Spanish-English Bilingual Speech Therapy: A Review of Availability, Practice, and Need

Bethany Lormis

A Senior Thesis submitted in partial fulfillment

of the requirements for graduation

in the Honors Program

Liberty University

Spring 2017

Acceptance of Senior Honors Thesis

This Senior Honors Thesis is accepted in partial
fulfillment of the requirements for graduation from the
Honors Program of Liberty University.

_____

David Towles, Ed.D.
Thesis Chair

_____

Lynnda S. Beavers, Ph.D.
Committee Member

_____

Jared Barber, M.A.
Committee Member

_____

Cynthia Goodrich, Ed.D.
Assistant Honors Director

April 25, 2017
Date

Abstract

Spanish-English bilingual speech therapy is a growing field in the United States, especially in the public school system. The Spanish speaking population in America is increasing, and Spanish-English bilingual children require different speech assessments and treatment from English monolingual children. The bilingual language development process is different, which affects how speech language pathologists (SLPs) need to assess and treat those clients. International studies help add to existing and guide the creation of future bilingual speech therapy programs, but non-English or Spanish language-specific techniques are not very useful. Another consideration is language and cultural barriers, which hinder the ability of a therapist to communicate effectively with the parents. Collaboration is a part of treatment plans, and SLPs are responsible for providing the best care possible and continuing training in relevant areas, making Spanish-English bilingual individuals a high demand in the field. There are not many SLP programs with a bilingual focus in the United States, which means that there are not many certified bilingual speech therapists. Given the growing need for bilingual speech therapists, this makes it challenging for SLPs to fulfill their ethical obligations. As the need for bilingual SLPs intensifies, members of the field should work towards providing therapists with the necessary training to treat the unique needs of bilingual clients.

Keywords: Spanish-English bilingual language acquisition, bilingual speech therapy

Spanish-English Bilingual Speech Therapy: A Review of Availability, Practice, and Need

The United States is a growingly multicultural and multilingual country, with Spanish ranking as the second most spoken language (United States Census Bureau, 2015). This increasing population has created a higher need for Spanish-English bilingual professionals. One such profession in which Spanish-English bilingual services are important is speech language pathology, or speech therapy. Speech development is a process unique to each language, and the differences between English and Spanish do not allow for the same speech assessment techniques or treatment programs to be effective for speakers of both languages (Gorman & Gillam, 2003). The methods used for English are not what should be used for Spanish, and Spanish-English bilingual speech requires a further specialized approach.

SLP clinicians outside of the United States, such as those in England, have published studies regarding the best methods of assessment and treatment for bilingual clients (De Lamo White & Jin, 2011). Specific techniques used in studies involving different languages may not be effective in developing assessment and treatment programs for Spanish-English bilingual speakers, but it is beneficial to consider the implications of international studies to develop better bilingual speech therapy services.

Another factor to consider when developing these programs is intercultural communication. Parents are often heavily involved in the treatment process, especially when one language needing treatment is spoken mainly at home (Kummere, Lopez-Reyna, & Hughes, 2007). It is important for SLPs to communicate effectively with the clients' parents in order to provide the best care possible for the clients, which is one of

the ethical standards licensed SLPs are required to uphold (American Speech-Language-Hearing Association, 2016). This standard, coupled with the growing Spanish speaking population, highlights the need to recruit individuals who are already Spanish-English bilingual to the field of speech therapy. These individuals already have a proficient understanding of the two languages, which is not an area of instruction a bilingual SLP program should include, but they still require bilingual SLP training to gain understanding of the specialized practice required to serve bilingual clients.

The American Speech-Language-Hearing Association requires that SLPs determine the effectiveness of their services and continue in any relevant education or training within their field (2016). However, degree programs including a bilingual focus are limited; not every state has a program, and only states may issue a bilingual SLP certificate (American Speech-Language-Hearing Association, n.d.a). As the need for bilingual SLPs continues to increase, an effort should be made to recruit bilingual individuals to the field, and states should make it a priority to include at least some bilingual focus classes or training in their programs. Even as electives, these classes might educate future professionals and give anyone in the field an opportunity to gain knowledge and experience about bilingual speech therapy.

Demographics

Speech pathology, or speech therapy, is a growing field in the United States, especially in the public school system. Students undergo speech assessment as early as pre-k and kindergarten, and speech therapists can work with students through high school. The United States is clearly a multicultural and multilingual society today, and

this impacts the field of speech pathology. Bilingual children cannot be assessed and treated with the same methods as monolingual children (Gorman & Gillam, 2003). Based on the 2015 census data discussed below, it is evident that the bilingual population is growing in the United States, which also suggests a continued need for bilingual professionals, such as speech therapists, and the specialized training available to certify them.

