Accent, Attitudes, and the Speech-Language Pathologist

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Accent, Attitudes, and the Speech-Language Pathologist

A thesis submitted in partial fulfillment of the requirement for the degree of Bachelor of Arts in Linguistics from The College of William and Mary

by

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Accepted for [High Honors (Honors, High Honors, Highest Honors)]

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Accepted for High Honors
Abstract

This research provides an updated survey about the beliefs held by speech-language pathologists (SLPs) and speech-language pathology students concerning SLPs who have non-standard accents. Of specific interest are these individual’s thoughts about the minimal level of intelligibility an SLP should have to be effective and thoughts about which clinical populations would be most affected by accents, as well as information about the types of comments and actions targeted at SLPs who speak with non-standard accents, and an understanding about if and how the field has improved over the years in regards to the topic of accent and SLPs. An online survey collected quantitative and qualitative data from 52 SLPs and 33 students who were primarily from the states of New York and Virginia. The majority of participants agreed that accent should be fully intelligible and should cause little interference in communication, but few expected near-native proficiency of SLPs. In general, participants rated individuals in clinical populations that were attempting to improve their articulation or who had hearing difficulties as most likely to be affected by accent, but there was a large amount of variability in the majority of ratings; however, individuals from New York consistently indicated that accent would have a higher effect on all populations than individuals from Virginia did, yielding a significant difference. Negative comments and actions towards SLPs based on accent were present, but few, and the results suggest that proficiency in English may be more important than the presence of an accent in such situations. These results indicate a need for research that definitively shows how accent affects specific clinical populations, so that beliefs about minimal intelligibility ratings can be justified. Furthermore, they indicate a prevalence of positive beliefs among SLPs and students
about SLPs who speak with non-standard accents, though suggestions for future study and improvements in policy are discussed.
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Chapter 1:
Introduction

“I was born in Brazil and did not learn English until I was 21 years old after moving to this country. During my training as a speech and language pathologist (SLP) I encountered discrimination and prejudice towards what first was only a limited English proficiency to what later became merely an accent as my proficiency of English increased. I have experienced everything from questions such as “how can you become an SLP with such an accent?” or being told by a professor in one of my communication and disorders classes that I in fact had a speech disorder in front of the entire class, to being discouraged to pursue a career as an SLP. Dealing positively with such comments was a challenge!”

- Barbara Fernandes (Fernandes, 2010).

Barbara Fernandes, a trilingual speech-language pathologist in Texas, wrote the above quote in an article entitled, “Nondiscriminatory Standards and Expectations for Speech and Language Pathologists” (Fernandes, 2010). In that article, Fernandes discusses her unsatisfactory experiences going through accent modification classes that left her feeling unempowered, and she offers anecdotes about other colleagues who have experienced similar situations. Fernandes was able to push beyond the negativity directed at her because of her accent and continue on to have a successful career, but it is important to realize that her story does not represent a unique or isolated incident as other authors have commented on the fact that individuals with accents face certain struggles and doubts about their abilities to provide effective SLP services on account of their
accents (Langdon, 1999; Levy & Crowley, 2011). In practice, what this means is that individuals who speak with non-standard accents may be discouraged from pursuing a major in communication sciences and disorders, restricted from clinical practicum experiences, required to enroll in accent modification classes, or questioned about their abilities by supervisors and employers (ASHA, 1998a).

Despite these concerning realities, bilingual and trilingual speech pathologists such as Barbara, who may very well speak English with an accent from another language, are in high demand (ASHA, 2012; Saenz & Wyatt, 1998). According to data released in 2010 by the United States Census Bureau, the number of individuals over the age of five who speak a language other than English at home constituted nearly 20% of the population (United States Census Bureau, 2010). With an estimated six to eight million individuals in the United States who have some form of language impairment, as reported by the National Institute on Deafness and Other Communication Disorders (NIDCD, 2010) it is very reasonable to assume that speech-language pathologists’ client populations will include individuals who are bilingual. However, a demographic report released by the American Speech-Language-Hearing Association (ASHA) in 2009 showed that the number of speech-language pathologists and audiologists who list themselves as bilingual service providers totaled only 7401 members (5.3%) that year, compared to a membership of over 140,030 members (ASHA, 2009a; ASHA, 2009b). As the United States becomes more diverse, the need for speech-language pathologists who can provide effective clinical services in languages other than English only becomes greater. It is therefore tantamount to address the concerns of potential SLPs who speak
with non-standard accents, in order to ensure that they receive the best possible training and support.

In undertaking this study, I draw from my background in linguistics and psychology which has taught me to respect the way in which language is intricately tied to identity, and given me an understanding about how people’s ideas and beliefs about language are related to ideas and beliefs about the individuals who speak a certain language. Indeed, according to Bucholtz and Hall (2004), “among the many symbolic resources available for the cultural production of identity, language is the most flexible and pervasive.” This statement appropriately illustrates that the way we speak is an essential indicator of who we are.

Furthermore, as a recently accepted master’s candidate for a degree in speech-language pathology with a bilingual focus, I find the tension surrounding the accented SLP to be professionally relevant. I hope to provide services in Chinese and Spanish, but I know that my accent in these languages shows traces of my first language, English. For example, I still struggle with trilling my “r” in Spanish which is something I will have to work to change. I recognize the unique position of the speech-language pathologist as a health professional whose very job it is to evaluate and treat communication disorders, thus I must consider the implications of accented speech, including my own, on the provision of effective services for individuals whose communicative abilities are somehow impaired.

In pursuit of a better understanding of this situation I framed four research questions: (1) What is the minimal amount of intelligibility that a practitioner should have to be effective? (2) Which specific clinical populations are most affected by accents?
(3) What types of comments and actions are targeted at SLPs who speak with non-standard accents? and (4) If and how has the field improved in their treatment of SLPs who speak with non-standard accents? In order to answer these questions, I designed a survey that was sent to speech-language pathologists and speech-language pathology students primarily in New York and Virginia. In the second chapter of this thesis, I provide a review of the relevant literature concerning accent and the SLP. In the third chapter, I elaborate upon the methodology that was used in this study. In chapters four and five I provide the quantitative and qualitative results of the survey, respectively, and discuss their implications. Finally, in chapter six, I offer a conclusion, suggest further avenues of study, and elaborate on my own future plans in conjunction with this research.
Chapter 2:

Literature Review

In this literature review, I begin by defining what speech-language pathology is, defining what communication disorders are, and providing a demographic breakdown of the speech-language pathology profession in the United States in order to provide context about the relationship that SLPs have with communication and to illustrate the need for diversity in the field. I then define what an accent is, including information about how one persists and how accents are categorized. Subsequently, I show how language attitudes affect character judgments and employability prospects for individuals who speak with non-standard accents. I then review the literature on perception of accent, which illustrates the important distinction between intelligibility and comprehensibility. Next, I review the available literature on accent and its relation to speech-language pathology, and end with an overview of policy statements released by ASHA that deal with issues of linguistic diversity and accent to show what steps have been taken so far in the field in relation to this topic.

2.1 Speech-Language Pathology

2.1.1 Definitions. Speech-language pathology is a health profession in which clinicians, known as speech-language pathologists or speech-therapists, specialize in the evaluation, diagnosis, and treatment of speech, language, cognitive communication, and swallowing disorders. In addition to working with these disorders, speech-language pathologists may also work in the areas of accent modification or teaching English as a second language. ASHA (1983) stresses that an accent or features of a non-standard
dialect are not communication disorders, but rather communication differences; however, speech-language pathologists are able to provide accent or dialect modification services if an individual elects for them.

2.1.2 Communication disorders. ASHA (1993) defines a communication disorder as, “an impairment in the ability to receive, send, process, and comprehend concepts or verbal, nonverbal and graphic symbol systems.” It defines four general categories of communication disorders: (1) speech disorders, (2) language disorders, (3) hearing disorders, and (4) central auditory processing disorders.

Speech disorders include disorders of articulation, fluency, and voice. An articulation disorder is a disorder in which speech sounds are produced in ways that vary from their normal production (ASHA, 1993). Often individuals with craniofacial disorders, such as cleft palate or cleft lip, will possess an articulation disorder. A fluency disorder is a disorder in which the normal fluid flow of speech is disrupted. One example of such a disorder is stuttering. A voice disorder describes a disorder which causes impairment in the ability to produce sounds. For example, an individual who completely loses the ability to speak would be given a diagnosis of aphonia.

Language disorders are disorders in the ability to comprehend or produce spoken, written, or signed language (ASHA, 1993). Such a disorder typically involves impairment in phonology, morphology, syntax, semantics or pragmatics. Hearing disorders result from impaired auditory systems, and can affect the comprehension and production of language. Individuals who are deaf must rely on other systems to communicate, while individuals who are hard of hearing still rely on the auditory system, though it is impaired. Finally, central auditory processing disorders are disorders in which audible signals are
not processed correctly. For example, there may be problems in areas such as analyzing, organizing, or storing auditory information.

**2.1.3 Demographics.** The American Speech-Language-Hearing Association is the professional organization for speech-language pathologists and audiologists in the United States. At the end of 2011 its membership included 120,997 certified speech-language pathologists, though membership including audiologists and affiliates reached over 150,200 members (ASHA, 2011a). More than half of all speech-language pathologists who are members of ASHA work in schools; however, as a whole, speech-language pathologists work in a variety of settings including colleges and universities, hospitals, rehabilitation centers, short-term and long-term nursing care facilities, and private practice, among others. In terms of other demographics, the field is a highly homogenous one, with most of the members being white females. Males comprise only 4% of speech-language pathologists, and only 7.3% of members indicated that they were members of a racial minority group, with an additional 4.5% indicating that they were part of the Hispanic or Latino ethnic group (ASHA, 2011a).

