Title

What Are the Needs and Experiences of Low-Income Latino Parents of School-Age Children With a Hearing Loss?

Author

Christie, Michelle Anne

Publication Date

2013

UNIVERSITY OF CALIFORNIA

Los Angeles

What Are the Needs and Experiences of Low-Income Latino Parents of School-Age Children With a Hearing Loss?

A dissertation in partial satisfaction of the

requirements for the degree Doctor of Education

by

Michelle A. Christie

2013

ABSTRACT OF THE DISSERTATION

What Are the Needs of Low-Income Latino Parents of School-Age Children With a Hearing Loss?

by

Michelle A. Christie

Doctor of Education

University of California, Los Angeles, 2013

Professor Alison Bailey, Chair

This qualitative study examined the characteristics, needs, and experiences of low-income Latino families with school-age children with a hearing loss who attend a Los Angeles-based after school program focused on parent education. Latino parents self-reported the challenges they face having a child with a hearing loss in their family, and the lessons learned and applied at home to support their child with a hearing loss's development of communication skills. The outcomes of the study support current research in deafness highlighting the lack of information that parents receive once their child is diagnosed with a hearing loss, and their need for continual parent education throughout the child's critical language development years (0–6 years) as well as the school-age years. The outcomes of the study uncover salient information about the needs of low-income Latino families with children with a hearing loss and highlight the benefits of an after school program focused on ongoing parent education and support groups.

The dissertation of Michelle A. Christie is approved.

Howard S. Adelman

Rashmita Mistry

Marjorie Orellana

Professor Alison Bailey, Committee Chair

University of California, Los Angeles

2013

Dedication Page

This dissertation is dedicated to my son, Jack. His encouragement and love have been my driving force and greatest strength.

Table of Contents

Acknowledgements

I would like to acknowledge my wonderful dissertation committee and my dedicated Chair, Dr. Alison Bailey, for their expertise and support. I would also like to express my gratitude for the incredible support team I have had during my doctoral process. Appreciation is sent to my dad, who has never stopped believing in me; Kathy Buckley, who has been a true friend; Eileen Nelson, who has gone above and beyond; Paige Kamin, for endless hours of discussions about our educational system; Amber Gerber, my loyal and dear friend; Dr. Martindale and Dr. Wesley, whose advice and friendship allowed me to finish the dissertation; and to my sisters, brother, and friends who never doubted my abilities (even when I did) and Jack, who holds the key to my heart.

Lastly, I thank the children and families I have had the privilege of working with throughout the years--they have inspired me every day of my life.

Michelle A. Christie

CURRICULUM VITAE

EDUCATION

M.S. Education – University of Southern California/John Tracy Clinic,
Los Angeles, CA - 1995 - Graduated with 4.0 GPA
Received Full Fellowship, 1995 by USC

B.S. Business Management Minor: Communication – DePaul University
Chicago, IL - 1991, Magna Cum Laude

PROFESSIONAL CERTIFICATIONS/AFFILIATIONS

Communications-Handicapped Credential -2004
American Speech-Language-Hearing Association: Clinical Certificate of Competence (CCC)
Alexander Graham Bell Association
Council for Exceptional Children
California Charter School Association
Hearing Loss Association of America
Academy Television Arts and Sciences

PROFESSIONAL EXPERIENCE

1996- present **Founder, Executive Director**
No Limits Theater Group, Los Angeles, CA

- Leads the nonprofit organization that provides educational performing arts for children with hearing loss.
- Raised over 12 million dollars in funds with additional 2 million from in-kind donations.
- Responsible for the organization's consistent achievement of its mission and financial objectives.
- Writes and secures grants.
- Assures that the organization has a long-term strategy and fundraising plan that is mission and impact driven.
- Provides leadership in developing programs, organizational and financial plans with the Board of Directors and staff, and carries out plans and policies authorized by the board.
- Promotes active and broad participation by volunteers in all areas of the organization's work.
- Plans all annual fundraising events, including Walkathon and Gala.
- Maintains official records and documents, and ensure compliance with federal, state and local regulations.
- Responsible for data and evaluations of the programs to ensure excellence and efficiency.
- Maintains a working knowledge of significant developments and trends in the field.

- Publicizes the activities of the organization, its programs and goals, including social media and website oversight.
- Establishes sound working relationships and partnerships with community groups and organizations.
- Responsible for the recruitment and employment of all personnel, both paid staff and volunteers.
- Works with Finance Committee, and the board in preparing a budget; sees that the organization operates within budget guidelines.
- Trains and manages staff, educators of the deaf, and volunteers how to replicate productions nationwide.
- Directed and produced over 50 original plays and supervised over 75 productions nationwide. Performed at the John F. Kennedy Center of the Performing Arts and other renowned theatre venues across the country.

2001- **Founder, Executive Director**
present **No Limits Educational Center, Los Angeles, CA**

- Leads, develops and implements the after school program for school age children with a hearing loss and their families.
- Creates and manages programs that include individual auditory, speech, and language therapy, literacy, arts, science and technology, parent education, leadership and mentoring for teens with hearing loss, and family support.

1996- **Speech and Language Specialist**
present **No Limits, Los Angeles, CA**

1996- **Curriculum Director**
present **No Limits, Los Angeles, CA**

1996- **Parent Support Leader**
present **No Limits, Los Angeles, CA**

2011 **Adjunct Professor**
Cal Lutheran University

1995- **Resource Specialist (Grades K-6)**
1999 **Echo Horizon School, Culver City, CA**

1995- **Teacher**
1995 **Centralia School District/Raymond Temple School, Centralia, CA**

1993- **One-on-One Aide for multiple-handicapped deaf classroom**
1994 **San Diego School District/Lafayette Elementary, San Diego, CA**

WRITINGS, PUBLICATIONS, AND PRESENTATIONS

Writings: Original Children's Plays

Building Blocks
Timeless Journey
A Meaningful Life
Mission: POSSIBLE
Believe It or Not!
Do You Believe?
Heroes' Way
The No Limits Files
It Begins with a Dream
Silent No More
Above and Beyond

Putting on a Theatrical Production: No Limits Start Up Kit

Summer Guide: "Expanding Language through Experiences"
1998, 1997, and 1996

Publications

Christie, M. & Scott-Weich, Bridget (2006). AG Bell Launches Collaboration in Los Angeles. *Voices Magazine. 44-46.*

Christie, M. & Martindale, M. (2005). Literacy and school age children with hearing loss: An integrated approach. *AG Bell Association*

Hear Us Now monthly newsletter, 2008-present. Newsletter distributed to teachers and parents from Los Angeles Unified School District's deaf and hard of hearing program.

Recent articles include:
- *Cal Lutheran Launches New Program*
- *A New Study Provides Hope*
- *What is Hear Us Now?*
- *Will You Be My BFF for VD?*
- *Family Day at 153rd Street Elementary Brings Lots of Smiles*
- *No Limits at the John F. Kennedy Center in DC*
- *Surviving the Holidays*
- *Bats, Ghosts, Werewolves, OH MY!*
- *It's All About Talking It Up!*
- *ADA and IDEA*

Presentations

2011 - 2013

"Leadership in Teens and Preparing for College"
Weekly - No Limits for deaf children

"Preparing Your Child with a Hearing Loss for College" – 10 week program
Weekly - No Limits for deaf children

"Literacy and Deaf Children" –
Weekly - No Limits for deaf children

2010

"The Strategic Plan: Paving the Road for your Child with a Hearing Loss"
January to April – Weekly - No Limits for deaf children

"The Strategic Plan: Creating your Mission and Vision"
April to June – Weekly - No Limits for deaf children

"The Strategic Plan: Your IEP Team"
September to December – Weekly - No Limits for deaf children

2009

"Working with your deaf child"
January 22 – LAUSD – 153rd Street Elementary

"Tips for a Successful School Year"
January 28 – LAUSD – Palms Elementary

"Sound & Fury" – Moderator
February 18- LAUSD – Palms Elementary

"Family Day"
February 27- LAUSD – 153rd Street Elementary

"Positive Role Modeling & Behavior Management"
March 18- LAUSD – Palms Elementary

"Vendor Night"
June 3- LAUSD – Palms Elementary

"Practical Ways to Develop Language"
October 6- LAUSD – Farmdale Elementary

"Language at Home: Cookies & Milk"
October 20- LAUSD – 153rd Street Elementary

"The Strategic Plan"
October 28- LAUSD – Palms Elementary

"Holiday Stress"
November 17- LAUSD – 153rd Street Elementary

2008

"Building Blocks to Language"
January 22 - LAUSD – 153rd Elementary Street

"Building Language at Home"
January 23 – LAUSD – Farmdale Elementary

"Expanding Vocabulary"
March 12 - LAUSD – Palms Elementary

"Language Games to Grow On"
March 27 – LAUSD – Melrose Elementary

"Auditory Games to Grow On"
April 15 - LAUSD – 153rd Elementary Street

"Making Language a Game"
April 23 – LAUSD – Farmdale Elementary

"Making Experience Books"
May 21 - LAUSD – Palms Elementary

"New Technology and Resources"
June 4 - LAUSD – Palms Elementary

2007

"Cookin' Up New Language – Part I"
October 23 - LAUSD – 153rd Street

"Involving Parents"
October 17 - LAUSD – Palms Elementary

November 15 – LAUSD –Melrose Elementary
"Bringing Language Home"

2006

"No Limits" presented with Maura Martindale
AG BELL Convention

"Cookin' Up Language"
October 15 – LAUSD - Saticoy Elementary

"The Building Blocks to Language"
October 18 – LAUSD - Palms Elementary

"Language, Language, Language"
November 2 – LAUSD - Saticoy Elementary

Presented No Limits
Opening Session – AG Bell

"Theatre in the Classroom"
May, 2004 - Clarke School for the Deaf

"Hearing Loss"
1996, 1997, 1998 - Parent Forum at Echo Horizon School

AWARDS AND ACCOMPLISHMENTS

- 2012 Congressional Recognition from Congresswoman, Karen Bass
- 2012 Culver City Disability Award for outstanding leadership.
- Commendation from Assemblyperson, Bill Rosendahl in 2012
- "Megan Cooper Award" by Executive Service Corp's for excellent governance and leadership in a nonprofit organization in 2011
- Los Angeles Disability Council awarded No Limits as the "Best Nonprofit Organization" for children with disabilities, 2011
- 2010 Commendation by Mayor Villaragosa of Los Angeles
- 2009 Proclamation from the Los Angeles County Board of Supervisors, 2nd District Mark Ridley-Thomas' Office for outstanding work in the Los Angeles school system.
- 2009 – Calvary Christian School "Making A Difference" Award
- 2008 Received the *Spirit of Giving* Award by Harmony Women's Guild
- George Washington Medal of Honor by the Freedom's Foundation. Other recipients include Astronaut Scott Glenn and Judge Rehnquist in 2005.
- Honored as the "Top 100 Heroes" in the country by the Volvo For Life Committee for her dedication and commitment to deaf and hard of hearing children in 2005.
- Heide Mengel Award by John Tracy Clinic during fellowship program at University of Southern California/John Tracy Clinic Graduate Program, 2005.
- No Limits was chosen to be the "Grand Service Project" for the International Order of

the Rainbow for Girls, for outstanding leadership, 2002

- "Citizen Cool" Award by Ben & Jerry's Organization, 2004
- Honored with a "Special Recognition Award" by the California Educators for the Deaf, 1999
- Won "Best Arts Program in the Country" by Parents Magazine, 1999.its received "Service to Mankind Award" by Sertoma Organization, 2000.
- Subject of 4 documentaries for the revolutionary techniques in teaching deaf and hard of hearing children. No Limits has been featured in newspapers, magazines local and national news stations across the country including OPRAH, CNN, PBS, and the Learning Channel.

Chapter 1

If I had to choose being deaf or being blind, I would chose blindness.

Blindness separates you from things and deafness separates you from people.

Helen Keller

In the United States, approximately 3 in 1,000 babies are born with permanent hearing loss, making hearing loss one of the most common birth defects in America (Ross et al., 2008). According to 2012 research from the National Health and Nutrition Examination Survey (NHNES), which sampled people ages 12 and above, nearly 1 in 5 Americans experiences a hearing loss that interferes with his or her ability to communicate and engage in social interactions. The adverse consequences of hearing loss can impact a child with a hearing loss's speech, language, social, and cognitive development, and subsequently educational and vocational attainment (Aurelio & Tochetto, 2010; Olusanya et al., 2007; Olusanya et al., 2005). Research indicates that audiological management, educational intervention, and parent involvement have the potential to connect children who are deaf or hard-of-hearing to the hearing world and remove them from a world of silence (Estabrooks, 2006; Moeller, 2000; Robertson, 2009).

In California, 73% of deaf adults, deafened at birth or during early childhood, live on state programs, as they are considered underemployed or unemployable (DSS, 2008). According to the California Department of Education (CDE), 82% of California children with a hearing loss leave high school "functionally illiterate" (CDE, 2008), not performing higher than the third grade level. The primary reason was poor communication skills.

The CDE’s Special Education Division’s report of December 1, 2012 shows that there are twice as many Latino children with a hearing loss in California as Caucasian children. Specifically, there are 7,496 deaf and hard-of-hearing Latino children compared to 3,527 Caucasian, 1,344 Asian, and 784 African-American children. In Los Angeles Unified School District (LAUSD) and Los Angeles County alone, there are a combined total of 3,237 deaf and hard-of-hearing children of the total 7,496 statewide (CDE, 2012).

With more than 90% of children with a hearing loss born to hearing parents, most of these parents have never encountered this disability and do not have the skills to work with their disabled child (Mitchell & Karchmer, 2004; Calderon, 2000; Feher-Prout, 1996). Research reinforces the importance of parent education and involvement in children with a hearing loss’s communication and academic success (Moeller, 2000; Yoshinaga-Itano, 2003; Yoshinaga-Itano et al., 1998; Calderon, 2000).

But what do we really know about low-income Latino families who have a child with a hearing loss and are Spanish speakers? Research indicates very little. In the United States, the fastest-growing minority group is Spanish-speakers (Ramirez & De la Cruz, 2002), with increasing numbers of children who are diagnosed with a hearing loss. Understanding how to work with these families and their children has become more important than ever (Rhoades et al., 2004). Likewise, poverty plays a significant role in their lives. With 23.2% of Latino families living in poverty in the United States (U.S. Census Bureau, 2010) and with the number increasing each year, more research is needed to address these evolving statistics.

This study is designed to better understand the characteristics, needs, and experiences of low-income Latino parents of school-age children with a hearing loss and to explore outcomes, if any, in the areas of hearing-loss knowledge, beliefs, aspirations, and behaviors as a result of being enrolled in an after school program focused on parent education. With a large population of children with a hearing loss of Latino descent, this study unveils information that can serve educators and Latino parents of children with a hearing loss, emphasizing the importance of parent education. Educators must understand the families and students with whom they work in order to help children with a hearing loss develop communication competence and academic success.

Research is sparse about understanding the needs of low-income families with children with a hearing loss, as most research focuses on the Caucasian middle class. Research becomes even sparser when examining families of Latino descent with school-age children with a hearing loss. This population is of particular interest since there are no studies examining those dynamics collectively. The families recruited in the study were enrolled in an after school program called No Limits. The No Limits program focuses on providing services to low-income children with a hearing loss who use spoken language and their families. Teaching children with a hearing loss how to speak is one path to learning language. Other options also exist, including American sign language (Morere, 2011; Chamberlain & Mayberry, 2008) or oral language in Spanish (Marschark & Spencer, 2009; Waddy-Smith, 2012). When alternatives are given between sign language vs. spoken language, the choices made by parents of children with a hearing loss have changed significantly over time. In 1995, 40% of parents chose spoken language options, compared to 60% of parents who chose sign language options. In 2005, the chose of spoken language more than doubled, at 85%, compared to 15% of parents who chose sign language options (Brown, 2006). The participants in this study enrolled in the after school program to support their choice to foster oral language in English for their child with a hearing loss.

The program is intensive; it requires the parents to attend three times a week, along with participating in weekly parent education classes and individual auditory, speech, and language therapy sessions with their child. One of the targeted outcomes of the program is to teach parents how to enhance their child's language ability and ultimately apply the lessons learned at home. The study aims to understand the characteristics of the families enrolled in the after school program in hopes of shedding light upon why these families attend the after school program. Additionally, the study seeks to understand the parents' experiences and whether their perspectives have changed as a result of attending the after school program, including weekly parent education classes.

The following questions were investigated: What are the characteristics and self-reported needs of Latino parents of a child with a hearing loss who enroll in the after school program? What are the characteristics of the after school program, what type of services do the families currently receive at their school, and what services do they seek to receive at the after school program and why? Lastly, what attributes do Latino families give the program? Did the parents self-report any changes in the way they communicate with their children with a hearing loss, work with their school personnel, or change their aspirations of their child's future? This study's aim is to fill in the vast gap in research of this population in order to provide better resources for the families and children with a hearing loss.

Parent Involvement

Research supports the importance of parent involvement as a predictor of success for communication and language development for a child with a hearing loss (Moeller, 2000). Learning language is more than learning how to produce sounds to speak; it also involves attaching meaning to sounds. It requires a meaningful language base of communication between parent and child with a hearing loss to promote language acquisition (Robertson, 2009). Beals, De Temple, and Dickinson (1994) administered a study that distinguished between “immediate” and “non-immediate” talk of mothers from low-income families when reading to their child. A mother asking questions about the characters, explaining the meanings of the words, making inferences and predictions, and discussing setting and main ideas, represents non-immediate talk. In comparison, immediate talk is represented by a mother asking questions pertaining only to the book itself. Parents using non-immediate talk had positively correlated results to story comprehension of the child upon reaching school age. The same researchers studied how explanatory and narrative conversations between parent and child resulted in larger receptive vocabularies and higher listening comprehension scores (Beals et al., 1994). This study found that teaching parents how to communicate with their young child with a hearing loss could expand a child’s critical thinking and cognitive skills, and improve the development of word knowledge and language acquisition.

Low-income children with a hearing loss perform less well academically than middle-class children with a hearing loss. A study by Geers and Moog (1989) found that of the students with a hearing loss who used spoken language, those who achieved the highest reading levels were from middle-class families. By contrast, children with a hearing loss who are from low-income families are at a high risk for not being exposed to accessible language because in most countries, poverty often translates into a lack of accessibility to the educational and clinical services that expose children with a hearing loss to language at the appropriate age. Lederberg and Golbach (2002) found that parental stress and concerns about communication increased when their children with a hearing loss were older than age 2. This could be because children in poverty often are identified late and, as a result, are not aided until after age 2. The lack of communication between parent and child can lead to additional stress (2002).

Latino Parents of Low Socio-Economic Status

Communication breakdowns and misunderstandings between the child and parent can lead to greater frustration as well as lost opportunities for language development. Parents with less patience and understanding about their child with a hearing loss's needs to have information repeated or explained can impact the child's development of vocabulary, and receptive and expressive language skills (Calderon & Greenberg, 1999). Research reveals that mothers' emotional availability and involvement influences children with a hearing loss's language development (Pipp-Siegel et al., 2002). Through parent education, knowledge has shown to reduce stress in low-income families and provide the tools to help parents navigate the school system and understand the needs of the child from the age of diagnosis to adulthood (Hadadian & Rose, 1991).

Research Design

This study implemented a qualitative approach to examine the experiences of low-income Latino parents who attend an after school program that focuses on parent education. Upon enrollment in the program, these parents provided documentation showing income between 100% and 200% of the poverty level based on 2013 Department of Health and Human Services (DHHS) Poverty Guidelines. In this study, the level of participants' income will be referred to as "low-income." The parents who attend the No Limits Educational Center, including weekly parent education classes, were asked to participate in a focus group and/or interview to discuss the benefits, if any, of the after school program. A qualitative method was selected to provide a deeper understanding of the parents' perspective on and knowledge of hearing loss, and to provide a unique point of view regarding their needs that they felt would serve to maximize their children's education and language development. Triangulating the data collected from focus groups, interviews, field notes, and children's language assessments has created a more meaningful and comprehensive study.

The participants were recruited from the No Limits Educational Center after school program. The low-income Latino families were asked to volunteer for the focus group, and of those participants, a purposive sample was asked to participate in the interview. The inclusion and exclusion criteria of the participants were:

Participant Inclusion

- Latino parents with income between 100% and 200% of the poverty level based on 2013 Department of Health and Human Services (DHHS) Poverty Guidelines. [1]
- Parents whose child with a hearing loss's primary mode of communication is spoken language.
- Parents of school-age children with a hearing loss between ages 5 and 14.
- Parents of a child with a hearing loss who participated in the after school program.
- Parents who attended weekly parent education classes for a minimum of one year.

Participant Exclusion

- Parents who speak languages other than Spanish or English.
- Parents with children who have multiple disabilities.
- Parents who cannot read and write.
- Parents of a child with a hearing loss whose primary mode of communication is sign language.

---

[1] Families with income between 100% and 200% of poverty level according to the 2013 Poverty Guidelines provided by the Department of Health and Human Services (DHHS).

Significance of the Study

Research pertaining to Latino parents of children with a hearing loss who are low income is gravely lacking, and no research exists about how low-income Latino parents of school-age children with a hearing loss can maximize their children's language learning opportunities through parent education.

With an increasing population of Latino families with children who have a hearing loss, the findings of the study can provide deeper insight to this population. By focusing on parental involvement and education, the findings may not only relieve a family's stress, but also help improve the educational outcomes of children with a hearing loss by maximizing their listening, communication, and cognitive potential. This study will not only be beneficial to those in the Los Angeles area, but to families across the country who are below the poverty line and need parental training to help maximize their children with a hearing loss's learning outcomes. The study also can bring awareness to educators in the field of deafness, assist them in becoming more culturally sensitive to their Latino families, and increase their understanding of the families' needs and aspirations for their child. Educators who understand the impact of income combined with ethnic, cultural, and linguistic diversity may greatly improve their capacity to deliver effective services to their students. Educators who are more sensitive to these issues will be better prepared to inform families about different communication and educational options and advocate for ethnically diverse families (Rhoades et al., 2004). Research strongly suggests that as more families learn advocacy skills, they increase the chances of success for their child with a hearing loss's future. Yet, teachers and families together are perhaps the strongest combination and reinforce the need for parent involvement in a child's educational goals.

Dissemination of the Study

The research will be distributed to national and international organizations. Based on the findings, recommendations will be developed for promoting positive parent educational outcomes and “best practices” for educators. Additionally, a parent handbook for low-income Latino parents will be published in English and Spanish in order to support other Latino families with children with a hearing loss.

Chapter 2 – Literature Review

According to Early Hearing Detection and Intervention (EHDI, 2010), 1 out of 33 American children are born with a permanent hearing loss each day, making it the number one birth defect in the country. Nearly half of the children with hearing loss in the United States are Latino, and 1 out of 4 Latino children is born into poverty every day (Portrait, 2009). Yet there is no research that identifies the needs of low-income Latino families who have school-age deaf or hard-of-hearing children. In fact, studies that do examine parents of children with a hearing loss often are from higher socio-economic backgrounds and Caucasian English-speaking families (Calderon, 2000; Yoshinaga-Itano, 2003; Lederberg & Everhart, 2000). In addition, most of these studies focus on younger children between 0 and 3 years of age who have had early intervention, i.e., their families have received information about how to care for the needs of their child with a hearing loss before age 3. Yet the majority of Latino children with a hearing loss are diagnosed later than age 2 (Portrait, 2009; Chia-ling et al., 2008). As a consequence, low-income Latino families generally do not receive early intervention. Thus, these families do not acquire basic knowledge of hearing loss and of how to communicate with their children with a hearing loss to promote language learning (Jackson & Turnbull, 2004).

My study focuses on understanding the current knowledge and beliefs of low-income Latino families with school-age children with a hearing loss, examining whether Latino parents self-report a change in their perceptions, aspirations, and behaviors since being enrolled in the after school program. The study seeks to answer how, if at all, after participating in the program, low-income Latino parents change their interactions with their children who are deaf or hard-of-hearing.

This literature review is divided into four main sections. The first section presents an overview of hearing loss and its impact on language development, compounded by the added difficulty the child with a hearing loss faces when raised in low-income families. This section specifically targets the economically disadvantaged Latino community. A brief overview is presented regarding parents' choices of using sign language and/or spoken language for their child's communication modality. This study focuses on children with a hearing loss who use oral English language. The second section highlights the importance of parents making informed decisions regarding treatment options for their children. This section examines the challenges and barriers, such as uninformed beliefs and social stigmas, which impact a Latino family's knowledge and beliefs regarding their child with a hearing loss. The third section details the importance of early intervention in the treatment of children with a hearing loss. The fourth section stresses the importance of parent-child involvement to a child's development. Further, it examines the factors that impact parent involvement and parent-child interaction as they relate to children with a hearing loss's language development.

Debate Between Sign Language and Spoken Language

A long history of debate exists in the field of deafness in what is considered the most appropriate or best mode of communication for children and adults with a hearing loss (Marschark, 2007). The debate passionately continues today as technology advances and more children are receiving digital hearing aids as well as cochlear implants. The Deaf community often refers to the upper case D to denote a distinctly different cultural group that uses sign language only. A lower case d is defined as a person who uses spoken language (Woodward, 1972). This study is not designed to address the debate and will be referring to the children in the study as "children with a hearing loss" rather than children with a hearing loss. The focus of the study is to examine the perceptive of parents who have chosen spoken language as the mode of communication for their child with a hearing loss. Research is readily available on children with a hearing loss (Calderon, 2000; Geers, 2003; Marschark, 2007; Moeller, 2000; Robertson, 2009; Yoshinaga-Itano, 2003) and, thus, the importance of understanding their parents is where the focus of this study lies.

Children with Hearing Loss in the United States

The majority of children born with a hearing loss in the United States have families who have little or no experience with deafness (Jackson & Turnbull, 2004). Late diagnosis of hearing loss (typically after three months) or lack of early intervention services can negatively impact a child with a hearing loss's life in the areas of socialization, communication, and academic achievement (Lemajić-Komazec, 2008; Yoshinaga-Itano, 2003; Moeller, 2000; Robertson, 2009; Meinzen-Derr et al., 2011).

The Department of Social Services reports that 74% of deaf and hard-of-hearing adults are unemployed, with inability to read and poor communication skills cited as the primary reasons (DSS, 2008). A third of all deaf adults in the United States rely on some form of government assistance; the average income of deaf adults is 40%-60% of what their hearing counterparts earn (DSS, 2008). Helfand et al. (2001) found that children with a hearing loss learn language at only 50%-60% of the rate of their hearing peers. As a result, many children with a hearing loss struggle to read and write and never achieve functional literacy (Moeller et al., 2007; Traxler, 2000; Robertson, 2009; Vermeulen et al., 2007). In fact, in 2008, the California Department of Education reported that 82% of California's children with a hearing loss graduated from high school illiterate and functioned at no higher than the third grade level (DOE, 2008).

According to data from the Special Education Enrollment by Ethnicity and Disability Report (2010), the LAUSD has more than 3,200 children with a hearing loss, with the largest group (40%) of the children being of Latino descent. Overall, 73.5% of students in the LAUSD identify as Latino. At a public school for the deaf within LAUSD, the school had a 76.5% dropout rate in 2010 (DOE, 2010), reflecting the low academic performance of children with a hearing loss.

Despite these dismal statistics on educational performance, advancements in today's hearing aids and cochlear implant technology have allowed some children with a hearing loss to succeed in a world among their hearing peers. With research-driven educational services, many children with a hearing loss can graduate from college, pursue careers, and live happy and productive lives. But do these success stories include low-income Latino children who are deaf or hard-of-hearing? Students who are deaf or hard-of-hearing from higher socio-economic status (SES) families perform better on standardized tests of achievement, on average, than students who are deaf or hard-of-hearing from lower SES families. However, when students with a hearing loss receive the needed resources and their parents are actively involved in their education, they too can succeed (Kluwin, 1994; Moeller, 2000; Calderon, 2000).

The majority of research on parents of children with a hearing loss shows the independent impacts of various factors: poverty (Portrait, 2009; Rhoades, 2004); lack of knowledge of hearing loss (Steinberg et al., 2003; Marschark, 2007); false perceptions and stigma of hearing loss (Marschark, 2007; Steinberg et al., 1997; DesGeorges, 2003; Meadow-Orlans, 1994); absence of available resources (Hintermair, 2006; Young, 2003); and lack of sufficient parent involvement (Geers & Moog, 1989; Mahoney & Bella, 1998; Calderon & Greenberg, 1999; Calderon, 2000). These factors have a negative effect on children's communication competence and academic performance (Marschark, 2007; Lederberg & Everhart, 2000; Moeller, 2000; Blamey, 2003; DesJardin & Eisenberg, 2007; Blair et al., 1985). One of the main factors that impacts children with a hearing loss's communication skills is poverty (Portrait, 2009; Rhoades et al., 2004).

Poverty's Impact on Language Development

Poverty in the United States continues to affect the lives of young children and negatively impacts their communication skills. The U.S. Census Bureau's (2010) *Income, Poverty and Health Insurance Coverage in the United States* indicates that the official rate of poverty increased from 14.3% to 15.1% from 2009 to 2010, with poverty increasing from 20.7% to 22% for people under the age of 18. Nearly 1 in 6 children live in poverty in the United States (2010).

Among these children living in poverty, 58% of them are Latino children age 0 to 8 years (Portrait, 2009). Latinos are the fastest growing minority group in the United States, making up about 15% of the U.S. population (Livingston et al., 2008). If current demographic trends continue, this number will double to 29% or approximately 100 million people by 2050. The National Task Force on Early Childhood Education for Latinos (2008) found that 64% of children between the ages of 0 and 8 are either immigrants (first generation Americans) or from families in which one or both parents are immigrants (second generation Americans). Of those children between 0 and 8 years of age, 9 out of 10 are born in the United States (Portrait, 2009). Low-income Latino children will play significant social, political, and economic roles in the future of the United States (2009). The socioeconomic status of families influences their children's academic performance, especially in language development.

Studies demonstrate that the knowledge base of a child living in poverty may be compromised as a result of his or her environmental circumstances (Payne, 2005; Portrait, 2009;

Rhoades et al., 2004). A lack of meaningful experiences in their environment creates a challenge in vocabulary and reading readiness (Robertson, 2009) due to diminished exposure to oral and written language (Raikes & Thompson, 2005; Locke et al., 2002; O'Neill-Perozzi, 2003). Studies show that reduced vocabulary in low-SES homes is prevalent around the country (Dodd & Carr, 2003; Dollaghan et al., 1999; Justice & Ezell, 2001; Locke et al., 2002), affecting children's literacy, language, and academic performance in their elementary years.

A 10-year longitudinal study by Hart and Risley (1995) examined parent-child talk in 42 Kansas families with children between 7 and 36 months of age over a three-year period. The study divided the parents into three groups: professional, working, and welfare families. Every spoken word between a parent and child was recorded for one hour, once a month at the family's home, and then transcribed. The study concluded that the variation in a child's IQ and language ability was relative to the amount the parents spoke with their child. Furthermore, a child's academic successes at ages 9 and 10 were attributable to the amount of talk between parent and child from birth to age 3. The study highlighted the different levels of vocabulary among the families. All family groups used similar amounts of controlling language (commands, imperatives, and prohibitions), but the welfare families used a significantly lower amount of vocabulary—only 600 words per hour—compared to professional families, who used 1,200 words per hour. Also, the welfare families used more directive talk (e.g., "sit down," "do this") than the other groups, while professional and working-class families used more varied vocabulary, complex thinking, and positive feedback. These differences, it is argued, may impact children's literacy and academic achievement later in life. It is important to note that this study had no experimental control so causal inferences are not valid. In addition to highlighting the importance of meaningful and varied conversation between parent and child, Hart and

Risley's (1995) study supports other research claims that low socio-economic status can negatively impact a child's language and communication ability (Roseberry-McKibbin, 2008). However, criticisms follow this landmark study as it looks through the lens of a deficit model. It ignores the culturally embedded linguistic practices of the families. There is a large degree of variation in the nature and degree of parent oral language use and support for children within families from low SES backgrounds (Bailey & Moughamian, 2007). Consequently, some educators may follow the deficit model with children from low-income families or who live in poverty and thus ignore or simply miss the child's full range of language practices and potential. Educators can value the culture of their students and help to enhance vocabulary and academic achievement (Miller et al., 2005; Dudley-Marley & Lucas, 2009).