Spanish is the second most common language spoken by families in their homes in the United States, and the children of those families who are enrolled in public schools are Spanish-English bilingual (United States Census Bureau, 2015a). A census study from 2009-2013 showed that out of 294,480,000 speakers aged five years or older in the United States, approximately 37,400,000 speak Spanish; of that population, over 16,000,000 speak English less than proficiently (United States Census Bureau, 2015a). The last number is important to keep in mind for the cultural and ethical concerns discussed later. It is also important to point out that the Spanish speaking population, while significantly concentrated in some southwestern areas, is not isolated to the Southwest of the country. The United States Census Bureau further focused their 2009-2013 study on demographics within each state, and their findings were that the lowest percentage of Spanish speakers was in Maine, with less than one percent of the population speaking Spanish. The highest was in California, with over twenty-five percent speaking Spanish (2015b). However, some states, such as Georgia, Idaho, Massachusetts, and Kansas, have a Spanish speaking population between seven and eight percent, which illustrates that the need for Spanish-English bilingual services is not only

in the Southwest (United States Census Bureau, 2015b). Spanish is a relevant and significant second language in every state, and the growing presence Spanish speakers affects public and health service fields, such as speech therapy.

The national census has predicted that the Hispanic population will continue to increase in the years to come, rising from seventeen to twenty-eight percent by 2060 (United States Census Bureau, 2014). This prediction, coupled with the data showing that in 2013-2014 seventeen percent of students enrolled in public school kindergarten and first grade were English language learners (ELLs), reveals that there are and will continue to be a large population of Spanish-English bilingual students in the United States (National Center for Education Statistics, 2016). This is an important factor for speech-language pathologists to consider because the language development process for bilingual children is significantly different from that of monolingual children.

Monolingual vs Bilingual Language Acquisition

Before discussing bilingual language acquisition, one must understand the differences between English and Spanish monolingual language acquisition. The developmental differences between these two languages aid in understanding how a bilingual child will go through the process of learning both languages. Factors such as whether a child is simultaneously or sequentially bilingual affects the developmental process as well (Gorman & Gillam, 2003). Also, within the realm of bilingual language development there are those who develop normally and those who have speech or literacy difficulties, just as those who learn only one language. From the studies done by Gorman & Gillam, 2003; Brice & Montgomery, 1996; Bunta & Ingram 2007; and Hoff & Core,

2015, discussed further below, it can be concluded that it is important to understand each aspect of language development mentioned above for SLPs to be able to identify which category a child fits into and put him in the best learning environment possible.

Monolingual Language Development: English and Spanish

Although Spanish teachers sometimes encourage their students by pointing out the similarities between English and Spanish, such as the many cognate words, Spanish and English are different on very basic levels of language. These fundamental differences affect how a child learns one language versus the other. One primary difference between the two languages is speech rhythm, which is the normal pattern for the duration of spoken units in a language (Bunta & Ingram, 2007). English is a stress driven language, meaning word and syllable length are determined by stress patterns; yet, Spanish is a syllable driven language, meaning that each syllable has essentially the same length (Bunta & Ingram, 2007; Gorman & Gillam, 2003). Bunta and colleagues discuss how speech rhythm has been identified as one of the first tools of language development, being measured and tested in children as young as five months old, and it provides the foundation for phonological awareness, which is an ability to identify and process speech sounds and units. This ability, when tested, is a good indicator of speech and literacy developmental progress and potential (2007; 2003). Phonological awareness consists of the processing and response to salient cues of a language that play a crucial role in the development of that language; one such cue is often the syllable (Gorman & Gillam, 2003).

Building on the differences in syllables between English and Spanish, English has a basic consonant-vowel-consonant (CVC) syllable pattern, while Spanish has a consonant-vowel (CV) syllable pattern (Gorman & Gillam, 2003). This difference leads to more variation in developmental techniques. Gorman and Gillam recognize that CVC syllables are more difficult to separate and identify. The difficulty comes from the fact that English can have as many as three consonants in the onset position of syllable (CCCVC), which makes figuring out which consonant goes with which vowel more challenging for English-language learners (Gorman & Gillam, 2003). In order to compensate for this language development challenge, children learning English rely on other tools early on, such as onset-rime units within a single syllable, to distinguish between and process words, but in Spanish the syllable as a whole is the main processing tool used in the language development process (Gorman & Gillam, 2003).

