the use of SimCom as a communication tool when hearing siblings were present. Those families mentioned they knew SimCom wasn't the right strategy since both languages have their own grammar rules, and structures. It may be beneficial to explore various effective and promising practices to develop and facilitate bilingual development in both languages in the homes.

Seven out of eight families identified multiple benefits of having a Deaf mentor in their homes, yet there is very little research about overall programming and the outcomes of pairing families with Deaf mentors. Additionally, this study relied on data collected in 1-hour interviews with each family about their values, perspectives, and thoughts about language planning. It would be beneficial to explore deeper and further with a longitudinal study of various families.

## **Conclusion**

This study explored the ways in which eight families of bimodal-bilingual Deaf children in the United States utilized, revised and reflected upon their family language policy. The findings indicate families, overall, value ASL and English for their Deaf children and support bilingualism. Most literature on this topic has focused on hearing families and their experiences with English. This study provides a new perspective that does not currently exist in the literature.

These findings are valuable for bridging families' funds of knowledge and developing a linguistic foundation in ASL using a family language policy, ensuring Deaf children are primed for ASL and English bilingualism (Gonzales et al., 2005; King & Fogle, 2013). The connection to the Deaf community and Deaf individuals through the Deaf Mentors Project is a key to providing families with an array of knowledge, skills, abilities, and contacts to grow and resist various forms of oppression from the medical community (Larwood & LaGrande, 2004; Watkins et al., 1998). The sociocultural lens values the cultural knowledge, skills, and abilities of the socially-marginalized deaf population to support young deaf children (Bauman & Murray, 2009; Solomon, 2012;

Yosso, 2005). The process of the early linguistic acquisition of ASL-English bimodal-bilingual development and its contribution to young children's linguistic outcomes as a foundation for future academic engagement (Humphries et al., 2012; Petitto, 2009; Petitto et al., 2001; Petitto & Knoelmann, 2003; Snoddon, 2008) and lifelong success is supported through family language policy (Humphries et al., 2015; King & Fogle, 2013; Pizer, 2013; Splosky, 2012).

## APPENDIX A

### IRB Approval Letter



#### Office of Research Integrity and Assurance

Research Hall, 4400 University Drive, MS 6D5, Fairfax, Virginia 22030  
Phone: 703-993-5445; Fax: 703-993-9590

DATE: November 8, 2016

TO: Julie Kidd  
FROM: George Mason University IRB

Project Title: [972920-1] Family Language Policy in American Sign Language and English Bilingual Families

SUBMISSION TYPE: New Project

ACTION: DETERMINATION OF EXEMPT STATUS  
DECISION DATE: November 8, 2016

REVIEW CATEGORY: Exemption category #2

Thank you for your submission of New Project materials for this project. The Office of Research Integrity & Assurance (ORIA) has determined this project is EXEMPT FROM IRB REVIEW according to federal regulations.

Please remember that all research must be conducted as described in the submitted materials.

Please note that any revision to previously approved materials must be submitted to the ORIA prior to initiation. Please use the appropriate revision forms for this procedure.

If you have any questions, please contact Karen Motsinger at 703-993-4208 or [kmotsing@gmu.edu](mailto:kmotsing@gmu.edu). Please include your project title and reference number in all correspondence with this committee.

This letter has been electronically signed in accordance with all applicable regulations, and a copy is retained within George Mason University IRB's records.

## **APPENDIX B**

### **Informed Consent Form**

### **Family Language Policy in American Sign Language and English Bilingual Families**

#### **INFORMED CONSENT FORM**

##### **RESEARCH PROCEDURES**

This research is being conducted to learn how families with deaf children use American Sign Language and English in their homes. If you agree to participate, you will be asked to participate in a two-step interview process. The first step will be an initial interview to collect demographical information and the second step will be an hour-long interview with the researcher. The location will be agreed between you and the researcher. The interviews will be videotaped. The videotapes are used solely for the research purposes associated with this study.

##### **RISKS**

There are no foreseeable risks for participating in this research. (If applicable)

##### **BENEFITS**

There are no benefits to you as a participant other than to further research to the general knowledge about hearing family members with deaf child(ren) and their perspectives on ASL and English languages in the homes.

##### **CONFIDENTIALITY**

The data in this study will be confidential. The data from the interview will be recorded. Any information collected will be kept confidential by maintaining all materials in locked files and offices. The data kept on my computer will be password protected. Your identifying information will be removed and replaced with a pseudonym name.