Parents can improve their child's language and communication performance. Lederberg and Everhart (2000) recommended that parents of children who are deaf or hard-of-hearing be taught how to enhance their children's language regardless of their own educational level. Both how and how often parents speak to their children are determining factors in encouraging language promotion. For example, a parent can ask open-ended questions to induce higher level thinking in their children, in contrast to topic control, yes-or-no questions, or the use of directives (Beals et al., 1994).

Low parental education level can be a further barrier to children's language development. For instance, Portrait (2009) states, in comparison to Caucasians, Latinos have lower parent education levels or relatively little formal schooling, a greater number of children living in single-parent homes, a significantly higher child poverty rate, and a greater percentage of children who are English language learners. Of the 33.4 million Latino children between 0 and 8 years of age in the United States in 2000, about 6.1 million (18%), had a mother who had not completed high school, and 1.8 million (6%) had a mother who did not reach eighth grade (2009).

Notwithstanding a family's educational level, positive outcomes for language development of a child with a hearing loss can still exist (Yoshinaga-Itano, 2003; Geers, 2003; Moeller, 2000). Other factors, such as early identification and intervention, parent involvement, degree of hearing loss, socioeconomic status, and parental stress can contribute to a child's positive or negative performance in language development (Yoshinaga-Itano, 2003; Moeller, 2000; Calderon, 2000; Robertson, 2009, Hoff, 2003; Pipp-Siegal, 2002; Portrait, 2009). The costs of therapy and medical devices for children with a hearing loss can further affect children's performance by the additional stress it can place on the family.

The Barriers of Costs for Parents of a Child with a Hearing Loss: Hearing Device, Audiology, and Speech Training

The cost of hearing devices. For parents of all socio-economic and educational backgrounds, learning of their child's hearing loss can bring about immediate feelings of stress, grief, anger, guilt, helplessness, denial, and, above all, confusion (Steinberg et al., 2003). In addition to this emotional trauma, parents encounter stress as they learn about the costs of having a child with a hearing loss. Although studies show that the consistent use of hearing aids develops communication ability for children with hearing loss, most hearing aids are priced between $4,000 and $6,000 in the United States. For families living in poverty, the expense of hearing aids is a barrier. The cost can prevent a child with a hearing loss from attaining the aids necessary for learning to communicate and academic success. A study by the Better Hearing Institute claims that 2 out of 3 (64%) parents stated "finances" as the significant reason for not acquiring hearing aids for their child. In the United States, hearing aids are not fully covered by most insurance companies; coverage is often limited to a credit of $500 or $1,000, which can be applied to the overall cost (Kochkin, 2010).

For most families, this credit is not sufficient to allow them to afford the amplification devices. Children who rely on state services can receive hearing aids at no cost, but it can take up to a year before children receive their aids, resulting in loss of valuable time for the development of language. Parents, therefore, will sometimes stop seeking hearing aids for their child, unaware of the long-term impact of this decision and how it can negatively impact their child's future employment (Kochkin, 2010).

Additionally, even for parents who are able to receive hearing aids for their child, ongoing maintenance is costly. The ear molds of hearing aids are typically replaced every 3 months due to a child's normal growth. The cost is generally $75 per ear mold. Batteries cost over a dollar each and need to be replaced every 2 to 5 days, depending on the power and brand of the hearing device. There are other considerable costs for families with hearing loss as well.

The costs of audiology and speech training. Audiology, speech, and language training are an additional cost for low-income parents. Robertson (2009) suggests that a child receive audiology—speech and language training—to match sounds he or she hears to oral language (2009). For a child with a hearing loss to advance in verbal communication, it is important that experts in the field of deafness assist the child in developing spoken language ability (Edgar & Rosa-Lugo, 2007). Private auditory, speech, and language therapy can be costly; preventing many low-income families from receiving the training they need to help their child. Auditory Verbal Therapy (AVT), a well-documented family-based approach, encourages speech sessions at least once a week (Estabrooks, 2006). Currently, the rate paid by Los Angeles Unified School District is $130 per hour for a certified auditory-verbal therapist from a nonpublic agency, and the price can dramatically increase up to $200 privately. Most children and their families cannot afford to receive this individualized education and must rely on the public school system. Affluent Caucasian-American families with children with a hearing loss tend to have more opportunities to access AVT (Easterbrooks et al., 2000). Moreover, there are less than 20 AVT-certified specialists in California (Alexander Graham Bell Association, 2011) and, consequently, most parents must pay out of pocket for these services.

Those who cannot afford to hire specialists must face the added problem of the absence of qualified educators in poor public school districts along with a critical shortage of speech-language pathologists (SLPs) (Edgar & Rosa-Lugo, 2007). According to the U.S. Bureau of Labor Statistics (2000), more than 26,000 additional SLPs were needed to fill the demand between 2002 and 2012. Due to this shortage, many school-age children who require speech and language services either are not being served or must seek professionals outside the school system (Edgar & Rosa-Lugo, 2007).

Another concern is that the majority of professionals working with children with a hearing loss is Caucasian Americans and may not understand the diversity of its new students with a hearing loss. In fact, over 95% of the members of the American Speech and Hearing Institute (ASHA) are Caucasian Americans. Thus, understanding the needs and experiences of the Latino families may be lacking (Rhoades et al., 2004).

Parents’ Informed Decisions: Communication Modalities, Educational Setting, and Cultural Decisions of Latino Families

Communication modalities. Professionals, educators, and society can play a role in Latino parents’ informed decisions (Steinberg et al., 2003). Most Latino parents whose children are diagnosed with a hearing loss have little understanding of deafness and its potential implications for their children (Jackson & Turnbull, 2004). Contradictory information about educational and communication outcomes can cause stress and insecurity in parents about raising their child with a hearing loss (Bemrose, 2003; Tattersall & Young, 2003). Latino families must decide which communication approach— sign language or spoken language—is best for their child and ultimately for the family (Yuelin et al., 2003). Yuelin, Bain, & Steinberg (2003) examined 29 Latino families across four geographical areas in the United States after their children's hearing loss had been identified. The families were asked to discuss how they searched for appropriate interventions and made choices regarding communication options and educational placement. The study concluded that the parents' decisions were challenging mainly due to "language and cultural barriers and…limited access to information, resources and a full range of options" (p. 291). These families relied on professional recommendations regarding communication choice 96% of the time and "relied on the professionals who were treating their child to provide information, not only about hearing loss itself, but also about available services, medical assistance, and the rights of the child and parents" (p. 21). Eighty-six percent of Latino parents made their decision on the best communication modality for their child based on the suggestions of school professionals, who recommended using a combination of sign language and spoken language (Yuelin et al., 2003). This is referred to as the Total Communication approach, where a teacher both speaks and signs during instruction. Only 52% of the Latino families studied were given written materials about the different options of communication available for their child (Yuelin et al., 2003).

Educational setting. Parents of children with a hearing loss must make decisions about their child's educational setting. Parents often rely on experts in the field of deafness to decide what type of educational setting in which to place their child with a hearing loss, rather than making the decision themselves (Marschark, 2007). In general, parents of children with disabilities face four primary options for instructional settings for their children's learning: 1) regular school setting or mainstream; 2) resource rooms; 3) self-contained classroom with like disabilities; and 4) special schools (2007).

Educational settings may differ by racial/ethnic composition (Gallaudet Research Institute, 2010). For the past 30 years, the Gallaudet Research Institute has conducted an annual survey to gather data on over 60% of students with a hearing loss from pre-K to twelfth grade in the United States, including service data and demographic and program information (Gallaudet Research Institute, 2010). Instructional settings differ significantly in racial/ethnic composition. Caucasian students make up the majority (63.8%) of students in regular school settings and resource rooms, with Latinos following at 17.2%, and African-American students at 10.5%. Self-contained classrooms with like disabilities have the highest percentage of minorities, with Latino students at 30.7%, African-Americans at 18.5%, and Asians at 4.7%. In the United States, more than 90% of the students with a hearing loss come from a one-language home, either English- or Spanish-speaking. The self-contained classrooms, highly populated by Latino children, also feature students with the highest number of Spanish-only homes, with over 66% of the students using sign language only. For students with a hearing loss in the regular school settings, over 75% of them use spoken language (Marschark, 2007). The California Department of Education's Special Education Divisions (CDE, 2012) report that a majority of students of Latino descent in the Los Angeles Unified School District use sign language in self-contained classrooms. Placement of a child in such classrooms brings with it particular challenges for a Spanish-only family, who will need to learn two new languages, both American Sign Language and English. Cultural factors also play a role in parental decisions for their child with a hearing loss.

Cultural decisions of Latino families. Cultural factors have been shown to influence Latino families' choices regarding their child's mode of communication, education, and resources. Steinberg et al. (1997) found that the majority of Latino families were making choices in the absence of essential information. Consequently, their choices may have had different outcomes than they originally believed (1997). Steinberg et al. (1997) suggested that decisions were made in the context of cultural barriers, limited resources, and lack of access to current information. Spanish-speaking parents of children with a hearing loss in the United States must engage in a trilingualism of Spanish, English, and American Sign Language. Steinberg's findings revealed that Latino parents were given fewer options, especially about cochlear implants or spoken language. Few Latino parents (55%) were given written materials for review as compared to non-Latino parents (92%), and access to health care was not discussed with the families. Latino families based their decisions on what they referred to as an act of faith or God's choice, as they had little access to other families with a child who was deaf or hard-of-hearing. Steinberg et al. (1997) offered options for improvement, such as creating parent groups based in the community (e.g. homes, churches, etc.) to help the families navigate this challenging time.

The Importance of Early Intervention and Parent-Child Interaction

Early intervention. The success of children with a hearing loss has largely been attributed to early intervention (Meinzen-Derr et al., 2011; Portrait, 2009; Moeller, 2000; Mahoney & Bella, 1998). Children with a hearing loss are unable to hear spoken language in their immediate surroundings without amplification and therefore are at a distinct disadvantage in learning spoken language (Blamey et al., 2001). Much research has focused on understanding the predictors of children with a hearing loss's success, with some focusing on new technology, such as cochlear implants, and others focusing on age of onset of hearing loss and socio-economic status of parents. Multiple studies have provided increasing evidence that early-identified infants with a hearing loss advance in speech and language at rates that exceed later identified peers (Apuzzo & Yoshinaga-Itano, 1995; Calderon, 2000; Calderon & Naidu, 2000; Kennedy et al., 2006; Robinshaw, 1995). A study by Apuzzo and Yoshinago-Itano (1995) examined the outcomes of 72 children with a hearing loss whose disability was identified before 6 months of age and 78 children who were identified as deaf after 6 months of age. The children were evaluated between the ages of 13 months and 36 months, and 96% participated in the same early intervention program. The findings showed that the receptive and expressive skills of the earlier identified children were significantly greater than those of the later identified children (Apuzzo & Yoshinaga-Itano, 1995). The earlier the hearing loss is identified, the better the chance the child will be able to acquire a language, whether spoken or signed (Apuzzo & Yoshinaga-Itano, 1995; Calderon, 2000). In fact, Meinzen-Derr et al. (2011) suggest that early intervention improves children with a hearing loss's language ability and, if provided prior to age 6 months, children are more likely to have age-appropriate language skills, regardless of hearing loss severity (2011).

Parent-child interaction. Previous studies have also acknowledged the importance of parent-child interaction during early intervention (Calderon, 2000; Calderon & Naidu, 2000; Power et al., 1990; Woods et al., 2004; Mahoney & Bella, 1998). Yet families with low SES often have children diagnosed late and do not receive the resources to engage in early intervention (Steinberg et al., 2003; Hintermair, 2006). Families who do enroll in birth-to-three programs can benefit from comprehensive information, but unfortunately, not all programs provide the same quality of information (Marschark, 2007). Services are limited by the skills of the professionals and the resources available (Meadow-Orlans et al., 2003). Training professionals on the principles of adult learning would maximize their ability to communicate effectively with the parents of the hearing impaired (Bodner-Johnson, 2001).

Most parents who have not enrolled in early intervention programs rely on the public school system to provide services for their children. Resources at the schools are generally minimal and rarely include parent education training to promote language development (Steinberg et al., 2003; Steinberg et al., 1997; Meadow-Orlans et al., 2003).

Latino families are often less inclined to place their 3-5-year-old child in a preschool program, due primarily to lack of information about the importance of preschool and the cost (Portrait, 2009). The College Board (2008) states that many minority children are educationally behind their peers by the time they reach kindergarten, specifically in vocabulary and reading readiness (2008). A study by the University of California, Berkeley, recently reported that fewer Latinos enrolled in preschool in 2009 than in 2005 (Zehr, 2012). For low-income Latinos with a child with a hearing loss, this can have a significant negative impact on their child's educational development (Steinberg et al., 2003), and the need for parent education becomes even more salient.

Parental Factors that Influence Language Development: Parent-Child Talk, Deaf vs. Hearing Parents, Stress, Perceptions/Beliefs, and Self-Efficacy Parental Involvement

Parental involvement is a critical factor in children's educational success (Yoshinaga-Itano, 2003; Moeller, 2000). Moreover, children with a hearing loss whose parents are well informed and who actively participate in their children's education earn higher grades and test scores. Children with participating parents have better social skills and improved behavior, and mainstream with hearing children more frequently than those children whose parents do not actively participate in the education of their children (Moeller, 2000; Calderon, 2000).

Parent education and involvement are essential to children with hearing loss (Calderon, 2000; Moeller, 2000; Beals et al., 1994; Geers & Moog, 1989; Lederberg & Golbach, 2002). Educational programs for parents of children with a hearing loss generally focus on how to care for and maintain their children's hearing device instead of techniques to develop communication skills for their children so they can succeed academically. Low-income families with children with a hearing loss are often late diagnosed and do not have the resources or parent education available to them (Estabrooks, 2006; Meadow-Orlans, 1994; Marschark, 2007).

Parent involvement and education are key components to the success of a child with a hearing loss's future, but so are parents' communication skills (Calderon, 2000). Calderon examined parents' involvement by looking at four child outcomes: language development, early reading skills, and positive and negative measures of social-emotional development. The sample population was 28 children between 9 and 53 months. The main predictors of success in early literacy for this sample were maternal communication skills and child's degree of hearing loss. The study found that parents who relied on outside resources, such as speech therapists, did not spend as much time interacting with their children at home compared to parents who did not have access to these resources (Calderon, 2000). Therefore, the study revealed the importance of parent involvement. Although the parents' involvement in their children's school-based educational program had a positive effect on academic performance, the strongest predictor for children's communication skill and academic development was parent communication skills (2000).

Another study by Reynolds & Temple (1998) examined hearing parents with children with a hearing loss and the correlation between parental participation and school achievement, and found that cognitive readiness at kindergarten entry was based on the level of parental involvement, even when factors such as parents' education, age, and gender, were held constant. However, this study had mixed outcomes when examining family-based influences and children's academic, language, and psychosocial adjustment. These results may have been influenced by the parents' attitudes and/or expectations toward their child's actual achievements, parents' coping skills, and family values regarding education of their disabled child.

Parental participation in the education of disabled children is also influenced by social stigma and misconceptions about hearing loss. According to a study by the Better Hearing Institute (2010), 1.23 million or 1 out of 6 owners of hearing aids in the United States over the past five years do not wear their hearing aids. The 6-10 years of age group has the greatest percentage of hearing aid owners not wearing their hearing aids. The study identified that one reason a child does not wear hearing aids is parents' perception of the negative stigma placed on their child in an educational environment (Better Hearing Institute, 2010). Hintermair (2006) reported parents approached this disability with their own fears, stigmas, and lack of knowledge. Estabrooks (2006) suggested it would prove beneficial for parents to be taught not only how important it is for their children to wear their hearing device during all waking hours, but how not being able to hear sounds negatively impacts their child's language ability. Through knowledge and dispelling misconceptions of hearing loss, parents of children with a hearing loss can be better prepared to navigate the educational system (Estabrooks, 2006). Outside the educational system, parent-child communication in the home plays a key role in a child with a hearing loss's language development.

Parent-child talk. Parents play a significant role in developing language through parent-child talk. Marschark (2007) found that parent-child interaction from an early age could positively impact a child with a hearing loss's social, cognitive, and language development. Estabrooks (2006) states that parents need to learn the importance of speaking often to their child with a hearing loss for the development of positive linguistic, cognitive, and social-emotional skills. As the nuclear and extended family make up the majority of a young child's immediate environment, parental conversation can potentially create a stimulating environment, rich with language and complex thinking. Parents may need to be taught specifically how to speak with their child in ways that encourage richer vocabulary and communication skills (Lederberg & Everhart, 2000).

In the development of communication skills, multiple studies have shown that parents of children with a hearing loss can improve their children's receptive and expressive language by talking to them as much as possible (Robertson, 2009; Calderon 2000; Moeller, 2000; Ling, 1988; Woods, 1986). Just as hearing children do, children with hearing loss learn to speak through listening, and must hear a word before being able to say it (Robertson, 2009; Ling, 1988). Due to the advancement in technology from digital hearing aids to cochlear implants, children with a hearing loss no longer need to learn to speak through lip reading, but rather can learn through audition alone. Therefore, parent talk is extremely important to a child's language development. Through active interaction and parent-child talk, children with a hearing loss develop a sense of the rhythm of the language and begin to form words naturally. Parents of children with a hearing loss can learn to enhance language through their actual interactions with their children (Beals et al., 1994). For example, instead of a parent giving directives, such as "sit down," a parent can expand language by saying, "Sit down on the brown wooden chair."

Although parents of children with a hearing loss can enhance their child's language within their immediate environment through parent-child talk, parents must be aware of incidental language often not heard by their child with a hearing loss (Robbins, 2000). The majority of language development in hearing children is through incidental language—language they overhear through conversations (Robbins, 2000). Since children with a hearing loss generally do not hear incidental language, they must be directly taught language. However, parents of children with a hearing loss may have little knowledge of how to interact with their child and of ways that they can enhance their child's language (Harrison & Roush, 2001; Moeller, 2000). Through parent training, techniques can be taught that allow parents to maximize their time spent on, and the quality of, parent-child talk (Steinberg et al., 2003).

Learning language is a more complex process than simply learning how to produce sounds to speak. The long-term Home-School Study of Language and Literacy (Beals et al., 1994) investigated the various ways in which home and preschool experiences affected the literacy skills of low-income children age 3 through early school years. The study distinguishes between the "immediate" and "non-immediate" talk of mothers from low-income families when reading stories to their child. "Non-immediate" talk is employed when a mother asks questions about the characters in the story, explains the meanings of the words, makes inferences and predictions, and discusses settings and main ideas. "Immediate" talk is employed when a mother asks questions pertaining only to the book itself. Use of "non-immediate" talk correlated positively with children's story and print comprehension upon reaching school age. This study also addressed how explanatory and narrative conversations between parent and child resulted in larger receptive vocabularies and listening comprehension scores, and found that teaching parents how to communicate with their young child with a hearing loss could expand their critical thinking and cognitive skills and improve the development of word knowledge and language acquisition.

Parent communication skills impacted a child's literacy development. A study by Raikes and Thompson (2005) examined 2,600 low-income mothers and their children who participated in 17 Early Head Start programs nationwide, finding that mothers who read to their child regularly from age 14 months to 36 months had children with greater cognitive and language development than the mothers who did not (Raikes & Thompson, 2005). A study by Yarosz and Barnett (2001) featured mothers with less than a high school diploma. When asked how often they read to their child, 13% of Caucasians said they had never read to their child compared with 48% of Latino mothers who did not speak English (Yarosz & Barnett, 2001).

Deaf vs. hearing parents. Previous studies have distinguished between the ways hearing and deaf parents interact with their children, providing techniques for improvement. Hearing parents of children with a hearing loss tend to control the interaction and be more topic-driven (Meadow-Orlans & Steinberg, 1993). Meadow-Orlans and Steinberg's (1993) study revealed that hearing mothers' interaction with their 18-month-olds with hearing loss was less flexible, more intrusive, and involved less positive engagement. The study found a positive association between the level of social support received by the hearing parents and positive interaction with their child with a hearing loss. Power et al. (1990) found that when mothers corrected their child more often, their child produced shorter utterances and fewer linguistic initiatives. When a child does not have expressive skills, the flow of conversation by the parent can be helpful, but as the child develops expressive skills, parental directives, topic control, and flow of conversation can actually inadvertently hinder the growth of a child's language development (Power et al., 1990).

Several studies have concluded that hearing mothers of children with a hearing loss discourage the active participation of their children to engage in dialogue (Schlesinger, 1988; Wedell-Monning & Lumley, 1980). Tannock (1988) identified three ways that mothers control interactions with their child with a disability: response control, topic control, and turn-taking control. Response control is represented when a mother of a child with a hearing loss primarily uses commands or questions to get a response. Topic control is based on the mother’s dominance of the topic, and is unrelated to a child’s ongoing topic or activity. Lastly, turn-taking control is used when a mother dominates the interaction by engaging in long or frequent turns in conversation with less emphasis on the child’s input. Language becomes noticeably delayed in children with a disability when parents become more dominant (1988).

Maternal dominance might be a reaction to a hearing parent’s “sense of powerlessness” as opposed to deaf parents (Schlesinger 1988, p. 306). Lederberg and Everhart (2000) found that hearing mothers of children with a hearing loss did use slightly more maternal control compared to hearing mothers of hearing children and deaf mothers of children with a hearing loss. This finding could be based on the fact that hearing mothers of hearing children and deaf mothers of children with a hearing loss share the same language, allowing for a more natural setting for communication. Furthermore, the children with a hearing loss in Lederberg and Everhart’s (2000) study used a visual approach to communication (sign language) and the hearing parents used a dual modality of both auditory and visual approaches to communicate with their child. As a result, the hearing parent-child with a hearing loss interaction was more strained (Lederberg & Everhart, 2000). Such findings may suggest what Wood et al. (1986) determined that childhood deafness leads hearing adults into “spirals of increasing control” (p. 2). Robertson (2009) found that parent education and language learning workshops would encourage less maternal control and provide parental techniques to help their child with a hearing loss develop language, including recasting, asking open-ended questions, and providing positive feedback (2009).

Parental stress. Higher levels of parental stress have been associated with higher rates of behavior problems and poorer social and emotional development for both hearing and nonhearing children (Crinic & Low, 2002; Hintermair, 2006; Lederberg & Everhart, 2000). Quittner and colleagues (2010) studied parental stress and its association with language delays and behavior problems in their children with a hearing loss. The study had a sample population of 181 children with a hearing loss and 92 hearing children, and controlled for maternal education and family income. Self-reports and child behavior problems measured parents' stress. Language delays were measured through researcher observation. Not surprisingly, parents of children with a hearing loss had more context-specific stress. For instance, if the children had greater language delays, then the parents had greater stress, as they had to find new strategies to effectively communicate with their children. The study suggests the need for families to learn appropriate techniques for communication within a natural setting, both to reduce stress and to improve the child's language learning (Quittner et al., 2010; Jackson & Turnbull, 2004; Woods et al., 2004).

Parental perceptions and beliefs. Parents' perceptions of and beliefs about hearing loss can have a lasting impact on both the child and the family. Parents often experience a ripple effect of grief, shock, and disappointment when they are told their child cannot hear (Luterman et al., 1999). The extended family can become a source of mixed emotions, as they too are grappling with adjusting to a child with a disability (Bat-Chava & Martin, 2002). The negative impact can resonate throughout the entire family, as siblings often feel disconnected from the family when their parents' attention is directed toward the child with a hearing loss. This can lead to resentment and internal conflict (Bat-Chava & Martin, 2002).

Emotional conflict within the family can be further strained by social stigma (Bat-Chava & Martin, 2002). The Better Hearing Institute Marke Trak VII study by the University of Wisconsin sampled 475 parents of deaf and hard-of-hearing children under the age of 18 (Kuchkin, 2007). Each parent was given a survey on why hearing aids were not being used. The responses included parents' minimization of hearing loss in their child, professional recommendations not to wear the hearing device, social stigma and attitudes toward hearing aids, lack of financial resources, and lack of knowledge and experience about hearing loss. One out of every three parents who participated in the survey noted that stigma impacted their decision not to have their child wear the hearing aids and stated that physicians agreed with them that the stigma of hearing aids outweighed the benefit of using the hearing device. Twenty-two percent of the parents said they were embarrassed to have their child wear hearing aids, 19% said peers made fun of their children, and 17% felt that their child looked disabled or mentally slow when wearing hearing aids. The significant amount of minimization by parents and misinformation by pediatricians confirms the importance of parent education and advocacy. The Better Hearing Institute study (2007) found that children who were not encouraged to wear a hearing device and whose parents were uninformed about hearing loss underperformed throughout their childhood and adulthood, impacting their job attainment and overall ability to communicate with society (Kochkin, 2012).

The problem with many of the research studies that investigate spoken and language outcomes is that there are varied factors that can influence the child's communication outcomes. Geers et al. (2007) found that the type of sensory device (cochlear implant or hearing aids) may not be the primary influence, but rather the age at identification of hearing loss, mode of communication, additional disabilities, parent involvement, and quality of early intervention (2007). Other research has found a greater degree of hearing loss to be one of the main predictors of lower spoken and language outcomes (Wake et al., 2005; Sininger et al., 2010; Nicolas & Geers, 2006). The age of identification research (Nicolas & Geers, 2006) has contrary outcomes, with some studies showing that age of identification is associated with better outcomes in some children, but not in others (Fitzpatrick et al., 2008). Despite these many factors, Moeller (2000) states that parental involvement plays a key role in the development of communication in children with a hearing loss.

Parental self-efficacy. Level of self-efficacy has been shown to influence the amount and quality of parent-child interaction (DesJardin, 2005). Self-efficacy is defined as persistence in a given task until success is achieved (Bandura, 1989). Thus, parents' perception of their own skills can influence the way they interact with their child with a hearing loss. Positive self-efficacy is related to parents' perceived competence in their role as parents and their positive viewpoint on how they help to meet their child's needs. Negative self-efficacy is linked to maternal depression (Teti & Gelfand, 1991), perceptions of child difficulty (Coleman & Karraker, 2000), and stress (Raikes & Thompson, 2005). DesJardin (2005) noted that parents of children with cochlear implants who perceive themselves as more knowledgeable may actually have more positive interaction due to their self-efficacy. DesJardin also suggested ways to influence positive self-efficacy in order to help parents facilitate better language models for their children and improve parent-child interaction. DesJardin's suggestions include providing positive verbal feedback to parents as they work with their child and having parents observe other parents or educators modeling productive parenting activities to promote language learning.

Overview of Effective Strategies for Language Development

Regardless of obstacles such as poverty or low education levels, parents of children with a hearing loss can be taught effective methods for enhancing their child's language and literacy development and strengthening communication skills (Marschark, 2007; Moeller, 2000; Easterbrooks et al., 2000; Raikes & Thompson, 2005; Yarosz and Barnett, 2001). Because quality of parent-child conversation is an important factor to a child's language development, parents of all socio-economic status (SES) levels can have a positive impact on their child's development by following conversation techniques such as asking open-ended questions instead of yes-or-no questions, presenting the child with multiple choices instead of one choice (Beals et al., 1994), and reading and asking questions with their children on a regular basis (Robertson, 2009; Yarosz & Barnett, 2001).

Narrative and explanatory conversations between parent and child result in larger vocabularies and listening comprehension ability among low-income children (Beals et al., 1994), and greater cognitive and language development has also been found in children whose parents read to them regularly, especially between the ages of 14 months and 36 months (Raikes & Thompson, 2005). Reading to their children, engaging in "non-immediate" talk about the stories, and explaining words and themes are essential strategies parents can use in encouraging their children's language skills.

The style in which parents engage with their children with a hearing loss is important to language development (Tannock, 1988). Based on Tannock's (1988) findings that language becomes delayed in children with a hearing loss when parents become more conversationally dominant, strategies for parents to encourage language growth in their child include allowing the child to take control of the topic during conversation and permitting equal turn-taking, focusing on the input or response from the child (Tannock, 1988). Similarly, speaking *with* the child instead of *to* the child and keeping communication inquiry-based rather than directive influence a child's development of communication skills (Schlesinger, 1988).

Encouraging positive self-efficacy in parents has also been shown to promote language learning in their child (DesJardin, 2005). Providing parents with positive verbal feedback and placing them in an environment where they can observe other successful parents and educators have been shown to be beneficial influences on parental self-efficacy (DesJardin, 2005).

Conceptual Framework

This study uses Vygotsky's constructionist theory and Bronfenbrenner's ecological systems theory to understand the needs of low-income Latino parents and how they interact with their children with a hearing loss. The study will address the cultural, socio-economic, and environmental factors that can impact families and their children with a hearing loss's learning outcomes.

Vygotsky's theoretical framework is based on how learning occurs in a socio-cultural context. The theory focuses on the cognitive and language development of social interaction and play among children with adult guidance, that is, through the use of the primary caregiver's support or "scaffolding" a young child to a higher level of thinking (Vygotsky, 1962). My study will draw upon constructionist theory to explore the need for parent-child interaction to enhance language development through parent workshops. Vygotsky's constructionist theory focuses on the zone of proximal development. Coffey (2004) defines the zone of proximal development as "the gap between what a learner has already mastered (the actual level of development), and what he or she can achieve when provided with educational support (potential development)" (p. 1). By asking questions and recognizing a child's individual learning style, the parent, teacher, or mentor can address the immediate needs of the child by identifying the child's actual level of development and begin scaffolding to reach the child's potential learning outcome (Vygotsky, 1962). It is through social interaction that full development in the zone of proximal development can be attained. My study provided language-learning workshops to low-income Latino parents to teach parents how to interact more effectively with their children with a hearing loss in hopes of maximizing developmental outcomes.

Bronfenbrenner's systems theory (1986) addresses the layers of the environment that can impact a child's development, including poverty. The immediate family can have a negative or positive effect on a child's development. A series of studies reported by Dunst et al. (1986) examined the impact of a family intervention program and used Bronfenbrenner's theory to demonstrate that the amount of support mothers received from intervention agencies, other community organizations, and church was important to how they interacted with their children. These studies revealed that children's development was related to the social support that their mothers received rather than social support for the children. Family and early intervention programs were useful to relieve stress and influence attitudes toward disability and maternal well-being.

Limitations and Gaps in Research

A consistent limitation in previous research on parents and their children with a hearing loss is small sample size. This may be due to the amount of commitment needed by the parents in order to participate in these earlier studies. Also, many of the families participating in these studies were middle class as well as educated beyond high school; thus, they were not representative samples of the deaf population (Geers & Moog, 1989; Calderon, 2000; Yoshinaga-Itano, 2003; Lederberg & Everhart, 2000). The children studied were generally under age 5, and the studies rarely included low-income school-age children with hearing loss. Many of the samples were homogeneous, reflecting little ethnic diversity. Consequently, previous findings may not accurately represent all types of families in the United States. Additionally, most research on children with hearing loss focused on the pedagogical relationships between teacher and child, with emphasis on the outcomes of the child with a hearing loss. Few studies assessed parents' current knowledge of hearing loss or the iterative effects of parent workshops. Moreover, previous research has not addressed the perspectives of low-income Latino families of school-age children with hearing loss whose primary mode of communication is spoken language.