According to the Bureau of Labor Statistics (BLS), Speech-Language pathology is a field that is expected to grow faster than average, at a rate of 23% from 2010 to 2020, compared to the national average of 14% (BLS, 2012). In 2010 the median annual wages for speech-language pathologists were $66,920. The Bureau of Labor Statistics indicates that qualifications required to practice as a speech-language pathologist include a master’s degree or a doctorate in speech-language pathology, in most cases a certificate of clinical competence, and licensure in the state where the individual practices. Also, notably for the current research, the Bureau of Labor statistics states that, “Speech-
language pathologists should be able to effectively communicate diagnostic test results, diagnoses, and proposed treatment in a manner easily understood by their patients and their families.” Determining what effective communication means for the speech-language pathologists who speaks with an accent is the necessary next step.

2.2 Definition of Accent

Everyone who speaks has certain prosodic and segmental features that characterize their language which are influenced by biological and environmental factors including age, gender, race, and place of origin. These features constitute an individual’s accent (Sebastian, 1985; Lippi-Green, 2010; ASHA, 2011b). Accent is a very persistent and salient part of an individual’s identity, and it is something that is difficult to change after a certain point. Lippi-Green (2010) constructs this idea using the metaphor of a sound house. Every child, she says, has the same set of tools and blueprints with which to build their sound house, but as people age they lose these tools. Specifically, Long (1990) shows that the general consensus in the literature is that phonology becomes set around six years of age.

In a technical report, ASHA (1998b) states that individuals can be put into three basic categories based on their accent or dialect: (1) Those who were born in another country and learned their first language before they learned English, (2) Those who were born in the United States and learned their first language before or as they learned English, and (3) those who were born in the United States or another country whose only language is English. Some examples given of individuals in category three include individuals who speak one of the New York dialects, individuals who speak Southern
English, individuals who speak with the British dialect, and individuals who speak Standard American English (ASHA, 1998b).

2.3 Accent and Attitudes

2.3.1 Standard language ideology. Accent prestige theory maintains that individuals who speak with an accent that is not the accent of the dominant group will be viewed negatively (Fuertez, Potere, & Ramirez, 2002). In the United States, the prestige variety is Standard American English. ASHA (1986) categorizes Standard American English as, “the linguistic variety used by government, the mass media, business, education, science, and the arts.” Given that there is this prevalent standard language ideology, it necessarily follows that there are ideas about “non-standard” varieties as well. When a language is labeled as non-standard it is because it deviates in some way, such as in prosodic or grammatical features, from the standard. In many cases, someone who speaks a non-standard variety may be stigmatized because of their language. Speakers of Southern English and African-American English, for example, are often told that their language is incorrect, and that it should not be used in certain situations such as at job interviews because it can mark them as somehow less intelligent and inadequate. This has had the unfortunate effect of creating a situation where individual’s home varieties are devalued, and one in which children fall behind in school or are graded incorrectly because of how their language variety differs from the standard that is used (Charity-Hudley & Mallinson, 2011).

Though not a language, per se, accented English can also be seen as non-standard and several studies have shown that speaking with an accent may result in negative
character evaluations for the speaker. For example, Ryan, Carranza, & Moffie (1977) focused on the reaction towards English speech spoken with a Spanish accent. In their study the researchers made recordings of ten Spanish-English bilingual students who varied in their degree of accent, all reading the same formal passage. They used these recordings as stimuli for native English speaking participants and instructed them to rate the speakers on a seven point scale for a total of five attributes: the likelihood of being a friend, eventual occupation, the degree to which their speech was accented-unaccented, the degree to which they were pleasant-unpleasant, and the degree to which the speech was fluent-non-fluent. The results showed that as judgments of accentedness increased, the evaluations of the five character attributes became more negative.

Brennan & Brennan (1981) conducted another study with similar results. In this study the researchers examined how Anglo-American and Mexican American raters judged accented Spanish speech that varied in degree of accent. The stimuli used were a set of nine recordings of Mexican-Americans reading the same passage. Three linguists judged these recordings on an accentedness index scale and established that the speakers exhibited a range of accentedness. Participants in the study rated the recorded speakers on a seven-point scale for a set of eight variables that were equally divided between status judgments (e.g. educated-uneducated) and solidarity judgments (e.g. friendly-unfriendly.) The results indicated that participants’ status judgments were largely predicted by accentedness index ratings. Specifically, high accentedness ratings were correlated with low status and solidarity judgments, and vice versa. In light of the reviewed research, it is apparent that individuals make character judgments based on accent. For the SLP and SLP student such character judgments can be detrimental to their progress in the field.
2.3.2 Accent and employability. The literature has shown that proficiency in English correlates with better jobs, increased graduation rates, and a greater degree of success in American society in general (White & Kaufman, 1997). On the one hand these ratings could represent that negative evaluations of speakers with accents carry over into judgments about employability. To this effect, Rey (1997) examined the way in which accent affected ratings of employability by having participants judge recordings of the speech of 19 speakers who included white Americans, black Americans, and Cuban Americans with minimal, medial, and heavy accents. Participants in the study were individuals from actual businesses who were in charge of hiring. These participants were asked to make judgments about the social status of the speakers they heard, to rate, on a seven point scale, whether or not they would hire the speakers for positions in seven fields (public relations, executive, manual labor, clerical, skilled technician, sales, foreman), and to rate how the speaker sounded in regards to four dichotomous variables (limited-versatile, decisive-indecisive, communicates well-problems communicating, and old-young).

The results of the study indicated that participants consistently judged white Americans as more favorable in both judgments about their social status, and speech than Black Americans and Cuban Americans. Additionally, the participants judged white Americans more favorably for most positions except clerical and foreman, which the authors suggest may actually be a positive judgment due to the lower status of those jobs. Similarly, a more recent study by Carlson & McHenry (2006) examined how accent, ethnicity, and comprehensibility affected employability ratings. In this study the authors compared employability ratings of speakers with either a minimal or maximal Spanish or
Asian accent to those of speakers who spoke Standard English and found that maximal accent was correlated with lower ratings on this scale.

Though negative social judgments based on accent may be a factor, on the other hand, the relationship between accent and employability could be explained by actual limitations that accent causes which make an individual unable to perform their job effectively. According to the Equal Employment Opportunity Coalition (EEOC), “An employment decision based on foreign accent does not violate Title VII if an individual's accent materially interferes with the ability to perform job duties” (EEOC, 2002). Thus, individuals who speak with an accent whose job requires a certain degree of intelligibility are under pressure to not only be competent in their positions, but also to actively modify and control the way in which they speak. Of course, such judgments are based on individual’s perceptions of accent, and it is not always the case that individual’s beliefs about how much they can understand someone are the same as how much they actually understand (Derwing & Munro, 1997).

2.3.3 Accent, intelligibility, and comprehensibility. An examination of the available literature pertaining to perception of accents reveals that an important distinction needs to be drawn between the terms intelligibility and comprehensibility. Derwing & Munro (1997) define intelligibility as “the extent to which the native speaker understands the intended message.” One way that researches have measured intelligibility is by having participants transcribe the words they hear and later counting the number of words which were transcribed correctly (Derwing & Munro, 1997). A different method is to have participants listen to a speaker and identify words out of a list (Burda, Overhake, & Thompson, 2005). Zielinski (2006) argues that intelligibility involves both the speaker
and the listener. Accordingly the speaker contributes non-standard phonological features and the listener contributes a certain preference for features that are important in their language, such as a preference for strong syllables in English (Cutler, Mehler, Norris, & Segui, 1992). Comprehensibility differs from intelligibility in that it refers to the ease with which a listener understands what a speaker is saying. It is generally measured by having participants rate on a scale how easy the speaker was to understand.

Derwing and Munro (1997) conducted a study in which the researchers sought to discover how accents were related to intelligibility and comprehensibility. They recorded intermediate level speakers from four different language backgrounds (Cantonese, Japanese, Polish, and Spanish) as they dictated a story. These recordings were then presented to native English speaking subjects who had to orthographically transcribe everything they heard, as well as give judgments about the accentedness of the speaker and the comprehensibility of the speaker. The researchers calculated intelligibility scores for all participants by counting the number of words that they transcribed correctly. The results indicated that intelligibility scores were higher than comprehensibility judgments which were in turn better than accentedness ratings. What these results imply is that a high level of accentedness does not necessarily make speech unintelligible, even if listeners indicate that they have trouble interpreting it.

Subsequent research by Bradlow & Bent (2008) has even shown that individuals are able to adapt to non-native accents with repeated exposure. In this particular study, researchers conducted two experiments. In the first experiment the researchers used four recordings of sentence lists spoken by different non-native speakers of English which were taken from the Northwestern University Foreign-Accented English Speech
Database. The four recordings used were all judged to have different baseline intelligibility scores, and were categorized as Chinese-low, Chinese-medium, Chinese-high and Slovenian medium, based on the first language and baseline intelligibility rating of the speaker. Participants in this experiment listened to sentences in one of the conditions and were required to transcribe, in Standard English orthography, the sentences that they heard. The results of the first experiment indicated that intelligibility scores were higher in the single-talker conditions than they had been in the multiple-talker conditions, which the baseline intelligibility rating were based upon. Furthermore, when the researchers separated intelligibility scores into quartiles based on time of exposure, throughout the experiment, they saw that the intelligibility scores increased with exposure, although it took more exposure for the intelligibility to raise with the speakers with lower baseline intelligibility rates. In the second experiment the researchers included a speaker-independent condition where participants were exposed to stimuli created from recordings of multiple speakers of Chinese-accented English. The results of this experiment showed that subjects were able to adapt to accented speech across different speakers of the same accent.