Beyond syllables, the phonetics and phonology of these two languages are different. Spanish has five stressed vowels and diphthongs, a few consonant clusters that appear in limited word positions, and restrictions on which consonants may appear word finally; however, English has many more tense and lax vowels and diphthongs, several consonant clusters that appear in almost any word position and with few restrictions on word final consonant endings (Gorman & Gillam, 2003). These differences not only make ineffective the sharing of phonological awareness testing materials between the languages, but Gorman & Gillam (2003) report that a Spanish-English bilingual child has to learn how to master the unique complexities of both phonologies, which explains the slower developmental rate discussed by (Hoff & Core, 2015). There are many more

differences between Spanish and English, but Gorman & Gillam suggest that even the ones described above are significant enough to suggest that each language needs a unique approach in areas such as speech therapy (2003).

These language-specific characteristics play a part in language learning processes, but they also influence literacy development techniques, since, as Gorman & Gillam point out, orthography also varies between Spanish and English (2003). SLPs are responsible for aiding the speech and literacy development of their clients, and the different learning methods and skills used between these two languages mean that these processes cannot be measured and tested in the same way by SLPs (Gorman & Gillam, 2003). Accurate testing is the first step in treating a speech therapy client, and Gorman & Gillam suggest that speech therapists use specialized tools and materials for clients with a primary language other than English to aid in the assessment and treatment process (2003).

Bilingual Language Development: Spanish-English

There are two categories of bilingualism that are used when discussing language development, simultaneous and sequential; simultaneous bilingualism is when a child learns two languages from birth, as in cases when the parents speak two languages, and sequential bilingualism is when a child learns one language from birth and a second later (Gorman & Gillam, 2007). Hoff & Core include in their discussion about bilingualism that there is no universal standard used to decide when a person is proficient enough in two languages or has been exposed equally enough to two languages to be defined as bilingual, so the term “bilingual” will be used to include both subcategories and assume

that the person either speaks two languages at home or uses a different language at school than at home (2015). However, sequential bilingualism will frequently be singled out, since a large amount of research discussed in this review is focused on this language development process, rather than simultaneous language acquisition (Brice & Montgomery, 1996; Gorman & Gillam, 2003; Hoff & Core, 2015; Holm, Dodd, Stow, & Pert, 1999; Kohnert, 2010; Kummere, Lopez-Reyna, & Hughes, 2007; Pham, Ebert, & Kohnert, 2015).

In general, dual language acquisition involves a different rate and process of development from the acquisition of one language. It takes longer to develop two languages than one, and the effects of this can be seen in a bilingual child's early vocabulary range and rhythm, which is often less developed than his monolingual peer's (Bunta & Ingram, 2007; Hoff & Core, 2015). Bunta & Ingram concluded through their study of speech rhythm that young Spanish-English bilingual speakers keep a neutral rhythm pattern, as seen in Spanish, for a longer period of time, but around age five they exhibit distinction between English and Spanish speech rhythms (2007). This is another example of a bilingual child's developing in the two languages at different paces. Such a variance can be due to different levels of exposure to the languages, but it is also an attested fact of sequential bilingualism (Gorman & Gillam, 2003; Hoff & Core, 2015).

In sequential bilingualism, the language in which the child performs better is his dominant language and is usually his first language (L1), but the child may still show lower performance in his L1 than monolingual children of the same language (Hoff & Core, 2015). Another unique characteristic that has been observed in bilingual language

learners, especially sequential language learners, is that they struggle with pragmatic aspects of their second language (L2) (Brice & Montgomery, 1996). Brice & Montgomery discuss that this lack of pragmatic understanding has a negative impact on the success of a child in social and academic settings, and it can sometimes lead to false diagnosis of speech or learning underdevelopment (1996). The cause of this bilingual language acquisition challenge is forward transfer, which occurs when a speaker transfers skills or characteristics from his L1 to his L2 (Gorman & Gillam, 2003). Forward transfer is not an abnormal speech or literacy difficulty, although studies show that bilingual children who do have speech difficulties struggle with pragmatics even more so (Brice & Montgomery, 1996).

The language development of bilingual children versus that of monolingual children must be taken into consideration whenever speech evaluations are conducted. As attested by Brice & Montgomery, 1996 and Gorman & Gillam, 2003, what may seem like a speech disfluency or underdevelopment in a bilingual child's speech could be a normal phenomenon that occurs in the simultaneous or sequential acquisition of two languages. This opportunity for misdiagnosis reveals the need for specialized assessments geared towards the predicted language cues a child will respond to given his L1 and L2 (Gorman & Gillam, 2003). However, Brice & Montgomery point out that there are certain cases in which a bilingual child does have a legitimate speech difficulty that needs to be addressed, and Gorman & Gillam agree that the methods of treatment that are used in speech therapy with monolingual children may not be sufficient for speech therapy with bilingual children (1996, 2003).