Summary

Although the majority of children with a hearing loss in the United States come from economically disadvantaged Latino families, few studies have targeted these groups, and no strategies have been implemented for helping Latino parents cope with, and encourage growth and learning skills in, their offspring. Research often looks through the lens of a deficit model that can create negative stereotypes of children and families who are living in low-income circumstances or live in poverty, as opposed to welcoming cultural and linguistic differences to create a richer school environment. Studies conducted on children with a hearing loss have proven the importance of early intervention and parental engagement in preventing future illiteracy, ineffective communication skills, and unemployment among the deaf population.

Because of many factors, including lack of knowledge about deafness, social stigma, lack of economic resources, and low parental education levels, low SES families of Latino descent are challenged by the resources necessary for their child's development, such as properly maintained hearing aids and speech therapy. Similarly, Latino parents are likely to rely on public schools and medical clinics to decide on treatment and educational placement options for their children. Also, language barriers among hearing Spanish-speaking parents and their children can add to parental stress levels and can severely limit essential early communication between parent and child, inhibiting children's language development.

In conclusion, utilizing the framework of Vygotsky's constructionist theory and Bronfenbrenner's ecological systems theory, this study sought to examine low-income Latino children with a hearing loss's parents' perceptions of the benefits of being enrolled in the after school program, and whether the strategies of language development presented actually changed the way they communicated with their children at home. The study examined whether there was a difference in perceived aspirations for their children after attending parent education workshops.

This study contributes to the understanding of parents' whose child with a hearing loss uses spoken language. Although research is mixed as to the best method for developing language in children with a hearing loss, the study adds to the field of deafness by understanding this population of families and the perceived benefits of parent education.

This study addressed the following research questions:

1) What are the characteristics of low-income Latino parents of a child with a hearing loss who enroll in the after school program?

   a. What are the characteristics and demographics of the families enrolled?
   b. What are the self-reported needs of the families enrolled?
   c. What services do the families currently receive at their school and what services do they seek to receive at the after school program and why?

2) What are the characteristics of the program offered?

a. What services does the program provide for the parents and child with a hearing loss?

b. How does the program fill in the families' perceived gaps in their child's education?

3) What attributes do low-income Latino families give the program?

a. Based on parent reports from Latino families enrolled in the after school program, what changes in their child's development (linguistic, auditory, speech, pragmatic, etc.) have been observed since starting the program?

b. How, if at all, does the program change the way Latino families interact with the school Individual Education Program team, including teachers, speech therapists, etc.?

c. To what extent do they perceive the weekly parent education classes to have supported their personal needs and needs for their child?

d. Based on self-report, how have Latino parents' aspirations for their child changed, if at all, since attending the program?

e. In what ways, if any, do Latino families report the parent education classes have changed their views of their child's educational progress and future and why?

Chapter 3 - Study Methods

A prominent gap currently exists in research that focuses on understanding the needs and experiences of low-income Latino parents with children with a hearing loss. This gap exists despite the fact that the Latino population is now the fastest growing minority group in the United States (Flores et al., 2012) and the United States has an increased population of Latino/Hispanics who have children with a hearing loss (Rhoades et al., 2004). Rhoades et al. (2004) state that professionals need to understand how income, family structure, and ethnic, cultural, and linguistic diversity will change the way we provide services to children with a hearing loss from Spanish-speaking families. Parent education can serve to meet some of the needs of these families, and research can identify those needs. When a family has a child with a hearing loss, communication is the desired outcome, whether it is sign language or spoken language. Whatever the form, the goal is to prevent the child from experiencing isolation. Families who choose the path of spoken language often struggle to afford individual private therapy or do not receive adequate services from their public school system. As a result, children with a hearing loss can have deficits in their communication abilities, which can subsequently impact their educational, social, and cognitive abilities as well as their speech and language skills (Moeller, 2000; Robertson, 2009; Marschark, 2007). For all children with or without disabilities, research shows positive outcomes from parent involvement. Thus, parents of a child with a hearing loss can greatly benefit from parent education (Moeller, 2000; Robertson, 2009; Robertson et al., 2006; Calderon, 2000; DesJardin & Eisenberg, 2007).

The lack of programs tailored to educating parents of children with a hearing loss is truly alarming, and for parents who are Spanish speaking, this situation can border on being overwhelming. Yet there is currently only one after school program in the entire United States that provides services for children with a hearing loss and families that includes weekly parent education for low-income Latino families with a school-age child who has a hearing loss and uses spoken language as the mode of communication.

Research Design

This study uses a qualitative design that seeks to provide a comprehensive understanding of Latino parents' experiences and perceptions of the services received at the after school program. Utilizing a qualitative approach using parent interviews and focus groups helps to identify the perceived benefits, language strategies learned and applied, and perceived aspirations of low-income Latino parents. The data collection instruments used were focus groups and interviews. In contrast to a quantitative design, a qualitative approach affords the deeper level of analysis needed to construct meaning of the experiences of this under-represented population. While the quantitative approach would provide a snapshot of data about Latino parents of children with a hearing loss, a qualitative approach cultivates personal insight and self-reporting of parents' experiences, and how they perceive the benefits of the after school program. Moreover, a qualitative approach lends itself to providing rich layers of data for a deeper understanding of this under-represented group.

History of the after school program. A teacher of the deaf, I founded No Limits in 1996. I realized that there were no similar programs for oral children with a hearing loss to improve their speaking abilities within a theatrical setting. Realizing that oral children with a hearing loss are often lost in the shuffle of the hearing world, I designed a language-enriched theater program where oral children with a hearing loss could develop their communication skills, expand vocabulary, learn proper models of grammatical structure, understand character development through role-playing, cultivate creativity, and develop public speaking skills to help them confidently move into the hearing world. I have written and published original plays that have been performed throughout the country by children with a hearing loss.

No Limits started in Los Angeles, but soon expanded its program across the nation. Its original shows have featured hundreds of oral children with a hearing loss from California, New York, New Jersey, Nevada, Connecticut, Pennsylvania, Oregon, Illinois, Michigan, Washington, D.C., and Minnesota. No Limits has produced 74 original productions reaching more than 100,000 people.

In 2002, No Limits expanded its program beyond the theatrical arts to provide free auditory, speech, and language training year-round, and in 2011 implemented its Leadership and Mentoring program to assist middle and high school students with a hearing loss in learning how to navigate the school system and prepare for college. As of 2013, 100% of No Limits students who participated over three years in the after school program are attending or have graduated from college. More than 90% of alumni return to No Limits to volunteer and work with the younger generation of children with a hearing loss and their families.

No Limits has a diversified stream of revenue, from individual contributions to grants by foundations and corporations to special events including our Annual Gala and Walkathon. As the founder and executive director of this nonprofit organization and the after school program, I have unlimited access to the site, which gave me flexibility in scheduling the focus groups and interviews used for the purposes of this study.

Participants. The parents were purposely selected for the focus groups and interviews based on the following inclusion criteria: parent of a school-age child with a hearing loss who uses spoken language as his or her primary mode of communication, Latino heritage, enrolled in the after school program for a minimum of one year, attended parent education classes, and economically disadvantaged and falling within the Poverty Index of 2013. Thus, the participants were low-income Latino parents from the greater Los Angeles area who had children between the ages of 5 and 14 with a moderate to profound hearing loss. The study was limited to parents who desired to have their children with a hearing loss use spoken language, rather than sign language, as their communication modality. Parents of school-age children with a hearing loss, ages 5-14, were targeted because there is little research on this age group. Furthermore, little research examines the parents of children with a hearing loss, more specifically Latino parents with socio-economic challenges.

Describing the site: The after school program—No Limits. No Limits Educational Center is an after school program dedicated to children with a hearing loss and their families. The center provides services to low-income families. The after school program is the only one in the United States that focuses on children with a hearing loss between the ages of 3 and 18 and offers weekly parent education classes to parents of children with a hearing loss year-round. The Educational Center's mission is to provide children with a hearing loss with the skills to be fully included with their hearing peers and to provide parents with the educational resources to become advocates for their child with a hearing loss.

No Limits is located in the heart of downtown Culver City, across from a movie studio and the live theater district. No Limits is located on the second floor of a bank building with approximately 4,500 square feet of space. The facility has colorful walls with eight individual speech rooms decorated thematically: "Space Room" features rocket ships on the walls and is used as a computer lab; "Ski Lodge," where the students can sit in a cabin surrounded by windows decorated with snow-covered tress; "Cowboy Room," which has costumes for dressing up as cowboys or cowgirls during the days of the Wild West; "Theater Room," with a stage to encourage children to develop their creativity and public speaking skills; “50s Diner” for children to learn to order food, make milkshakes, and practice role-modeling while learning how to communicate; “New England Lake Room,” where the lessons take place in a boat; “President’s Room,” which is used as a think tank for the older teens; and the “Jungle Room,” used as a literacy lab, with animals and trees throughout the room. In addition, the conference room is filled with musical instruments, including a piano, for the children to learn music appreciation and develop listening skills using a variety of instruments. One of the music teachers has a profound hearing loss and teaches the children how to play the piano as well as to discriminate between different sounds (high and low pitch). She also introduces different genres of music, such as jazz and rock. Other rooms include an audiology room, teacher resource room, and the executive director’s office. Behind the executive director’s desk is a wall of words that she and her staff use to teach and inspire the children, such as “confidence,” “gratitude,” “believe,” “inspire,” “dream,” “commitment,” and the phrase “I can do it!” When exiting the elevator, the first thing a visitor sees is a 3-D tree with branches hanging from the wall and ceiling. Under the tree is a park bench and four signs that read, “Confidence: *I Can Do It!;* Commitment: *I Will Do It!*; Perseverance: *I Will Do It Again and Again*; and Support Group: *Be a Friend*.”

The after school program offers individual auditory, speech, and language therapy for children with a hearing loss who use spoken language. The offerings include two hours a week with certified teachers of the deaf; two hours of literacy classes; weekly two-hour parent classes; a Leadership and Mentoring Academy to prepare middle and high school teens with a hearing loss for college; science, technology, engineering, arts, math (STEAM); academic tutoring; and a theater and music arts program. The parents and children attend the program three times a week (either Monday, Wednesday, and Saturday or Tuesday, Thursday, and Saturday, depending on the parents' work schedule). The same teachers work with the students in 10-week cycles, which culminate in a graduation ceremony where the students wear caps and gowns and deliver a memorized graduation speech that they write. They recite their speech in front of their parents, extended families, teachers from their public schools, educators in the field of deafness, and the general public. After the ceremony, the students and parents return to the program the following week with a new set of goals and objectives (or if previous goals were not met, they are revisited in the new session). The summer is dedicated to the No Limits theater program. Approximately half of the students who are enrolled in the Educational Center participate in the theater program.

Data collection procedures. Twenty low-income Latino parents/guardians who were enrolled in the after school program and had children under the age of 15 were invited to participate in the focus groups (Appendix F, G) and semi-structured interviews (Appendix H, I). The moderator of the focus groups and interviews recruited parents to participate in the study with an initial phone call. The moderator used a script (Appendix B, C) and asked the parents in Spanish if they would be interested in participating in the study. Since the parents were already enrolled in the after school program, it was emphatically stated that their participation would not impact their enrollment at the agency.

Parents were informed that their participation would be completely voluntary, that they could withdraw at any time, and that there were no consequences for declining to participate or withdrawing. There was no incentive for participation. It was explained that honest and frank input was important because we hoped to improve the program and our understanding of Latino parents of school-age children with a hearing loss.

Every person contacted was interested and thus, participated in the study. Each parent was given individual time with a translator to thoroughly review the informed consent form (Appendix D, E). The parents were then given times to participate in the focus groups (Appendix F, G). For convenience, the focus groups were arranged on days when the parents were already scheduled to attend with their child. Dinner, childcare, and a translator were provided for the four focus groups and 13 interview sessions. Once the parent signed the informed consent, each was given a reminder call the day before their scheduled focus group session.

In order to answer research question 1, "What are the characteristics of Latino parents of a child with a hearing loss who enroll in the after school program?" parents were asked prior to the focus group session to complete a form that included basic demographic information about themselves and their child with a hearing loss. The form was available in English and Spanish. The fill-in blanks included the family's length of time in the program, the age at which the child began the program, services received, current school placement, age at which the child was diagnosed with a hearing loss and age of amplification, and enrolled parents' highest degree of education. Also, through the focus groups and semi-structured interviews, data was collected to understand the characteristics of the families and their experiences of having a child with a hearing loss, including how they learned about the No Limits programs and why they enrolled, whether they were employed, the amount of travel time from home to the No Limits office, spouse's experiences, and where they found strength during times of hardship. Additional in-depth inquiries were conducted during the focus groups and interviews, where parents shared personal stories about their children and gave examples of any attributes of the after school program that addressed their child's needs, as well as their own. Twelve of the mothers spoke

Spanish only and seven were bilingual, speaking both English and Spanish. Four of the participants were separated or divorce. The average number of children in the participants' families was three.

Data collection methods: Focus groups. To answer questions 1 through 3 (What are the characteristics of Latino parents of a child with a hearing loss who enroll in the after school program? What are the characteristics of the program offered? What attributes do Latino families give the program?), there were four focus groups (three focus groups with five participants, and one with four participants). All of the parents or guardians who participated in the study were Latino. All 20 of the invited parents agreed to participate, though one parent dropped out for personal reason, resulting in an actual participation rate of 95%. See Table 3.1 indicating 19 participants for the focus groups and 13 participants for the interviews. Of the 19 participants, two fathers participated (one in a focus group and one who joined his wife for the interview). Another guardian was a grandmother who received full custody of her deaf grandson. The grandmother participated in the study and attends the No Limits parent classes. Two families have two children with hearing loss enrolled in the program. The 19 parents and guardians reflected on the experiences of 21 children.

Table 3.1

Number of Participants in Focus Groups and/or Interviews

Focus groups	Interviews
N=19	N=13 out of 19

The Spanish-speaking moderator conducted the focus group sessions with Dr. Tymika Wesley, a professor at the University of Indiana University Southeast and former teacher at No Limits. Dr. Wesley provided field notes and observations of parents' behavior to triangulate the data collected. Dr. Wesley was chosen for the study because she not only understands the needs of parents of children with a hearing loss, but also is familiar with the overall No Limits program. As the founder of the after school program, I chose not to be present during the focus groups and interviews to avoid bias and to allow parents to speak freely about the program.

The focus groups and interviews were designed to elicit responses to answer research questions 1–3. The focus groups and interviews were audio taped; immediately following the focus groups, the data was transcribed in both English and Spanish, and then reviewed along with the field notes before proceeding to interviews. While reviewing the data, I looked for themes and repeated responses in the answers to the research questions as well as any additional information that would provide greater insight and depth to the study. If a response was not sufficient to understand the parent's perspective, the interview method was used to fill in the gaps in data.

Dr. Wesley took field notes and observed while the Spanish-speaking moderator conducted the focus groups. The focus group sessions lasted between 90 and 105 minutes. According to the field notes, the parents seemed comfortable sharing their thoughts, but several of them became emotional when speaking about the day their child was diagnosed with a hearing loss and the impact it had had on their lives. During the focus groups, Spanish was used exclusively, since all the participants preferred it.

Semi-structured interviews. After the focus groups, the interview protocol (Appendix H, I) was designed based on gaps in the responses and/or need for greater understanding, as well as when new ideas from the focus groups surfaced. Of the focus group participants, 13 parents or guardians were purposely selected for the semi-structured interviews in order to represent the range of demographics and perspectives that emerged during the focus groups. The parents were eager to share more about their personal experiences of having a child with a hearing loss and to provide their own perspectives about the changes that had occurred since attending the after school program. In fact, 18 of the 19 focus group participants asked to be interviewed.

Interviews were used as a reflection process about the participants' self-efficacy and the potential benefits of attending the after school program and parent education classes. Interviews were semi-structured to elaborate on concepts brought up in the focus groups, elicit narratives from the participants to reveal more of their behaviors related to the program, answer follow-up questions, and, as previously mentioned, fill in any gaps in the focus group data. Varying perspectives of the participants were considered in order to provide a comprehensive understanding of the different characteristics and demographics. These characteristics included age of identification of their child's hearing loss, how long the child had been receiving services, type of school their child currently attended, types of services they were receiving at their current school, how many other children were in the family, parents' level of education, parents' level of participation, child's level of development, whether they were bi- or mono-lingual, and what other support or resources were available to them. Open-ended questions were used to prompt narrative responses. The interviews lasted approximately 60 minutes. All data from the interviews were transcribed in both English and Spanish immediately. During the interviews, four of the parents who were bilingual preferred that the interview be conducted in English while the rest of the interviews were conducted in Spanish only.

Data Analysis

Krueger and Casey's Analysis Plan guided my data analysis (Krueger & Casey, 2000). The Plan involves 1) identifying a thematic framework to developing categories; 2) indexing and coding by sifting through data, highlighting and sorting, and identifying connections pertaining to the research questions; 3) charting by rearranging the quotes into new themes and data reduction; and 4) mapping and interpreting the data and identifying relevant findings.

The data analysis was inductive, moving from specific raw data to abstract thoughts, concepts, and categories (Merriam, 2009). The data analysis method used for the focus groups and interviews began by organizing and preparing the data for further analysis by thoroughly reading and re-reading the transcribed data. I then digitally coded the data into different themes that emerged. These responses were tallied as well as open-coded for themes that emerged from the data. I used member checking by inviting three randomly selected participants to review a summary of the data analysis and sought feedback as well as checked for accuracy. I engaged in reflectivity as a researcher and reviewed my own assumptions and actions that might influence a situation; I also included any negative or discrepant information. Therefore, when reviewing data, I did not label the data by the parents' names, but rather numbers, because I did not want to review data with preconceived thoughts about the parent or child during my data analysis. However, this was not possible for some transcriptions because some parents included their child's name when responding to the questions. Not being fluent in Spanish myself, all transcriptions of the interview audiotapes were crossed-checked by two Spanish translators, as I am monolingual. During my analysis, I imported the source data from the background information form (Appendix J, K) provided by the parents, to triangulate the data with the interviews, field notes, and focus groups. I also used the self-reported data from parents on the language and academic levels of their child. The research questions always guided the emergence of findings and sub-findings.

Ethical Considerations

As a teacher of the deaf and the founder of the nonprofit organization that is the site of the study, there was the potential for inherent biases in my study. My perspective may be viewed as being skewed toward valuing children with a hearing loss who use spoken language as opposed to sign language. Historically, debate has prevailed on what mode of communication is best for children with a hearing loss, and the intensity of the contrary points of views remains.

As the qualitative researcher, I had to be cognizant of my prior experiences with low-income Latino families of children with a hearing loss in order to not draw inaccurate inferences from the parents' responses during the interviews. Another possible bias I had to consider was that the parents might try to satisfy me with specific responses. Therefore, by having a third-party Spanish-speaking moderator conducting the interviews, parents were likely to feel more comfortable speaking frankly about the after school program and their experiences.

Anonymity of individuals was protected through the use of pseudonyms during the process of coding and recording data (Creswell, 2009). One desktop Mac computer with password protection was designated solely for the data analysis. All data was saved on the Internet with a secure password.

All data was protected in a locked file cabinet at my home, and data—including audiotapes—will be destroyed after three years. Audiotapes were used during the focus groups and interviews. Field notes were taken during the interviews and focus groups. A third-party transcriber transcribed the audiotapes from the interviews and focus groups. Confidentially of participants and data collected was of the upmost importance.

Trustworthiness

It was my aim to ensure that my study would be trustworthy. Thus, I used the following procedures to ensure the accuracy and credibility of my findings: triangulation, member checking, reflectivity, and inclusion of negative or discrepant information.

In my analysis, I triangulated the data to generate a multi-layered understanding of the findings through interviews, focus groups, and field notes. Member checking ensured the authenticity of the data collection (Creswell, 2009). Three of the participants checked the data transcriptions for accuracy. Reflectivity helped me to avoid bias in my analysis and observations (Creswell, 2009). I was extremely cognizant of my role as the executive director of the program and as researcher to ensure that I stayed true to the data. I avoided any personal opinions or past experiences with the participants that were unrelated to the data at hand. As a researcher and a teacher of the deaf who has taught parent classes for over 10 years, I was highly sensitive to any potential bias I might bring to the study. My discussion chapter includes any negative or discrepant information from the study.

Chapter 4 – Study Findings

This study investigated the characteristics of Latino parents with school-age children who have a hearing loss and have attended No Limits for at least one year. The study specifically sought to determine whether the parents perceive their understanding and experiences to have changed as a result of receiving services, including parent education classes, at the after school educational center No Limits. This study focused specifically on low-income Latino parents since this is an understudied population in the field of deafness.

This study's participants were selected based on their enrollment in this after school program and being low-income Latino parents of children under the age of 15. The study will explore this program by looking through the lens of low-income Latino families with children with a hearing loss. Specifically, the study will seek to answer the following questions: 1) What are the characteristics of Latino parents of a child with a hearing loss who enroll in the after school program? 2) What are the characteristics of the program offered? 3) What attributes do Latino families give the program?

The next section of this chapter presents the findings that were germane to answering research questions 1–3. Spanish was the primary language used by parents during the focus groups and interviews. To honor the integrity of the responses, the Spanish data is included along with the English translation. Additionally, a distinction is made in the study between parents of a younger child vs. parents of older children to create a richer understanding of the parents' testimonials. When referenced as a "younger child," the child's age is between 5 and 9 years old and "older child" between the ages of 10 and 14 years old.

In addition to basic factual information, the parent responses were analyzed thematically to gain a better understanding of the needs and profiles of the parents who enroll in this after school program. Select parents' comments are included to represent the overarching sentiments that parents expressed. The quotations are cited in original form with translation into English where appropriate.

Twenty parents/guardians who met the criteria of having children under the age of 15 with a hearing loss, participating in the after school program at No Limits, and being low-income Latino, were invited to participate in the study. All agreed, though one parent dropped out for personal reasons, resulting in a 95% participation rate. Two families have two children in the program, resulting in 21 children being profiled in this study.

Overview of overarching themes are enumerated below then described in detail.

Research Question 1: What are the characteristics and demographics of Latino parents of a child with a hearing loss who enroll in the after school program?

- Prior experience with hearing loss. The majority (85%) of the families had no prior experience with hearing loss before their child was born and as a result, they did not know where or how to find resources to help their child with a hearing loss.
- Etiology of hearing loss. The majority (68%) of parents/guardians did not know the etiology of their child's hearing loss.
- Type of loss. With the exception of one child, all the children (94.7%) have a sensorineural hearing loss as opposed to a conductive loss (0.05%).
- Severity of loss. The majority (90%) of children have severe to profound hearing loss. Two children (10%) have a moderate hearing loss.
- Age at diagnosis and amplification. The age of diagnosis of hearing loss ranged from birth to 60 months, with a median age of 28 months at time of diagnosis. The gap between age of diagnosis and the age of amplification ranged from 1 to 12 months, with a median wait time

of 5.5 months.

- Parents' highest degree of educational attainment. Of the parents who disclosed their educational attainment, two-thirds reported to have completed high school or college; one third completed middle school.
- Employment status. Sixty percent of the parents worked full time. Of the seven who do not work, three had quit their jobs to care for their children.
- Reactions of spouses. Most mothers (80%) reported that the fathers took longer to adjust to having a child with a hearing loss. One parent said the stress resulted in a divorce; another said it strengthened her marriage.
- Distance from home to No Limits. The drive to the after school program ranged from 20 minutes to 2 hours, with an average drive of 45 minutes.
- Reasons for enrollment in the afterschool program. The parents universally reported that they enrolled in No Limits to receive more services for their child.
- Sacrifices. Of the 17 parents with more than one child, 13 (76%) reported that their hearing children had to sacrifice the most because all the parent's attention was on their child with a hearing loss.
- Finding strength. The parents found their strength from their child with a hearing loss and/or God.

Research Question 2. What services do the families currently receive at their school and what services do they seek to receive at the after school program and why?

- Services at school. The parents reported a school-based services ranging from 30 minutes of speech therapy in a weekly group session to 60 minutes of individual therapy twice a week.
- School placement. The majority of the parents changed their school placement after being

enrolled in the after school program.

Research Question 3. What attributions do Latino families give the program?

- Academic and communication growth. All parents attributed their children's academic and communication growth to the services and knowledge received in the after school program.
- Skills applied at home. All parents reported having applied the skills they learned in the after school program to the home setting.
- Trust. Many parents (42%) felt they were treated differently because they were Latino, non-English speaking, or of low income.
- Stress and self-efficacy. The majority (89%) of the parents reported that the parent classes reduced their levels of stress.
- Aspirations. Unanimously, the parents reported that their aspirations for their children had changed after being in No Limits.

The following participant responses address Research Question 1: **What are the characteristics and demographics of Latino parents of a child with a hearing loss who enroll in the after school program?**

Themes relating to Research Question 1 emerged from the parent/guardian interviews: prior knowledge about hearing loss, child's etiology of hearing loss, child's type and degree of hearing loss, and child being late diagnosed and amplified. Additional investigation to fully understand the characteristics of the families included the parents' highest degree of education, working or nonworking, spouses' involvement, and distance to and from home and the after school program.

Experience with hearing loss

The majority of the families interviewed, sixteen of 19 (85%), had no prior experience with hearing loss before their child was born and as a result, they did not know where or how to find resources to help their child with a hearing loss.

A high percentage (85%) of participating families did not have other people in their family with a hearing loss, and thus it was their first experience with the disability. As a result, most parents reported that they were devastated and shocked by the news. When the parents found out their child had a hearing loss, they felt alone and lost. This is consistent with research that reveals that 90% of parents who have a child with a hearing loss are hearing parents and have no idea what to do and where to go when they find out their child has a hearing loss (Mitchell & Karchmer, 2004). A parent who had a younger child with a hearing loss said:

Cuando vine a No Limits, Yo no sabía nada. No tenía ni idea. Estaba perdida. Yo no entienda cuál era el problema de mi hijo, no sabía nada. Yo no tengo familia con sordera y no sabes nada. Ahora tienes un niño pequeno con un problema que no sabes qué hacer ni qué esperar.	**When I came to No Limits, I didn't know anything.** I had no idea. I was really lost. I didn't understand what my son's problem was and I didn't know anything. **I don't have family with deafness** and you know anything. Now you have a little kid with a problem that you don't know what to do or what to expect.

Parents of older children with a hearing loss shared the same sentiment:

Dora: Me sentía perdida ... porque yo no sabía cómo actuar. Yo no sabía lo que necesitaba. Si necesitaba terapia? O ¿qué tengia que hacer con él. Cuando tu hijo es así, no lo sabes.	Dora: **I felt lost**…because I didn't know how to act. **I didn't know what I myself needed.** If I need therapy? Or what I need to do with him. When your child is like that, you don't know.
Carla: Yo estaba perdida. Yo estaba completamente perdida. Sabes, era mi primer hijo y [en] mi familia no hay nadie con problemas de audición.	Carla: I was lost. **I was completely lost. You know, he was my first child and [in] my family there is nobody with a hearing problem.**

A bilingual parent of one of the oldest children in the study said in English:

> Bianca: I feel like I was alone and frustrated because I wanted to do more for my son and if only I got support. [English original]

Another parent of an older child, Katrina, said in her interview that by coming to the No Limits parent classes, she felt less alone:

Katrina: No te sientes como si estuvieras solo. Te sientes que hay algo que tu está haciendo para ayudar a tu hijo.	Katrina: You don't feel like you're alone. You feel that there is something that you're doing to help your child.

Estela, who enrolled in No Limits with her child in third grade and whose daughter is now is in sixth grade, shared how difficult it was to initially accept that her child was deaf:

> Because the first opinion that she did not pass the hearing test, I was really, really hurt. And then the second one came back and they told us the same thing and I'm like, maybe the second time they'll tell us different, because of course she's little and she'll start talking soon.… But then the third time, after the third one, we're like, okay, let's try two more times and see what happens. **I would look at her not talking, but I still didn't want to accept that she had a hearing loss.** [English original]

Even in the cases of the two parents who had two children with a hearing loss, one parent was surprised to have another child with a hearing loss and, in fact, her second child was not diagnosed until age 4, although she had a 9-year-old child with the same disability.

Silvia: Con mi segunda hija me golpeó duro. Tengo dos hijos con pérdida auditiva. Luché mucho con los médicos porque ellos me decían que mi hijo era normal. Con las dos niñas me dijeron eso. Tuve que esperar un año para obtener una cita con el especialista. Fue difícil para mí, pero con suerte y la gracia de Dios ... que no era el médico que la diagnosticó primero, era un audiólogo del distrito escolar. El audiólogo dijo: "No puedo diagnosticar, pero yo creo que es	Silvia: With my second daughter it hit me hard. I have two kids with hearing loss. **I struggled a lot with the doctors because they would tell me my child was normal.** With both girls I was told that. I had to wait for about a year to get an appointment with the specialist. It was hard for me but with luck and God's grace... it wasn't a doctor that first diagnosed her, it was an audiologist from the school district. The audiologist said, "I can't diagnose her, but I

> una pérdida de audición." Y fue duro, pero en ese momento yo aceptaba todo porque ... yo estaba bien con eso porque Dios la envió a mí de esa manera y hay otros niños que están peor o más enfermos y tienen más problemas. Pero era difícil.

> think it's a hearing loss." And it was hard but in that moment I accepted everything because...**I was okay with it because God sent her to me that way and there are other kids who are worse off or are more sick and have more issues. But it was hard.**

One of those parents of a younger child who was premature with a heart condition said:

> Kasandra: Bueno, mi hija tuvo una cirugía de corazón así que nos sentimos como si hubiéramos pasado por algo difícil y ahora estamos aquí, de nuevo pasando por otra cosa. Realmente nos tiró al suelo. Pero una vez que supimos exactamente cual era su nivel de pérdida de audición realmente nos ayudó y nos quito un poco de la pérdida.

> Kasandra: Well, **my daughter had heart surgery** so we felt like we had gone through something difficult and now here we were again dealing with something else. **It really knocked us down**. **But once we knew exactly what her hearing loss level was, it really did help us and took a bit of the initial loss away.**

Many of the parents' stories referred to the lack of information from the doctors once their child was diagnosed and the difficulty of only speaking Spanish. One parent of a younger child said, "When my doctor diagnosed my son, he didn't tell me what I had to do. He didn't tell me that therapy existed. Nothing. I came from a family where nobody ever had hearing loss so you don't know." Silvia, who has two children with a hearing loss, said:

> Silvia: El doctor te da un diagnóstico y te dice que tu hijo es sordo, pero no te dice nada mas. Él no te dice que hay una escuela o hay esta terapia. No hay nada. Realmente tienes que tener suerte para que alguien te pueda explicar exactamente lo que está mal con tu hijo y qué tipo de servicios puede recibir. Mi hija mayor le diagnosticaron a los 4 años y ha tenido un IEP

> Silvia: **So the doctor gives you a diagnosis and tells you your child is deaf, but doesn't tell you anything else.** He doesn't tell you that there's this school or this therapy. There's nothing. **Truly you have to be lucky for you to get someone to try to explain to you exactly what is wrong with your child and what kind of services you can get.** My older daughter was

> durante los últimos 4 años y yo todavía no sabía lo que era un IEP. Yo no entendía todos los servicios que puedan tener hasta que llegué a No Limits con mi segunda hija vino a No Limits. Mi segunda hija teiene mas mejores servicios que mi primera porque ahora sé lo que pedir.