In a more recent study by Adank, Evans, Stuart-Smith, & Scott (2009) the researchers conducted two experiments in order to examine how participants comprehended native accents under adverse listening conditions. In the first experiment, the researchers had speakers of Standard English and speakers of Glaswegian English listen to true/false sentences recorded in both accents in quiet and in three varying signal-to-noise ratios (SNRs). The results of this first experiment revealed that Standard English speakers took a longer time responding to sentences spoken in Glaswegian English when
they were presented in moderate adverse listening conditions. These results suggest a longer processing time for the unfamiliar accent.

2.4 Studies on Accent and Speech-Language Pathology

As evidenced by the research reviewed so far, there have been many studies which have examined language attitudes towards accent and language variation. Within the field of speech-language pathology there have also been a large number of studies which have focused on issues surrounding the evaluation and treatment of communication disorders in clients from culturally and linguistically diverse populations. For example, several studies have examined the over diagnosis of African-American children as having speech and language disorders due to testing materials that are not culturally or linguistically sensitive to the presence of features of African-American English (Craig, 1996; Washington, 1996). A similar body of literature is available concerning clients who are bilingual, or speak English as a second language (Brice, 2002; Restrepo, 2001). Given the amount of focus that is placed on the client’s language variation, one would think that there would be a substantial literature addressing the language varieties of the therapists, especially concerning how variations in the therapists speech might affect the treatment outcomes of their patients. In fact, there are precious few studies that have quantitatively or qualitatively looked into this area.

2.4.1 Qualitative studies. Langdon (1999) conducted one of the earliest studies on this topic. In her study, she surveyed bilingual clinicians from California and gathered information on their self-identified ratings of speech intelligibility in English and the other language in which they provided services, their opinions about how foreign accent
might affect the quality of services, descriptions of situations where accent had interfered in service delivery, and their views on the minimal acceptable level of intelligibility for provision of services. Ratings for intelligibility were based on the Michigan Speech Intelligibility/Communicative Index which allowed for ratings from one to six, with one indicating that speech was “basically unintelligible” and “accent precludes functional oral communication” and six being “near-native intelligibility” and “accent is virtually nonexistent.” All but five of the pathologists in the survey rated their intelligibility in English at level six and the majority rated their accent in the second language at level five (speech is fully intelligible; accent causes little interference). The majority (55.2%) suggested that the minimal level of intelligibility for service delivery should be level five. Opinions about accent ranged from it not being an issue to it not being allowable.

Levy & Crowley (2011) conducted a more recent study in which they collected responses from program directors and students at universities in New York about policies and practices in place for students with foreign accents. They were especially interested in student’s language backgrounds and their plans to practice using a non-English language or not. The major result from the survey was that there was no consistent policy in place for students who spoke English with foreign accents, and that native speakers of English were held to less stringent standards for their accent in their second language, than nonnative speakers were for their accent in English.

2.4.2 Quantitative studies. Thus far, studies of this type in the literature have examined how accent is comprehended by children with communication disorders (Nathan & Wells, 2001; Wilkinson & Payne, 2005) and by older individuals with hearing
difficulties and cognitive impairments such as dementia (Burda, Scherz, Hageman, & Edwards, 2003; Burda, Hageman, Brousard, & Miller, 2004).

The results of the studies with a focus on children with articulation and speech disorders are variable. Nathan & Wells (2001) examined how an unfamiliar accent was processed by children with speech difficulties, by comparing the results of normal and language-disordered children on a lexical decision task. The researchers presented words to the children orally in either the child’s native accent or in a foreign accent and the child had to decide whether or not the word they heard matched with a picture that they were shown. The results indicated that even though children with speech difficulties performed about as well as controls when words were presented in their own accent, they performed worse than normal controls when decisions had to be made about stimuli presented in the unfamiliar accent.

Wilkinson & Payne (2005) found a somewhat different result. In their study the researchers examined how the clinician’s accent affected the receptive and expressive performance of four normal and four disordered African-American preschool children. Their stimuli included a set of 20 stimulus words (10 spoken with an accent and 10 without), and 20 stimulus sentences (five spoken with no more than three accented changes, the same five without changes, five spoken with prosodic changes, and the same five without changes). Wilkinson, an African-American therapists, and Payne, a bilingual therapist with a minimal accent whose native language was Spanish recorded all unaccented stimuli. To measure comprehension, the researchers played the recordings for the children and then presented them with a set of pictures from which they had to choose the appropriate item mentioned in the recording. To measure production, the children had
to repeat a word that the clinician modeled for the child via the recorded stimuli. The results revealed that the children with articulation disorders scored worse than the children without articulation disorders on comprehension of accented speech; however, there was no significant difference between these two groups on production scores. The authors interpreted their results to indicate that a clinician with a mild accent would not have an effect on the comprehension and production of preschool children.

Research on the effect of accent with older individuals has been more consistent. Burda, Scherz, Hageman, & Edwards (2003) conducted a study in which they examined how the intelligibility and comprehensibility of a Taiwanese and Spanish speaker varied with the age of their participants. Independent raters judged the accents of the Taiwanese and Spanish speaker, and indicated that both had strong accents, though the Spanish speaker’s accent was a little stronger. The groups consisted of a young group (participant aged 20-39) a middle group (participants aged 40-59) and an older group (participants aged 60 and above). All participants were tested for hearing and participants in the older group consisted only of individuals who had hearing problems. In the study speakers read 20 mono and disyllabic words and 10 sentences. Participants transcribed these words and sentences, and received an intelligibility score based on how many words they transcribed correctly. Participants also rated the comprehensibility of the speaker and the accentedness of the speaker on a seven-point scale. The results of the study revealed that the older group received the worse scores for intelligibility, regardless of the native language of the speaker. Additionally, scores for the English speaker were always higher than the scores for the Taiwanese and Spanish speaker, regardless of the age of the listener. Similar results were found for older individuals who suffered from dementia.
who were exposed to English, Taiwanese, and Spanish speakers (Burda, Hageman, Brousard, & Miller, 2004). This shows that accent is more difficult to comprehend for older individuals.

2.5 ASHA Policy Statements

The American Speech-Language-Hearing Association has been in existence since 1925, however only within the last 50 years has it begun to pay any attention to language variation among its client and member populations. Indeed, Taylor (1986) writes, “Prior to 1968, little interest was shown within the professions of speech pathology and audiology in addressing the unique clinical needs of individuals with communication disorders from culturally and linguistically diverse populations.” Taylor (1986) states that the shift in focus began in 1968 with the formation of the ASHA Black Caucus, and since that time the American Speech-Language-Hearing Association has made a substantial effort to incorporate the organization within a more culturally-sensitive framework, as evidenced by the creation of a number of policy statements, position statements, and technical reports.

2.5.1 Social dialects and American dialects. In 1983, ASHA released a position statement entitled, “Social Dialects” in which they asserted that a dialect must not be considered a disorder (ASHA, 1983). The statement went on to say that the speech-language pathologists must have knowledge of the dialect as a rule-governed linguistic system, knowledge of its grammatical and phonological features, and knowledge of nondiscriminatory testing features. Furthermore, in treating individuals who speak with a social dialect it is necessary to only treat the errors, not features of the dialect, unless the
client elects to receive services for their non-standard features. Two decades later, ASHA (2003) released an updated position statement called, “American Dialects.” This position statement reiterates much of what was stated in the social dialects statement, but it elaborates on the competency of nondiscriminatory testing features, saying that professionals must be familiar with nondiscriminatory testing and dynamic assessment procedures, such as “identifying potential sources of test bias, administering and scoring standardized tests in alternative manners, using observation and nontraditional interview and language sampling techniques, and analyzing test results in light of existing information regarding dialect use.” The statement also provides an additional competency requiring “an appreciation for the communities and cultures of speakers of AE [American English], as well as a thorough understanding of the social attitudes toward dialect use.”

2.5.2 Clinical management of communicatively handicapped minority language populations. In 1985, ASHA released the position statement, “Clinical Management of Communicatively Handicapped Minority Language Populations” (ASHA, 1985). In the statement of need they touch on the increasing diversity in client populations at the time, and suggests a number of clinical areas in which proficiency in the minority language may or may not have an effect. For example, the authors state that a monolingual clinician should be able to provide assessment of pure tone and hearing thresholds and assessment of cleft lip and cleft palate in minority language populations. Alternatively, areas of difficulty include assessing voice quality, and assessing phonemic, allophonic, syntactic, morphological, semantic, lexical, and pragmatic characteristics of a minority language.
The position statement goes on to recommend professional competencies for individuals on a continuum of English proficiency. Specifically three types of speakers are focused on: those who are bilingual English proficient, those who are limited English proficient and those who are limited in both English and the minority language. Bilingual English proficient clients are defined as those whose proficiency in English is greater than their proficiency in a minority language. For professionals, the statement says it is not necessary for them to be proficient in a minority language to provide services in English, but they must be able to distinguish between dialectal differences and disorders.

The category of limited English proficiency includes clients who exhibit greater control in a minority language than in English. For the speech-language pathologists to provide services in the minority language they are expected to have several competencies: (1) native or near native fluency in English and the minority language, (2) ability to describe normative processes of speech and language acquisition for monolingual and bilingual individuals, (3) ability to administer and interpret assessments which can distinguish between communications disorders and differences, (4) ability to apply intervention strategies in the minority language, and (5) cultural sensitivity to factors which might affect the delivery of services. Possession of these competencies is also necessary for individuals to identify themselves as bilingual speech-language pathologists or audiologists (ASHA, 1989).