##### **VIDEOTAPING INTERVIEW**

The taping will take place at the agreed upon location between the researcher and participant. The semi-structured formal interview will be taped to ensure accuracy in translating data. The video will be transferred to my office computer and under a password protected folder. The researcher and her committee members will have access to the data.

**PARTICIPATION**

Your participation is voluntary, and you may withdraw from the study at any time and for any reason. If you decide not to participate or if you withdraw from the study, there is no penalty or loss of benefits to which you are otherwise entitled. There are no costs to you or any other party. You will receive \$25 in Amazon electronic-gift card as an appreciation for your time.

**CONTACT**

This research is being conducted by Bobbie Jo Kite, PhD. Candidate, Early Childhood Education at George Mason University. She may be reached at [REDACTED] for questions or to report a research-related problem. Dr. Julie Kidd is her advisor and can be reached at [REDACTED]. You may contact the George Mason University Office of Research Integrity & Assurance at [REDACTED] if you have questions or comments regarding your rights as a participant in the research.

This research has been reviewed according to George Mason University procedures governing your participation in this research.

**CONSENT**

I have read this form, all my questions have been answered by the research staff, and I agree to participate in this study. This study will be video recorded for the sole purpose of allowing the researcher to ensure accuracy of information. Tapes will not be shared with anyone outside of the research team and will be kept in a secure location. The video tapes will be destroyed five years after completion of the study.

\_\_\_\_\_ I agree to videotaping.

\_\_\_\_\_ I do not agree to videotaping.

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Date of Signature

## APPENDIX C

### Initial Interview Questions

#### Background Information

- 1) Tell me about your family. Who is in your family?
  - a) What is your relationship with the deaf child?
  - b) Who lives in your home?
- 2) Demographical information
  - a) What is your race or ethnicity?
    - i) African American, Black
    - ii) Asian, Asian-American
    - iii) Asian-Pacific Islander
    - iv) Hispanic, Latino, Spanish-origin
    - v) Native American
    - vi) White
    - vii) N/A
    - viii) Other:
  - b) Your highest level of education?
    - i) Less than High School
    - ii) High School/GED
    - iii) Some college

- iv) 2-year college degree (Associates)
  - v) 4-year college degree (BA, BS)
  - vi) Master's degree
  - vii) Professional degree (MD, JD)
  - viii) N/A
- c) What is your identity?
- i) Deaf
  - ii) Hearing
  - iii) Other:
- d) What are your languages?
- i) Your first language:
  - ii) Your second language:
  - iii) Your third language:
  - iv) Other:
- e) How does your family primarily communicate with each other at home?
- i) ASL and spoken English (bimodal-bilingual)
  - ii) Sign and spoken English (simultaneously)
  - iii) ASL only
  - iv) Spoken English only
  - v) Other:

### Child Information

2. When did your child become deaf?

- i) Follow up: Before or at birth, age when child became deaf, or unknown
- ii) Date of birth
- iii) Any amplifications?
  - (1) Hearing aids
  - (2) Cochlear implants
  - (3) N/A
  - (4) Other:

American Sign Language Information

- 1) How did American Sign Language emerge in your family?
  - a) When?
- 2) How did your language abilities in American Sign Language emerge?
- 3) How did your child's language abilities in American Sign Language emerge?

Reminder: Bring artifacts to support your family language planning during our interview.

## **APPENDIX D**

### **Interview Questions**

#### **Language Planning at Home**

1. What are your beliefs about your child's language development?
  - a. Follow up: What does being a bilingual mean to you? What are your thoughts about ASL and/or English?
2. Walk me through the process of including ASL in your homes.
  - i) Who referred you? Who/what influenced your decisions? What were the external forces?
3. How does your child communicate with you? What are your thoughts about your child's language abilities?
4. Walk me through the day on how your child uses both languages daily.
5. How much are ASL and/or English being used in home? Which is used more, and why?
  - a. Who takes on the responsibility of either language?
6. How do you provide support for ASL and English development at home?
  - a. What services or support have you received to maintain two languages?
7. What do you value about ASL and English?

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Bobbie Jo Kite graduated from Western Pennsylvania School for the Deaf in Pittsburgh in 1999. She received her Bachelor of Arts in early childhood education from Gallaudet University in 2004 and her Master of Arts in deaf education from Gallaudet University in 2005. She was employed as an early childhood teacher at Kendall Demonstration Elementary School in Washington, D.C., and New Mexico School for the Deaf for 6 years before becoming a faculty member in the Gallaudet University Department of Education at Gallaudet University in 2011.