> diagnosed at age 4 and **she has had an IEP for the past 4 years now and I still didn't know what an IEP was.** I didn't understand all the services that she could have until **I came to No Limits with my second daughter came to No Limits. My second deaf child has much better services than my first because now I know what to ask for.**

A parent of an older child said:

> Josephina: Eres nuevo en esto. No sabes nada acerca de esta discapacidad. Cuando no lo sabes, porque no hay ningún miembro de la familia con el mismo problema. Y más que nada, la barrera del idioma, ser latino y no habla Inglés se hace un poco difícil. Y también con las escuelas de zonas latinas, hay menos ayuda. Ellos te escuchan menos solo para ir con la corriente y no hay progreso y so lo te dejan con eso. Te dejan en el limbo.

> Josephina: You're new to this. You don't know anything about this disability. When you don't know because there's no family member with the same problem. And more than anything, the language barrier, you don't know. **Being Latino and not speaking English gets a bit difficult. And also with the schools in the Latino areas, there's less help. They listen to you less and they just go with the flow and there's no progress and they just leave you with that.** They leave you in limbo.

Table 4.1

Parents' Report of Causes of Hearing Loss

Cause of hearing loss (Etiology)	Number of children
Genetic	3
Premature	2
Premature & Ototoxic (Drug-caused hearing loss)	1
Unknown	13
Meningitis	2

Etiology of hearing loss. Table 4.1 indicates three families in the study had a lineage of hearing loss. Three of the parents reported that their child was premature, with two of the children having a medical condition before age 2 months. For the third, hearing loss occurred through ototoxic medication used to treat serious illness. Two of the parents reported that their children had had meningitis, a bacterial infection of the membranes that cover the brain and spinal cord (meninges). Three parents had relatives with hearing loss; 13 of the parents reported that they did not know whether their child was born deaf or lost his hearing after birth. Thirty-three percent of the parents recounted that the doctor told them that their child was normal even though their child was over age 2 and not talking. Eight of the parents reported that their child was misdiagnosed. Four of those children were misdiagnosed as autistic and placed in an autistic classroom for at least 2 years before the age of 5. Berta, parent of a younger child with a hearing loss, shared that she was overwhelmed not knowing what was wrong with her child. One doctor said her son had water in the ear and he was fine. Then another doctor told her that her son did not have water in the ear. She said tearfully:

> Berta: No fue hasta que un médico me dijo: "Lo siento, tu hijo necesita audífonos." Yo no sabía de qué se trataba. Mis familiares me preguntaban: "¿Por cuanto tiene que usar esos?" Yo les decia no lo sé. Cuando mi hijo tenía 18 meses el Centro Regional me mando a una escuela para niños autistas. Yo iba a las reuniones de padres allí y escuchaba ellos hablar de los niños autistas y los síntomas de la misma. Me dije a mí misma que mi hijo no tenía nada de eso. Recibí una llamada de uno de los maestros de la comunicación total y me dijo soy un maestro para los

> Berta: It wasn’t until one doctor told me, “I’m sorry, your son needs hearing aids.” I didn’t know what that was about. **My family members would ask me, “How long does he have to wear those?” [hearing aids] I would tell them, I don’t know.** When my son was 18 months old, Regional Center sent me to an autistic school for children. I would go to the parent meetings there and listen to them talk about autistic children and the symptoms of it. I would tell myself that my son didn’t have any of that. I got a call from one of the teachers at total

niños que no pueden oír. Lo saqué de esa escuela [autista] y lo puso en la escuela de la senias. Nunca pense que el iba a ser capaz de hablar como yo algún día.	communication and she said, “I’m a teacher for children who can’t hear.” **I took him out of that [autistic] school and put him in the signing school. I never knew that he would be able to talk like me one day.**

Type and degree of hearing loss of children enrolled in program. Table 4.2 shows that 18 of 19 parents had children with a sensorineural hearing loss as opposed to a conductive loss.

Table 4.2

Type of Hearing Loss

Type of Hearing Loss	Number of Children
Sensorineural	18
Conductive	1

Sensorineural hearing loss occurs when the inner ear (cochlea) is damaged or there is nerve damage from the inner ear to the brain. This is one of the most common types of permanent hearing loss (ASHA, 2013). Conductive loss is within the middle ear and can often be cured with medication.

Nineteen of the 21 children of the parents in the study had severe to profound losses. The chart below shows the different degrees of hearing loss and outlines the degree of hearing loss for the children of the Latino parents from the study.

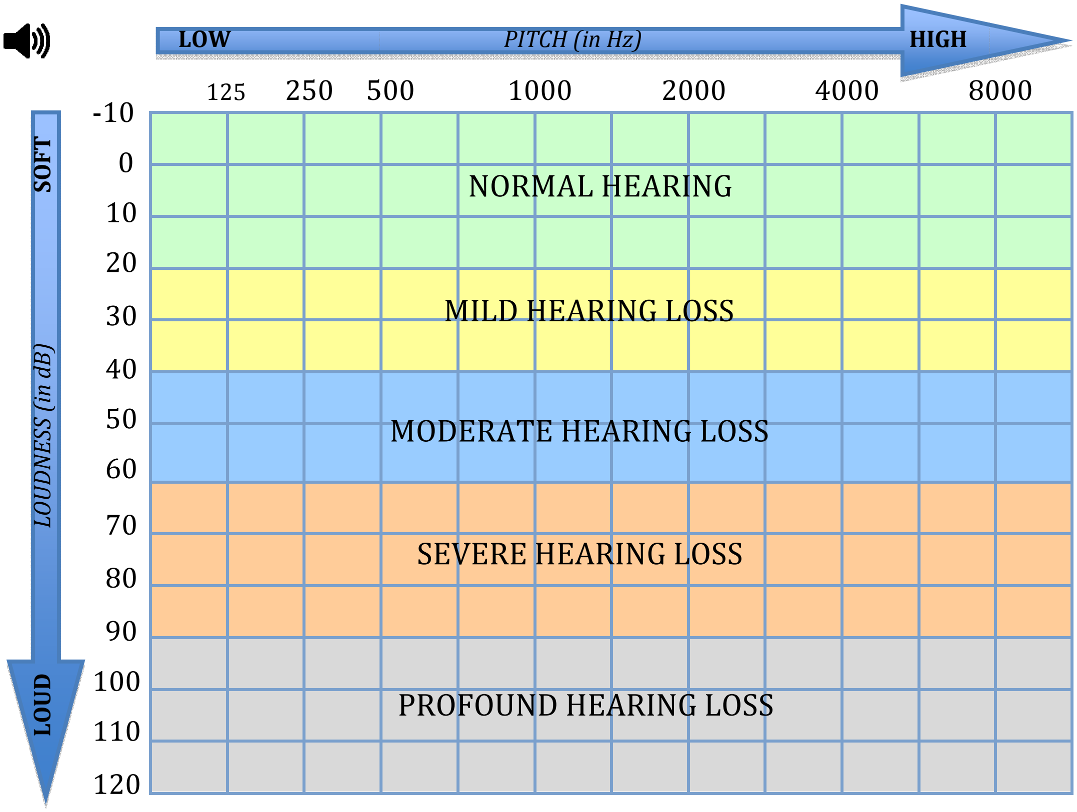

Figure 1. Degree of Hearing Loss

(No Limits, 2013; Adapted from American Academy of Audiology, and Northern, J. & Downs, M. (2002). *Hearing in Children* (5th ed.). Baltimore, MD: Lippincott Williams and Wilkins).

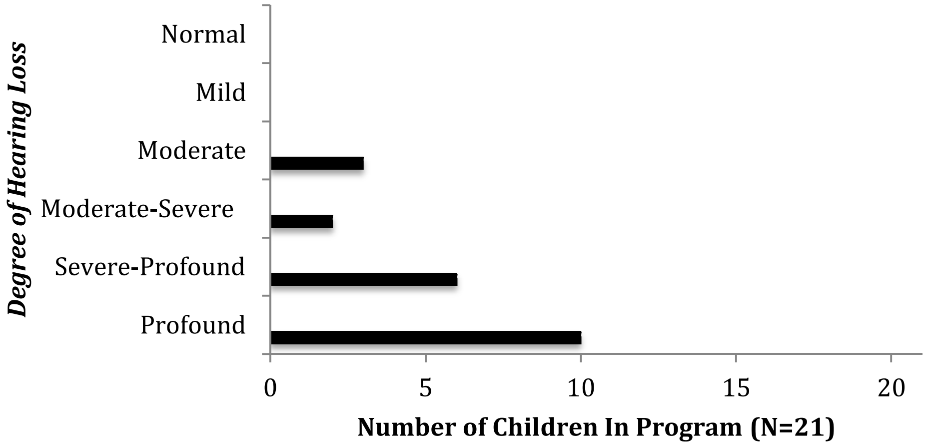

Figure 2. Participants' Child or Children's Hearing Loss

In line with the existing literature on Latino children with hearing loss (Portrait, 2009), the children in this study were diagnosed late, at average age of 26 months. This leads to the second important finding in the study.

Diagnosis and Amplification

Sixteen of 21 (76%) children were diagnosed at or later than 6 months.

Late diagnosis of a hearing loss is generally considered after 3 months of age with the goal of a child who is deaf or hard-of-hearing receiving appropriate intervention by 6 months (Lemajić-Komazec et al., 2008). The children were significantly late in their diagnosis of a hearing loss with over 40% not being diagnosed until age 3 or later in their life. Based on the findings, on average, the wait time between diagnosis and receipt of hearing aids was 5 months. Sixty-three percent reported that they received free hearing aids through California Children's Services (CCS) or Medi-Cal.

Two of the parents had health insurance through the husband's work when their child was born. One parent reported that she bought one of the hearing aids but could not afford the other one. It took her 9 months to pay the $1,800 for the first one and she had to wait another year and a half to pay for the second one. She later learned about CCS. The findings also revealed that children receiving hearing aids within the past 2 years had a longer time between age of diagnosis and age of amplification (through use of a hearing device) compared to children who were older and received hearing aids over 2 years ago. This may be because many CCS offices have an overload of cases, causing significant delay. Table 4.3 displays the length of time between age of diagnosis and age of amplification. The age of diagnosis of hearing loss ranged from birth to 60 months, with a median age of 28 months at time of diagnosis. The gap between age of diagnosis and age of amplification ranged from 1 to 12 months, with a median wait time of 5.5 months.

Juliana, parent of a younger child, explained the amount of time it took her to get an appointment with a specialist and the additional time it took for her child to receive amplification

Juliana: Mi hija tuvo meningitis a los 2 años...El doctor en America dijo que todo estaba normal y entonces le dije: "Creo que mi hija no oye. Tal vez fue debido a la meningitis. Necesito que la envie con alguien, un audiólogo para que puedan diagnosticarla." Entonces tomó más de 6 meses para conseguir nuestra primera cita. No fue hasta que tenía tres años que ella fue diagnosticda y luego otro año para conseguir sus primeros audífonos. Se puso los audífonos a los 4 años.	Juliana: My daughter got meningitis...at age 2.…The doctor [in America] said she was normal and then I told them, I think my daughter doesn't hear. Maybe it was due to the meningitis. I need you to send her to someone, an audiologist so they can diagnose her. **It then took over 6 months to get our first appointment. It wasn't until she was three that she got diagnosed and then another year to get her first hearing aids. She got her hearing aids at age 4.**
Silvia: Diagnosticaron a mi segunda hija de 3 años y 3 meses y le dieron audífonos 6 meses después. Mi hija mayor fue diagnosticada mas tarde, cuando tenía 5 años y le tomó casi más de un año y medio para que ella consiguiera los audífonos.	Silvia: They diagnosed my second daughter at 3 years and 3 months and they gave her hearing aids 6 months later. My older daughter got diagnosed later, when she was five and it took over a year and almost a half for her to get hearing aids.

Table 4.3

Child's age at diagnosis, amplification, and length between diagnosis and amplification

Parent's Name	Child's Age of diagnosis (months)	Child's Age of amplification (months)	Length between diagnosis & amplification (months)
Bella	18	22	4
Bianca	29	31	2
Carla	60	60	0
*Carmen	32	34	2
Carmen	9	13	4
*Clara Faye	48	60	12
Clara Faye	0	6	6
Dora	0	6	6
Estela	12	18	6
Helena	8	18	10
Isora	0	12	12
Josephina	0	3	3
Juanita	36	42	6
Juliana	36	48	12
Kamila	42	54	12
Kasandra	2	11	9
Katherine	42	42	0
Katrina	60	66	6
Krystal	24	30	6
*Silvia	44	48	4
Silvia	48	60	12

*Silvia, Carmen, and Clara Faye have two children with a hearing loss.

It is concerning that 76% of the children in the study were late diagnosed, given that much effort and money has been allocated for newborn hearing screening tests nationwide. Blamey et al (2001) found that low-income families often did not return for additional screening if their child failed the neonatal hearing test at the hospital, revealing a need to strengthen the follow-up procedures and turnaround time from diagnosis to amplification.

Geers (2003) and Robertson (2009) largely attribute the success of children with a hearing loss to early intervention. Children with a hearing loss benefit from early amplification, as they can learn to develop language alongside their hearing peers. With ages 0-6 years being the critical years for language development, meaningful language opportunities are being lost when children with a hearing loss are late diagnosed (Moeller, 2000). The parents in this study reported that their children were severely delayed in their communication and vocabulary skills, and attributed this to late diagnosis and receiving their child's hearing device months after their child's initial diagnosis.

Parents' highest level of education. Research has indicated that maternal education can be a factor in the achievement of their child's communication and academic abilities (Stevenson & Baker, 1987). The findings in this study did not find a correlation between parental educational levels and their child's communication ability. The parents with higher degrees of education had children who functioned below grade level, as did the parents with less education. Table 4.4 shows the breakdown of the education levels for the parents who participated in the study.

Table 4.4

Parents' Highest Degree of Education

Completed middle school	Completed high school	Completed 4-year college	Did not respond
6	10	2	1

Ten of the parents had completed high school, six parents completed middle school, and two parents completed a 4-year university. One of the parents completed her college degree in Mexico and the other in the United States. Another parent chose not to answer the question. Similar to the other parents, the two college degreed parents both struggled to find resources for their child and commented that they had no idea where to begin or how to work with their child.

This finding creates more questions than answers. Six parents did not pursue schooling after middle school, though it should be noted that 8th grade was considered to be the culminating level of education in their countries. Regardless, the findings suggest no discernible pattern between the parents' experiences obtaining services for their children and their levels of educational attainment. Both educated parents had difficulty attaining resources. Additionally, since all parents, with varying educational backgrounds, found the after school program and all chose to commit to the intensive time commitment required, minimum of three days per week, this may simply indicate that persistence is a more common factor among these parents rather than the level of educational attainment.

Working or nonworking parents who attend after school program. Eleven of the parents (58%) who brought their child to No Limits worked full time. Seven of them do not work and of those seven, three had quit their jobs once they found out about their child's hearing loss.

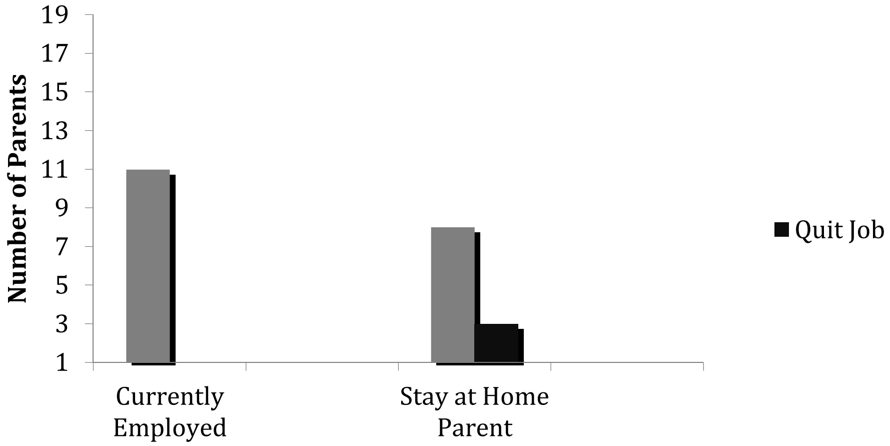

Figure 3. Working and Nonworking Parent

The parent of a younger child explained how the direction of their family's life changed when the family learned of the child's hearing loss:

Carla: Yo iba a la escuela y trabajaba. Tuve que dejar ambos y concentrarse en conseguir ayuda para mí primero y para el. Para mí, para que supiera realmente cómo ayudarlo. Cambió nuestra vida por completo.	Carla: I was going to school and working. I had to stop both and concentrate on getting help for me first and for him. For me to actually know how to help him. **It changed our life completely.**

Juanita, the parent of a younger child, responded as follows to the question, “Does your husband come to No Limits as well?”

Juanita: Cuando puede, viene, pero porque su sacrificio es que él trabaja siete días a la semana para que yo me pueda concentrarme en ayudar a nuestro hijo, y estar en casa en caso de una emergencia. Además, el no sabe leer ni escribir. Así que yo ago todo eso, pero en algunos casos el vene a observar y aprender.	Juanita: **When he can, he comes, but because his sacrifice is that he works seven days a week so that I can focus on helping our son, and be at home in case an emergency arises. Also, he doesn’t know how to read or write.** So I do all of that but in some cases he will come to observe and learn.

All of the working parents reported that they had to rearrange their work schedule so they could attend No Limits with their child three times a week. However, two parents mentioned that they had understanding bosses who allowed them to shorten their hours or days if needed to accommodate the needs of their child with a hearing loss. Sixty percent of the working mothers who participated in the study worked cleaning offices or homes, one was a caregiver for the elderly, one worked at a bakery, and one was a bookkeeper. All of the mothers stated that their husbands worked at least one job, and it has either brought them closer together or farther apart.

Reaction of spouses to a child with a hearing loss in the family. When asked how their spouses reacted to the news of their child being diagnosed with a hearing loss, 16 out of 19 (80%) mothers reported that the fathers took longer to adjust to the sad news. Some mentioned that the father felt the need to get a second job, and others reported that their husband insisted that the mothers stay home with the child. Juliana, with a younger daughter, said:

> Juliana: Tenia peleas con mi marido. Él decía: "Yo no puedo pedir el dia. Me van a despedir. Tienes que hacerlo. Me dedicaré a traer el dinero, pero tu tienes que dedicarte a la niña. Tenemos que seguir avazandola. "Así que aprendí a conducir y el estaba todo el día en el trabajo. Mis hijas no ven a su padre, excepto los domingos, porque se va temprano en la mañana y vuelve cuando están dormidas. Pero gracias a Dios, él me dio mi coche y él tiene su propio coche. Y podemos venir aquí [No Limits].

> Juliana: I would get into fights with my husband. He would say, “I can’t take off. I’m gonna be fired. You have to do it. I will dedicate myself to bringing in the money, but you have to dedicate yourself to the girl. We have to keep her moving forward.” **So I learned how to drive** and all day he is at work. My daughters don’t see their father except on Sundays because he leaves early in the morning and comes back when they are asleep. **But thanks to God, he gave me my car and he has his own car. We are able to come here [No Limits].**

Another mother said that the news of her child’s hearing loss had caused her and her husband to get divorced, since the father would not accept that their son had a hearing loss and as a result, his son did not wear the hearing aids when she was not around. The opposite happened to another parent, who commented that finding out about her child’s condition actually kept her marriage together.

Distance from home to No Limits. The average drive (one way) to the after school program was 45 minutes with a range of 20 minutes to 2 hours the most. Since enrolling at No Limits, three of the parents have had to learn to drive, and one was too afraid to drive on the freeway and takes only side streets. When the families mentioned the distance, 18 out of 19 (90%) exclaimed that it was worth it because they could see the progress in their child. Only two parents mentioned the price of gas and the difficulty of the expense.

When parents self-reported their needs, they generally focused on the need for additional speech services for their child and for parent education. The finding reveals why parents enrolled in the after school program and how it helped them to fulfill their needs as a family struggling to find resources for their child with a hearing loss.

Enrollment in afterschool program

All of the parents reported that the main reason they enrolled in the No Limits program was that their children needed more services and they wanted to learn how to help them.

Table 4.5 displays parents' self-reported response from the focus groups to the services they receive at the after school program. The below Table 4.5 indicates a tally of the responses and reveals speech and language are the main services they mentioned the most and how it corresponds with the main need for their child.

Table 4.5

Main Services Received at No Limits Reported by Parents

Speech Development	Language Development	Reading	Parent Classes	Leadership	Theater	Music
8	5	5	3	1	3	3

When asked in the focus group, "Why did you enroll your children in this after school program?" the majority parents stated that they were not receiving enough services at their schools and their child was not able to communicate. Some of the following responses were given including Carmen, a parent of two children with a hearing loss:

Carmen: Creo que es porque la escuela de mis hijos no es suficiente para ellos. Allí recibe terapia individual que le ayuda. El hace trabajo en la escuela y luego vienen aquí después de la escuela y eso le ayuda mucho.	Carmen: **I think because my children's school is not enough for them.** Here he receives individual therapy that helps him. He works at school and then they come here after school and that helps him a lot.

Kamila, parent of a younger child, said in English:

I was searching for speech therapy because he was diagnosed very late. What I liked about it

[No Limits] was that they also had parent classes that would give us information that nobody else would give you. [English original]

Another parent agreed that the parent classes helped them to advocate for their child and learn what they could do at home to help develop their child's language. Silvia added:

Silvia: Vine a conseguir más apoyo, especialmente en el lenguaje para ella. Sé que No Limits es para hablar. Y eso es lo que quiero para mi hijo. Que aprender el idioma y también informarme sobre cómo ayudar mejor. He notado la diferencia con ella desde que hemos estado aquí. Ella está avanzando más con el lenguaje.	Silvia: I came to get more support, especially in language for her. I know that No Limits is about speaking. And that's what I want for my child. To learn the language and also inform myself on how to help her better. I have noticed the difference with her from the time that we have been here. She is progressing more with language.
Helena: Cuando me enteré del programa, mi hijo necesitaba necesitaba mucha ayuda. Ella era como un bebé en el lenguaje, porque ella la diagnosticaron tarde. Yo sólo esperaba que un día podría leer, escribir y hablar. Pero poco a poco se está haciendo bien y es por eso que estoy aquí. No Limits está ayudando.	Helena: When I found out about the program, my child was in need of great help. She was like a baby in language because she got diagnosed late. I just hoped that one day she could read, write, and talk. But little by little, she is doing good and that's why I am here. No Limits is helping her.

Other parents were struggling with the school system to get services and felt that they were fighting to get some of the most basic services their child needed to learn spoken language. Katherine, whose daughter has been in the program at an early age and who took notes during the parent classes, said:

> Katherine: She first started at a school in East LA]. They provided the speech and language but they were always trying to shorten the time. We had to fight. They were having group therapy and she was sitting with other kids with different problems, not the same problems. I came to No Limits to give her what she was not getting at the school. [English original]

Josephina said of her older son with a hearing loss:

Josephina: En la escuela sólo le dan a mi hijo una media hora de terapia de grupo y siento como que no tiengo el apoyo suficiente para mi hijo.	Josephina: In school they only give my son a half hour of group therapy and I feel like I don't have enough support for my child.

Eight of 19 (42%) Latino parents said that their child was not speaking at all when the child enrolled in the after school program and that they wanted to be able to communicate with their child. Juliana, who received no services at her public school and switched her daughter to a private school after attending No Limits, explained what she wanted for her child:

Juliana: Lo que quiero más que nada es que ellos [No Limits] le enseñen a hablar porque no podía hablar. Yo quería que fuera a terapia del habla. Ella no podía comunicarse con nadie incluyéndome a mí.	Juliana: What I want more than anything was for them [No Limits] to teach her how to talk because she couldn't talk. I wanted her to go to speech therapy. She couldn't communicate with anyone including me.

Table 4.6

Self-Report of Parents' Reasons for Enrolling at No Limits

Parent	Child Not Speaking	Child Not Reading	In Need of Information
Bella	X		
Bianca		X	
Carla	X		
Carmen			X
Celeste	X		
Clara Faye			X
Dora			
Estela			X
Helena		X	
Isaac	X		
Josephina	X		
Juanita		X	
Juliana	X		
Kamila		X	
Kasandra		X	
Katherine	X		
Katrina		X	
Krystal	X		
Silvia	X		

Nine of the parents reported that their child was not speaking when they applied to the after school program. Sixteen of 19 (85%) of the parents reported that they enrolled in the after school program for individual auditory, speech and language therapy, which they were not receiving at their school, as opposed to group class of auditory, speech and language therapy. They believed that one-on-one therapy would provide greater outcomes for their child with a hearing loss rather than in a group setting with other children with varying degrees of abilities. Tailoring instruction to meet the needs of their child solely was reported as extremely important. They also wanted the after school program to teach their child how to read, and to teach them the skills to advocate for their child, especially during IEPs. Other parents wanted No Limits to improve their child's self-esteem through the performing arts program. All the families at No Limits said they came to help their child do better. Juanita reinforces her wishes for her son:

Juanita: Saber que mi hijo no podía oír, yo quería que mi hijo fuera como el resto de los niños que pueden oír, pero mas que todo quería que él hablara. Él ahora está aprendiendo hablar.	Juanita: Knowing that my child could not hear, I wanted my son to be like the rest of the kids who could hear, but most of all I wanted him to speak. He is learning to speak now.

Other self-reported needs of the parents focused on finding balance in the lives and time for their other children in the family.

Sacrifices

Of the seventeen parents with more than one child, 13 (76%) reported that their hearing child or children had to sacrifice the most because all the parent's attention was on their child with a hearing loss.

When asked, "What sacrifices have you incurred by having a child with a hearing loss?" 13 parents did not reference their own sacrifices, but instead expressed their concern for their hearing child(ren). Juanita commented about her hearing daughter, age 9, who was older than her younger son with a hearing loss:

> Juanita: Bueno, gracias a Dios, ella es una buena chica. Ella no nos cuestiona porque desde que se enteró de la pérdida auditiva de nuestro hijo, nos han dado la responsabilidad de ayudarlo y le dijo que tiene que ayudar a su hermano con la tarea, traducir a sus padres y venir a las clases para aprender como nosotros los padres. Le digo que si por alguna casualidad de que yo ya no estoy aquí que tiene que ayudarlo porque ella sabe los dos idiomas.

> Juanita: Well thanks to God she is a good girl. She doesn't question us because since we found out about our son's hearing loss. **We have given her the responsibility to help him and told her she has to help her brother with homework, translate for parents and come to classes to learn too like us parents. I tell her if that for some chance I am no longer here she needs to help him because she knows both languages.**

Silvia said that the hearing child in the family sacrificed by having to eat in the car, miss play dates with friends, and miss extracurricular activities and personal time with their parents.

> Silvia: Hay un montón de sacrificios. Más que nada, tenemos otros niños y los sacrificamos aún más. Por ejemplo, no nos vamos a casa. Tienen que comer en el coche. A veces comen comida fría. A veces estan muy cansados con un montón de tareas. Las dos hermanas mayores tienen que sacrificar mucho, tiempo con amigos y familiares, y llegan tarde. Estan muy cansadas. Si comienzas a pensar en ello, hay un montón de sacrificios. Más para ellos que yo como padre. Y para mí es un sacrificio muy feliz.

> Silvia: **There are a lot of sacrifices. More than anything, we have other kids and they sacrifice even more.** For example, we don't go back home. They have to eat in the car. Sometimes they eat cold food. Sometimes they're very tired with a lot of homework. **So the older sisters have to sacrifice a lot, playtime with friends and family, and come home late.** They're really tired. If you start to think about it, there are a lot of sacrifices. More for them than me as a parent. And for me it's a very happy sacrifice.

Parents of younger children with a hearing loss echoed this sentiment of the sacrifice it takes to be enrolled in the after school program:

> Juanita: A veces es 45 minutos, a veces es de una hora. Depende de tráfico. Lo mismo, a veces tomo

> Juanita: Sometimes it is 45 minutes, sometimes it's an hour. It depends on traffic.

comida en el coche. Tengo una hija más joven y siempre tengo que dejarla con mi hermana durante 4 horas. Le dijo a mi hija que me acompañara y ella me dice: " No quiero", y ella me dice que algunas veces se siente como un niño oculto porque todo el tiempo está para María. Sacrificamos la casa también porque la mayoría de las veces, estas de un lado a otro con tu hija. Llegas a casa y estás muy cansada y no tienes ganas de hacer nada. Así que llegar a la casa y comenzar a prepararte para el día siguiente. Y el día siguiente, es la misma cosa.	The same thing, sometimes I take food in the car. I have a younger daughter and I always have to leave her with my sister for 4 hours. And I'll tell my daughter to come with me and she'll say, "I don't want to" and she'll tell me sometime she feels like the hidden child because all the time it's for Maria. We sacrifice the house as well because most of the time, you're back and forth with your daughter. You come home and you're really tired and you don't really feel like doing anything. So you just get home and you start preparing for the next day. And the next day, the same thing.
Bella: A veces tengo que dejarla en casa con uno de los vecinos, porque tengo que traer a mi hijo aquí y eso es tres horas a veces. Ella me llama y me dice "¿Cuándo vuelves a casa. Tengo miedo. "Yo le digo que tenemos que ayudar a su hermano porque él necesita más ayuda. Ella dice: "Mamá, lo entiendo." Pero a veces no puede hacer las actividades que quiere.	Bella: Sometimes I have to leave her at home with one of the neighbors because I have to bring my son here and that's three hours sometimes. She calls me and she tells me "When are you coming home? I'm scared." I tell her we have to help your brother because he needs the most help. She says, "Mom, I understand." But sometimes she can't do the activities she wants.

Finding Strength

When parents discussed their other children's many sacrifices, as well as their own, the question was asked, "Where do you find your strength?" Although God was mentioned throughout the focus groups and interviews, more families mentioned their child with a hearing loss was the source of their strength.

Fifteen of 19 (79%) Latino parents found their strength during difficult times from their child or children with a hearing loss.

Table 4.7

Latino Parents Self-Report of Where They Find Strength

Interview question: Where do you find strength?	Frequency	Percentage
From their child with a hearing loss	12	63%
Both child with a hearing loss and God	3	16%
God	4	21%

During the focus groups and interviews, some parents became emotional and mentioned how God had helped them through the rough times of not having any direction or knowing how to help their child. Yet when asked, “Where do you find your strength?” Twelve out of 19 (63%) of the parents said from their child with a hearing loss and four (21%) said God (see Table 4.7). Katherine, has a child diagnosed at five and an older child, has also struggled with the school system and said:

> Katherine: Honestly I think it’s the great love I have for her and of course, God. It’s hard to explain it. I still struggle to cope with my emotions, which, in a way, are what drives me to be stronger for her. [English original]

Bella and Kasandra, parent of younger children, and Josephina, parent of a older child, declare:

Bella: De Dios y de nuestro amor por nuestros hijos, allí es donde agaramos toda nuestra fuerza.	Bella: From God and from our love for our children, that’s where we get all our strength.
Kasandra: Más que nada ver su progreso, nos da fuerza para seguir luchando. Incluso si ella no estaba haciendo bien o se quita [sus audifonos] seguiríamos ayudandole con todo. Pero cuando uno no ve progreso, uno se pone deprimido. Pero cuando progresan, te motivas para continuar.	Kasandra: More than anything to see her progress, that gives us strength to keep fighting. Even if she wasn’t doing well or taking off [her hearing aids] we would still help and do everything. **But when you don’t see them progress, you do get depressed. But when they progress, you get**

	motivated to continue.
Josephine: No lo sé. Creo que Dios me eligió y me dio un hijo con una discapacidad porque yo voy a ser capaz de desarrollar una solución para ayudar a mi hijo.	Josephina: I don't know. I think God elected me and gave me a child with a disability because I'm going to be able to develop a solution to help my son.