The last category includes individuals who are limited in both languages. For these individuals assessments should be conducted in both languages to determine the most appropriate language for intervention. If this language is found to be English then proficiency in the minority language might not be necessary, but if it is found to be the
minority language then the speech-language pathologists should have the same competencies as are necessary to serve individuals with limited English proficiency. Of course not all speech-language pathologists who encounter clients with limited English proficiencies will have the competencies necessary to provide services. In these situations the statement suggests the hiring and recruitment of bilingual pathologists or audiologists, or the utilization of other professionals (i.e. psychologists) who have bilingual competencies. If all other options are exhausted they also suggest the consistent use of interpreters or translators who are given appropriate training.

2.5.3 **Students and professionals who speak English with accents and non-standard dialects.** The position statements just detailed focus largely on the linguistic diversity of the client, but it was not until 1998 that the language varieties of the clinician were considered. In 1998 ASHA released a position statement and technical report, both entitled, “Students and Professionals Who Speak English with Accents and Non-standard Dialects: Issues and Recommendations” (ASHA, 1998a; ASHA, 1998b). The position statement stated that students and professionals could effectively provide services as long as they had:

…the expected level of knowledge in normal and disordered communication, the expected level of diagnostic and clinical case management skills, and if modeling is necessary, are able to model the target phoneme, grammatical feature, or other aspect of speech and language that characterizes the client's particular problem. The statement went on to stress that decisions about acceptance into speech-pathology programs or employment positions based solely on the presence of an accent or dialect were discriminatory in nature, and instead encouraged understanding of linguistic
diversity. The associated technical report recommended the developments of future position statements on accent and dialect, the provision to students of strategies about how to improve their use of standard English, the development of resources for clinical supervisors, the exploration of ways to educate employers about multicultural sensitivity, and the encouragement of universities to collaborate with experienced clinicians who could serve as mentors for students.

2.5.4 The clinical education of students with accents. A subsequent position statement that spoke on policies towards individuals with accents in the profession was not written for over a decade. Finally, in 2011 ASHA released a position statement entitled, “The Clinical Education of Students with Accents” (ASHA, 2011). In this position statement the authors mentioned the still current relevance of the ASHA (1998a) position statement, and then detailed a list of nine strategies for supporting students with accents. These strategies were to provide early support, provide an accent modification/intelligibility enhancement plan, avoid communicating inferiority, be respectful of what the student brings to the profession, focus on the client’s perception of accent, address client concerns regarding a student’s accent, choose external placement sites with care, stress that acquisition of self-awareness by students is key, and seek outside support and guidance. Finally, in looking towards the future the authors stated that there needs to be more empirical evidence about who will have difficulty understanding clinicians with accents, and that there also need to be more objective measures of intelligibility.

2.6 Summary: The Need for this Research
There is little research available on speech-language pathologists who speak with accents. Furthermore, with the exception of the recently released ASHA (2011b) position statement and the study by Levy and Crowley (2011), it has been over a decade since any research has looked at the opinions of individuals currently working in or interested in becoming part of the profession. All studies on the topic and position statements released by ASHA stress the need for more exploration in this area. It is my aim to add to the literature by providing an updated survey about the beliefs of speech-language pathologists and speech-language pathology students on this topic.

My survey is modeled loosely on that of Langdon (1999) in several ways. First, I gather intelligibility ratings using the same Michigan Intelligibility/Communicability index that she does. Like Langdon (1999), I also ask participants in my study about their specific positions regarding the impact of accent on clinical effectiveness, and ask whether or not a client has ever withdrawn from their services because of their accent. Though these few questions are the same, my survey is more expansive. I include a second quantitative measure that gathers data about participants’ beliefs concerning the effect that accent has on specific clinical populations, which is something that no other study has reported. I also use several questions to gather information about specific comments and actions that were targeted at SLPs who have accents, in order to gauge whether or not beliefs towards SLPs with accents are largely negative or positive, and to see if and how the field has changed over time.

In accordance with the findings of Langdon (1999) I predict that the majority of minimal intelligibility ratings will be a five out of the six-point scale that is used. I further predict that ratings about the effect of accent will be greater for clinical populations
where articulation is a focus, and also among the elderly and individuals with hearing difficulties. Lastly, I predict that participants will report the existence of negative comments and actions towards individuals who speak with non-standard accents, but I foresee an overall positive improvement in the treatment of individuals who speak with non-standard accents.
Chapter 3:

Methodology

In this chapter, I first elaborate on how I recruited participants for this survey. I then describe the survey which was used in more detail, providing information on why certain questions were asked, especially in relation to how the items were used to answer the four major research questions. Lastly, I review the experimental procedure.

3.1 Participants

Participants in this study included speech-language pathologists (hereafter referred to as SLPs) and speech-language pathology students over the age of 18 who were recruited primarily from the state of New York and the commonwealth of Virginia. New York was chosen because of its degree of cultural and linguistic diversity with the intent that this would provide access to a number of SLPs who used a second language in their provision of services. Virginia was chosen in order to provide a regional comparison.

Using ASHA’s online directory of SLPs, emails were sent to 237 SLPs who indicated that they provided services in a language other than English; however, due to a large number of emails that were bounced back, a conservative estimate of the number of individuals reached through this method is 150 SLPs. Emails were also sent to department chairs of 21 SLP programs in New York and eight programs in Virginia, who were asked to forward the email to their department members and students, but only three universities replied with confirmations that they had forwarded the survey. An estimate of ten SLPs from Virginia saw invitations to participate through social media websites, and an additional 40 SLPs were invited to participate during an SLP conference in
Virginia. Furthermore an uncertain number of individuals were recruited through word of mouth. Thus, a total estimate of 203 SLPs and 90 students (assuming 30 students reached from each confirmed university) were recruited for this survey. As an incentive to participate, all participants were given the chance to enter themselves into a raffle for a $25 visa gift card at the end of the survey.

3.2 Materials

I developed two surveys for this study: one for SLPs (see appendix B) and one for students (see appendix C). Most of the questions remained the same for both groups, though slight variations are evident in some cases. For example, one question for SLPs asks “In which state do you currently practice?” while the corresponding question for students asks, “In which state do you currently attend school?” Half of the items in the survey focus on providing answers to the research questions, and the other half are used to collect demographic information about the participants that could be used for descriptive results and additional analyses.

3.2.1 Determining minimal intelligibility. Participants were asked to provide a rating of minimal intelligibility using the University of Michigan Speech Intelligibility/Communicability Index as described in Morley (1996). This index consists of six levels, which are fully described in question #13 of Appendix B. In addition to providing this rating, the survey asked participants to elaborate on their responses.

3.2.2 Effect of accent on specific clinical populations. Participants rated how much they thought accent would impact the treatment outcomes for a set of eleven specific clinical populations, using a scale where a rating of zero meant that accent had
no effect and a rating of ten meant that accent had a very large effect. The eleven specific clinical populations which participants were asked to rate included individuals undergoing accent modification, individuals who use augmentative and alternative communication, individuals with autism spectrum disorders, individuals with craniofacial disorders, children undergoing early intervention, elderly individuals, individuals with disfluency disorders, individuals with dysphagia (a swallowing disorder), individuals with auditory difficulties, individuals with neurogenic speech and language disorders, and individuals with voice disorders. I selected the majority of these categories based on their listing as common areas of interest for SLPs in a guide for students written by the National Student Speech-Language-Hearing Association (NSSLHA, 2010) though I included the groups of elderly individuals and individuals with auditory difficulties specifically because of the research which has been written on the effect of accent for these populations (see Burda, Scherz, Hageman, & Edwards, 2003).

3.2.3 Comments and actions targeted at accented SLPs and improvement in the field. I included a number of questions in order to gain an understanding about the types of comments and actions which were targeted at SLPs who spoke English with a non-standard accent and to see how the field had improved. Three questions asked participants to describe any situation in which their accent had been commented on by professors or supervisors, peers or colleagues, and clients, respectively. There was also a question asking participants to describe any situation in which anyone had ever discouraged them from pursuing speech-language pathology because of their accent. Another question asked if there had ever been an instance when the participant felt that a fellow student or professional should not be providing services because of their accent in
English or another language, and a final question asked if bilingual SLPs who speak English as a second language are looked at the same as bilingual SLPs whose native language is English.

**3.2.4 Demographic Questions.** A significant number of demographic questions are present in the current study. I included some, including age, gender, work setting, and self-ratings of intelligibility solely for descriptive purposes, while I included others for their value as independent variables for analyses purposes. Of specific interest were questions about whether participants were raised as English monolinguals (English L1) or not, whether or not they provided services in a language other than English (Use L2), and information about the state (NY or VA) in which they currently practiced or studied. There was also a set of questions that asked participants to indicate whether or not they were familiar with the ASHA (1998a) position statement, and if they were, to indicate where they had read or heard about it. Additionally, participants were allowed and encouraged to add additional comments based on the answers they gave in the quantitative category and these comments were used to create general themes about the beliefs concerning the effect of accent in provision of clinical services.

**3.3 Procedure**

The Internal Review Board provided ethics approval for the surveys that were used for SLPs and Students. Participants in the study received either an email or piece of paper containing a link to the survey. This link directed participants to a page that included a consent form (see appendix A), which described the purpose, nature, benefits, risks, confidentiality procedures, payment, and rights of the participant. An instruction on
this consent form asked participants to print or save a copy of this form for their records. Following this, the survey required participants to click one of two buttons at the end of the consent form, which indicated either, their decision to participate or their decision not to participate in the study.