Assessment and Treatment for Bilingual Clients

Researchers and clinicians within the field of speech language pathology have published literature on which approaches prove best for testing and treating bilingual clients (Brice & Montgomery, 1996; Bunta & Ingram, 2007; Gorman & Gillam, 2003; Hoff & Core, 2015). One general suggestion is that SLPs, English as a second language (ESL) teachers, and regular teachers need to collaborate to ensure that the assessment and treatment of these students is appropriate and effective (Brice & Montgomery, 1996). ESL teachers are included for situations when a bilingual student, who is struggling in a normal classroom but does not have any language disorders, may need to be placed in an ESL class to speed up his L2 acquisition, in areas such pragmatics, so he can perform well academically and socially. Another idea is for SLPs to include specialized activities and assessments for phonological awareness in bilingual children, since it has been linked to predicting and developing reading capabilities, especially during early elementary years (Gorman & Gillam, 2003). These materials need to be created specifically for Spanish-English bilingual children because phonological awareness development is different in the two languages (Gorman & Gillam, 2003). Gorman and Gillam suggest that the focus, at first, be on the client's L1 cues because the underlying skills needed to process language cues in L1 will transfer to L2; in other words, if the child knows how to process the cues, it does not matter what the cues are, and those skills will be best developed using L1 cues first (2003).

Other clinicians have published their findings in specific case studies with bilingual speakers. Some clinicians and researchers have focused on stuttering diagnoses

of Spanish-English bilingual children (Holm, Dodd, Stow, & Pert, 1999; Taliancich-Klinger, Byrd, & Bedore, 2013). In both studies, speech samples were taken in English and Spanish, narrative and conversational form, and run against the English diagnosis standard for stuttering (1999; 2013). Taliancich et al. and Holm et al. note differences between the English and Spanish results, which revealed that the stuttering characteristics were more prevalent in Spanish, but other speech disfluency characteristics appeared in English (1999; 2013). They drew two conclusions from their studies: stuttering-specific as well as language-specific factors contribute to accurate assessment of speech of bilingual children; disfluency and disorder basic characteristics are language independent, but the output of bilingual children will be varied based on which language they are speaking (Holm et al., 1999; Taliancich et al. 2013). These conclusions provide evidence supporting the suggestion made by Brice & Montgomery (1996) that SLPs need to approach bilingual speech assessments differently and be careful to sort out developmental differences from disorders.

Kathryn Kohnert published a study on bilingual children with primary language impairment (PLI) concerning how to make accurate diagnoses and create effective treatment plans (2010). While bilingual and monolingual children with PLI show similar symptoms, the most common symptoms include slower development and delayed writing and social communication, which are all normal developmental differences seen in bilingual children (Kohnert, 2010; Hoff & Core, 2015). Identifying PLI is done primarily by observing behaviors, meaning that distinguishing differences from disorder is done case by case (Kohnert, 2015). Though all have limitations, Kohnert discusses several

techniques used in the formal assessment process: comparing the child's language performance to monolingual peers, other bilingual peers, or to the speaker himself over time, and the best assessment will be based on data gathered by using a combination of these techniques as well as indirect reports from teachers, family, and observations of the child's environmental and social settings (2015). Then, treatment plans are made in order to promote generalization, which is a transfer or sharing of learned skills in the treated language to the untreated language (Kohnert 2015), similar to the L1 and L2 cues discussed previously (Gorman & Gillam, 2003). Strategies for carrying out the service plan may be bilingually or cross-linguistically focused, meaning it addresses both languages simultaneously or one and then the other, respectively. There has not been much research to date regarding the effectiveness of these intervention strategies, but Kohnert has been a part of a few such research teams.

In their 2015 study evaluating post-treatment progress of bilingual PLI clients, Pham, Ebert, and Kohnert discovered that a bilingual intervention plan may be more effective than a cross-cultural one. In their study, the clients who participated in bilingual treatment experienced continued progress in both English and Spanish; whereas, the students who were only directly treated for English did not show considerable progress in Spanish (Pham, Ebert, & Kohnert, 2015). Bilingual children with PLI or other language disorders may not be able to generalize between L1 and L2 as well as those who demonstrate normal development, but Pham, Ebert, & Kohnert recommend that more research is needed to continue advancing in the assessment and treatment of bilingual children with PLI (2015).