Faith and its influence on decision-making. Faith also influenced sixteen out of 19 parents when making decisions about their child's health and education. When talking about their children, God was mentioned 23 times during the focus groups. During times of difficult decisions, the parents used God to give them direction or the answer they needed when making a decision. One parent said that she was confused as to whether her son should get a cochlear implant (surgical hearing device). She sent in the paperwork and it was returned. She thought maybe God was telling her that she should not do it. Three times it was returned or lost by the cochlear implant center. She felt that God gave her the answer she needed. Her son did not receive the implant. This supports previous research on the strong faith of Latino families and how influential God is in their lives and decision-making. Bella, who has a younger child with a hearing loss, said:

Bella: Sólo Dios nos puede ayudar, Dios nos ayudará. Yo no sabía nada de lo que la escuela no me ayudaba. Tenían un audiólogo en escuela y ella sabía que los audífonos no eran adecuads para él. Yo no sabía qué hacer. Yo no podía comer ni dormir. Mi marido era más fuerte que yo. Yo no lloré tanto como antes. Le pido a Dios que ponga gente buena en mi camino.	Bella: **Only God can help us, God will help us.** I didn't know anything that the school didn't help me [with]. They had a school audiologist and she knew the hearing aids for my son weren't right for him. I didn't know what to do. I couldn't eat or sleep. My husband was a lot stronger than I. I didn't cry as much anymore. **I would ask God to put good people in my path**.

Another parent also discussed that her son might need a cochlear implant, but was unsure about it. She said, “Right now, I sort of do not want the implant but I have seen the difference it makes. So I will leave that up to God.”

The following participant responses address Research Question 2:

Services parents seek. Parents have many decisions facing them as their child comes of school age, including what services they should request from the school district. Research question 2c addresses these questions as follows: What services do the families currently receive at their school and what services do they seek to receive at the after school program and why?

Parents reported that the services they received at school ranged from 30 minutes once a week of speech therapy in a group setting, to individual speech therapy for 1 hour twice a week.

The parents reported that they found the after school program in several different ways: by meeting the director of the program at their elementary school, from other parents who were already enrolled in the program, from a brochure, or based on a recommendation during an IEP meeting. Several parents added that they were on the waiting list for 2 to 3 years. One parent said, “I had a friend that would come to the program and I saw how her daughter was progressing.” Over half of the parents mentioned that they were on the waiting list and felt relieved that they were able to enroll despite the time commitments of the after school program. One parent did not initially understand that she could not drop off her child, but was required to stay and learn while her child received individual auditory, speech and language therapy. She said, “I later realized that I was learning along with my child.”

Parents’ most-reported responses to what they sought to receive at the after school program were free individual auditory, speech and language therapy, parent education, and the theater program. However, all of the parents said the primary reason was for the individual auditory, speech and language therapy. The schools were not providing it and the parents were concerned because their child had limited language and speaking abilities. During the application process, they learned of the other services provided by the after school program, including leadership, bi-weekly literacy classes, STEAM, music, and academic tutoring. Several parents commented that No Limits filled a gap in their child's education by providing these services and the parent classes helped them to learn what was resources were available to them.

School placement. The study asks, "How does the program fill in the families' perceived gaps in their child's education?"

Sixteen of 19 (84%) Latino parents changed their school placement after being enrolled in the after school program because of what they learned in the parent classes, including their right to request more services for their child.

Over 80% of the families changed their child's school placement from total communication (signing and speaking) to an oral program or switched to another oral program that provided more services in order for what they believed would provide a better education. The children were now attending a charter school, a private program, or local school. The range of services the children now received depended on the type of school their child was currently attending. Some of their children were mainstreamed and others were in self-contained classrooms with only children with a hearing loss. The parents stated that their children with a hearing loss were receiving significantly more services now after attending the No Limits program. Over eighty-percent of the parents said that what they learned in the parent classes about IEPs, school placement, and their child's rights, they learned at No Limits (Appendix L). Additionally, six parents from the focus group spontaneously compared the teachers at school to the teachers at the after school program. They explained that the teachers at No Limits had higher expectations with clear goals for their child.

The parents who changed programs reported that when they began to understand the needs of their child and the IEP process, they were no longer satisfied with the placement offered by their school district. Juliana, mother of a younger child, said:

> Juliana: Cuando estaba en esta otra escuela su maestra de segundo grado no estaba capacitado para trabajar con niños sordos. Supuestamente este maestro era para educación especial, pero tenía ninos con autismo en la clase y un día entré en al calon. Le pregunto al maestro: ¿cómo está mi hija? Y ella dijo: "Su hijo no entiende nada. Lleve a su hijo a una clase de señas porque no entiendo nada. "Entonces me enojé y me fruste y rápidamente pedi un IEP. Me llevé a mi hija de esa escuela. La llevé a una escuela privada y el distrito pagó todo.

> Juliana: When I was at this one school, her second grade teacher was not trained to work with deaf kids. Supposedly this teacher was for special education, but she had kids with autism in the class and one day I went into the classroom. I asked the teacher, how’s my daughter doing? And she said, “Your child doesn’t understand anything. **Take your child to a signing class because she doesn’t understand anything.” So I got mad and frustrated and I quickly asked for an IEP. I took my daughter out of that school. I took her to a private school and the district paid for it.**

Based on the topics presented on the weekly parent education classes, the parents reported that they became more prepared attending IEP meetings and thus, approaching educators about the needs of their child. Parents also reported becoming aware of other schools options from other parents who attend the after school program along with parent classes informing them of all the school options in Southern California.

Sixteen of 19 (84%) parents reported that they did not understand that they had a choice of communication when their child was first diagnosed and that the specialists influenced their decision. In fact, several parents commented that once their child received hearing aids, the school district or regional center started teaching their child sign language.

Bella: Un día en la escuela, recuerdo que vi una niña de 8 años de edad, senando con otro estudiante y fue entonces cuando me di cuenta que esta escuela era para niños sordos que se señaban. Me quedé en shock.	Bella: One day at school I remember I saw an 8-year-old girl signing to another student and that's when it hit me that this school was for children with a hearing loss who sign. I was shocked.
Silvia: Con mi hija de 4 años, empecé con las clases señas. Cuando hice mi IEP dijeron señas sería mejor para ella. Ella estaba en la clase de señas por menos de 6 meses y después me vine a No Limits. Vi a los otros niños hablando, así que luego la cambie a una escuela en la que se le enseñe a hablar. Habla un poco, pero lo poco que habla es el discurso, pero no mas señas. Ella aprendio la señas un poquito, pero ahora se ha olvidado de todo eso. Y ella está hablando y queremos que este en una escuela nueva porque al escuchar a otros niños, ella aprende más.	Silvia: [With] my 4-year-old daughter, I started off with signing classes. When I did my IEP they said signing would be better for her. **She was in the signing class for a little less than 6 months and then I came to No Limits. I saw the other kids talking so I then changed her to a school where they would teach her how to talk.** So she talks a little but the little that she talks is speech, not signing anymore. She did learn how to sign a little bit but now she's forgetting all of that. And she's talking and we want her to be at that new school because by hearing other kids, she learns more.

Another parent commented that when her child was diagnosed at age 5, the district had her observe a total communication program. She never saw an oral program where the students with hearing losses use oral communication only. The mother said it turned out that there was no room for her child in the signing program so she ended up going into a mainstream program instead. As a result, her child was integrated with hearing children and learned how to speak.

My findings support previous research indicating that parents are not given balanced information when choosing their mode of communication and school placement options (Yuelin et al., 2003). Even though the parents in this study wanted their child to speak, they did not know if it was possible. Over 80% said that the after school program was the first place they began to understand not only the possibilities for their child, but that their child could learn to speak one day.

The following participant responses address Research Question 3:

Attributions Latino families give the program. All the parents reported that they attributed the academic and communication growth of their child to the services and knowledge received from the after school program. Specifically, all 19 parents reported that their child was talking and listening much more since participating in the after school program. A parent of an older child said:

Josephina: Jugaba con los niños pero no hablaba. Ahora si lo hace.	Josephina: He played with kids but he didn’t talk. Now he does.

A parent of a younger child said:

Carla: Habla mucho! Me he dado cuenta de la diferencia. A veces no usa sus audífonos y él todavía habla y las otras personas que conocen dicen: "¡Vaya, a ha progresado."	Carla: He talks a lot! I’ve noticed the difference. Sometimes he doesn’t wear his hearing aids and he still talks and the other people that know him say, “Wow, he has progressed.”
Carmen: Sí, creo que les ha ayudado [dos niños con pérdida auditiva]. Al principio no podía decir una frase o pedir agua, y ahora ella puede hablar.	Carmen: Yes, I think it has helped them [two children with hearing loss]. At the beginning she could not say a sentence or even ask for water, and now she can talk.
Silvia: Lo mismo. Cuando llegó aquí, sabía un poco. Pero después de estar aquí, utiliza oraciones más completas.	Silvia: The same thing. When she came here, she knew a little. But after being here, she uses more complete sentences.

> Katherine: When I arrived here the first day of the parent class, we took a test to find out what we did or did not know. I didn’t know anything so then I realized I had to come here. Since I started then, I have been coming to the classes and I have learned so much. I now got 100% on the test. [English original]

When parents were asked, “Do you know of any other programs that provide these services?” 100% responded “No.” One parent added that there are no after school programs for children age 5 and older in the greater Los Angeles area that provide all these services. One mother said, “I’m really happy with the services here.” Another parent added, “The difference between his [son’s] school and here is that the teachers are of higher quality. You can really tell the difference.” When parents were asked about how the after school program helped their child, there were different responses, from speech therapy to reading to parent education. Estela, a parent of an older child with a hearing loss, said:

Estela: I don’t think the speech therapy is the same at school. Some aren’t teachers of the deaf. It’s very different than the way they teach here. They try to move his mouth differently, but it’s not the same process with the children here. At school, it’s not much help. Here is where he’s learned how to speak. [English only]

Juanita: La lectura ha ayudado mucho aquí. Mi hija es la que lee mas mejor en su clase a pesar de que ella tiene el menor idioma y ha estado allí la menor cantidad de tiempo. Toda la ayuda que recibe aquí es realmente notable en su clase. Cuando se trata de la lectura, se entiende todo. Eso es lo que es mejor la lectura.	Juanita: Reading has helped a lot here. My daughter is the one that reads the best in her class despite the fact that she has the least language and has been there the least amount of time. All the help she gets here is really noticeable in her class. When it comes to reading, she understands everything. That’s what is best is the reading.
Silvia: Las clases para padres me ayudan mucho. Te ayuda y también ayudan a otras personas, que son como tú cuando empezaste, ignorante como tú. Tu puedes ayudar a aprender lo que el maestro está haciendo con tu hijo para que puedas aprender como ayudar en lo en la casa. En los días de descanso, es cuando puedes ayudar mas a tu hijo.	Silvia: The parent classes help me a lot. It helps you and it also help other people because they are just like you when you started, ignorant like you. You can help them to learn what the teacher does with your child so you can learn how to help them at home. On the days off, you focus more on helping your child.

The parents also attributed the fact that they learned that they were their child's primary teacher to the after school program. Juliana, parent of a younger child, and Krystal, parent of an older child, explains:

Juliana: Me dijeron que te vamos a enseñar cómo enseñarle a tu hija. Vamos a prepararte para que puedan hacer lo mismo en casa. La mayoría de las veces ella está contigo asi que tienes que ayudarla en todo momento.	Juliana: They [No Limits] told me that we are going to teach you how to teach your daughter. We're going to prepare you so you can do the same at home. The majority of the time she is with you so you have to help her at all times.
Krystal: No Limits nos enseñó a no protejer los y pensar, mi pobre niño, o sentir lástima por ellos, si no darles confianza.	Krystal: No Limits taught us not to shelter them and think, my poor child, or feel sorry for them, but to give them confidence.

The parents reported that they had to change the way they worked with their child in developing their communication skills. One of the study's main purposes was to inquire whether the parents actually applied what they learned from the after school program at home. This leads to research question 1a.

Based on parent reports from Latino families enrolled in the after school program, what changes in their child's development (linguistic, auditory, speech, pragmatic, etc.) have been observed since starting the program? Parents were asked to report what they learned and applied, if anything, at home, and to provide examples. Every parent was able to provide at least two examples of what they had learned from the parent classes. Most of them talked about expanding their child's vocabulary and sentence structure, as well as having high expectations and not treating their child like a victim. One of the important outcomes of the study was that parents, when given the tools, would apply them outside the program, specifically at home. All the parents reported that they believed their active participation in their child's language development contributed to their child's growth in communication.

Skills applied at home

All of the parents gave specific information about what skills they learned at No Limits and applied at home:

Nineteen of 19 Latino parents attribute to the after school program that they learned skills that they can apply at home and as a result, their child has improved in the areas of speech, listening, language, pragmatics, and reading.

Parents expressed that they learned to be consistent and have rules at home and to treat their child normally, repeat themselves if their child didn't understand, expand sentence length, using proper grammar, practice auditory skills, play board games, sing to their child, introduce new vocabulary, and read to their child on a regular basis, even if their child could not hear all the sounds (Appendix L). The following parents give examples.

Carmen: He aprendido a aplicar las reglas. Y eso es una cosa que he aprendido en las clases para padres. Sordos, problemas de audición infantil oral, normal, es algo que todos los niños necesitan reglas-para que crezcan siendo responsable.	Carmen: I have learned to implement rules. And that's one thing **I've learned from the parent classes. Deaf, hard-of-hearing, oral, normal child, it's something that all children need—rules so that they grow up being responsible.**
Kasandra: Caminamos hacia él para que nos escuche y hablamos detrás de él para que desarrolle sus habilidades para escuchar. O si me pide algo con una frase incompleta, no se lo doy hasta que lo pida con una oración completa. Yo dijo algo primero y luego el lo repite. Hago enfoque en la palabra correcta que tiene que utilizar.	Kasandra: We walk up to him so he can hear us and talk behind him so he develops his listening skills. **Or if he asks for something with an incomplete sentence, I won't give it to him until he asks for it with a complete sentence.** I say something first, then he repeats it. I emphasize the correct word he has to use.
Helena: Aprendí la importancia de cantarle a mi hijo. También aprendí a pasar tiempo de	Helena: I learned the importance of singing to my child. I also learned to spend quality time

calidad con ella como con sus juegos de mesa.	with her like board games.

The parents demonstrated their great desire to have their children speak precisely by sharing their understanding of the importance of vocabulary development. Juanita, who has a younger son with a hearing loss, gave further examples.

Juanita: Tengo que pensar en su vocabulario. Por ejemplo, le digo, dame un zapato. Pero tengo que explicar que hay diferentes tipos de calzado, como sandalias, zapatos de tenis. Tengo que ser específico para aumentar el vocabulario. Hay muchos diferentes tipos de la palabra "zapato" y tengo que enseñarle eso.	Juanita: I have to think of his vocabulary. For example, I say to him, **get me a shoe. But I have to explain that there are different types of shoes, like sandals, tennis shoes. I have to be specific to increase vocabulary. There are different kinds of the word “shoe” and I have to teach him that.**

Bianca, a mother of an older child said:

> I would go home and apply what I learned…I was teaching him how to read out of a book focused on comprehension and to be more fluent. [English original]

Carla, a parent of a younger child who has switched schools since attending No Limits shares:

En el principio, cuando aún no estaba leyendo, ponia las palabras en cosas como en los cajones, el refrigerador, cepillo de dientes y así es como Carlos aprendió las palabras y aprendió a leer. He implementado esto. Además, he aprendido que es hora de jugar uno contra uno con él en una zona tranquila.	In the beginning when he was not reading yet, **I put the words on things like on drawers, on the refrigerator, [the] toothbrush, and that is how Carlos learned the words** and learned to read. I implemented that. Also, I learned it is time to play one-on-one with him in a quiet area.

One parent of a younger child said that she helped her child by playing games, but she said that her own language barrier impeded her ability to help her child at home:

Kasandra: Realmente no le ayude en casa tanto. No puedo ayudarla mucho por mi español	Kasandra: I don’t really help her at home that much. I **can’t help her much because of my**

y yo todavía no sé bien el Inglés.	**Spanish** and I still don't know English well.

Other Spanish-speaking families also expressed concern that they had difficulty communicating with their child with a hearing loss and felt ill equipped to correct their child's sentence structure because their child was learning English at school. When asked how she communicated with her son, one mother replied, "He only speaks basic English so that kind of helps me. If I ask him something in English and it's wrong, my daughter corrects me. I say 'Yes, you're right.' I don't want him dumb."

Other parents reported changes in their child's progress in reading, confidence, leadership, and speaking in front of others through the graduation and theater program. Parents whose children had participated in the summer theater program claimed that they saw a significant boost in self-confidence. In fact, three parents said a teacher had reported seeing improved communication and confidence skills since the children had joined the theater program.

Bella: Mi hijo le encantaba el teatro. El habla mucho más y no tiene miedo de estar enfrente de la clase en la escuela. Los maestros dijeron eso.	Bella: My son loved the theater. He talks so much more and is not afraid to go in front of the class at school. The teachers said that to me.

Five of the 19 (26%) parents said that the graduation ceremonies, where the children memorize a speech and recite it in front of over 100 people, had been good practice for their child to speak in front of others. Helena, parent of a younger child, said it made her proud.

Cuando mi hija hizo su primera graduación en su bata y capa, lloré. Nunca me imaginé que hablaria delante de la gente como lo hizo ella. Ella estaba tan segura. Yo no creo que yo pudiera hacer eso.	When my daughter did her first graduation in the cap and gown, I cried. I never imagined her speaking in front of people like she did. She was so confident. I don't think I could do that.

Bella: Mi hijo le encantaba el teatro. El habla mucho más y no tiene miedo de estar enfrente de la clase en la escuela. Los maestros dijeron eso.	Bella: My son loved the theater. He talks so much more and is not afraid to go in front of the class at school. The teachers said that to me.

Another parent mentioned the leadership class and how he had seen a change in his son, who was learning about college and how to be a leader. This father said, “My son loves the leadership class and I see the change in his attitude toward school and his future.”

When the parents were asked about the IEP process, the atmosphere changed in the room. Every parent had something to say about how confusing and scary the IEP process was for him or her. One of the research questions inquires about the IEP process, and whether the after school program has helped them. All of the parents emphatically said “Yes.”

Katrina: Porque antes yo sólo quería entrar y escuchar lo que el distrito estaba diciendo y yo no sabia qué era lo mejor para mi hijo. El distrito sólo hace lo que es más conveniente para ellos. Trabajan en la forma que fuera más conveniente para ellos. No es lo que el niño necesita. Me ha sorprendido. Miré a tres IEPs y fueron los mismos objetivos. No lo habían cambiado. Así que he aprendido mucho acerca de cómo hablar con ellos y entender los derechos de mi hijo.	Katrina: Because before I would just go in and listen to what the district was saying and I wouldn’t know what would be best for my child. The district only does what is most convenient for them. They work in whatever way is more convenient for them. Not what the child needs. I was surprised. **I looked at three IEPs and it was the same goals. They hadn’t changed it. So I have learned a lot about how to talk to them and understand the rights of my child.**
Carla: He aprendido mucho acerca de los IEPs de no haber sabido nada hasta ahora. Ahora ya no tengo que luchar cuando llega el momento de mi IEP.	Carla: I have learned a lot about the IEPs from having not known anything to now. Now I don’t have to fight when it comes time for my IEP.

The parents were passionate when talking about their child's rights and the lessons learned on how to work with their child at home. They also expressed how they now liked to help other families in the same situation. One parent of an older child declared:

Josephina: El programa [No Limits] me ha ayudado a conocer los derechos de mi hijo y ayudar a otros padres que tienen niños con pérdida auditiva. Como supe de una madre que lloraba yo la pude ayudarla.	Josephina: The program [No Limits] has helped me know the rights of my child and help other parents who have kids with hearing loss. Like I knew a mom who would cry and I was able to help her.

Estela: Since I start parenting classes, I began to have clarity and hope while I could learn to advocate for my son and his rights. I feel more comfortable working with my child and getting through the school system. I am definitely less stressed because I don't feel alone anymore. [English original]

Trust

The IEP process was stressful for the parents and some felt they were treated differently because of their race, which led to an important dialogue about trust.

Eight of 19 (42%) parents felt they were treated differently because they were Latino, had low-income levels, and/or spoke Spanish only.

All the parents' home language is Spanish. All of the parents who spoke only Spanish brought up that they did not believe they were receiving accurate translations during IEP meetings with the school.

Kasandra: Recuerdo cuando estábamos en el distrito tratando de mover la a una escuela ordinaria. Vi que el traductor estaba cambiando las cosas, así que les dije que, o bien me traducen bien o que me cambien mi cita.	Kasandra: I remember when we were in the district trying to move her to a mainstream school. **I saw that the translator was changing the things** so I told them that either she translate it right or they needed to change my appointment.

Juanita: Hay momentos en que uno duda de la intérprete. No fue sino hasta hace poco que supe pue podíamos llevar a nuestro propio intérprete. Siempre he confiado en el intérprete que me dan. Siento que a veces no es una desventaja para ellos. Siento que a veces no son honestos. Siempre me he sentido dudas sobre lo qué me estaban diciendo. Me siento como si estuvieran defendiendo siempre sus mejores intereses y no la mía. Si llebara a otra persona que sabía más sobre el sistema, siento como que sería más honesto y sólo la verdad se hablaria.	Juanita: **There are times when one doubts the interpreter**. Not until recently did I know we could bring in our own interpreter. I have always relied on the interpreter they give me. I feel like that sometimes there is a disadvantage to them. **I feel like sometimes they are not honest. I have always felt doubt on what it was they were telling me.** I feel like they are always defending their best interests and not mine. If I took someone else with me that knew more about the system, I feel like they would be more honest and only the truth would be spoken.

One bilingual parent agreed with this claim. She believed that Latino families were treated differently. Her son was in a charter school with few Latino children, and mainly Caucasian children. Kamila postulated:

Like so many things it was hard and I notice that it's really different how they [school educators] treat you and how they treat American people. I have no idea why. I volunteer on my son's school to translate to the few Hispanic people that are there and you notice the difference. Some of the teachers or person from the school are really nice and the other ones they feel like why we have these [Latino] kids here. So for me it wasn't too hard **but I notice that most of the time for the Spanish speaking only people there is a difference completely. Not so much because you speak Spanish. It's because you don't have the same income.** [English original]

Another parent had a different opinion and reported that she felt it was because she spoke Spanish only and educators judged her. She said, "It is sad people think that just because you don't know English, you don't know anything." She continued by saying that she understood English more than she could speak it and that she had had experiences where the translator did not translate what she said. She expressed her frustration that the person who translated was someone from the office who was asked at the last minute to fill in and thus was not trained.

Stress and Self-Efficacy

The high level of stress was apparent among all the parents when talking about the lack of resources and the unfamiliarity of the IEP process. The question was asked:

To what extent do Latino parents perceive the weekly parent education classes to have supported their personal needs and needs of their child? The following theme emerged from this question, which addresses parents' level of stress and how knowledge from the parent classes had given them a new level of confidence.

Seventeen of 19 (89%) Latino parents reported that the parent classes reduced their level of stress as they learned how to advocate for their child and understand the school's IEP process.

Seventeen parents reported that parent education classes reduced their level of stress because of the knowledge they attained (Appendix L). Much of the stress parents felt were about their child's future, a lack of resources, and working with the IEP team. Although the families said that they had enrolled in the after school program to help their child communicate, they also expressed concerned about their child's social-emotional growth, including self-esteem and how well he or she would do as a teen and adult. The parents expressed many worries they had for their child.

> Katherine: For me, it would be their self-esteem. That would be my biggest concern. Because she is a very noble person and I don't see her self-esteem being as high as it could be. [English original]

Carla: Creo que mi mayor preocupación sería el progreso académico. Tuve que enviar lo un año atras y me preocupa que en el futuro cuando se encuentra en su adolescencia, se retrace. Ahora mismo tiene muy alta el autoestima. Sus audífonos no son un problema para él. Lo que me preocupa es cuando tenga	Carla: I think my biggest worry would be the academic progress. I had to send him back a year and I'm worried that in the future when he is in his teenage years, he will be set back. Right now he has very high self-esteem. His hearing aids are not an issue for him. My concern is when he's 13, how he's gonna

trece años, cómo va a reaccionar.	react to that.
Josephina: Para mí, la mayor preocupación sería que él sea capaz de integrarse. Me preocupa que trate de esconder sus orejas o atributos físicos.	Josephina: For me, the biggest concern would be him being able to integrate himself. I worry that he would try to hide his ears or physical attributes.
Carmen: Me preocupa cómo van a ser cuando sean mayores. Me preocupo por los años de la adolescencia. Eso es todo.	Carmen: I worry about how they will be when they are older. I worry about the adolescent years. That's it.

Over half of the parents said they felt more confident in and hopeful for their child's future because they now understand their child's needs. Parent education classes were useful in relieving stress and empowering parents. "The stress is still there, but it is less," since coming to the parent classes, said Silvia. One parent said, "I feel more secure and confident in helping my son." The parents reported that the parent classes helped them identify their child's needs, what services were available, and gave them the knowledge to fight for their child's legal rights.

Juanita: Ellos [la escuela] ahora ven que sabemos ahora estamos hablando. Por eso se dice: "Oh, quien esta entrenando a esta madre?" Ahora cuestionamos todo. Estamos más en encima de los derechos de nuestros niños.	Juanita: The [school] sees that now we know what we are talking about. So they say, "Oh, who was training this mother?" Now we question everything. We are more on top of our kids' rights.
Bella: Nos han enseñado a no firmar el IEP o dejar que otros nos presionen para firmar el IEP porque tenemos diez días, y necesitamos tiempo para pensar lo.	Bella: They've taught us not to sign the IEP or let others pressure us to sign the IEP because we have 10 days and we need time to think about it.
Juliana: En las clases para padres, en realidad te despiertas. Sé sobre los servicios que mi hija tiene que recibir por la ley y sé cómo luchar porque fui a un debido proceso y me ayudó aquí,	Juliana: In parent classes, you actually wake up. **I know the services that my daughter needs to receive by law** and I know how to fight because I went [through] due process and

así que gane contra el distrito escolar.	they helped me here so I won against the school district. I have learned not to be stepped all over. **They step on me but they're also stepping on my daughter.**

> Kamila: The truth is all the information we need to know about the IEP we learned here. [English original]

Families' suggestions for improving the parent classes included having a psychologist to help them cope in difficult times, having an advocate who is bilingual to attend IEPs with them, and opening another No Limits.

> Katherine: For me, I feel like one or two advocates should go with the parents to IEPs. An advocate that belongs to the center that Michelle can say, "You know, this family needs you to go and help them out at the IEP." [English original]

Dora: Creo que sería genial tener un psicólogo. A la mejor una consejería de apoyo para los niños y para nosotros los padres, a veces uno está un poco deprimido.	Dora: I think it would be great to have psychologist. Maybe counseling support for the kids and us parents, sometimes one is a bit depressed.

Aspirations

Based on self-report, how have Latino parents' aspirations for their child changed, if at all, since attending the program?

Nineteen out of 19 Latino parents reported that their aspirations changed after being in No Limits.

When parents were asked to compare their aspirations for their child from when they first arrived at the after school program and to the present, the parents were forthright and quick to respond that their aspirations had significantly changed. Krystal said:

Krystal: Yo no tenía ninguna otra aspiración. No ilusión. Pero después de llegar a No Limits y ver y aprender	Krystal: **I did not have any other aspirations.** No illusion. **But after coming to No Limits and seeing and**

acerca de los otros niños que habían terminado la escuela y se han ido a la universidad, pensé que mi hijo podría hacer eso también.	**learning about the other kids that had finished school and gone to college, I thought that my child could do that, too.**
Clara: Una vez que consiga ayuda y encontre información para mis hijos y acerca de su problema de audición. Las [aspiraciones] ha cambiado después de No Limits. Mi hijo no hablaba y ahora se ha mejorado en su lenguaje y su forma de comunicación.	Clara: Once I get help and find information for my children and about their hearing problem. **It [aspirations] has changed after No Limits.**_My child did not talk and now she had improved in her language and her way of communicating.
Bella: Bueno, sinceramente, yo no tenia aspiraciones, lo que había era un sentimiento de preocupación y tristeza. Sí, ahora tengo aspiraciones y esperanzas y la felicidad de saber que mi hijo puede ser una persona graduada de una universidad con un buen trabajo y que puede tener un futuro.	Bella: Well, sincerely, I did not have aspirations; what I had was a worried feeling and sadness. **Yes, now I have aspirations and hope and happiness to know that my son can be a graduated person from a university with a good job and that he can have a future.**

Some parents stated that they had no aspirations before coming to the after school program, while others exclaimed that they had had aspirations for their child but their aspirations were now heightened. Three primary factors were repeatedly mentioned as reasons for parents' enhanced aspirations for their child: 1) witnessing the progress of the child, 2) learning how to advocate for their child, and 3) seeing alumni from the after school program return as college graduates and living independent, successful lives. For 17 of the 19 (89%) parents, this was the first time they met a deaf adult who spoke. It gave the parents hope for their child's future.

Child's educational progress and future. Along the same line as aspirations, the following question was examined: In what ways, if any, do Latino families report the parent education classes have changed their views of their child's educational progress and future and why? All of the 19 parents reported a change in how they viewed their child's educational future since attending the after school program. Table 4.8 displays the frequency of parents' responses regarding how they saw their child’s educational progress and future.

Table 4.8

Frequencies of Parents’ Responses of Child’s Future

Graduate from university	Independent	Speak	High grades	Have a family
10	2	3	2	2

Some parents stated that they had first only wanted their child to speak, but later said they wanted their child to graduate from a university. After meeting alumni with hearing loss in college, it helped them to see that their children, too, could attend a university and graduate from college like their hearing peers.

> Katherine: We want [Kimberly] to be independent and advocate for herself; if she can do that, she will be fine in life. We want her to feel “normal” and be aware of her disabilities but also know that limitations are only in the mind of those who want them. She can be anything she wants and we will love and support her all the way. [English original]

Carmen: Para mi hija, primero, quiero que ella hablara con claridad y que ella se entienda al hablar con otras personas. Ahora ha cambiado porque he aprendido que mi hijo pueda aprender, ser un niño normal, e ir a la universidad tener un futuro como cualquier otro niño.	Carmen: For my daughter, at first, I want for her to speak clearly and for her to be understood when she speaks to other people. Now it has changed because I have learned that my child can learn, be a normal child, and go to the university [and] have a future just like any other child.

Sixteen of 19 parents attributed a level of hope to coming to the program and seeing graduates who are currently in college or have graduated from college return to volunteer at No Limits. One of the teachers has a cochlear implant and a parent said, “It gives you hope, when I see the teacher. That is how I want to see my daughter. It gives me hope.” Of the 19 participants, only two had ever met an adult person with a hearing loss until they came to the after school program.

Summary of Findings

This study investigated the characteristics of low-income Latino parents enrolled in the No Limits after school program, and examined, through self-reports, the impact it had in their lives as well as their child with a hearing loss's life. The findings clearly indicate that the Latino parents in this study are hard working and dedicated, and desperately want their child to communicate and receive more services so they can one day graduate from a university. Yet the path to achieving these goals has been undefined because of the lack of knowledge of where to begin. The majority of these parents had no experience with deafness prior to their child's diagnosis. Therefore, much confusion and feelings of being lost can arise, causing great stress. Parents recounted the pain of hearing the news that their young child could not hear as vividly as if it had happened yesterday. Although their children are now of school age, the emotional turmoil lingers as they fight to learn their child's rights and to navigate through the school system.