By clicking the button indicating that they did want to participate, participants understood that they were providing their digital signature. If the participants indicated that they did not want to participate, then the survey redirected them to a thank-you page at the end of the survey. If the participants attempted to move on to the next page without clicking either button he survey displayed an error message which kept them from moving further in the survey until a button was clicked. For the participants who decided to participate, clicking the appropriate button took them through a progression for the rest of the survey. Settings in the survey allowed participants to move back and forth throughout the survey. Additionally settings allowed the participant to opt not to complete the entire survey in one sitting. Specifically, participants could stop taking the survey, and when they re-clicked or re-entered the link into their web browser, the survey redirected them to where they had left off. An additional set of settings ensured that participants could only complete the survey once. The survey tool recorded all results anonymously by generating a random ID for each respondent. If participants included their email at the end of the survey, I kept this information strictly confidential.
Chapter 4:
Quantitative Results and Discussion

4.1 Demographics

4.1.1 Response rate. A total of 99 individuals responded to the survey. Seventy of these respondents were SLPs, and thirty-nine were students. The total estimated response rate for SLPs was 34% (70 out of the 203 contacted). The estimated response rate for students was 43% (39 out of the 90 contacted). I did not consider the results from eight SLPs and one student in analysis because of the late date of their responses. Additionally, I eliminated the responses from ten SLPs and from five students because they did not complete the survey. This resulted in a total of 85 responses that I used in analysis. Fifty-two of these respondents were SLPs, six were undergraduate students, and twenty-seven were master’s level students. All students were grouped together for analysis purposes.

4.1.2 Age, gender, and state. The average age for SLPs was 44, with ages ranging from 25 to 66. The average age for students was 23 with ages ranging from 19 to 30. In total there were seventy-nine females and six males. This result is as expected based on the gender makeup of the profession as a whole (see ASHA, 2011a). Of those who responded, 31 SLPs (59.6%) and 13 students (39.4%) indicated that they practiced or studied in New York; 17 SLPs (32.7%) and 16 students (48.5%) indicated that they practiced or studied in Virginia. An additional 4 SLPs (7.7%) indicated that they practiced in other states which included California, Pennsylvania, Texas, and Indiana. In cases where the influence of region was analyzed, the data of these four individuals were not considered. These results are summarized in Table 1.
Table 1
Demographic information of participants

<table>
<thead>
<tr>
<th>Category</th>
<th>N</th>
<th>Average Age</th>
<th>Gender</th>
<th>State</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Female</td>
<td>Male</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>NY</td>
<td>VA</td>
</tr>
<tr>
<td>SLP</td>
<td>52</td>
<td>44</td>
<td>47</td>
<td>5</td>
</tr>
<tr>
<td>Student</td>
<td>33</td>
<td>23</td>
<td>32</td>
<td>1</td>
</tr>
<tr>
<td>Total</td>
<td>85</td>
<td>67</td>
<td>79</td>
<td>6</td>
</tr>
</tbody>
</table>

4.1.3 Experience. 98.1% of SLPs responded to information about the extent of their experience. The majority of these individuals (37%) had been practicing for between ten and fifteen years, and the next largest group (33%) had been practicing for over 20 years. The remaining results are illustrated in Figure 1.

Figure 1. Years of Work Experience, SLPs. Pie chart showing the years of experience that SLPs have in the field. All experience is counted after the completion of a master’s degree.

I created a variable for analysis purposes that split these individuals based on whether or not they had been practicing before or after the ASHA (1998a) position statement was released, because I wanted to analyze if any differences in ratings may
have existed due to changes based on policy. SLPs who had been practicing for 15 years or less constituted the post-statement group and SLPs who had been practicing for more than 15 years constituted the pre-statement group. The vast majority of SLPs (64.7%) fell into the former group. Though technically part of the post-statement group, students remained in their own category.

4.1.4 Work setting. The survey asked for information about the settings in which the SLPs and students had gained experience. For SLPs this question referred to places where they had worked during the extent of their practice. For students, this question referred to places where they had observed or gained clinical experience. The majority of SLPs worked in either a university (23.5%) or a school (21.5%). Comparatively, the majority of students (66.7%) had gained experience in a clinical setting. Figure 2 summarizes these results.

![Figure 2. Experience in Work Settings. Bar graph showing the settings in which SLPs and SLP students have gained work experience. SLPs and students could gain experience in multiple settings.](image)

4.1.5 Experience with age groups. The survey asked SLPs and students to indicate which age groups they had observed or worked with. The original ten age ranges
were 0-6 months, 7 months- 2 years, 3-5 years, 6-11 years, 12-17 years, 18-30 years, 31-50 years, 51-64 years, 65-74 years, and ages greater than 75. Due to the degree of consistent selections of certain age groups, these ranges were categorized into five smaller variables: infants (0-2 years), preschool (3-5 years), school age (6-17 years), adults (18-64 years), and elderly (65 years and over). The most popular age group was school-age (56.4% professionals; 84.8% students) followed by preschool (63.5% professionals; 81.8% students) and adults (51.9% professionals; 72.7% students). For professionals the percentage of individuals who worked with infants was slightly higher than the percentage who worked with elders (42.3% and 40.4% respectively), but for students the reverse was true (60.6% for elders and 39.4% for infants). These results are shown in Figure 3.

![Figure 3. Participants’ Experience with Age Groups. Bar graph showing the percentage of SLPs and students who work with each age group. SLPs and students could work with multiple age groups.](image)

### 4.1.6 Language background and use.
Out of the 52 SLPs, 39 individuals (75%) indicated that English was their first language (English L1) and the remaining 13 (25%)
indicated that they were raised bi or multilingual or that their first language was a
language other than English (English L2). Similarly, twenty-six students (78.8%) were
raised as English L1 students and seven (21.2%) were English L2 students. In total,
English L2 SLPs spoke sixteen different languages and English L2 students spoke eight
different languages, with the most commonly spoken L2 being Russian (14.8% of
English L2 SLPs and students). These languages are listed, by number of speakers, in
Table 2.

Table 2
Numbers of English L2 individuals and those who use L2 in provision of services, by
language.

<table>
<thead>
<tr>
<th>Language</th>
<th>English L2</th>
<th>Use L2</th>
<th>Language</th>
<th>English L2</th>
<th>Use L2</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>SLP</td>
<td>Student</td>
<td>SLP</td>
<td>Student</td>
<td>SLP</td>
</tr>
<tr>
<td>Arabic</td>
<td>1</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ASL</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cantonese</td>
<td>1</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dutch</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>French</td>
<td>1</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>German</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gujart</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hebrew</td>
<td>1</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hindi</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Indonesian</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Italian</td>
<td>1</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Japanese</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Totals</td>
<td>19</td>
<td>8</td>
<td>27</td>
<td>7</td>
<td></td>
</tr>
</tbody>
</table>

Table 2 also shows the number of SLPs and students who use or anticipate using a
second language in the provision of services (Use L2). Almost half (44.2%) of the SLPs
indicated that they provided services in another language, with there being an almost
even split between English L1 SLPs and English L2 SLPs. Similarly, 15 students (45%)
anticipated providing services in a language other than English, and five of these students
(33%) were English L2 individuals, which means that the majority of English L2 students
(71.4%) planned to use a second language to provide services. The most common L2 language was Spanish (38.2%), which is consistent with the needs of the general US population, as the most recent data released in 2010 from the United States Census Bureau reports that Spanish is the most common non-English language spoken at home by individuals over the age of five. Specifically, 12.2% of the population speak it (United States Census Bureau, 2010). Table 3 shows a cross tabulation reporting the relationship between first language and provision of services in a second language.

Table 3
Cross tabulation of language background and language use

<table>
<thead>
<tr>
<th>First Language</th>
<th>SLP Use L2</th>
<th>SLP Don’t Use L2</th>
<th>SLP Total</th>
<th>Student Use L2</th>
<th>Student Don’t Use L2</th>
<th>Student Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>English L1</td>
<td>12</td>
<td>27</td>
<td>39</td>
<td>10</td>
<td>16</td>
<td>26</td>
</tr>
<tr>
<td>English L2</td>
<td>11</td>
<td>2</td>
<td>13</td>
<td>5</td>
<td>2</td>
<td>7</td>
</tr>
<tr>
<td>Total</td>
<td>23</td>
<td>9</td>
<td>52</td>
<td>15</td>
<td>18</td>
<td>33</td>
</tr>
</tbody>
</table>

Taken together, what these results imply is that a large amount of participants may provide services in a language in which they have an accent. In fact, the percentage of bilingual SLPs and students in this sample (44%) is above the 5.3% reported by ASHA (2009a; 2009b).

4.1.7 Self-ratings of accent. The survey asked participants to rate their accent in English and any other language in which they provided or anticipated providing services using the Michigan Communicability/Intelligibility Index. Figure 4 reports the ratings given by the thirteen English L2 SLPs and the seven English L2 students for their accent in English. For each group, the vast majority rated their accent in English at level six, which means that they felt their accent was native-like and caused no interference. Only ten English L1 SLPs (83.3%) and two English L1 students (28.6%) provided ratings for
the language in which they provided or anticipated providing L2 services. These results are reported in Figure 5. English L1 SLPs were evenly split between ratings of four and five (40% each), leaving only 20% who rated their accent at level six. Both of the students rated their accents at level four.

Figure 4. English L2 participants’ ratings of intelligibility in English. Bar graph showing intelligibility ratings using the Michigan Communicability/Intelligibility Index.

Figure 5. English L1 participants’ ratings of intelligibility in an L2. Bar graph showing intelligibility ratings using the Michigan Communicability/Intelligibility Index for English L1 individuals who provide or anticipate providing services in an L2.
What these results show is that English L2 SLPs and students hold, or at least rate themselves at a higher level of intelligibility in English than English L1 SLPs and students who provide service in an L2. The findings of Levy & Crowley (2011) that English L1 students who anticipate providing bilingual services are held at lower standards are consistent with these results.