However, research within the speech pathology field can reveal other areas that require growth as well. Effie Kritikos conducted a survey of three groups of SLPs from five different states, including monolingual SLPs, bilingual via education SLPs, and bilingual via cultural experience SLPs (2003). She asked them their opinions about the efficacy of assessing bilingual children, and the majority reported low efficacy, either personal, general, or both (2003). Most monolingual SLPs admitted a belief of low personal efficacy, while bilingual via education SLPs spoke of lack of language proficiency; bilingual via culture SLPs spoke of insufficient proficiency of the language and lack of experience as pitfalls, but reported the highest level of self-efficacy (Kritikos, 2003). Half of the respondents said they interpret assessment results differently if the client is bilingual, and forty percent said they hesitate to recommend speech therapy for bilinguals, partly because of their lack of knowledge of bilingual issues (Kritikos, 2003). Kritikos (2003) discusses that this survey reveals that SLPs in the United States field may not feel confident in their ability to assess and treat a client because of a language barrier or lack of experience and training. Pham, Ebert, & Kohnert (2015) conclude that there is still much research needed to determine the best ways to test and treat the speech bilingual clients. However, based on the low efficacy and availability of bilingual SLPs in the United States reported by Kritikos (2003), it is evident that a sufficient method does need to be established to meet the unique needs of these clients.

Implications from International Studies

Bilingual speech therapy is not a concern that is unique to the United States. Other countries have realized the need to develop bilingual speech therapy procedures,

and their research and conclusions can be evaluated and compared to methods here in the United States. England is one of the countries that has published research in the area of bilingual speech assessment and treatment. Some British clinicians have claimed that using a sociocultural assessment is effective in accurately testing a bilingual child's speech ability because it integrates the linguistic standards of fluency in the individual languages while still considering cultural background (De Lamo White & Jin, 2011). De Lamo White & Jin suggest that the socio-cultural approach should be the basis for every assessment performed by an SLP because it help the therapist to look at the unique environmental background of the client while incorporating other more traditional linguistic approaches, but they do admit that this approach is not the perfect solution for every situation and requires further research (2011).

Another British publication introduces the idea of a dynamic assessment, DAPPLE, for bilingual preschoolers (Hasson, Camilleri, Jones, Smith, & Dodd, 2013). The assessment is administered in a test-teach-test format that measures a child's capacity for learning vocabulary, sentence structure, and phonology, and it is designed to help separate differences from disorders in bilingual speech (Hasson et al., 2013). Hasson et al.'s results supported their goals, showing that speech therapy clients struggled more in vocabulary, sentence structure and phonology than bilingual speakers not in speech therapy; however, they also discussed the likelihood that obvious performance or concentration issues in the classroom may lead to a speech therapy referral, when it could be a matter of attention issues, not language underdevelopment (2013). The above research consisted of children exposed to many European languages (De Lamo, White, &

Jin, 2011; Hasson et al., 2013), and although their findings can be applied in general terms to the bilingual speech therapy situation in the United States, they may not be sufficient for the specialized Spanish-English bilingual techniques described by Gorman & Gillam (2003).

Cultural and Ethical Concerns

Another important aspect for speech therapists to include in their consideration of treatment methods for bilingual clients is communicating with the client's parents. It is beneficial to the clients when their parents are aware of what is going on during therapy sessions, and therapists can collaborate with the parents to teach them techniques and tools to use at home as well (Kummere, 2007). Whenever a client is speaking Spanish at home and learning English in school, speech therapists must be in communication and collaboration with the parents so that they can learn what their role in the therapy process will be, and that role may be the primary practitioner of speech therapy activities and techniques created by the therapist (Kummere, 2007). However, this task can include additional challenges in the case of Spanish-English bilingual clients. There could be a language barrier in cases with Spanish monolingual parents or parents who only speak English at low levels of fluency.

Also, it is important to recognize any cultural differences that could affect how the parents view their child's speech difficulty and the process of speech therapy so that both the therapist and the parents can work together to advance the development of the client. Kummere's study of fourteen Mexican immigrant mothers' perceptions of their children's speech and literacy difficulties and therapy services reveals some important