Despite the many obstacles these Latino parents face, there is no doubt that they are dedicated to their child's education and to their own. Parent education not only helped them be better advocates, but it also had a ripple effect and reduced their level of stress and helped them become more confident. In fact, the parents report that the services their child receives today are much better than when they first started the program, as they have learned about their child's needs and how to become advocates for them. They were able to fill gaps in their child's education when they learned what to do. For example, parents switched schools when they learned that there were options for their child.

Unquestionably, enrolling in this after school program required a deep level of commitment. The parents reported the great sacrifices they made to attend the program three times a week. Yet the greatest sacrifice they reported was that of the hearing sibling, whose needs were often overlooked while their time was directed toward the child with a hearing loss.

The need for counseling for themselves and their children was prevalent in the findings, and although the parents had school-age children, they were still sad and worried for their child. Moreover, many of the fathers of the family tended to still struggle with accepting their child’s hearing loss and worked more hours to allow mothers to stay home and dedicate their lives to their child with a hearing loss in hopes of him or her becoming an independent adult.

When parents were asked what advice they had for other Latino parents with children with a hearing loss, one parent answered, “Tell them they are not alone. It’s just hard to find the right place and the right people. Because I felt alone before I found No Limits and I don’t feel that way.” Another sentiment expressed by a parent was to tell other Latino parents in the same situation, "No te rindas. Lucha por tus derechos. Obtener una segunda opinion." Or, translated in English, “Don’t give up. Fight for your rights. Get a second opinion.”

One parent said frankly about raising her child with a hearing loss, “I know it’s my job and I have to do it. I can’t say, ‘I quit’ because no one else is going to do the job for me. But I love my child and I will do anything for her. She has taught me so much and has given me great strength.” Clearly, low-income Latino parents of school-age children with a hearing loss in the study face many obstacles, but these findings show that when given the resources, these parents will do whatever it takes to help their child succeed.

Chapter 5 – Discussions and Conclusions

As an educator in the field of deafness in Los Angeles and across the country for the past 17 years, the findings of the study support much of the research available, as do my experiences of working with low-income Latino children and their families. The findings reveal that low-income Latino families who attend the after school program are often misinformed regarding facts about hearing loss. According to the data, the parents have felt helpless and alone, and state that there are few to no options for them. The study highlights the many variables that may impact the families including income, home language, maternal education, degree of hearing loss, early intervention, age of diagnosis and amplification. These variables may be possible causes for a child with a hearing loss's success or lack of progress in acquiring academic and communication competence (Yoshinago-Itano, 2003; Moeller, 2000). Thus, the study has many findings that are consistent with the review of the current literature provided in Chapter 2, and a few unexpected outcomes.

In addressing research question 1: *What are the characteristics of Latino parents of a child with a hearing loss who enroll in the after school program?* (Appendix A) The data show no parents had hearing loss. This is consistent with prior research that indicates that over 90% of children with a permanent hearing loss are born to two hearing parents (Mitchell & Karchmer, 2004). As a result, the families had no prior experience with hearing loss before their child was born and as a result, they did not know where or how to find resources to help their child with a hearing loss (Yuelin et al., 2003). Consequently, the families share that they feel "alone" and "lost." Research also addresses the stress many Latino families endure emotionally and financially, as the cost of having a child with a hearing loss is significant to most families. The findings clearly support the parents' testimonials. Additionally, all the parents in the study eagerly wanted to participate, and mentioned that they wanted to share their story. As is evidenced in the data from the field notes, the parents were still grieving, often shedding tears when talking about their child's life and the struggles they faced as a family. Many of the parents spontaneously shared that being in a support group with other families in the same situation helped them realize that they were not alone, and helped them seek knowledge about hearing loss.

The lack of knowledge impacts their decision-making and ability to provide adequate care for their child with a hearing loss. From my experience with these families, I have often witnessed parents unable to tell me if their child is in an oral or total communication (both signing and spoken language) program, understand how to troubleshoot when the hearing device does not function, or know their child's degree of hearing loss. I have never had a parent who first enrolled in No Limits that could explain how to read their child's audiogram (hearing test). This is not surprising since a one-time explanation is not enough, even for college graduates in the field of deafness. It takes many levels of explanation to be understood and, often, educators, medical experts, audiologists, and other professionals do not provide continual education for parents. The importance of knowing the degree of hearing loss can help a parent know what their child can hear, and thus, can speak. Lessons can be tailored to their child's hearing loss to provide maximum benefits and communication competence. From the later findings of the current study, it clearly shows that parents can learn to maximize these benefits for their child when given the tools.

An additional finding related to a sub-question of research question one: *What are the characteristics and demographics of the families enrolled*? (Appendix A) The study uncovers that the majority of parents had children who were diagnosed after two years. This finding is perplexing to me, although I am not surprised by the data. According to the statistics disclosed by the Center for Disease Control (2008), over 92% of babies born today in America receive a hearing screening by one month of age (CDC, 2008; NCHAM, 2007). Research supports the benefits of diagnosing a hearing loss before age 6 months, as it has shown to help a child with a hearing loss develop language abilities comparable to his or her hearing peer (Moeller, 2000). The success rate for these children when given proper intervention, skills, and advanced hearing technology is extremely promising (NCHAM, 2005). Yet, only 50% of the babies who do not pass their hearing screening receive follow-up diagnostic testing, and only 33% receive intervention by age 6 months (NCHAM, 2005). A few overarching factors state that children were at higher risk of becoming lost to follow-up on audiologic evaluation if their mothers were covered by public insurance, smoked during pregnancy, and were non-Caucasian (Chia-ling et al., 2008). Subsequently, those children do not participate in early intervention programs and, likewise, the children and families in the study are part of those dismal statistics. They, too, have not received the services. Moeller (2000) reported that children enrolled in an intervention program prior to age 11 months had reasoning and receptive vocabulary results within normal range at age 5 years, whereas the children who were enrolled later in an intervention program had scores that were much lower. This study would corroborate the low level of language abilities of the children enrolled at No Limits because of the late diagnosis and late amplification (Lemajić-Komazec, 2008). Policy and procedures need to be reexamined to address this loss of follow-up on patients and lack of early intervention services.

With the need for more follow-up intervention, another area of concern is the quality of physicians who are misdiagnosing children. According to the findings, over half of the parents of the infants and toddlers in this study were told by medical professionals that the child was "normal" and did not have a hearing loss, even when the family suspected it. Of course, with most of the families relying on the state for medical care, the likelihood that the quality of health care may be compromised due to their low economic status is great. To address this problem, general physicians with Latino patients should be provided current information about hearing loss, referral options, and indictors of hearing loss. News outlets or distribution of bilingual brochures can help educate parents about signs of hearing loss.

Regarding late amplification, more than half of the parents reported that after receiving the diagnosis, it took six months or longer to get hearing aids provided by California Children's Services (CCS). Research suggests the importance of amplification or hearing aids in the critical years of birth to age 6 when developing language and listening skills (Yoshinaga-Itano et al., 2000). A hearing child learns five new vocabulary words a day. By missing six months or more of listening and hearing new words, which can total up to 900 vocabulary words, this constitutes an enormous lost opportunity for these children (Biemiller, 2009). Based on the findings, more than 90% of the children attending the after school program at age 5 are coming in with fewer than 50 vocabulary words in spoken language and sign language compared to their hearing peers at the same age with more than 4,000 root word meanings (Biemiller, 2009). This delay in the system is impacting the cognitive, communication, and academic progress of the children. It also places stresses on the educational system because it requires that the children be in "catch up" mode throughout their primary years when, if diagnosed and amplified early, these children with a hearing loss would have the chance to develop language naturally alongside their hearing peers.

On the other hand, contrastive research would argue that late diagnosis and late amplification does not impact a child's future language ability. Based on the study by National

Acoustics Laboratories (NAL), Ching et al. (2009) argue that that there are other factors involved that are more significant determinants to the outcomes and should be considered, including quality of early intervention, degree of hearing loss, maternal education, and mono- or bilingualism, to name a few. The study by NAL argues that Universal Newborn Screening has not shown strong results (Ching et al., 2009). Further research is needed with larger sample sizes and aggregated data.

An implication of the finding is that it can serve to highlight the need for providing loaner hearing aids for children to avoid any listening delay between the age of diagnosis and amplification, as well as between when a hearing aid breaks and when it is returned after being repaired. Regarding the latter situation, I have witnessed a delay of more than three months while a hearing aid is being fixed—this results in the child having no ability to hear at home. Additionally, schools will provide hearing aids, but do not let children take them home. I have witnessed too many times teachers removing the hearing aids while the child is approaching the bus at the end of the school day. Thus, children are going home with no sound, not hearing their parents' voices or those of other family members. Research indicates that hearing loss can lead to isolation and negatively impact a child's education and social-emotional growth (Marschark, 2007). Loaner hearings aids should be provided by the school for home use when a child's hearing aid breaks and is being repaired. Understandably, schools are concerned that the hearing aids will not be returned, but these hearing aids can be provided by nonprofit organizations such as the Starkey Foundation or Rotary clubs, which dedicate their mission to providing hearing aids to impoverished children with a hearing loss. The educational system might consider partnering with these organizations so a child does not lose a day of sound—or cry when the teacher takes away their hearing device as the school bus approaches.

What services do the families currently receive at their school and what services do they seek to receive at the after school program and why? (Appendix A) The findings reveal Latino parents' main reason for enrolling in the No Limits program was that their child needed more services. The parents were not receiving individual auditory, speech, and language therapy and some were actually told that group therapy was better for their child, even though the other students were at different levels of development. The lack of services for the parents is quite typical in the oral deaf programs in the Los Angeles area. Many parents expressed their frustration with not receiving basic accommodations, such as their child having preferential seating, an FM system (a hearing device to allow the child with a hearing loss to hear the teacher's voice more distinctly than the background voices or noises), and an appropriate location to conduct speech services. In fact, I know parents whose children have received speech therapy in the nurse's offices while other students are being tended to for illness and injuries, or even next door to the cafeteria where the children are unable to learn due to the noise from the hundreds of students in the lunch area. Of course, the alternative is to seek private individual auditory, speech and language therapy, but it is costly, on average $175/hour, and these families cannot afford to hire an AVT (Auditory Verbal Therapist) or speech pathologist for their child on a weekly basis. Exacerbating the problem, there is a shortage of teachers of the deaf and SLPs nationwide (Edgar & Rosa-Lugo, 2007). Thus, the inequity between parents who can afford the needed therapy for their child to parents who cannot is often seen in the achievement levels of their children with a hearing loss, and affects whether they will be successful or not.

The lack of achievement in school is most often a result of children with a hearing loss having poor literacy skills. Thus, the findings expose parents' concern for their child to be able to read and write on grade level. Yet, parents can become confused by what they are told by educators. For instance, I have parents apply to the program who have been told that their child with a hearing loss will not learn how to read and write because they cannot hear. Over 90% of the children who enroll in the program after age 8 do not know basic skills, such as the alphabet. Interestingly, they can sing the alphabet, but they cannot identify phonemes. As a result, these children need immediate intervention and most schools do not offer it. Therefore, further research is needed to identify the loopholes in the educational system for these children and highlight the importance of the deficient in the system so change can take place.

Lastly, when discussing what services the parents currently receive and what they seek to receive from the after school program, a few parents stated that they came to the after school program specifically for the parent education classes so they could learn how to work with their child in developing language skills. However, most parents initially came to the after school program to build their child's needs, not their own. Later, they acknowledged how the parent classes helped them to become advocates for their child with a hearing loss. I am hopeful that further research identifying the benefits of parent education to low-income Latino families will result in more resources being allocated to this area of need.

Reflecting on question 1c: *What are the self-reported needs of the families?* (Appendix A)

Thirteen of 17 parents in the study with a hearing child or children said their hearing child sacrificed the most in their family. According to research on siblings of children with a hearing loss, the siblings often feel neglected because all the focus is on the child with the disability (Tattersall & Young, 2003; Bandura, 1997). This can create additional stress on the family and adversely affect positive relationships between either the siblings or between the parent and child (Tattersall & Young, 2003). Stresses can affect all family members. The children with a disability can feel frustrated that they cannot do what their sibling can do as quickly or easily, often feel left out and alone with fewer friends, receive constant reminders compared to their sibling, have low self-esteem, and are angry for are not being understood, according to the study. For the nondisabled sibling, conflicts can arise. Nondisabled siblings can feel that unequal time is given to their disabled sibling, or that their parent favors their sibling more, causing a fracture between their sibling relationships.

The data from this study revealed that the hearing siblings are not only helping their deaf siblings with homework, but are also sacrificing their own extracurricular activities since they must also come to the after school program designed for their siblings with a hearing loss. Several monolingual Spanish-speaking parents mentioned that the hearing siblings are also the communication lifeline with teachers, audiologists, and medical professionals because they tend to be the only ones in their families who speak English. I can verify this from firsthand experience; I have often witnessed parents asking their hearing child to translate for them. This finding is relevant since it does not simply indicate that siblings feel “left out,” but that the parents are aware of their own behavior. This finding can serve as vital information to the after school program so that parent education classes address this topic, as well as provide support to the hearing sibling. Hearing siblings also can be taught about the disability in the classes so they can better understand their sibling with a hearing loss. Instead of only teaching the parents, hearing siblings can be taught based on age and maturity. Siblings should be included in the discussion so they understand how they, too, are an important part of the family unit and their nonhearing siblings’ life.

As educators, we can be sensitive to the hearing sibling and encourage and promote positive sibling interaction. Accolades can be given to the hearing sibling by having “Sibling Day” or, during graduation, giving the hearing siblings diplomas alongside their sibling with a hearing loss. With little research in understanding the hearing and nonhearing sibling relationship, especially among Latino children, information can guide programs across the country on how better to encourage and support these important relationships occurring at a vital time in their lives—their childhood. Future research can explore and measure the potential impact of hearing and nonhearing sibling relationships in the areas of cognitive, language, social, and emotional areas of development. Bronfenbrenner's theory highlights the interactions and relationships a child has within their immediate environment, such as family, school, and their community. Bronfenbrenner's theory sees the impact of a child on the family and the family on the child referred to as a bi-directional relationship. This bi-directional relationship can have the greatest impact, whether it is positive or negative, on a child (Bronfenbrenner, 1986). The finding about siblings in this study lends itself to the implication that more research on children with a hearing loss and hearing sibling relationships be explored.

The parents found most strength during difficult times from their child with a hearing loss, and that faith influences their decision-making. These findings support the data, along with the data indicating that God plays an important role in Latino families' lives. God helps them to cope during difficult decisions, such as deciding to have their child receive a cochlear implant. Interestingly, the parents find strength from the child with a hearing loss who takes most of their time and finances, rather than from the hearing sibling who helps work with their child with a hearing loss from translations to homework.

How does the program fill in the families' perceived gaps in their child's education? (Appendix A) This finding is most interesting because it highlights how the parents applied their knowledge from the parent education classes to seek a different school placement for their child. In fact, 84% of the parents in the study changed school placement for their child with a hearing loss. The parents learned what their child needed and what other options were available to them. The parents' stated the primary reasons they decided to change schools were poor quality teachers, lack of expertise of the speech therapists, and low expectations of their children. Thus, parents had learned the difference between low- or high-quality services and had the confidence during the IEP to request the change. Changing a child's school placement involves a meeting with the IEP team and often a consensus by the team to switch placement. Some of the parents switched from a total communication program to an oral, and others switched from a public school to a private school or charter school. Parents repeatedly reported they learned about the IEP process through the after school program and had previously attended many IEPs having no idea what services their child needed. Class topics from the parent education classes that the parents attended focused included procedures related to the IEP process, parental rights to the law, school placement options, and advocacy resources (Appendix L).

Based on parent reports from Latino families enrolled in the after school program, what changes in their child's development (linguistic, auditory, speech, pragmatic, etc.) has been observed since starting the program? (Appendix A) The study reveals not only the benefits of the after school program, but more important, that low-income Latino parents are eager and willing to learn skills to help their child with a hearing loss excel. During my years of working with teachers, I have been told countless times that this population is not actively engaged in their child's education. This finding contradicts that position. These parents are eager to learn, but few resources have been available to them. This also contradicts the belief that parents from poverty have no time for their child with a hearing loss due to the enormous stresses in their lives. The findings clearly show that the parents can learn new how to help their child, since each parent was able to provide examples of what they had learned. Certainly, parents could have self-reported that at home they applied the lessons learned when they did not. However, every parent in the study was able to provide concrete strategies of what they actually do to help their child. Of course, the amount of time needed to implement these strategies may have been reported as greater than what was actually required (it cannot be known for sure), but what is undeniable is that they were able to report, without prompting, strategies and tools that can improve their parent-child talk and the child's overall social-emotional, academic, and communication abilities.

How, if at all, does the program change the way Latino families interact with the school's IEP team, including teachers and speech teachers, etc.? (Appendix A) The finding that 8 out of 19 (42%) parents felt they are treated differently because they are Latino, low-income level, and/or speak Spanish only was unanticipated; it arose during the focus groups. Interview questions followed up to engage in a deeper conversation about the topic. More research in this area to understand the weight of these factors on the parents and their child with a hearing loss's lives would be insightful. The immediate environment, according to Bronfenbrenner's theory, can positively or negatively impact future relationships. Understanding the parents' perceived outlook on how their income level, home language, or ethnicity impacts their interaction with educators or the quality of services their child receives is of upmost importance. Based on the testimonials from study participants and through the field notes, this was a painful topic for the parents and clearly implies that educators need to be well equipped in understanding how to work with this growing population—and to be culturally sensitive to the child with a hearing loss and their families. The parents' frustration of not knowing English was most prevalent during the IEP meetings. Most parents referred to the IEP meetings as the place where they felt were most obviously treated differently or unfairly. The implications of the study based on the parents' testimonials and suggestions indicate the need for ensuring that IEP forms are presented to the families in their preferred language (Spanish), that a qualified translator—not an inexperienced office staff member who will translate every single word being said— is provided, and that rather than assuming that the parents are uneducated and uninterested in their child's education, the assumption is that the parents want the best for their child.

> School personnel often misread the reserve, nonconfrontational manners, and noninvolvement of Hispanic parents to mean they are uncaring. In Latino culture, teachers are highly respected and any interference from parents may be considered rude and disrespectful (Tinkler, 2002).

Understanding the dynamics of the school environment and the culture of the Latino population can serve to encourage parent involvement that can lead to student achievement (Portrait, 2009).

The study also found that education classes reduced parents' level of stress as they learned how to advocate for their child and understand their school's IEP process. Although I have experienced this perspective to be valid, parent education classes do not remove the stress completely. Deafness is an ongoing process and differs greatly from blindness. People often believe that wearing hearing aids is like wearing a pair of glasses, yet this analogy is misguided. Eyeglasses can immediately engage a child in activities and does not prevent a child from social interactions. However, hearing is different. Because the brain does not have to be trained to see, a person can see when they put on glasses. But when an individual receives a hearing aid, the brain must learn to attach meaning to sound. The amount of time this takes will vary, depending on the person's degree of hearing loss and the number of years they have been without hearing.

This ability is a key factor when understanding the difference between hearing loss and vision loss.

The degree of hearing loss can also warrant different levels of stress. A child with a mild loss typically has fewer challenges than a child with a profound loss. The vision analogy is parallel here; the more visually impaired the person is, the more that vision technology can help that person use the technology to better navigate the world. In contrast, the more hearing impaired an individual is, the longer it may take for hearing aids to be adapted and used effectively to accommodate language acquisition.

Additionally, the technology of glasses is much less complicated than that of hearing aids. While the eyeglass' prescription needs to be adjusted to match the vision loss, the technology itself requires little maintenance. In contrast, hearing aids, in addition to being adjusted to match the degree of loss, must be kept in special equipment to maintain dryness, require molds that fit the ear (and thus must be replaced as the ear grows), need batteries that often must be changed weekly, and use tubing that must be maintained. Moreover, understanding whether hearing aids are working properly takes training. The technology must be checked daily to make sure it is working correctly. Children and their families must be taught how to become advocates for themselves in regard to managing the technology. This adds another level of stress.

In sum, although parent education can reduce stress for families, ongoing training is needed as technology advances. Thus, there is a need to continue parent education for school-age children with a hearing loss and their families.

Lastly, findings related to the final research question that asked: *Based on self-report, how have Latino parents' aspirations for their child changed, if at all, since attending the program?* (Appendix A) are important in the field of deafness because research supports that high expectations of a child improve a child's academic outcomes and low expectations do the reverse (Detchon, 2006). The finding discovers that 100% of the parents stated a change in their aspirations since attending the No Limits after school program. One of the salient aspects of this finding is parents' reporting their aspirations changed after meeting adults with a hearing loss who were in college. From my experience (and even as recently as 2013), parents have shared with me that they have been told by teachers that their child with a hearing loss will never be able to read and write. The low expectations from others had tarnished their dreams for their child's future. In many of the parent classes, I have heard newly attending parents state they would like their child to be happy one day, get married and have a family, and graduate from high school. The possibility of college seemed unattainable.

This finding proves that we must not only teach parents about the IEP process and tools they can use at home to enhance their child's communication skills, but we also must remember to inform them of what is possible for their child. Presenting deaf role models can show them firsthand how the future can be bright despite the challenges. With parents having the tools and advocacy skills to work with the school system to provide the best services for their child, this population of children has enormous potential. Technological advances are on their child's side and will continue to improve. Parent education can be the guiding force for their child's success regardless of ethnicity, income, and home language.

Limitations of Study

The study has limitations that must be taken into consideration in the interaction of the results presented here. One limitation inherit in the study is that the recruited participants are all currently enrolled in the same after school program for which the researcher serves as the director. These participants, although needed in the study to self-report their experiences and needs, may be swayed to report more positive outcomes of their participation in the program to protect their enrollment status. Even though it was presented at the beginning of each focus group and interview that the study was separate from their enrollment at No Limits, it may have prevented them from reporting divergent or negative outcomes. To ameliorate this possibility, I did not come to the office when the focus groups and interviews were conducted so they would not see me and would therefore feel more comfortable speaking freely.

Also, like many studies involving parents of children with a hearing loss, the sample size is small, mainly due to the difficulty of recruiting a large population of families who have a child with a hearing loss over a period of time. As a result, this may not fully represent this population. A unique factor in this study is that all of the participants were low-income Spanish speaking Latino, some of whom monolingual Spanish. Further research would be needed to compare the data on a larger scale. On that same note, the parents in this study may not be a representative sample because they actually may be viewed as unique, with their high level of commitment to driving their child with a hearing loss three times a week to an after school program and enduring the family and other types of sacrifices that are required because of this commitment. One could argue that this represents a specific population of families who are more resourceful and, thus, a less representative sample.

Since the study focused on self-reporting, parents may have inflated how often they work with their child at home using the tools received from the after school program. Social desirability responses are when participants in a study tend to present themselves in a more favorable image. This is often done to avoid criticism and to gain social approval. Typically, social desirability responses appear in socially sensitive questions. As a result, this can create invalid responses (Van de Mortel, 2008). For this study, parents may not want others to know that they are not working with their child at home, as it may reflect negatively upon them as parents. To avoid embarrassment, they may embellish their answers to appear more positive. According to Van de Mortel, the only way to avoid social desirability responses is to not ask socially sensitive questions, but rather, more neutral questions (2008).

Another possible limitation is that the researcher of the study was not the data collector. To avoid any bias, an independent data collector was chosen to conduct the focus groups and interviews. Although this choice did avoid potential bias or influence of responses by the parents since they personally knew the researcher, it did prevent the researcher from directly observing the reactions and emotions of the parents and how the parents interacted with one another. Being monolingual English, the researcher also had to use translated transcripts of the interviews. There are times when a translation does not fully capture the nuances of a dialogue in its original language. Also, by not being the data collector, the researcher was unable to ask her own follow-up questions. Field notes by Dr. Wesley allowed the researcher to listen to the transcripts while reading the observational notes that focused on parents' emotions and affect. It enabled the researcher to hear the emotions and confirm them through the field notes.

Additionally, with regard to the research question pertaining to any change in their aspirations for their child with a hearing loss since attending the after school program, the parent had to rely on memory from over a year prior. As a result, these findings may not be as reliably self-reported as others.

Research Contributions and Implications

This study contributes to research by examining in some depth the characteristics, needs, and experiences of low-income Latino parents of school-age children with a hearing loss. With no prior research on these aspects of this population, the study holds merit and the population warrants further investigation for wider and deeper analysis. The current study has indicated the importance of parent education in the process of providing services to low-income Latino families and the unique needs of this population of parents with children with a hearing loss.

> Changes in composition and attitudes of U.S. society have important implications for professionals in auditory-based practices. High rate of immigration from developing countries, where hearing loss is more prevalent, is leading to a growing number of children with special needs that do not share the same culture of most auditory-based clinicians (Rhoades et al., 2004, p.285).

The implications of the study clearly show the need for teacher education programs to become culturally aware of these students, and for the special educational teams to be sensitive to the needs of their families. Educators need to provide the families with the necessary tools to apply at home, as parents spend a large amount of time with their children. Other implications of the study show the importance of involving the parents and of being aware that although parents of school-age children may have already been through the grieving process at age of onset of their child’s diagnosis of hearing loss, the memories and pain still surface and impact their lives. Consequently, ongoing counseling and parent support groups are suggested.

In addition, these families want to be heard. Providing support services with other families sharing the same struggles can relieve families of the sense of being alone and isolated. Education classes should include teaching parents not just the basics of an IEP, but actually how to enhance language and communication skills with their child in order to avoid future obstacles. Other results indicate that it’s in the best interests of everyone involved to keep expectations high and avoid stereotypes (such as Latino parents are not involved parents, or that because they speak Spanish, their needs are less important).

The study’s contribution can lead others to incorporate parent education into their programs and professional development for their teachers on an ongoing basis.

Practical Implications

This study has provided practical implications for the after school programs, especially when addressing the hearing siblings. Studies have investigated the relationship between a disabled and nondisabled sibling and the results are mixed. For some nondisabled siblings, it can create stress in the family, but other results show, sibling with a hearing loss by becoming more independent, cooperative, and acquiring a higher level of empathy for others (Bat-Chava & Martin, 2002). Some of the factors for a positive outcome were based on birth order, family size, parents’ anxiety about deafness, and negative sibling comparisons. If a child with a hearing loss was born first, the sibling relationship was healthier because the family had time to adjust to the new lifestyle focusing solely on the child with a hearing loss. When additional children were added to the family dynamic, the hearing children were integrated into this lifestyle. In contrast, if a child with a hearing loss was born second or third in the birth order, it led to a disproportionate amount of time dedicated to the child with a hearing loss, creating stress on the hearing sibling. The larger the family size the more positive relationships occurred among the siblings. Another factor was how the parents dealt with the hearing loss in the family and whether or not they compared the children in their abilities. Sibling relationships, supported by Bronfenbrenner’s theory, are a vital component in the development of a child.

For the after school program, the findings suggest practical implications that can serve to better the services provided to meet the needs of the parents. For example, the siblings were mentioned as making the biggest sacrifice, yet the after school program spends little time recognizing their sacrifice. Based on this finding, No Limits recently dedicated one of its rooms as “The Siblings Hub,” where the brothers and sisters of children with a hearing loss can have their own place to do their homework and “hang out” with other siblings like themselves. No Limits has initiated a “Sibling Day” and “Gratitude to Siblings” cards. Arts and crafts projects are also provided here. Siblings are invited to attend the music program and auditory, speech and language therapy, if they wish.

Another practical implication of the study is allowing parents to have allocated time to share their stories and experiences at every weekly parent class and by setting up a parent network outside of the Center. Parents were eager to share their stories when participating in the study. As mentioned, they feel a need to share their stories and be heard. Although their children are school age, they still are grieving and in pain for their child. The study highlighted how much parents desire information and how they want and need continual education, but they also need to have a place to share their day and their frustrations and joys. Sharing experiences serves two main roles: a chance for parents to empathize with one another and a chance for No Limits to learn more about their needs.

Additionally, the study reveals the need for educators to be sensitive during the Individual Education Plan (IEP) process. Whether it is the parents’ first IEP or their fifteenth, the process is still intimating and overwhelming for them as Spanish speakers. The parents share a great deal about “fighting the system,” or “fighting for their child’s rights,” showing the importance of including the parents in the discussion. This also helps to prevent a “parent versus school" mentality. The parents expressed that they want to feel as if they are on the same team, a team that has the best interest of their child at the forefront. Of course, the dynamics are difficult for most families who have children with disabilities. I have been involved in hundreds of IEPs and have witnessed firsthand the differences between how Spanish-speaking families are treated compared to Caucasian middle-class families. I have been in IEPs that did not have translators at the meeting, and seen Spanish-speaking families being told to sign the IEP even though it was given to them in English, which they could not read or understand. I have witnessed the translator not translating what everyone is saying in the group. Similarly, I have witnessed educators at IEPs talking poorly about a mother, in English, knowing she does not understand what is being said. But as the findings reveal, parents do know. Whether they understand everything or not, they know.

The practical implication of the study is the importance that educators treat all families, regardless of ethnicity, language abilities, educational level, and income, with respect and dignity. The findings clearly show that this population of families tries to support and obtain the optimal services for their children and, if given the tools, will apply them to provide a better future for their children with a hearing loss.

Future Research

This study lends itself to future studies addressing the needs of the Latino population with children who have a hearing loss. Future research may consider focusing specifically on parent education curriculum, the outcomes of attending parent education sessions using an experimental group with pre- and post-assessments, and observing parents using the lessons learned from the parent classes with their child with a hearing loss to evaluate the program. Additionally, more research addressing the loophole in the medical and universal hearing screening where children are still late diagnosed and late amplified, and what policy can be enforced to resolve this critical problem is needed. Future research should be focused on how educators interact with Spanish-speaking families and what “best practices” can be implemented into the curriculum and teaching pedagogy.

This study only scratches the surface for understanding the needs and experiences of low-income Latino families. More research in exploring how Latino families navigate through the school system, find resources, communicate with their child who speaks English, interact with other family members including siblings, and what we can do as educators to better support their needs as well as their child with a hearing loss is needed. A longitudinal and/or ethnographic study would shed greater light on this growing population who has children with a hearing loss. Most studies focus on parents who have children who communicate with sign language. Few studies focus on parents who have children with a hearing loss who use spoken language, especially Latino families. Consequently, further research is gravely needed to better understand their needs and experiences. By understanding their needs, local and national representatives, school districts, educators, administrations, teachers of the deaf, and speech and language pathologists in the medical field from doctors to audiologists can establish “best practices” and high quality services for these children and parents of Latino descent. Helen Keller said, “While they were saying among themselves it cannot be done, it was done.” It must be our vision to create equity among all children and families so they can succeed in school and in life.