4.1.8 Accent modification. 95.3% of participants responded to the question about whether or not they had ever attended an accent modification class. Of these individuals, the vast majority (93.8%) had never attended an accent modification class; however, five SLPs had attended one. Four of these SLPs spoke English as their first language, and one was raised bi/multilingual. Of these five, three indicated that this class was taken specifically for professional reasons and two indicated that it was not taken for professional reasons. Thus, the majority of individuals were satisfied with their accent.

4.1.9 Knowledge of ASHA policy. When asked specifically whether or not they had ever read the ASHA (1998a) position statement, 28 professionals (53.8%) and 17 students (51.5%) indicated that they had. I decided to compare the number of individuals in the pre-statement, post-statement, and student categories in order to see whether or not knowledge of ASHA policy differed between the groups. Table 4 summarizes these results.

Table 4

<table>
<thead>
<tr>
<th>Experience</th>
<th>ASHA (1998a)</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Had Read</td>
<td>Had not Read</td>
<td>Totals</td>
<td></td>
</tr>
<tr>
<td>Pre-statement SLP</td>
<td>11</td>
<td>7</td>
<td>18</td>
<td></td>
</tr>
<tr>
<td>Post-Statement SLP</td>
<td>16</td>
<td>15</td>
<td>31</td>
<td></td>
</tr>
<tr>
<td>Student</td>
<td>17</td>
<td>16</td>
<td>33</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>44</td>
<td>38</td>
<td>82</td>
<td></td>
</tr>
</tbody>
</table>
Table 4 shows that in each category, the majority of individuals had read or been informed about the ASHA (1998a) position statement, which is a positive finding. The difference in percentage between those who had and had not been informed about the position statement was far from significant. However and shows little improvement over time. I conducted additional analyses to compare knowledge of the position statement with English L1 and English L2 individuals, as well as the SLPs and students who provided or anticipated providing services in a second language, as shown in Table 5.

<table>
<thead>
<tr>
<th>ASHA (1998a)</th>
<th>N</th>
<th>English L1</th>
<th>English L2</th>
<th>Use L2</th>
<th>Don’t use L2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Had Read</td>
<td>45</td>
<td>38</td>
<td>7</td>
<td>19</td>
<td>13</td>
</tr>
<tr>
<td>Had Not Read</td>
<td>38</td>
<td>26</td>
<td>12</td>
<td>18</td>
<td>20</td>
</tr>
<tr>
<td>Total</td>
<td>83</td>
<td>64</td>
<td>19</td>
<td>37</td>
<td>46</td>
</tr>
</tbody>
</table>

The results show that English L1 individuals were more likely than English L2 individuals to have read the position statement (59% vs. 36%). Individuals who provided or anticipated providing services in a L2 were more likely However than those who did not use an L2 to have read the statement (51.4% vs. 28.2%). Given that the majority of English L2 individuals rated their accent in English at level six, it is not surprising that they did not seek out information about policies towards individuals with accents. Additionally it makes sense that individuals who provide services in an L2 would have more knowledge about this policy than individuals who don’t. Still, awareness of this policy should be increased on a wider level to ensure that interactions with SLPs who speak with a non-standard accent are positive and in accordance with ASHA’s non-discriminatory standards.
4.2 Minimal Intelligibility Ratings

Forty-six SLPs (88.5%) and twenty-nine students (87.9%) provided ratings for the minimal level of intelligibility that they thought any speech-language pathologist should have to be an effective service provider. For SLPs, ratings ranged from a low of three to a high of six. For students, the lowest rating was a rating of two and the highest was a rating of six. 52.2% of speech-language pathologists and 58.2% of students believed that a minimum intelligibility rating at level five where, “accent was fully intelligible” and “caused little interference on communication” was appropriate. Very few participants (4.3% of SLPs and 3.4% of students) expected near-native proficiency. In fact, with percentages of 23.9% and 34.5% from SLP’s and students, respectively, significantly more individuals were willing to accept minimum intelligibility ratings at level four rather than level six. The full results are shows in Figure 6 below.

Figure 6. Participants’ Minimal Intelligibility Ratings. Bar graph showing ratings of minimal intelligibility that any SLP should have to be an effective service provider, using the Michigan Intelligibility/Communicability Index.
This pattern of results is consistent with those reported by Langdon (1999) who received responses from 38 speech-language pathologists in California. In her study 55.2% of participants gave minimum ratings at level five, and 21% gave ratings at level four, compared with only 7.9% who gave a minimum rating at level six. Such a pattern of results is comforting linguistically, as Lippi-Green (2010) and Long (1990) show how difficult it is for one to adopt a new accent, especially at a “near-native” level, that is indicative of individuals at level six.

I conducted additional analyses to see if different variables affected minimal intelligibility ratings, as summarized in Table 6.

<table>
<thead>
<tr>
<th>Variable 1</th>
<th>Variable 2</th>
<th>t-score</th>
<th>df</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Students</td>
<td>Professionals</td>
<td>0.222</td>
<td>67</td>
<td>0.876</td>
</tr>
<tr>
<td>N=29</td>
<td>N=40</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>M=4.59</td>
<td>M=4.63</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SD=.733</td>
<td>SD=.705</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pre-statement</td>
<td>Post-statement</td>
<td>0</td>
<td>38</td>
<td>1</td>
</tr>
<tr>
<td>N=16</td>
<td>N=24</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>M=4.63</td>
<td>M=4.63</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SD=.719</td>
<td>SD=.711</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>English monolingual</td>
<td>Not English monolingual</td>
<td>-1.394</td>
<td>74</td>
<td>.168</td>
</tr>
<tr>
<td>N=59</td>
<td>N=17</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>M=4.64</td>
<td>M=5.06</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SD=1.047</td>
<td>SD=1.197</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Use L2:</td>
<td>Does not use L2:</td>
<td>0.921</td>
<td>67</td>
<td>0.36</td>
</tr>
<tr>
<td>N=19</td>
<td>N=50</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>M=4.74</td>
<td>M=4.56</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SD=.733</td>
<td>SD=.705</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>New York</td>
<td>Virginia</td>
<td>1.041</td>
<td>59</td>
<td>.302</td>
</tr>
<tr>
<td>N=33</td>
<td>N=28</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>M=4.70</td>
<td>M=4.50</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SD=.684</td>
<td>SD=.793</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Specifically, I ran t-tests to compare the mean minimal intelligibility ratings of students vs. SLPs, pre-statement SLPs vs. post-statement SLPs, English L1 individuals vs. English
L2 individuals, individuals who Use L2 vs. individuals who do not Use L2, and individuals who practiced or studied in New York vs. Virginia. As shown in Table 6, none of these variables even approached significance. This can be interpreted to mean that the beliefs about minimal intelligibility are consistent across a range of categories.

4.3 Effect of Accent on Specific Clinical Populations

Participants provided ratings on a 10-point Likert scale in response to a question about how much they thought a clinician’s accent would affect the treatment outcomes for a set of 11 specific populations. Higher ratings meant that participants believed accent would have a large effect and lower ratings meant that participants believed that accent would have a small or no effect. Table 7 shows the overall ratings. Though specific ratings differed, SLPs and students both gave the highest ratings for individuals undergoing accent modification and individuals with auditory difficulties and gave the lowest ratings for individuals using augmentative and alternative communication and individuals with dysphagia. The high rankings for individuals with auditory difficulties is consistent with the findings of Burda, Scherz, Hageman, & Edwards, (2003).

Still, it is important to note the degree of dispersion in the data. The range in ratings for all specific clinical populations was high, with the lowest range being 9 and the largest being 10. This means that participants rated the effect of accent across the scale. Additionally, there is a noticeable variance in the ratings, with the highest variance being 8.5 for neurogenic disorders. Ratings for disfluency disorders, autism spectrum disorders, and elderly individuals also hover around that mark. Considering that there were only 11 possible ratings (0 to 10) this variance is alarming, and suggests that the
participants were not consistent in their ratings. This result shows how important it is that researchers gather more empirical evidence about the effect of accent on specific clinical populations, so that SLPs can come to a consensus on which groups are most affected.

Table 7
Ratings of effect of accent on treatment outcomes for specific clinical populations in order from least effect to largest effect.

<table>
<thead>
<tr>
<th>Specific Clinical Population</th>
<th>N</th>
<th>Range</th>
<th>M</th>
<th>SD</th>
<th>Variance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dysphagia</td>
<td>75</td>
<td>10</td>
<td>3.61</td>
<td>2.76</td>
<td>7.6</td>
</tr>
<tr>
<td>Augmentative and Alternative Communication</td>
<td>78</td>
<td>9</td>
<td>4.04</td>
<td>2.59</td>
<td>6.7</td>
</tr>
<tr>
<td>Voice Disorders</td>
<td>77</td>
<td>10</td>
<td>4.44</td>
<td>2.81</td>
<td>7.9</td>
</tr>
<tr>
<td>Craniofacial Disorders</td>
<td>77</td>
<td>10</td>
<td>4.68</td>
<td>2.8</td>
<td>7.9</td>
</tr>
<tr>
<td>Disfluency Disorders</td>
<td>81</td>
<td>10</td>
<td>4.88</td>
<td>2.9</td>
<td>8.4</td>
</tr>
<tr>
<td>Autism Spectrum Disorders</td>
<td>81</td>
<td>10</td>
<td>5.10</td>
<td>2.89</td>
<td>8.3</td>
</tr>
<tr>
<td>Neurogenic Disorders</td>
<td>81</td>
<td>10</td>
<td>5.75</td>
<td>2.92</td>
<td>8.5</td>
</tr>
<tr>
<td>Children in Early Intervention</td>
<td>81</td>
<td>10</td>
<td>5.98</td>
<td>2.77</td>
<td>7.7</td>
</tr>
<tr>
<td>Elderly Individuals</td>
<td>81</td>
<td>10</td>
<td>6.01</td>
<td>2.89</td>
<td>8.4</td>
</tr>
<tr>
<td>Individuals with Auditory difficulties</td>
<td>82</td>
<td>10</td>
<td>7.26</td>
<td>2.67</td>
<td>7.1</td>
</tr>
<tr>
<td>Individuals in Accent Modification</td>
<td>82</td>
<td>9</td>
<td>8.13</td>
<td>2.07</td>
<td>4.3</td>
</tr>
</tbody>
</table>