concerns to address (2007). The mothers were asked about their opinions regarding their children's speech difficulties and treatment multiple times over the course of the service plans, and at the beginning most mothers claimed that their child's speech was "fine", even though each child showed clear language underdevelopment (Kummere, 2007). Later in the treatment plan most mothers agreed that their child had a "delay", but they viewed the word "disorder" as something harsh and severe (Kummere, 2007). Kummere documented several specific comments from the mothers, who blamed the speech delays on physical issues ranging from premature haircuts to chronic ear infections, or family situations such as competing over toys with cousins and a lack of extended family members close by (2007). These comments suggest that the mothers do not understand their children's language underdevelopment or do not want to admit to their existence. The mothers did not know what to expect from their children's receiving speech therapy, but most claimed it had a very positive effect on their child's speech, even if no major improvement had been recorded by the therapist (Kummere, 2007). When asked what therapists should do to promote better understanding and support, the mothers suggested that SLPs speak Spanish, inform them about the progress and details of treatment plans, and continue to use existing strategies for therapy (Kummere, 2007). It is important to have effective communication with the parents because they often become the primary source of implementing the therapist's treatment plan, especially when the child's L1, for which many therapy activities are created, is spoken mainly at home. Therapists should observe what communication patterns are practiced in the house and figure out how the parent perceives speech and literacy underdevelopment to build a supportive relationship

with the parents and ensure that the client can get the most out of his treatment plan (Kummere, 2007).

Intercultural communication challenges lead to ethical concerns for speech therapists, since language barriers can hinder the ability for a speech therapist to properly treat a client. American Speech-Language-Hearing Association (ASHA) is the organization that licenses SLPs and publishes a code of ethics for practicing licensed therapists in the United States. The code of ethics states that SLPs should evaluate the effectiveness of services provided for each client, and they should not provide services for clients for which they are not qualified or trained (2016). Furthermore, ASHA states that SLPs should continue to pursue necessary education and training that is relevant to the field (2016). This means that if, as mentioned in above sections, a therapist does not feel confident in the effectiveness of assessments or the referring for and creating of treatment plans for bilingual clients, training and new material should be pursued. However, this training should not include fluency or language instruction; ASHA does not believe SLPs can be held to a specific or measurable standard of language proficiency (n.d.a). Individuals who are already bilingual should be recruited to the field and then given access to training geared towards the specialized practice of serving bilingual clients, as has been suggested by others in the field, such as De Lamo White & Jin (2011). Specialized training is still required to educate professionals or future professionals about the unique assessment and treatment techniques, which Gorman & Gillam (2003) discuss, needed to provide services for bilingual clients. Based on the 2015 census data and ASHA's code of ethics (2016), it is evident that Spanish-English

bilingual speakers are prevalent and common in the United States, and speech therapists need to be properly equipped to provide services for that population.

Available Resources in the United States

ASHA, in addition to providing clinical licensure, accredits speech language pathology degree programs. ASHA's statement regarding bilingual SLPs essentially says that the organization will not issue a national bilingual license because the requirements for being a qualified bilingual speech therapist are too ambiguous to set at a national level (American Speech-Language-Hearing Association, n.d.a). Each state sets its own standard; this usually consists of completing a degree program with an extra class or two focusing on bilingual speech therapy, and at some institutes, a portion of clinical hours must be completed in a bilingual environment (American Speech-Language-Hearing Association, n.d.b).

When speech-language pathology or communication sciences and disorders masters programs from different universities in the United States are compared, it reveals the variances in bilingual speech therapy specialization and certificate programs. ASHA's website includes a search database that locates programs by degree level and subject, and it provides an outline of accreditation information, admission requirements, program details, and any specialized tracks offered by the university (ASHA EdFind, n.d.). A search for masters programs in speech-language pathology generates over 200 programs, and the majority do not include a bilingual specialization track (n.d.). The SLP masters programs at four universities from four different states that do include a bilingual specialization vary in requirements, such as bilingual emphasis courses, bilingual clinical

experience, and an oral proficiency exam (California State University Long Beach, n.d.; Florida International University, n.d.; The University of Texas at Austin, 2015; The University of Colorado Boulder, 2016). The University of Texas at Austin lists all of the above requirements (2015; n.d.), and the University of Colorado at Boulder indicates that only one bilingual focus class is required (2016). All of these programs require at least two credit hours of instruction in a bilingual focus course, such as bilingual language acquisition or methods of providing services for bilingual individuals (Florida International University, n.d.). However, California State University Long Beach requires twenty-five hours of bilingual clinical experience (n.d.), while The University of Texas at Austin requires 125 hours (2015). Furthermore, the programs in Texas, Colorado, and California offer bilingual focus classes as electives, but Florida International University makes them mandatory for all student in the degree program (n.d.). The states of each of these universities are the entities that set the standards that a student must meet in order to obtain a bilingual certificate in that state (American Speech-Language-Hearing Association, n.d.b), and the variance between state bilingual speech therapy standards is apparent based on the data from the four universities outlined above.

Those who obtain the necessary qualifications, per the state's standard, are awarded a bilingual SLP certificate that is only valid in the state it is issued (American Speech-Language-Hearing Association, n.d.b). However, not all states offer a bilingual track in their speech pathology degree programs, and the choices of degree programs within the states that do offer this specialization are limited (American Speech-Language-

Hearing Association, n.d.b). This means that there are not many speech therapists with a bilingual certificate, which presents challenges within the field.