Appendix A

Findings and Sub-findings in Relation to Research Questions

Research questions	**Major Findings**	**Sub-findings**
RQ1 What are the characteristics of Latino parents of a child with a hearing loss who enroll in the after school program?	**16 of 19 (85%) low-income Latino families had no prior experience with hearing loss before their child was born and as a result, they did not know where or how to find resources to help their child with a hearing loss.**	**Sub-findings:** ▪ **Etiology of Hearing Loss:** 3 genetic, 2 premature, 1 medical condition, 13 unknown, 2 meningitis ▪ 33% told by doctors that child was normal ▪ 4 children placed in autistic classroom before age 5 ▪ All children had sensorineural loss ▪ 19 out of 21 children had severe-to-profound loss
RQ1a What are the characteristics and demographics of the families enrolled?	**11 of 21 (52%) low-income Latino parents' children were late diagnosed and relied on state services to provide their child's hearing devices.**	**Sub-findings:** ▪ 63% received free hearing aids through CCS ▪ 11 of 21 children diagnosed after age 2, with 9 of the 11 misdiagnosed ▪ 2 parents had health insurance ▪ 11 of 19 parents work full time ▪ 7 of the 19 parents do not work and 3 of those 7 quit job once child was diagnosed ▪ 100% of parents had to rearrange their child to commit to the after-school program's schedule ▪ 60% of the parents work cleaning offices or homes; 1 works for the elderly, 1 for bakery and 1 as a bookkeeper ▪ 16 of 19 mothers said fathers took longer to adjust to news of their child's hearing loss ▪ Average drive (one way) is 45 minutes. Shortest is 20 minutes –

		longest is 2 hours ▪ 18 out 19 said it is worth it because of the progress their child is making ▪ Only 2 parents mentioned the cost of gas and difficulty of expense ▪ 10 parents completed high school, 6 middle school, and 2 a four-year university (from Mexico & America)
RQ1c What services do the families currently receive at their school and what services do they seek to receive at the after school program and why?	**19 of 19 Latino parents reported that the main reason they enrolled in the No Limits program was because their children needed more services and they wanted to learn how to help their children**	**Sub-findings:** ▪ Parents report they currently receive 30 minutes a week in a group of speech therapy to 1 hour, 2 times a week ▪ 16 of 19 sought No Limits for individual auditory, speech and language therapy because their child was not receiving it at school. Also, reported they wanted their child to learn to read, and learn how to advocate for their child, especially at IEPs ▪ **Reason Enrolled in Program:** 8 out of 19 said child was not speaking when enrolled in program and wanted child to communicate verbally ▪ Parents reported a range from 30 minutes once a week in-group to 1 hour, twice a week of individual speech therapy ▪ 16 out of 19 parents now attend charter school, private program or switched to their local school ▪ Found program through director speaking at elementary school, other parents, brochure or recommended during IEP ▪ 11 of them were on the waiting list for over 2-3 years

RQ1c What services do the families currently receive at their school and what services do they seek to receive at the after school program and why?	**19 of 19 Latino parents reported that the main reason they enrolled in the No Limits program was because their children needed more services and they wanted to learn how to help them.**	**Sub-findings:** ▪ Parents report they currently receive 30 minutes a week in a group of speech therapy to 1 hour, twice a week ▪ 16 of 19 sought No Limits for individual auditory, speech and language therapy because their child was not receiving at school. Also, reported they wanted their child to learn to read, and learn how to advocate for their child, especially at IEPs ▪ **Reason Enrolled in Program:** 8 out of 19 said child was not speaking when enrolled in program and wanted child to communicate verbally. ▪ Parents reported a range from 30 minutes once a week in-group to 1 hour, twice a week of individual speech therapy ▪ 16 out of 19 parents now attend charter school, private program or switched to their local school ▪ Found program through director speaking at elementary school, other parents, brochure or recommended during IEP ▪ 11 of them were on the waiting list for over 2-3 years
RQ1b What are the self-reported needs of the families enrolled?	**Of the 17 parents with more than one child, 13 (76%) reported that their hearing child or children had to sacrifice the most because all the parent's attention was on their child with a hearing loss.**	**Sub-findings:** ▪ Parents reported they need more time with their hearing sibling ▪ **Found Strength:** 15 out of 19 found strength from child with hearing loss; 3 from child with hearing loss and God; 4 out of 19 – God only ▪ **Faith:** 16 out of 19 parents

	15 of 19 (80%) Latino parents found their strength during difficult times from their child with a hearing loss.	reported that faith influenced their decision-making
RQ2a What services does the program provide for the parents and child with a hearing loss?		**Sub-findings:** ▪ Parents report individual auditory, speech and language therapy, parent education, literacy, leadership classes, theater, and music
RQ2b How does the program fill in the families' perceived gaps in their child's education?	**16 of 19 (84%) Latino parents changed their school placement after being enrolled in the after school program because of what they learned in the parent classes, including their rights to request more services for their child.**	**Sub-findings:** ▪ Parents report after school fulfilled a gap in individual auditory, speech and language therapy, reading intervention, school options, and parent education ▪ 80% said learned about IEPs at No Limits ▪ 16 of 19 parents report they did not know they had a choice of communication and specialist-recommended sign language
RQ3 What attributions do Latino families give the program?		▪ Sub-findings: 100% attribute the academic and communication growth of their child to the after school program ▪ 100% reported their child is talking and listening more since attending program ▪ 100% said they do not know of any other after school program that provides similar services
RQ3a Based on parent reports	**19 of 19 Latino parents attribute to the after school**	**Sub-findings:** ▪ All parents were able to provide

from Latino families enrolled in the after school program, what changes in their child’s development (linguistic, auditory, speech, pragmatic, etc.) have been observed since starting the program?	**program that they learned skills that they can apply at home and as a result, their child has improved in the areas of speech, listening, language, pragmatics, and reading.**	at least 2 examples of skills they applied at home with their child from expanding vocabulary, being disciplined, play one-on-one, sing, repeat words when needed, and more ▪ 5 out of 19 mentioned the graduation ceremonies helped child’s speaking skills and confidence
RQ3b How, if at all, does the program change the way Latino families interact with the school IEP team, including teachers, speech therapists, etc.?	**8 of 19 (42%) parents feel they are treated differently because they are Latino, low-income level, and/or speak Spanish only.**	**Sub-findings:** ▪ All parents were confused and nervous about IEP ▪ 100% said learned about their child’s rights and IEPs from program and feel less stressed
RQ3c To what extent do they perceive the weekly parent education classes to have supported their personal needs and needs for their child?	**17 of the 19 Latino parents reported that the parent classes reduced their level of stress as they learned how to advocate for their child and understand the school’s IEP process.**	**Sub-findings:** ▪ 16 of 19 parents report a level of hope by attending program ▪ 17 of 19 parents said they had never met a deaf adult who speaks until coming to program
RQ3d Based on self-report, how have Latino parents’ aspirations for their child changed, if at all, since attending the program?	**19 of 19 Latino parents reported that their aspirations changed after being in No Limits.**	**Sub-findings:** Reasons for change in aspirations: 1. Witnessing progress of child; 2. learning how to advocate for their child, and; 3. saw alumni return as college graduates
RQ3e In what ways, if any, do Latino families report		**Sub-findings:** ▪ 19/19 parents report a change in

the parent education classes have changed their views of their child’s educational progress and future and why?		how they view their child’s educational future since attending the after school program ▪ Frequency of responses to child’s future: 10 parents responded they want child to go to university, 2 said to be independent, 3 said to speak well, 2 said to have high grades, and 2 said have their own family

Appendix B

Script for Phone Recruitment

Hello, my name is Tymika and I am part of a study about parent education for Latino parents. You were selected as a possible participant in this study because you are a parent of a child with a hearing loss and you attend the after school program, No Limits.

This study is being done to assess benefits, if any, of the services received, including parent education classes offered to you at the after school program.

Your participation in this research study is voluntary.

If you volunteer to participate in this study, the researcher will ask you to do the following:

- Attend one 90-minute focus group that includes other parents to discuss your experiences of attending the parent education classes at No Limits.
- You may be asked to attend one interview that will last no more than 30 to 45 minutes that will ask similar questions to the focus group. The questions will ask about your personal aspirations for your child, the parent education classes, your child's needs, and if there were any lessons that you learned during or after your attendance of the parent classes.
- This is a non-experimental study, but rather an in-depth understanding of the parent classes you attended and whether the classes can be useful to other parents who have children with a hearing loss. If so, the study will allow the researcher to use the findings and possibly publish a future parent handbook specifically for Latino parents of school-age deaf and hard-of-hearing children.

The focus groups and interviews will be held at No Limits – 9801 Washington Blvd., 2nd floor in Culver City, and translators will be available, along with food and childcare.

The times and dates will be Wednesday, February 6 at 4 p.m. or 5:30 p.m., or Thursday, February 7, 4 p.m. or 5:30 p.m.

Again, this is voluntary and if you would like to be removed at any time during the process, it will not be a problem.

Is this something you might be interested in participating in? If so, we will be asking you to come in to sign an informed consent form. We will have a translator to go over it with you and answer any questions you may have. Please let me know a good time this week that we can have you come in. You can also send the form via email.

Thank you for your time.

Appendix C

Escritura telefónica para Reclutamiento

Hola mi nombre es Tymika y yo soy parte de un estudio sobre la educación para padres Latinos. Su nombre fue seleccionado para ser un participante en este estudio porque usted es padre/madre de un niño con discapacidad auditiva y porque usted atendió a clases para padres en el programa No Limits. Usted también participo en dos exámenes, uno antes de tomar las clases y otro después de las clases.

Este estudio es para evaluar los beneficios de las clases de padres que se ofrecieron en el programa de No Limits.

Su participación en este estudio es voluntariamente.
Si decide participar en este estudio el/la investigador/ara le preguntara y pedirá lo siguiente:

- Atender un grupo de enfoque con otros padres para discutir las experiencias que vivieron en atender las clases de padres en No Limits. El grupo de enfoque tardara 90 minutos.
- Le preguntaran que atienda una entrevista que tardara entre 30 y 45 minutos. Las preguntas que le harán serán sobre sus aspiraciones para su hijo/a, sobre las clases que tomo, sobre las necesidades de su hijo/a y sobre temas que aprendió antes, durante o después de atender las clases.

- Este es un estudio para entender y comprender si las clases que tomo usted les beneficiara a otros padres que también tienen niños con discapacidad auditiva. Si la investigadora o el investigador descubre que el estudio es beneficioso, ay posibilidad que diseñen un libro especialmente para padres Latinos en donde hablan de temas y estrategias que necesiten para ayudar a su hijo/a.

El grupo de enfoque y las entrevistas serán en No Limits 9801 Washington Blvd., en el segundo piso en Culver City. También habrá traductores, cuidado de niños y comida.
Los días y horas serán determinadas a otro tiempo Su participación en este estudio es voluntariamente . Si en algún momento durante la entrevista ó durante el grupo de enfoque quiere removerse del estudio no habrá problema.

¿Usted cree que estará interesado en este estudio? Si la respuesta es si, nosotros vamos a contactarlo/a para que venga a firmar un consentimiento informativo. Nosotros tendremos un/a traductor/a por si tiene preguntas. Por favor informemos esta semana si podrá venir. También puede enviar la forma por correo electrónico.

Muchas gracias por su tiempo.

(Fin de conversación)

Appendix D

Informed Consent

University of California, Los Angeles
CONSENT TO PARTICIPATE IN RESEARCH

Parent Education for Latino
Parents of a Child with a Hearing Loss

Dr. Alison Bailey, a Faculty Sponsor from the Graduate School of Education and Information Studies and Michelle Christie, M.S. Ed. CCC, a doctoral student and principal investigator from the Educational Leadership Program at the University of California, Los Angeles (UCLA), are conducting a research study for Ms. Christie's dissertation project.

You were selected as a possible participant in this study because you are a parent of a child with a hearing loss at the after school program, No Limits. You also may have taken a pre-post assessment. The results will not be used in the study, but rather as a reference with all information confidential and your name anonymous.

Your participation in this research study is voluntary.

Why is this study being done?

This study is being done to assess benefits, if any, of the services at No Limits, including parent educational classes offered to you at the after school program you attend or have attended.

What will happen if I take part in this research study?

If you volunteer to participate in this study, the researcher will ask you to do the following:

- Attend one focus group that includes other parents to discuss your experiences of attending the parent education classes at No Limits.
- You may be asked to attend one interview that will last no more than 30 minutes to 45 minutes that will ask similar questions to the focus group. The questions will ask about your personal aspirations for your child, the parent education classes, your child's needs, and if there were any lessons that you learned during or after attending the parent classes.
- This is a non-experimental study, but rather an in-depth understanding of the parent classes you attended and whether the classes are useful for other parents who have children with a hearing loss. If so, the study will allow the researcher to use the findings and possibly publish a parent handbook specifically for Latino parents of school age deaf and hard-of-hearing children.

How long will I be in the research study?

Participation will take a total of about one hour for the focus group and 30 minutes to 45 minutes for the interviews.

Are there any potential risks or discomforts that I can expect from this study?

This has minimal foreseeable risks. Discomfort may occur when sharing personal stories about your challenges of raising a child with a hearing loss.

Are there any potential benefits if I participate?

The results of the study may benefit you by allowing you to better understand your own educational journey and abilities of working with your child with a hearing loss. Also, the results may benefit society and other Latino families in the future.

The results of the research may help Latino families with a child with a hearing loss and give them the tools to help their child achieve their personal dreams and educational goals. This demographic is rarely studied, and your input will allow us to make a difference in the field of deafness when studying Latino families with a child with a hearing loss who is learning to speak, rather than using sign language as a mode of communication.

What other choices do I have if I choose not to participate?

If you choose not to participate, you can consider sharing your input without it being included in the study.

Will I be paid for participating?

You will receive no monetary compensation for participation in the focus group and/or interview discussion.

Will information about me and my participation be kept confidential?

Any information that is obtained in connection with this study and that can identify you will remain confidential. It will be disclosed only with your permission or as required by law.

- For focus groups, all participants will be asked to keep what is said during the group discussion between the participants only. However, complete confidentiality cannot be guaranteed.
- Interviews will be audiotaped. You have the right to review the tapes made as part of the study to determine whether they should be edited or erased in whole or in part.
- Data from audiotapes will be used for educational purposes and will be destroyed after 3 years.
- Data will only be shared with dissertation team and experts involved in the research study, including Dr. Tymika Wesley.

Confidentiality will be maintained by means of one computer being used solely for data collection and transcription. All coding will have numbers assigned instead of using names to maintain confidentiality. All data will be locked up in a filing cabinet located at researcher's home and only the researcher will have access to it. Electronic data will be kept on iCloud with secure password and accessible only by researcher. Data will be used for educational purposes only and destroyed using a shredder after 3 years.

What are my rights if I take part in this study?

- You can choose whether you want to take part in this study, and you may withdraw your consent and discontinue participation at any time.
- Whatever decision you make, there will be no penalty to you, and no loss of benefits to which you are otherwise entitled.
- You may refuse to answer any questions that you do not wish to answer and still remain in the study.

Whom can I contact if I have questions about this study?

- The research team: Dr. Alison Bailey, Michelle Christie, M.S.Ed

If you have any questions, comments, or concerns about the research, you can talk to the one of the researchers. Please contact:

Michelle Christie.

UCLA Office of the Human Research Protection Program (OHRPP):
If you have questions about your rights while taking part in this study, or you have concerns or suggestions and you want to talk to someone other than the researchers about the study, please call the OHRPP at (310) 825-7122 or write to:

UCLA Office of the Human Research Protection Program
11000 Kinross Avenue, Suite 211, Box 951694
Los Angeles, CA 90095-1694
You will be given a copy of this information to keep for your records.

SIGNATURE OF STUDY PARTICIPANT

____
Name of Participant

____ ________________________
Signature of Participant Date

SIGNATURE OF PERSON OBTAINING CONSENT

____

Appendix E

Informed Consent - Spanish

Universidad de California, Los Angeles
CONSENTIMIENTO PARA PARTICIPAR EN LA INVESTIGACIÓN

Educación de los padres de bajos ingresos para padres Latinos de niños con pérdida de audición

La Dr. Alison Bailey, una patrocinadora de la facultad de la Escuela de Graduados en Educación y Estudios de la Información y Michelle Christie, MS Ed. CCC, un estudiante de doctorado e investigadora principal del Programa de Liderazgo Educativo en la Universidad de California, Los Angeles (UCLA), está llevando a cabo un estudio de investigación para el proyecto de tesis de la Sra. Michelle Christie.

Usted ha sido seleccionado como posible participante en este estudio ya que usted es padre de un niño sordo que asiste al programa después de la escuela en No Limits. Su participación en este estudio es totalmente voluntaria.

¿Por qué se realiza este estudio?

Este estudio se realizó para evaluar los beneficios, si los hubiere, de las clases educativas para padres que se ofrecen en el programa de educación después de asistir o haber asistido a la escuela regular.

¿Qué pasará si tomo parte en este estudio de investigación?

Si usted es voluntario para participar en este estudio, el investigador le pedirá que haga lo siguiente:

- Asista a un grupo de enfoque que incluya a otros padres para discutir sus experiencias sobre la asistencia a las clases de educación para padres en No Limits.
- Es posible que se le pida que asistir a una entrevista que tendrá una duración de no más de treinta a cuarenta y cinco minutos en la cual se le hacen preguntas similares a las del grupo de enfoque. Las preguntas serán acerca de sus aspiraciones personales para su hijo (metas), las clases de educación para padres, las necesidades de su hijo y si ha habido alguna lección que aprendió durante o después de asistir a las clases para padres.
- Se trata de un estudio no experimental, sino más bien una comprensión en profundidad de las clases para padres que recibió y si las clases son útiles para otros padres que tienen niños con una pérdida auditiva. Si es así, el estudio permitirá que el investigador utilice los resultados y podría ser posible que se publique un manual para padres futuros, específicamente para los padres latinos en edad de escuela para sordos y niños con problemas de audición.

¿Cuánto tiempo estaré en el estudio de investigación?

La participación se llevará a un total de alrededor de 90 minutos para el grupo de enfoque y de 30 minutos para las entrevistas.

¿Existen riesgos potenciales o molestias que puedo esperar de este estudio?

- Esto tiene mínimos riesgos previsibles. La incomodidad puede ocurrir al compartir historias personales con los otros padres acerca de sus retos de criar a un niño con una pérdida auditiva.

¿Hay beneficios potenciales si puedo participar?

Los resultados de la historia pueda beneficiar mediante la comprensión de su propio viaje educativo y las habilidades de trabajar con el ingenio de su hijo. Además, los resultados pueden beneficiar a la sociedad y otras familias latinas en el futuro, que se encuentren atravesando por los mismos problemas.

Los resultados de la investigación pueden ayudar a las familias hispanas con niños con una pérdida auditiva y así darles las herramientas para ayudar a su hijo a alcanzar su sueños y metas educativas. La demografía se estudia como una entrada que nos permite hacer una diferencia en el campo de la sordera o pérdida auditiva en el estudio de las familias latinas con niños con una pérdida auditiva que están aprendiendo a hablar, en lugar de utilizar la lengua de signos como medio de comunicación.

¿Qué otras opciones tengo si decido no participar?

Si decide no participar, se puede considerar compartir sus opiniones sin que se incluyan en el estudio.

¿Me pagarán por participar?

- Usted recibirá un pago de $ 25 por la participación en el grupo de enfoque y $ 15 para participar en la discusión entrevista. Si decide irse antes del final de las discusiones, usted recibirá un pago prorrateado por el tiempo de su participación.

¿La información sobre mí y mi participación se mantendrá confidencial?

Cualquier información que se obtenga en relación con este estudio y que pueda identificarle será confidencial. Esto será compartida solamente con su permiso o según lo requiera la ley.

- Para los grupos de enfoque, todos los participantes se les pedirá que mantenga lo que se dijo durante el debate en grupo entre los participantes solamente. Sin embargo, la confidencialidad no puede ser garantizada.
- Para las entrevistas, las entrevistas se grabaron, usted tiene el derecho de revisar las grabaciones realizadas como parte del estudio para determinar si deben ser editado o borrado en su totalidad o en parte.
- Los datos de cintas de audio se utiliza con fines educativos, y serán destruidos después de 3 años.

- Los datos sólo serán compartidos con el equipo de disertación y expertos involucrados en el estudio de investigación, entre ellos el Dr. Wesley Tymika y el Dr. Maura Martindale.

La confidencialidad se mantiene por medio de un equipo que se utiliza exclusivamente para la recolección de datos y transcripciones. Todos los códigos tendrán números asignados en lugar de utilizar nombres para mantener la confidencialidad. Todos los datos serán encerrados en un armario situado en la casa del investigador y sólo el investigador tendrá acceso a la misma. Los datos electronicos serán guardados en iCloud con contraseña segura y accesible sólo por el investigador. Los datos se utilizarán únicamente para fines educativos y destruidos al cabo de 3 años.

¿Cuáles son mis derechos si participo en este estudio?

- Usted puede elegir si desea o no participar en este estudio, y usted puede retirar su consentimiento y dejar de participar en cualquier momento.
- Sea cual sea la decisión que tome, no habrá pena para ti, y no hay pérdida de beneficios a los que tenían derecho por lo demás.
- Usted puede negarse a contestar cualquier pregunta que no quiera contestar y aún así permanecer en el estudio.

¿A quién puedo contactar si tengo preguntas sobre este estudio?

- El equipo de investigación: Dr. Alison Bailey, Michelle Christie, M.S.Ed.

Si usted tiene alguna pregunta, comentario o inquietud acerca de la investigación, usted puede hablar con uno de los investigadores. Por favor, póngase en contacto con:

Michelle Christie.

UCLA Oficina del Programa de Investigación de Protección Humana (OHRPP):
Si usted tiene preguntas acerca de sus derechos, mientras que la participación en este estudio, o tiene alguna inquietud o sugerencia y desea hablar con alguien que no sea los investigadores sobre el estudio, por favor llame a la OHRPP en (310) 825-7122 o escriba a:

UCLA Oficina del Programa de Investigación de Protección Humana
11000 Kinross Avenue, Suite 211, Box 951694
Los Angeles, CA 90095-1694

Se le dará una copia de esta información para mantener en sus archivos.

FIRMA DEL PARTICIPANTE DEL ESTUDIO

____
Nombre del Participante

Firma del participante Fecha

FIRMA DE LA PERSONA QUE OBTIENE EL CONSENTIMIENTO

Appendix F

Focus Group Protocol - English

All participants will be asked to keep what is said during the group discussion between the participants only. However, complete confidentiality cannot be guaranteed.

To warm up the group, I will have them introduce themselves, tell us age of their child, and say two things that they love about their child.

1. I heard you took parent education classes and actually took a test at No Limits that had a lot of fill-in questions. What was it like to take the first test?

   Probe: How did it feel after taking the initial test when you went home? Were you happy with your answers? Can you please tell me about that experience?

2. Before taking the parent classes, what were your aspirations for your child? What were your dreams for him/her as they became adults?

   Probe: Had you ever been told that your child cannot do something by educators, family, or friends?
   Probe: Can you tell me more about that?
   Probe: How did that make you feel?
   Probe: After you took the final exam, did your aspirations change for your child? If so, how? If not, why?

3. All of you attended parent classes. Tell me about your experience of attending the parent education classes.

   Probe: What were your initial expectations?
   Probe: Tell me how you felt going to class. Was it like going to school where sometimes you feel overwhelmed with all the material or was it something that you enjoyed learning about?

4. Please tell me about some of the topics that were discussed in class.

   Probe: Was there anything that you learned that you tried out on your child?
   Probe: Was there anything that you learned that you tried at home?

5. What were language strategies you learned to help your child communicate better? For example, new vocabulary, reading, or correcting speech.

6. Please tell if there was anything that was positive or negative about coming to the parent classes.

   Probe: Please tell me what was the most beneficial to you.

Probe: What was the least beneficial to you?

7. Please tell me what you felt was the main focus of the parent classes.

8. Were there topics in the parent classes you wished you learned more about?

   Probe: Were there topics that were not part of the class that you felt should have been? Please tell me.

9. Tell me what was the best part of the classes.

   Probe: Would you recommend these classes to other parents with children with a hearing loss? If so, why? If not, why not?

10. Do you believe that your skills working with your child have shown any improvement since attending parent education classes? If so, please provide some examples.

11. Before the parent education classes, did you feel prepared to work with your child? If so, how did you feel prepared?

    Probe: After attending the parent education classes, how do you feel now about working with your child?
    Probe: How do you feel about your confidence level when working with your child? Please provide me with an example.

    Probe: How do you feel about working with teachers or the school system now after attending parent education classes? Please provide me with an example.
    Please tell me about the classes themselves. Tell me your thoughts about the length of the classes, amount of classes (weekly) and the setting. Anything you think should change? Please explain.

Appendix G

Protocolo de grupo de enfoque - Español

Todos los participantes deberán mantener la discusión entre los demás participantes confidencial. Nosotros no podemos garantizar que todo lo discutido sea completamente confidencial.

Para empesar, quiero que los padres se introduscan, digan la edad de su hijo/a y que digandos cosas de su hijo/a que aprecian de el/ella.

1. ¿Escuche que usted tomo cursos para padres y tomo un examen en No Limits.

¿Como se sintió al tomar el primer examen?

Cuando llego a casa, ¿Como se sintió usted al tomar el primer examen? ¿Se sintió contento/ta con sus respuestas? ¿Puede compartir con migo su experiencia?

2. ¿Antes de tomar los cursos para padres cuáles fueron sus aspiraciones pare su hijo/a? ¿Cuáles eran sus sueños pare ellos para el futuro?

¿Hubo alguna vez en donde maestras, familia ó amigos/as le habían dicho que su hijo/a no podía hacer alguna cosa?

¿Me puede decir mas sobre eso?

¿Como se sintió?

¿Después que tomo el examen final, cambiaron sus aspiraciónes y sueños para su hijo/a? Porque?

3. Todos ustedes tomaron las clases para padres. Platiquen me sobre sus experiencias en asistir a estas clases.

¿Cuáles fueron sus expectativas antes de asistir estas clases?
¿Como se sintió ir a las clases? ¿Era como ir a la primaria donde le daban mucha información? ó ¿Era algo que le gustaba escuchar/aprender?

4. Por favor cuenteme sobre unos de los temas que discutieron en la clase.
¿Hubo algo que aprendió de la clase y lo aplico a su hijo/a?

¿Hubo algo que aprendió de la clase y lo aplico en su casa?

5. ¿Cuáles fueron las estrategias que aprendió para ayudarle a su hijo/a comunicarsemejor?

Por ejemplo, nuevo vocabulario, leyendo, ó corregir su lenguaje.

6. Por favor digame si hubo algo positivo ó negativo en asistir las clases.
¿Por favor digame que es lo que le beneficio mas de estas clases.

¿Cuál fue lo que le beneficio menos?

7. ¿Por favor dígame que fue el enfoque mas importante de estas clases?

8. ¿Hubo temas que usted deseaba discutir ó aprender en las clases?

¿Hubieron temas que no fueron discutidas en clase y piensa usted que deberían ser discutidas?

9. Dígame que fue la mejor parte de las clases.

¿Usted le recomendaría estas clases a otros padres con niños de esta discapacidad? Si o No? y porque?

10. Usted cree que sus habilidades en ayudar a su hijo/a an mejorado después de haber asistido a las clases? Si lo han, por favor deme unos ejemplos.

11. Antes de tomar las clases para padres, como se sintió? ¿Se sintió que estaba preparado/a para ayudar a su hijo/a? Explique.

¿Ahora como se siente usted después de atender las clases?

Se siente usted mas ó menos confiado/a en sus habilidades de ayudar a su hijo/a? Por favor deme ejemplos.

Después de haber tomado las clases, como se siente ahora hablar y trabajar con las maestras y la escuela de su hijo/a? Deme un ejemplo.

Por favor cuenteme que piensa sobre las clases que tomo. ¿Que piensa sobre la cantidad/duracion de las clases a la semana y el sitio en donde se enseño la clase?

¿Hay algo que piensa usted que debería cambiar? Por favor explique.

Appendix H

Interview Protocol

Please share with me your experience of when you found out about your child's hearing loss.

> Probe: How did your expectations of your child change?
>
> Probe: How has your life changed?
>
> Probe: Share with me some of the costs involved in having a child with a hearing loss.
>
> Probe: Did you have any experience with hearing loss in your life prior to your child's diagnosis?

Please share with me how you decided to choose your child's mode of communication (signing or spoken language).

> Probe: Who was the most influential in making that decision?
>
> Probe: Did that person provide you with an equal amount of information on both sign language and spoken language?
>
> Probe: What did they recommend for your child and why?

Please share with me what it was like for your spouse. How did he or she deal with his or her child having a hearing loss?

> Probe: Did it impact your marriage? If so, please give me examples.
>
> Probe: How involved was your spouse when developing communication with your child?
>
> Probe: How, if at all, does your spouse help with your child's academics? Homework?
>
> Probe: When did your child get a hearing device?
>
> Probe: How long did it take from the time of diagnosis to receive hearing aids?
>
> Probe: Where did you get them? How much were they?
>
> Have you met a deaf adult who speaks? If so, when and what was that experience like?

Please share with me some of your experience the first few years. What services did you receive? Be specific.

Now that your child is school age, what services do you receive at school? Do you receive more now or less? Please explain.

Tell me about your experience as a Latino person (and only speaking Spanish) navigating through the school system. Do you believe it is different than from a native English speaker? If so, please explain.

> Probe: Please share with me your experiences of translations provided by the school(s).

As a native Spanish speaker, how to do you communicate with your child who is learning English at school.

> Probe: Do you find it difficult to correct your child with a hearing loss's speech and language skills? If so, please explain.

Tell me about your other children. What type of sacrifices do you feel they make, if any. How do they (he or she) deal with the hearing loss of their sibling?

Where do you find your strength?

> Probe: How does religion impact your decision-making?

Tell me about your overall experience with the school system.

During the parent classes, you took a pre- and post-test. Share with me that experience.

> Probe: Was it helpful? Was it not helpful? Why or why not?

> Probe: What did you learn from it?

> Probe: How did it make you feel? Please share in detail.

Appendix I (Spanish)

Protocolo de Entrevista

¿Por favor comparta conmigo sobre su experiencia cuando usted se enteró sobre la pérdida auditiva de su hijo?

> ¿Cómo cambio sus expectativas de su niño?
>
> ¿Cómo a cambiado su vida?
>
> Compartir conmigo algunos de los costos implicados en tener un niño con pérdida auditiva.
>
> ¿Ha tenido alguna experiencia con pérdida de la audición en su vida antes de su diagnóstico del niño?

Por favor comparta conmigo cómo decidió elegir el modo de comunicación de su hijo (Lengua hablada o Programa de senas)

> Quien fue el más influyente en la decisión?
>
> Esa persona le proporcionan la misma cantidad de información sobre ambos señas v. lengua hablada.
>
> ¿Qué recomendaron para su hijo y por qué?

¿Por favor comparta conmigo como fue para su pareja? ¿Cómo él/ella lidiar con su hijo o hija que tenia una pérdida de la audición?

> ¿Afectó su matrimonio? De ser así, por favor déme ejemplos.
>
> ¿Cómo involucrado fue su cónyuge durante el desarrollo de la comunicación con su hijo?
>
> ¿Cómo, si es que ayuda su pareja con lo académico de su hijo. ¿Tarea?

¿Cuándo consiguió su hijo un dispositivo de la audiencia?

> ¿Cuánto tiempo tardó desde el momento del diagnóstico para recibir los audífonos?
>
> Dónde los consiguió? ¿Cuánto costaron?

¿Ha encontrado a un adulto sordo que habla? De ser así, cuando y como fue la experiencia?

Por favor comparta conmigo un poco de su experiencia los primeros años. ¿Qué servicios recibió? Esa específico.

Ahora que su hijo tiene edad escolar, ¿qué servicios recibe en la escuela? ¿Recibe más o menos? Explique por favor.

Hábleme de su experiencia como inmigrante (y sólo hablar español) navegando a través del sistema escolar. ¿Cree que es diferente al de un hablante nativo de inglés? Si es asi, por favor explique.

Por favor comparta conmigo sus experiencias de traducción proporcionada por la escuela (s)

Como un hablante nativo de español, cómo se comunica con su hijo que está aprendiendo inglés en la escuela

> ¿Encuentra difícil corregir el discurso de su hijo sordo y el conocimiento de la lengua? De ser así, por favor explique.