I conducted t-test on the same categories that were analyzed for differences in minimal intelligibility ratings to see if the mean ratings about the affect of accent on specific populations varied based on different variables. Out of these, the only significant difference in ratings occurred when comparing the means of individuals who had practiced or studied in New York vs. Virginia. Specifically, significant differences were found for the ratings of individuals undergoing accent modification (p=.025), individuals with craniofacial disorders (p=.039), and individuals with auditory disorders (p=.001). In fact, across the board, individuals in Virginia rated accent as having less of an effect than individuals from New York did.
This pattern of results may be partially explained by reflecting on the idea of the prevalence of accent in the south. Southerners, perhaps more so than any other individuals, are constantly told through media instruments and direct comments that they have an accent (Lippi-Green, 2010). If these individuals are constantly aware that they speak with a non-standard accent, then it is plausible that in answering this question southerners were thinking about their own language variety. Specifically, they accepted that they had an accent, believed that they were efficient service providers despite their accent, and thus rated the effect of accent as less severe.
Chapter 5:

Qualitative Results and Discussion

5.1 Elaboration on Quantitative Ratings

Participants were encouraged to elaborate on their responses about the minimal level of intelligibility that speech-language pathologists should have to be effective clinicians, and on their ratings about the effect of accent on specific clinical populations. Between these two questions, justification for responses showed similar patterns thus they are considered together. Four themes emerged in the analysis of results concerning the effects of reduced intelligibility and accent.

5.1.1 Theme one. The first theme I noticed in participant’s responses was that reduced intelligibility and accent may have a negative effect on individuals who are attempting to improve their articulation or who might have difficulty discriminating sounds. For example, one participant commented, “Any disorder that has a deficit in the areas of hearing, discriminating, sound production and perception may be affected by a dialectal difference.” Another said, “I think it [accent] has more of an impact on clients who are learning correct speech productions in the English language (including early intervention and neurogenic disorders) more than any other clients.”

This result is exactly as I predicted, and is supported by the research of Burda, Scherz, Hageman, & Edwards, (2003). Subsequent research has examined the possibility that elderly individuals, who may suffer from some hearing impairments, may be able to acclimate themselves to non-native accents (Burda, Overhake, & Thompson, 2005) which is in accordance with the findings of Bradlow & Bent (2008) that individuals can adapt to non-native accents over time., if their accent is largely unintelligible, However it
may be wise for the SLP to work to make themself more intelligible. Such judgments, however, must be supported by evidence-based practices, which are currently lacking in the profession (ASHA, 2011a; Levy & Crowley, 2011).

5.1.2 Theme two. The second theme I found in the responses was that reduced intelligibility and accent may increase attention processing demands on the client and inhibit progress in treatment. One participant commented that, “If a client needs to use above average attention to process the therapist’s speech, then the client is not receiving the best possible intervention.” And another said, “Speech-language pathologists need to be able to present information that does not require additional cognitive or linguistic processing from the patient/client.” Still another added, “If the client is distracted by a severe accent he/she has to add another level of attention and interpretation that they really should not be asked to deal with.”

Theme two makes sense from an attention processing standpoint, as research by Adank, Evans, Stuart-Smith, & Scott (2009) has shown that unfamiliar accents take a longer time to process even for individuals who do not have communication disorders. If it is true that accent actually does inhibit progress then, according to ASHA’s code of Ethics (ASHA, 2010), SLPs must refer their clients to another clinician who can provide better services, if they are unqualified to do so.

5.1.3 Theme three. The third theme I found in the responses was that reduced intelligibility and accent may inhibit the ability of speech-language pathologists to serve as appropriate models for their clients. Comments to this effect included, “I work with children with prosodic weakness and modeling is essential to help children learn appropriate prosody,” and “You are providing speech therapy- you are supposed to be the
model for your patients to imitate.” and also, “It is important for the SLP to be able to provide accurate models of speech and language without having a highly distracting accent.”

The inability to model phonemes is directly discouraged in the ASHA (1998a) position statement, as it states that students and professionals who speak with non-standard accents and dialects must be able to model the target phonemes, if this is necessary for their treatment. However, in the most recent position statement (ASHA, 2011b) the importance of modeling is said to be dated because:

Technological advances and applications for clinical service delivery today are such that modeling can be provided through a variety of means in the clinical setting. The use of computer applications, software, recordings, and the like give clinicians multiple options for providing models or presenting auditory stimuli, so their accent may be less of an issue for providing an appropriate model in some cases.

Of all the responses, only one individual suggested that technology could be used to mediate issues caused by the SLPs accent. It is therefore important that SLPs and SLP students become aware of the alternatives that are available.

5.1.4. Theme four. The final theme I found in the responses was that reduced intelligibility and accent should not be allowed to impair communication and understanding. For example, one participant wrote, “Dialectal variations and regional accents are evident in any language but should not deter from an SLP’s delivery of appropriate services and their clients ability to understand him/her.” And another added,
“The clinician’s clear intelligibility is tantamount for the highest level of communication to occur between all communicants.

Theme four specifically, and all four themes in general, invoke the question of where the communicative burden should fall. The communicative burden can be defined as the shared responsibilities placed on members in conversation to understand and be understood by one another. Lippi-Green (2010) writes about how in some situations individuals refuse to take on their share of responsibility in a conversation, thus when they make the expression, “I can’t understand you” they are really saying, “You can’t make me understand you.” The key question for speech-language pathology is, should paying clients, who are already impaired in their communication, be required to take on a larger amount of the communicative burden, by working to understand their clinicians?

If one considers the neurogenic communication disorder, Aphasia, where receptive and expressive communicative abilities are significantly impaired, it has been the case that the communicative burden is shifted from the patient to the other participants in the communicative act (Linebaugh, Kryzer, Oden, & Myers, 2006). Whether or not this should be true for other disorders is up to debate. It should be noted that, ASHA (2011b) specifically states, that “In the end, what matters is whether clients can understand and learn from a student clinician with an accent,” but it also states that clinics should, “educate a client and his or her family about why their concerns may be unfounded.” Derwing & Munro (1997) show that sometimes what a client thinks they understand (comprehensibility) is different than what they actually understand (intelligibility). It is thus important in these situations to gauge how much a client actually understands.
5.2 Comments about Accent

Out of all the individuals who responded, none indicated that they had ever been discouraged by anyone from pursuing speech language pathology because of their accent. This is a positive finding which shows that the situation has improved, at least in my sample, since the time during which the ASHA (1998a) position statement was released.

In addition to providing this information, participants were asked to describe situations in which professors, supervisors, peers, colleagues, or clients had ever commented about their accent. Of the 78 individuals who replied, a total of 33 indicated that they had received comments. The contents of these comments were of varying types, and different patterns seem to be true based on who provided the comment.

Comments from professors or supervisors were either neutral or were intended to help the individual improve. For example, one participant writes, “I spoke with a Long Island New York accent. My professor from Boston attempted to help, yet not until I moved to Boston for my CFY [Clinical Fellowship Year] did I work successfully toward acquiring a more neutral dialect.” And another responds, “Yes—commented on my “r-lessness”---I practiced and reduced this behavior.” This is encouraging because it shows that professors and supervisors were not judgmental, but helpful in their responses.

Comments from peers about accent were sometimes focused on identifying where the individual originated from. Thus one participant states, “They [classmates] were curious about what country I was from.” and another writes, “Some classmates say they can definitely tell I’m southern.” In other instances comments were of a humorous or teasing nature. To this effect one individual writes, “Regionalisms were considered humorous.” And another says, “I was often teased’ about using the word, ‘y’all’.” The
first type of comment shows that some students are interested in understanding more about their classmates, but the second type are indicative of the fact that features of non-standard varieties are seen as less valuable and less correct than the standard (Lippi-Green, 2010; Charity-Hudley & Mallinson, 2011). Such responses should be addressed to foster a sense of appreciation and understanding for language varieties and the differing cultural backgrounds of speakers.

Comments from clients covered a range of responses. Like the comments from peers, some clients noted the presence of an accent as a way to match the individual up with the region they had come from, thus one participant asserts that clients, “knew I was from Brooklyn New York” because of their accent. In other cases individuals received positive comments due to their accent. For example, one individual notes receiving positive comments because their accent “sounded European” and several individuals who had learned English as their first language received praise from clients because they sounded like native speakers in their second language. Still, some comments questioned the efficacy of the individual, such as one where an individual says, “A grandmother did not want me to treat her grandchild, saying, ‘If you can’t speak English, how would you be able to teach my child English.’” In total, three participants indicated that they had been rejected by clients because of their accent. All were individuals who had learned English as a second language. As mentioned earlier, though it is necessary to address client’s concerns, it is also important to inform the client about situations where there concerns may be unfounded.
5.3 Opinions about Other SLPs and Students with Accents

Seventy-seven individuals provided responses to the question which asked whether or not they had ever felt that a fellow student or professional should not be providing services because of their accent in English or another language. Of these, the majority (67.5%) indicated that they had never had such an experience, and 32.5% indicated that they had. For those who had such an experience, many commented that the speech of the individuals they were talking about was difficult for them or clients to understand. For example, one writes, “I work with some native Spanish speaking speech therapists who have very strong accents that children have difficulty understanding.” Others based their opinions on the claim that the other individuals’ general English proficiency or competence was limited, as in the following quote:

In my work, there is another speech teacher without an ASHA license. Her Spanish accent is really heavy. But the problem is not her accent, but her competency and knowledge of the English language. She provides services in English to students who are Spanish-English bilinguals. I have a hard time understanding her. Her vocabulary is limited, and her explanations are very confusing.