ASHA also publishes a national code of ethics for SLPs, which states the obligation a therapist has to provide the best treatment for the client or to refer the client to another therapist if she cannot do so (American Speech-Language-Hearing Association, 2016). One way to add to the number of SLPs who can adhere to ASHA's ethical standards concerning bilingual clients is to recruit individuals who are already bilingual. They can at least be confident in their ability to communicate with the client and family. However, Spanish-English bilingual clients require specialized assessments and treatment, and the challenge may be that there are more therapists who cannot fulfill their ethical duties to these clients than those who can. This is a relevant concern given the predicted continual increase of the Spanish speaking population in the United States. As the need for Spanish-English bilingual SLPs continues to grow, the amount and availability of bilingual focus programs and specialized training should increase as well. Such programs serve as advocacy for the specialized therapy and education for the therapists.

Conclusion

Demographics provided by the United States Census Bureau 2015 surveys illustrate the relevance of Spanish-English bilingual speech therapy by pointing out Spanish as the second most spoken language in the country. The profession's need is further revealed by a comparison of monolingual, both English and Spanish, versus Spanish-English bilingual language development. The languages, while sharing many

commonalities on the surface, are fundamentally different in terms of language acquisition (Gorman & Gillam, 2003). When a child is learning both languages at once the acquisition process is decelerated, or at least complicated, sometimes appearing as an underdevelopment (Brice & Montgomery, 1996; Hoff & Core, 2015).

Differences are normal, and specialized assessment techniques, such as those proposed in international studies help sort out normal from abnormal speech patterns (Hasson et al., 2013). Research, such as that published by De Lamo White & Jin, 2011 and Hasson et al., 2013, can be helpful in constructing future American methods and protocols, but it does have limitations. The reasoning behind the techniques can be applied to bilingual situations in American speech therapy, but the British assessment and treatment techniques themselves may not be as useful. They are specific to the phonological and rhythmic requirements of the languages most common in England, such as British English, French, Portuguese, and other European languages, as in the case of Hasson et al.'s 2013 study. However, it is still beneficial to consider the research and reasoning that other countries have applied to bilingual speech therapy as clinicians continue to develop Spanish-English bilingual speech therapy methods. The socio-cultural approach proposed by De Lam White & Jin may be especially helpful in drawing attention to the importance of investigating bilingual client's environmental background in order to gain a deeper understanding of what their language acquisition process has looked like thus far, aiding in identifying what would be normal differences and legitimate disorders in the client's speech and literacy (2011).

The phonological and rhythmic requirements for American English and Spanish are significantly different (Gorman & Gillam, 2003), and, therefore, need specialized assessment and treatment techniques. Bilingual children who show results of speech disorders require unique treatment plans and collaboration with the parents, which is why understanding the Spanish language and culture is important in bilingual speech therapy (Kummere, 2003). Beyond knowing the language, a bilingual speech therapist should understand the unique and salient characteristics of Spanish and English as well as Spanish-English bilingual language acquisition. In order to serve bilingual clients ethically, an SLP must be able to communicate with the client and family, as well as have the have the education and experience needed to understand the unique characteristics of the clients' speech and culture, but a lack of bilingually focused degree programs does not make this easy (American Speech-Language-Hearing Association, 2015; n.d.b).

Recruiting bilingual individuals to the field may help by adding to the population of SLPs who are confident in their capabilities to communicate effectively with their clients, but it does not address the need for specifically trained SLPs who can serve the bilingual clientele. ASHA does not have a national standard for bilingual speech therapists, but every state should make bilingual focus classes and training programs available. Such classes would not be geared towards teaching bilingual fluency, but rather they might provide instruction and training on the unique aspects of working with bilingual clients. This would serve as a platform of advocacy for the needed specialization and an opportunity for those who choose to gain knowledge about and experience with bilingual clients.

References

American Speech-Language-Hearing Association. (2016). *Code of Ethics* [Ethics]. Retrieved from http://www.asha.org/Code-of-Ethics/

American Speech-Language-Hearing Association. (n.d.a). *Bilingual Service Delivery* (Practice Portal). Retrieved from http://www.asha.org/PRPSpecificTopic.aspx?folderid=8589935225&section=Key_Issues

American Speech-Language-Hearing Association. (n.d.b). *ASHA State-by-state* (Advocacy). Retrieved from http://www.asha.org/advocacy/state/

American Speech-Language-Hearing Association: ASHA EdFind. (n.d.). *Search EdFind.* Retrieved from http://www.asha.org/edfind/

Brice, A. & Montgomery, J. (1996). Adolescent and pragmatic skills: A comparison of Latino students in English as a second language and speech language programs. *Language, Speech & Hearing Services in Schools, 27*(1), 68-82.