Cuéntame de tus otros hijos. ¿Qué tipo de sacrificios ¿se siente usted que hacen, si los hubiere. ¿Cómo (él o ella) lidiar con la pérdida de la audición de sus hermanos?

¿Dónde encuentra su fuerza?

> ¿Tiene la religión impacto en su decisiones?

Hábleme de su experiencia con el sistema escolar.

¿Durante las clases de padres, tomó una prueba de pre y post? Compartir conmigo esa experiencia.

> ¿Fue útil? ¿No era útil? ¿Por qué o por qué no?
> ¿Qué aprendió de ello?
> ¿Cómo le hizo sentir? Por favor comparta detalladamente?

Appendix J

Background Information

Participant Number:
This information will remain CONFIDENTIAL

Child's Name:	Parent's First Name:
Age of Child:	Grade Level of Child:
How long attended No Limits:	Age Child began at No Limits:
What services you receive at No Limits:	
Are you currently enrolled at No Limits:	
Age diagnosed with Hearing Loss:	Age received hearing aids:
When received cochlear implant?	
Name of Preschool:	Spoken Language or signing program?
Name of Elementary:	Spoken language or signing program?
Name of Middle School:	Spoken language or signing program?

Child Information

Before coming to No Limits, what were your aspirations for your child?

Since coming to the parent classes and participating in speech classes, have your aspirations changed or have they stayed the same? If so, provide an example.

Please mark your highest level of education.

- Middle School
- High School
- College
- Higher than College

Did you receive your degree in: (Please circle)

America Mexico Other

Where have you found strength during difficult times?

____

____

____

(Only for parents who received hearing aids from CCS) From the time you found out your child was diagnosed with a hearing loss, how long did it take to get hearing aids from CCS? _________

____

Were you working when you found out your child had a hearing loss?
Yes No

Did you change your work schedule after finding out? (For example, shortened hours, stayed home, worked more hours, etc.) If so, please explain.

____

____

____

Appendix K (Spanish)

Información Antecedente

Número de participante:
Esta información permanecerá CONFIDENCIAL

Nombre del Niño:	Nombre del padre:
Edad de niño:	Nivel de grado del niño (a):
¿Cuánto tiempo asistió a No Limits:	Edad el niño (a) comenzó en No Limits
Que servicios recibe en No Limits:	
Está actualmente inscrito en No Limits :	
Edad diagnosticado con pérdida auditiva :	La edad que recibió su audífonos
¿Cuándo recibido el implante coclear?	
Nombre de Escuela Preescola	Lengua hablada o Programa de senas
Nombre de la escuela elemental:	Lengua hablada o Programa de senas
Nombre de la Escuela Media:	Lengua hablada o Programa de senas

Información del Niño

Antes de llegar a límites, cuáles eran sus aspiraciones para su hijo?

____
____
____

Desde su llegada a las clases para padres y participar en las clases de voz, an cambiado su aspiraciones o se ha mantenido igual? Si es así, dar un ejemplo.

____
____
____
____

Por favor marque su nivel más alto de educación.
- Escuela Intermedia
- Escuela secundaria
- Universidad
- Más alto que colegio

Recibió su grado en (Favor de circular)

America Mexico Otro

¿ De dónde ha encontrado la fuerza durante tiempos difíciles?

____

____

____

(Solo para los padres que reciben audífonos de CCS) Desde el momento en que se encuentra a su hijo fue diagnosticado con una pérdida de la audición, ¿cuánto tiempo se tardo en obtener audífonos de CCS?

____

Trabajaba cuando se entero que su hijo tenia una pérdida de audición?

Si No

¿Cambió su horario de trabajo después de aprender de la perdida? (por ejemplo, horas acortadas, se quedó en casa, trabajó más horas, etc.) De ser así, por favor explique.

____

____

____

____

Appendix L (Parent Workshop Topics)

Topic Domains of Parent Education Workshops
1. Overview of Hearing Loss and Devices
2. Auditory, Speech and Language Development
3. Overview on the Development of Language and Literacy
4. Advocacy

Breakdown of Topics Within Domains			
Overview of Hearing Loss & Device	Auditory, Speech, Language	Language & Literacy Development	Advocacy
• Parts of the Ear • Etiology • Reading Audiograms • Hearing Devices • Sound Checks • Ling 6 Sound Test • Troubleshooting • Classroom Acoustics	• The differences between Auditory, Speech and Language • Demonstrations of Language Development and Techniques • Speech Production • Auditory Development Techniques	• Topic Control • Extended Sentence • Length thru Modeling • Intro New Vocabulary • Positive Reinforcement • Acoustic Highlighting • Check for Comprehension • Commands V. Inferences/Predictions • WH Questions • 5 Components to Literacy • Behavior Management • Involving Extended Family • Reading & Writing Workshops	• Understanding IEP Process • How to be an Parent Advocate • ADA • IDEA • Resources: Local and National • Parent Support Groups

Appendix M

Parent	Currently Employed?	Age of Child in Months	Age of Diagnosis in Months	Age of Amplification in Months	Etiology	Degree of Hearing Loss	Current School Program	Changed Program Since Attending No Limits?
Bella	Y	72	18	13	Premature/Autistic	Severe	Oral	Y
Bianca	Y	144	29	31	Premature Misdiagnosed	Profound	Sign and Oral	Y
Carla	N	108	60	60	Misdiagnosed/Autistic	Profound	Oral	Y
Carmen	Part-Time	120	32	25	Misdiagnosed	Profound	Oral	Y
Carmen	Part-Time	96	9	13	Genetic	Profound	Oral	N
ClaraFaye	Y	144	48	60	Genetic	Severe	Oral	N
ClaraFaye	Y	60	0	6	Genetic	Profound	Oral	Y
Dora	Y	84	0	6	Genetic	Severe	Sign	Y
Estela	Y	132	12		Misdiagnosed	Profound	Sign and Oral	N
Helena	N	84	8	18	Meningitis	Severe	Oral	Y
Isora	Y	132	0	12	Diagnosed at Birth	Profound	Oral	N
Josephina	N	120	0	3	Genetic/No Ears	Profound	Oral	Y
Juanita	Y	108	36	41	Misdiagnosed	Profound	Oral	Y
Juliana	N	108	36	48	Meningitis	Profound	Oral	Y
Kamila	Y	108	41	53	Misdiagnosed/Autistic	Moderate	Oral	N
Kasandra	N	84	2	11	Ototoxic Drug	Profound	Oral	Y
Katherine	Y	144	41	41	Misdiagnosed	Severe	Oral	Y
Katrina	Y	144	60	65	Premature	Severe	Oral	Y
Krystal	N	132	2	6	Misdiagnosed	Severe	Oral	Y
Silvia	N	60	44	48	Unknown	Severe	Oral	Y
Silvia	N	108	48	60	Unknown	Severe	Oral	Y

References

Alexander Graham Bell (AG Bell) (2011). Certified Auditory-Verbal Therapists. Retrieved February, 2011 from agbell.org.

American Speech-Language-Hearing Association (ASHA). (2013). *Hearing aids for children*. Retrieved March 13, 2011, from http://www.asha.org/public/hearing/Hearing-Aids-for-Children.

Annual Update of the Health and Human Services Poverty Guidelines, 78 Federal Register 5182-5183 (2013). Retrieved from http://www.gpo.gov/fdsys/pkg/FR-2013-01-24/pdf/2013-01422.pdf

Apuzzo, M. L., & Yoshinaga-Itano, C. (1995). Early identification of infants with significant hearing loss and the Minnesota child development inventory. *Semin Hear, 16*, 124-139.

Aurelio, F., & Tochetto, T. (2010). Newborn hearing screening: experiences of different countries. *International Archives of Otorhinolaryngology, 14*(3).

Bailey, A. L., & Moughamian, A. C. (2007). Parental scaffolding of narrative development in emergent readers and readers. *Narrative inquiry, 17*(1).

Bandura, A. (1989). Regulation of cognitive processes through perceived self-efficacy. *Developmental Psychology, 25*, 729–735.

Bandura, A. (1997). *Self-efficacy: The exercise of control.* New York: Freeman.

Bat-Chava, Y., & Martin, D. (2002). Sibling relationships of children with a hearing loss: The impact of child and family characteristics. *Rehabilitation Psychology,* 47(1), 73-91.

Beals, D. E., De Temple, J. M., & Dickinson, D. K. (1994). Talking and listening that support early literacy development of children from low-income families. In: Dickinson, D. K., ed. *Bridge to literacy: Children, families and schools.* Cambridge, MA: Blackwell 19-

40.

Bemrose, S. (2003). Giving information to parents. Factors to consider. Retrieved from http://www.deafnessatbirth.org.uk/content2/support/info/02/index.html.

Biemiller, A. (2009). Parent/caregiver narrative: Vocabulary development (0 – 60 months). In L.M. Phillips (Ed.), *Handbook of language and literacy development: A roadmap from 0 – 60 months.* [online], pp. 1 - 42. London, ON: Canadian Language and Literacy Research Network. Available at: Handbook of language and literacy development.

Blair J., Peterson M., & Viehweg S. (1985). The effects of mild sensorineural hearing loss on academic performance of young school-age children. *Volta Review,* 87-93.

Blamey, P. J. (2003). Development of spoken language by children with a hearing loss. *Oxford handbook of deaf studies, language, and education*, 232-246.

Blamey, P., Paatsch, L., Bow, C., Sarant, J., & Wales, R. (2001). A critical level of hearing for speech perception in children. *Acoustics Research Letters Online, 3*(1), 18–23.

Bodner-Johnson, B. (2001). Parents as adult learners in family- centered early education. *American Annals of the Deaf, 146*(3), 263-269.

Bronfenbrenner, U. (1986) Ecology of the family as a context for human development: Research perspectives. *Developmental Psychology, 22*(6), 723-742.

Brown, C. (2006). Early intervention: *Strategies for public and private sector collaboration*. Paper presented at the 2006 Convention of the Alexander Graham Bell Association for the Deaf and Hard of Hearing, Pittsburgh, PA.

Calderon, R., & Greenberg, M. (1999). Stress and coping in hearing mothers of children with hearing loss: Factors affecting mother and child adjustment. *American Annals of the Deaf*, 144, 7–18.

Calderon, R., & Naidu, S. (2000). Further support the benefits of early identification and intervention with children with hearing loss. *The Volta Review, 100*, 53-84.

Calderon, R. (2000). Parental involvement in deaf children's education programs as a predictor of child's language, early reading, and social-emotional development. *Journal of Deaf Studies and Deaf Education*, *5*(2), 140-155.

California Department of Education Special Education Division. (2008). *Special Education Enrollment by Ethnicity and Disability*. Retrieved from http://dq.cde.ca.gov/dataquest/.

California Department of Education Special Education Division. (2010). *Special Education Enrollment by Ethnicity and Disability.. www.cde.ca.gov/sp/se/*

California Department of Education Special Education Division. (2012). *Special Education Enrollment by Ethnicity and Disability*. Retrieved from http://dq.cde.ca.gov/dataquest/.

Center for Disease Control and Prevention. (2008). Summary of 2006 national EHDI data. Retrieved from www.cdc.gov/ncbddd/ehdi/data/htm.

Chamberlain, C. & Mayberry, R. I. (2008). ASL syntactic and narrative comprehension in skilled and less skilled adult readers: Bilingual-bimodal evidence for the linguistic basis of reading. *Applied Psycholinguistics*, *29*, 368-388. doi:10.1017/ S014271640808017X

Chia-ling, L., Farrell, J., MacNeil, J., Stone, S., & Barfield , W. (2008). Evaluating loss to follow-up in newborn hearing screening in Massachusetts. *American Academy of Pediatrics*, *121*(2), 335-343. doi:10.1542/peds.2006-3540.

Ching, T. Y., Dillon, H., Day, J., Crowe, K., Close, L., Chisholm, K., & Hopkins, T. (2009). Early language outcomes of children with cochlear implants: Interim findings of the NAL study on longitudinal outcomes of children with hearing impairment. *Cochlear Implants International*, *10*(S1), 28-32.

Coffey, H. (2009). *Zone of proximal development*. Retrieved from http://www.learnnc.org/lp/pages/5075

Coleman, P. K., & Karraker, K. H. (2000). Parenting self-efficacy among mothers of school-age children: Conceptualization, measurement, and correlates. *Family Relations*, *49*(1), 13-24.

College Board Advocacy (2008*). Coming to our senses: Education and the American future*. Retrieved from http://advocacy.collegeboard.org/

Creswell, J. W. (2009). *Research design: Qualitative, quantitative, and mixed methods approaches* (3rd ed.). Los Angeles: Sage Publications.

Crinic, K., & Low, C. (2002). Everyday stresses and parenting. *Handbook of parenting*, *5*(2), 243-267.

Department of Health and Human Services, CDC. Early hearing detection & intervention (EHDI) program. (2011) Retrieved from http://www.cdc.gov/ncbddd/ehdi/.

DesGeorges, J. (2003). Family perceptions of early hearing, detection, and intervention systems: Listening to and learning from families. *Mental Retardation and Developmental Disabilities*, 9(2), 89-93. doi: 10.1002/mrdd.10064.

DesJardin, J. (2005). Maternal perceptions of self-efficacy and involvement in the auditory development of young children with prelingual deafness. *Journal of Early Intervention*, *27*, 193–209.

DesJardin, J. L., & Eisenberg, L. S. (2007). Maternal contributions: Supporting language development in young children with cochlear implants. *Ear Hear*, *28,* 456–469.

Dodd, B., & Carr, A. (2003). Young children's letter-sound knowledge. *Language, Speech, and Hearing Services in Schools*, *34*(2), 128-137.

Dollaghan, C. A., Campbell, T. F., Paradise, J. L., Feldman, H. M., Janosky, J. E., Pitcairn, D. N., & Kurs-Lasky, M. (1999). Maternal education and measures of early speech and language. *Journal of Speech, Language, and Hearing Research*, (42), 1432-1443.

Dudley-Marling, C. & Lucas, K. (2009). Pathologizing the Language and Culture of Poor Children. *Language Arts, 86* (5), 362-370.

Dunst, C. J., Trivette, C. M., & Cross, A. H. (1986). Roles and support networks of mothers of handicapped children. In R. R. Fewell & P. F. Vadasy (Eds.), *Families of handicapped children: Needs and supports across the life span* (pp.167-192). Austin, TX: PRO-ED.

Early Hearing Detection Intervention (EHDI). (2010). Retrieved from http://www.asha.org/uploadedFiles/EHDIBriefWithTalkingPoints.pdf.

Easterbrooks, S. R., O'Rourke, C. M., & Todd, N. W. (2000). Child and family factors associated with children with a hearing loss's success in auditory-verbal therapy. *Otology & Neurology*, *21*(3), 341-344.

Edgar, D. L. & Rosa-Lugo, Linda I. (2007). The critical shortage of speech-language pathologists in the public school setting: Features of the work environment that affect recruitment and retention. *Language, Speech and Hearing Services in Schools*, 38, 31-46.

Estabrooks, W. (2006). *Auditory-Verbal Therapy and Practice*. Washington, D.C.: Alexander Graham Bell Association for the Deaf and Hard of Hearing, Inc.

Fitzpatrick, E., Angus, D., Durieux-Smith, A., Graham, I. D., & Coyle, D. (2008). Parents' needs following identification of childhood hearing loss. *American Journal of Audiology*, *17*(1), 38.

Flores, S. M., Batalova, J., & Fix, M. (2012). The educational trajectories of English language learners in Texas. *Washington, DC: The Migration Policy Institute*.

Gallaudet Research Institute. (2010). Regional and National Summary Report of Data from the 2009-10 Annual Survey of Deaf and Hard of Hearing Children and Youth. Washington, DC: GRI, Gallaudet University. Retrieved from research.gallaudet.edu/Demographics/2010_National_Summary.pd.

Geers, A., & Moog, J. (1989). Factors predictive of the development of literacy in profoundly hearing-impaired adolescents. *Volta Review*, *91*, 69–86.

Geers, A. E. (2003). Predictors of reading skill development in children with early cochlear implantation. *Ear and Hearing*, *24*(1), 59S-68S.

Geers, A. E., Nicholas, J. G., & Moog, J. S. (2007). Estimating the influence of cochlear implantation on language development in children. *Audiological Medicine*, *5*(4), 262-273.

Hadadian, A., & Rose, S. (1991). An investigation of parents' attitudes and the communication skills of their children with a hearing loss. *American Annals of the Deaf*, *136*(3), 273-277.

Harrison, M., & Roush, J. (2001). Information for families with young deaf and hard of hearing children: Reports from parents and pediatric audiologists. *In International Conference: A Sound Foundation Through Early Amplification*, *2*, 233-250.

Hart, B., & Risley, T. R. (1995). *Meaningful differences in the everyday experience of young American children*. Brookes Publishing Company, Inc., Baltimore, MD.

Helfand, M., Thompson, D. C., Davis, R., McPhillips, H., Homer, C. J., & Lieu, T. L. (2001). Newborn hearing screening: Systematic evidence review. *ARHQ* Publication No, 02-S001.

Hintermair, M. (2006). Parental resources, parental stress, and socioemotional development of deaf and hard of hearing children. *Journal of Deaf Studies and Deaf Education, 11*(4), 493-513.

Hoff, E. (2003). The specificity of environmental influence: Socioeconomic status affects early vocabulary development via maternal speech. *Child Development, 74*(5), 1368-1378.

Jackson, C. W., & Turnbull, A. (2004). Impact of Deafness on Family Life: A Review of Literature. *Topics in Early Childhood Special Education, 24*(15), 15-29. Retrieved from http://tec.sagepub.com/content/24/1/15.

Justice, L., & Ezell, H.K. (2001). Written language awareness in preschool children from low-income households: A descriptive analysis. *Communication Disorders Quarterly, 22*, 67-75.

Kennedy, C. R., McCann, D. C., Campbell, M. J., Law, C. M., Mullee, M., Petrou, S., & Stevenson, J. (2006). Language ability after early detection of permanent childhood hearing impairment. *New England Journal of Medicine, 354*(20), 2131-2141.

Kluwin, T. N. (1994). The interaction of race, gender and social class effects in the education of deaf students. *American Annals of the Deaf, 139*(5), 465-471.

Kochkin, S.; Luxford, W.; Northern, J. Mason, P.; and Tharpe, A.M. (2007). *MarkeTrak VII: Are 1 million dependents with hearing loss in America being left behind?* The Hearing Review, Vol. 14(10), pp. 10-36.

Kochkin, S. (2010). The Efficacy of Hearing Aids in Achieving Compensation Equity in the Workplace, *The Hearing Journal*, Volume 63 (10), 19-28.

Kochkin S. (2012). MarkeTrak VIII: The key influencing factors in hearing aid purchase intent. *The Hearing Review*. 2012; 19(3):12-25.

Krueger, RA & Casey, MA (2000) Focus Groups: A Practical Guide for Applied Research, 3rd ed. Thousand Oaks, CA: Sage Publications.

Lederberg, A., & Everhart, V. (2000). Conversations between children with a hearing loss and their hearing mothers: Pragmatic and dialogic characteristics. *Journal of Deaf Studies and Deaf Education, 5,* 303–322.

Lederberg, A. R., & Golbach, T. (2002). Parenting stress and social support in hearing mothers of deaf and hearing children: A longitudinal study. *Journal of Deaf Studies and Deaf Education,7,* 330-335.

Lemajić-Komazec S., Komazec, Z., Vlaski, L., & Dankuc, D. (2008). Analysis of reasons for late-diagnosis of hearing impairment in children. *Medicinski pregled*, *61*, 21.

Ling, D. (1988). *Speech and the hearing-impaired child: Theory and practice*. Washington: Alexander Graham Bell Association for the Deaf.

Livingston, G., Minushkin, S., & D'Vera Cohn. (2008). *Hispanics and health care in the United States: Access, information and knowledge*. Pew Hispanic Center.

Locke, A., Ginsberg, J., & Peers, I. (2002). Development and disadvantage: Implications for the early years and beyond. *International Journal of Language and Communication Disorders 37,* 3-15.

Luterman, D. M., Kurtzer-Caucasian, E., & Seewald, R. C. (1999). *The young deaf child*. Baltimore: York Press, Inc.

Mahoney, G. & Bella, J. (1998). An examination of the effects of family-centered early intervention on child and family outcomes. *Topics in Early Childhood Special Education*, *18,* 83–94.

Marschark, M. (2007). *Raising and educating a deaf child. (2nd ed)* New York: Oxford University Press.

Marschark, M., & Spencer, P. (2009). Evidence of best practice models and outcomes in the education of deaf and hard-of-hearing children: An international review.

Meadow-Orlans, K. P., Mertens, D. M., & Sass-Lehrer, M. A. (2003). *Parents and their children with a hearing loss. The early years*. Washington, DC: Gallaudet University Press.

Meadow-Orlans, K. P. (1994) Stress, support, and deafness: Perceptions of infants' mothers and fathers. *Journal of Early Intervention,*18, 91–102.

Meadow-Orlans, K.P., & Steinberg, A.G. (1993). Effects of infant hearing loss and maternal support on mother-infant interactions at 18 months. *Journal of Applied Developmental Psychology*, *14*, 407-426.

Meinzen-Derr, J., Wiley, S., & Choo, D. I. (2011). Impact of early intervention on expressive and receptive language development among young children with permanent hearing loss. *American Annals of the Deaf*, *155*(5), 580-591.

Merriam, S. B. (2009). *Qualitative research: A guide to design and implementation* (3rd ed.). San Francisco: Jossey-Bass Publishers.

Miller, P. J., Cho, G. E., & Bracey, J. R. (2005). Working-class children's experience through the prism of personal storytelling. *Human Development*, *48*(3), 115-135.

Mitchell, R. E., & Karchmer, M. A. (2004). When parents are deaf versus hard of hearing: Patterns of sign use and school placement of deaf and hard-of-hearing children. *Journal of deaf studies and deaf education*, *9*(2), 133-152.

Moeller, M. P., Tomblin, J. B., Yoshinaga-Itano, C., McDonald Connor, C., & Jerger, S. (2007). Current state of knowledge: Language and literacy of children with hearing impairment. *Journal of Deaf Studies and Deaf Education ,14*, 2. Retrieved from http://jdsde.oxfordjournals.org/.

Moeller, M. P. (2000). Early intervention and language development in children who are deaf and hard of hearing. *Pediatrics, 106*(3), E43–E60.

Morere, D. (2011) Visual Language and Visual Learning Science of Learning Center. *Reading Research and Deaf Children* (Research Brief No. 4). Washington, DC.

National Health and Nutrition Examination Survey (NHNES) (2012). National Center for Health Statistics, Health Data Interactive, www.cdc.gov/nchs/hdi.htm. Accessed on January 2013.

National Institute on Deafness and Other Communication Disorders. (2010). *NIDCD outcomes research in children and hearing loss, statistical report: Prevalence of hearing loss in US children.* Retrieved from www.nidcd.nih.gov/funding/programs/hb/outcomes/Pages/report.aspx.

Nicholas, J. G., & Geers, A. E. (2006). Effects of early auditory experience on the spoken language of children with a hearing loss at 3 years of age. *Ear Hear, 27*, 286–298.

Olusanya, B., Swanepoel, D., Chapchap, M., (2007). Progress towards detection services for infants with hearing loss in developing countries. *BMC Health Services Reach*, *7*(14). Doi: 10.1186/1472-6963-7-14.

Olusanya, B. O., Luxon, L. M., & Wirz, S. L. (2005). Childhood deafness poses problems in developing countries. *BMJ: British Medical Journal*, *330*(7489), 480.

O'Neill-Perozzi, T. (2003). Language functioning of residents in family homeless shelters. *American Journal of Speech-Language Pathology, 12*, 229-242.

Payne, R. (2005). *A framework for understanding poverty (3rd ed).* Highlands, TX: Process, Inc.

Pipp-Siegel, S., Sedey, A. L., & Yoshinaga-Itano, C. (2002). Predictors of parental stress in mothers of young children with hearing loss. *Journal of Deaf Studies and Deaf Education*, *7*(1), 1-17.

Portrait, A. D. (2009). National task force of Early Intervention For Hispanics: Para nuestros niños. Retrieved from ecehispanic.org

Power, D., Wood, D., Wood, H.A., & MacDougall, J. (1990). Maternal control over conversations with hearing and deaf infants and young children. *First Language*, *10*, 19-35.

Quittner, A. L., Barker, D. H., Cruz, I., Snell, C., Grimley, M. E., Botteri, M., & Team, C. I. (2010). Parenting stress among parents of deaf and hearing children: Associations with language delays and behavior problems. *Parenting: Science and Practice*, *10*(2), 136-155.

Raikes, H. A., & Thompson, R. A. (2005). Efficacy and social support as predictors of parenting stress among families in poverty. *Infant Mental Health Journal*, *26*(3), 177-190.

Ramirez, R. R., & De La Cruz, G. P. (2002). The Hispanic population in the United States: March 2002. *Federal Register*, *62*(280).

Reynolds, A. J., & Temple, J. A. (1998). Extended early childhood intervention and school achievement: Age thirteen findings from the Chicago Longitudinal Study. *Child Development*, *69*(1), 231-246. Retrieved from http://www.jstor.org/stable/1132082.

Rhoades, E. A., Price, F., & Perigoe, C. B. (2004). The changing American family & ethnically diverse children with hearing loss and multiple needs. *Volta Review*, *104*(4), 285-305.

Robbins, A.M. (2000). Language development. *Cochlear implants*, 269-283.

Robertson, L. (2009). *Literacy and deafness: Listening and spoken language*. San Diego: Plural Publishing.

Robertson, L., Dow, G. A., & Hainzinger, S. L. (2006). Story retelling patterns among children with and without hearing loss: Effects of repeated practice and parent-child attunement. *Volta Review*, *106*(2), 147.

Robinshaw H.M. (1995). Early intervention for hearing impairment differences in the timing of communicative linguistic development. *British Journal of Audiology 29(6)*, 315-334.

Roseberry-McKibbin, C. (2008). *Increasing language skills of students from low-income backgrounds: Practical strategies for professionals.* San Diego, CA: Plural Publishing, Inc.

Ross, D., Holstrum, W. J., Gaffney, M., Green, D., Oyler, R., & Gravel, J. (2008). Hearing screening and diagnostic evaluation of children with unilateral and mild bilateral hearing loss. *Trends in Amplification, 12*(1), 27.

Schlesinger, H.S. (1988). Questions and answers in the development of deaf children. In Strong, M. (Ed.). (1988). *Language learning and deafness* (pp. 261-291). New York: Cambridge University Press.

Sininger, Y. S., Grimes, A., & Christensen, E. (2010). Auditory development in early amplified children: Factors influencing auditory-based communication outcomes in children with hearing loss. *Ear Hear, 31*, 166 –185.

Steinberg, A. G., Davila, J. R., Collazo, J., Loew, R. C., & Fischgrund, J. E. (1997). A little sign and a lot of love...: Attitudes, perceptions, and beliefs of Hispanic families with children with a hearing loss. *Qualitative Health Research, 7*(2), 202-222.

Steinberg, A., Bain, L., Li, Y., Delgado, G., & Ruperto, V. (2003). Decisions Hispanic families make after the identification of deafness. *Journal of Deaf Studies and Deaf Education, 8*(3), 291-314.

Stevenson, D.L. & Baker, D.P. (1987). The family school relation of the child's school performance. *Child Development Special Issue: School and development*, 58, 1348-1357.

Tannock, R. (1988). Mothers' directiveness in their interactions with their children with and without Down syndrome. *American Journal for Mental Retardation, 93*, 766-774.

Tattersall, H. J., & Young, A. M. (2003). Exploring the impact on hearing children of having a deaf sibling. *Deafness & Education International*, *5*(2), 108-122.

Teti, D. M., & Gelfand, D. M. (1991). Behavioral competence among mothers of infants in the first year: The mediational role of maternal self-efficacy. *Child Development, 62*(5), 918-929.

Tinkler, B. (2002). A Review of Literature on Hispanic/Latino Parent Involvement in K-12, *Education*, 1-24.

Traxler, C. B. (2000). The Stanford Achievement Test: National norming and performance standards for deaf and hard-of-hearing students. *Journal of Deaf Studies and Deaf Education*, *5*(4), 337-348.

U.S. Census Bureau of Labor Statistics. (2000). *State & county quick facts: Allegany County, N.Y.* Retrieved from http://quickfacts.census.gov.

Van de Mortel, T. F. (2008). Faking it: Social desirability response bias in self-report research. *Australian Journal of Advanced Nursing*, *25*(4), 40.

Vermeulen, A., van Bon, W., Schreuder, R., Knoors, H., & Snik, A. (2007). Reading comprehension of children with a hearing loss with cochlear implants. *The Journal of*

Deaf Studies and Deaf Education, 12, 283-302.

Vygotsky, L. S. (1962). *Language and Thought*. Massachusetts Institute of Technology Press, Ontario, Canada.

Waddy-Smith, B. (2012). Students Who Are Deaf and Hard of Hearing and Use Sign Language: Considerations and Strategies for Developing Spoken Language and Literacy Skills. *Semin Speech Lang*, *33*, 310-321.

Wake, M., Poulakis, Z., Hughes, E. K., Carey-Sargeant, C., & Rickards, F. W. (2005). Hearing impairment: A population study of age at diagnosis, severity, and language outcomes at 7–8 years. *Archives of Disease in Childhood, 90*(3), 238-244.

Wedell-Monnig, J., & Lumley, J. M. (1980). Child deafness and mother-child interaction. *Child Development*, 766-774.

Wood, D. J., Wood, H. A., Griffiths, A. J. & Howarth, C. I. (1986). *Teaching and talking with children with a hearing loss.* London & New York: Wiley.

Woods, J., Kashinath, S., & Goldstein, H. (2004). Effects of embedding caregiver-implemented teaching strategies in daily routines on children's communication outcomes. *Journal of Early Intervention*, *26*, 175–193.

Woodward, J. (1972). Implications for Sociolinguistic Research among the Deaf. *Sign Language Studies,* vol. 1.

Yarosz, D. & Barnett, W.S. (2001). Who reads to young children?: Identifying predictors of family reading activities. *Reading Psychology*, *22*(1), 67-81.

Yoshinaga-Itano, C. (1997). The challenge of assessing language in children with hearing loss. *Language, Speech, and Hearing Services in Schools, 28*(4), 362.

.

Yoshinaga-Itano, C. (2003). From screening to early identification and intervention: Discovering predictors to successful outcomes for children with significant hearing loss. *Journal of Deaf Studies and Deaf Education*, *8*(1), 11-30.

Yoshinaga-Itano, C., Sedey, A. L., Coulter, D. K., & Mehl, A. L. (1998). Language of early-and later-identified children with hearing loss. *Pediatrics*, *102*(5), 1161-1171.

Yoshinaga-Itano, C., Coulter, D., & Thomson, V. (2000). The Colorado newborn hearing screening project: Effects on speech and language development for children with hearing loss. *Journal of Perinatology*, *20*(8), 132-137.

Young, A (2003). Parenting and deaf children: A psycho-social literature based framework, Retrieved April 9, 2007, from http://www.ndcs.org.uk/family_support/how_ndcs_can_help/parenting/resources_for_professionals/a_psychosocial.html

Yuelin, L., Bain, L., & Steinberg , A. G. (2003). Parental decision making and the choice of communication modality for the child who is deaf. *Archives of Pediatrics & Adolescent Medicine*, *157*(2), 162-168.

Zehr, M. A. (2012). *Education Week*, *30*(28), 13. Retrieved from http://www.edweek.org/ew/articles/2011/04/08/28preschool.h30.html.