Bunta, F. & Ingram, D. (2007). The acquisition of speech rhythm by bilingual Spanish- and English-speaking 4- and 5-year-old children. *Journal of Speech, Language & Hearing Research, 50*(4), 999-1014.

California State University Long Beach: Department of Speech-Language Pathology. (n.d.). *Special program in linguistic and cultural diversity (bilingual emphasis program).* Retrieved from http://web.csulb.edu/colleges/chhs/departments/speech-languagepathology/documents/1.BilingualEmphasisProgram.pdf

De Lamo White, C. & Jin, L (2011). Evaluation of speech and language assessment approaches with bilingual children. *International Journal of Language & Communication Disorders, 46*(6), 613-627.

Florida International University: Nicole Wertheim College of Nursing & Health Sciences. (n.d.). *M.S. in speech-language pathology.* Retrieved from http://cnhs.fiu.edu/csd/_assets/documents/MS-SLP%20curriculum.pdf

Gorman, B. K. & Gillam, R. B. (1996). Phonological awareness in Spanish: A tutorial for speech-language pathologists. *Communication Disorders Quarterly, 25*(1), 13-22.

Hasson, N., Camilleri, B., Jones, C., Smith, J, & Dodd, B. (2013). Discriminating disorder from difference using dynamic assessment with bilingual children. *Child Language Teaching & Therapy, 29*(1), 57-75.

Hoff, E. & Core, C. (2015). What clinicians need to know about bilingual development. *Seminars in Speech & Language, 36*(2), 89-99.

Holm, A., Dodd, B., Stow, C., & Pert, S. (1999). Identification and differential diagnosis of phonological disorder on bilingual children. *Language Testing, 16*(3), 271-292.

Kohnert, K. (2010). Bilingual children with primary language impairment: Issues, evidence, and implications for clinical actions. *Journal of Communication Disorders, 43*(6), 456-473.

Kritikos, E. P. (2003). Speech-language pathologists' beliefs about learning assessment of bilingual/bicultural individuals. *American Journal of Speech-Language Pathology, 12*(1), 73-92.

Kummere, S. E., Lopez-Reyna, N. A., & Hughes, M. T. (2007). Mexican immigrant mothers' perceptions of their children's communication disabilities, emergent literacy development, and speech-language therapy program. *American Journal of Speech-Language Pathology*, *16*(3), 271-282.

National Center for Education Statistics. (2016). *English language learners in public schools*. Retrieved from https://nces.ed.gov/programs/coe/indicator_cgf.asp

Pham, G., Ebert, K. D., Kohnert, K. (2015). Bilingual children with primary language impairment: 3 months after treatment. *International Journal of Language & Communication Disorders, 50*(1), 94-105.

Taliancich-Klinger, C. L., Byrd, C. T., & Bedore, L. M. (2013). The disfluent speech of a Spanish-English bilingual child who stutters. *Clinical Linguistics & Phonetics, 27*(12), 888-904.

The University of Colorado Boulder: Speech Language and Hearing Sciences. (2016). *MA-SLP curriculum (for students entering 2016-2017).* Retrieved from http://www.colorado.edu/slhs/sites/default/files/attached-files/2016-17_ma_curriculum.pdf

The University of Texas at Austin: Communication Sciences & Disorders. (2015, April). *Speech-language pathology course sequence.* Retrieved from http://csd.utexas.edu/graduate/speech-language-pathology-course-sequences

The University of Texas at Austin: Communication Sciences & Disorders (n.d.). *Bilingual certificate.* Retrieved from http://csd.utexas.edu/graduate/bilingual-certificate

United States Census Bureau. (2014). *Percent distribution of the projected population by Hispanic origin and race for the United States: 2015-2060* [data file]. Retrieved from http://www.census.gov/population/projections/data/national/2014/summarytables.html

United States Census Bureau. (2015). *Detailed languages spoken at home and ability to speak English for the population 5 years and over for United States: 2009-2013* [data file]. Retrieved from http://www.census.gov/data/tables/2013/demo/2009-2013-lang-tables.html

United States Census Bureau. (2015). *Detailed languages spoken at home and ability to speak English for the population 5 years and over for States: 2009-2013* [data file]. Retrieved from http://www.census.gov/data/tables/2013/demo/2009-2013-lang-tables.html