These results show, first of all, that individuals were more willing to comment on deficiencies in other’s communicative abilities than their own. However they also show the importance of considering communication outside of the realm of one specific feature, phonology, and looking at the language as a whole.
5.4 Perception of English L1 and English L2 Bilingual SLPs

Seventy-seven participants replied to the question which asked whether or not bilingual SLP’s whose native language is English are looked at the same as bilingual SLP’s whose first language is a non-English language. Of these, 25 participants (32.5%) said they were looked at the same, 29 (37.7%) said they were not looked at the same, and 22 (28.6%) indicated that they did not know. Participants who said they were not looked at the same tended to indicate that they were looked down upon because of their accents. For example, one participant writes, “I think that non-native speakers of English as clinicians, faculty members or students are looked upon as somehow less professional by those who are less familiar with different cultures and dialects.” And another adds, “I think for SLPs whose native language is English, bilingualism is seen as a strength only. SLPs who speak English as a 2nd language are more likely to raise the concern of whether they are providing a native like model for clients.” With nearly half of those who responded reporting that English L1 and English L2 bilinguals are not treated the same, these results show that more work is needed to promote cultural understanding and equality within the field, especially if the goal of increasing the diversity within the profession is to be met.
Chapter 6: Conclusion

“SLPs are one of the very few professionals who understand the origin of dialect and accent. It is our responsibility not only to practice and treat other professionals in a way that keeps this knowledge in mind, but also to educate other professionals about the importance of a nondiscriminatory behavior regarding linguistic diversity. A dialect is more than just a form of English: it is part of who we are as cultural individuals and part of our identity.” -Barbara Fernandes (Fernandes, 2010)

I felt that it was apt to close with a quote by Barbara Fernandes, which summarizes my views on the interaction of linguistics and speech-language pathology. More than anything, our accents and language are a reflection of who we are as individuals, and this study has been a learning process in which I have gained a deeper understanding about the current beliefs and policies held by individuals in a profession that I plan to pursue.

I set out to answer four questions concerning minimal intelligibility, the effect of accent on specific clinical populations, comments and actions targeted towards SLPs who speak with non-standard accents, and improvement in the field towards meeting the needs of individuals who speak with non-standard accents. I predicted that most individuals would expect accent to be fully intelligible, that clinical populations with articulation needs and hearing difficulties would be most affected by accent, that some negative comments and actions would still exist, but that in general, there would be a positive trend towards addressing the needs of individuals who speak with non-standard accents. I
used a mixed-methods survey design in order to answer my questions, and all of my predictions were shown to be true.

The majority of individuals felt that the accent of SLPs should be fully intelligible in order for them to provide effective services, and these ratings were consistent even when variables such as extent of experience, language background, language use, state of practice/study, were considered. However, only a small number of individuals felt that accent needed to be “near-native” which I considered to be linguistically sound given the difficulties of changing one’s phonology after a young age.

In terms of the effect of accent on specific clinical populations, most individuals agreed that individuals undergoing accent modification and individuals with hearing difficulties would be most affected, while individuals using augmentative and alternative communication devices and individuals with dysphagia, a swallowing disorder, would be least affected. However, in general, ratings for the effect of accent on the specific populations exhibited a high amount of variability. An additional finding was that individuals in New York consistently rated the effect of accent as being greater on clinical populations than individuals in Virginia did. This last result I interpreted to be the effect of internalized ideas about accent which are held in the south, whereby southerners believe they have an accent and thus think the effect of accent is not as great.

What these results imply is that even though most individuals agree about minimum intelligibility, there is no clear consensus about how an accent actually affects individuals in specific clinical populations, outside of considerations for a small set of somewhat obvious disorders. Thus, there needs to be justification for these beliefs, so I
highly echo the sentiments of other authors that more quantitative research must be undertaken concerning the effect of accents on specific populations.

In analyzing the additional comments that participants’ gave as justification for their ratings, four themes emerged. Reduced intelligibility caused by accent (1) may have a negative effect on individuals who are attempting to improve their articulation or who might have difficulty discriminating sounds, (2) may increase attention processing demands on the client and inhibits progress in treatment, (3) may inhibit the ability of speech-language pathologists to serve as appropriate models for their clients, and (4) should not be allowed to impair communication and understanding. In discussing the implications of these results, a key consideration was the question of where the communicative burden should lie- whether it should be on the already disordered patients, or on the SLP with a non-standard accent. Ultimately more quantitative research is needed in order for the field to come to a consensus on this issue.

Finally, in answer to the questions about comments targeted towards SLPs with non-standard accents, and a measure of improvement in the field, the pattern of results shows a mixed picture. On the one hand, comments and actions targeted towards SLPs with accents from professors, peers, and clients are largely positive, and ASHA has implemented several policies promoting a respect for cultural awareness; however, there is still evidence of negative comments and several individuals reported instances where there efficacy as therapist had been questioned or challenged by clients. Also the beliefs concerning the inequality of English L1 bilinguals and English L2 bilinguals show that the profession has a long way to go yet.
If only half of all individuals are aware of the policies, as was the case in the results of individuals who are aware of the ASHA (1998a) position statement, then progress will be slow. Additionally, as long as there is no empirical research to back up claims about the effect of accent or evidence-based tools which can be used to measure intelligibility then educating clients and students about when their opinions are unfounded, as ASHA (2011b) suggests, will be impossible. In the meantime, I suggest that efforts be taken to assure that individuals in the profession are fully aware of the policies of the organization concerning accent, especially because the client and professional population is becoming increasingly more diverse.

This fall I will matriculate at the Teachers College of Columbia University and pursue a master’s degree in speech-language pathology with a bilingual focus. I will take all the knowledge that I have gained as an undergraduate about language attitudes and the importance of language in forming part of our identities with me. I fully plan to continue studying the topic of SLPs who speak with non-standard accents, and hope to be able to provide some of the much needed quantitative research that will specify the effect of accents on specific populations of how linguistics. The rich cultural diversity of New York and the guidance of my professors will help me along my way.
References


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Appendix A: Pre-Survey Consent Form

THIS PROJECT WAS APPROVED BY THE COLLEGE OF WILLIAM AND MARY PROTECTION OF HUMAN SUBJECTS COMMITTEE (Phone 757-221-3966) ON 2011-06-15 AND EXPIRES ON 2012-06-15.

I. PURPOSE OF THIS RESEARCH STUDY:

This survey is being distributed in order to examine the current beliefs of speech-language pathologists about speech-language pathologists who speak English as a second language. Your answers will be used to inform an extensive report on the state of such beliefs in the field.

II. WHAT WILL BE DONE:

You will be asked to provide some information about your accent and the language(s) you use in clinical services. You will also be asked to rate what you believe to be an acceptable degree of second language accent on the part of service providers in the field. Finally, you will be asked to provide answers to open-ended questions about your beliefs.

Your participation in this study should take between 10-15 minutes.

III. POSSIBLE BENEFITS:

The results from this research will help to inform an up to date report on the state of client and professional beliefs towards speech-language pathologists who speak English as a second language. This information may potentially spark further research in the field so that evidence based policies can be formulated in order to alleviate any concerns and
provide support to students and professionals who speak English with an accent from another language.

IV.  **POSSIBLE RISKS:**

There is no anticipated potential physical, psychological, social, economic, monetary, or legal risk associated with any of the questionnaires. All participation is voluntary; there is no penalty for withdrawal at any time.

V.  **CONFIDENTIALITY OF RECORDS:**

All information collected for this study will remain confidential. Completed surveys will remain on Kenay Sudler’s password protected computer and/or in a locked filing cabinet. In addition survey responses will not have personal names or affiliations on them and participants will be referred to by pseudonyms in order to protect their confidentiality.

By signing this form and consenting to participate in this research study, you are indicating your agreement that all information collected from this survey may be used by current and future researchers in such a fashion that your personal identity will be protected. Such use will include sharing anonymous information with other researchers and teachers for checking the accuracy of study findings and for future approved research that has the potential for improving human knowledge.

VI.  **PAYMENT FOR PARTICIPATION**

Individuals who participate in the online survey will be given the option to enter into a raffle for a four $25 gift cards.
VII. VOLUNTARY PARTICIPATION WITH RIGHT OF REFUSAL:

Your participation in this research study is completely voluntary. You are free to choose not to answer particular questions in the survey. You are free to withdraw your consent for participation in this study at any time.

VIII. REVIEW OF STUDY:

The general nature of this study entitled "Examination of Attitudes Towards Speech-Language Pathologists who Speak English as a Second Language" conducted by Kenay Sudler has been explained to me. I understand that I will be asked to answer several questions about my language and the beliefs I hold about accents in the speech-language pathology field.

My participation in this study should take a total of about 15 minutes. I understand that my responses will be confidential and that my name will not be associated with any results of this study. I know that I may refuse to answer any question asked and that I may discontinue participation at any time.

Potential risks resulting from my participation in this project have been described to me. I am aware that I may report dissatisfactions with any aspect of this experiment to the Chair of the Protection of Human Subjects Committee, Dr. Lee Kirkpatrick, 757-221-3997 or lakirk@wm.edu. I am aware that I must be at least 18 years of age to participate. My digital signature below signifies my voluntary participation in this project and that I have printed out a copy of this consent form for my records.
IX. **SIGNATURE FOR CONSENT**

The above-named investigator has answered my questions.

[ ] By clicking this button and I agree to be a research participant in this study. If I do not want to be a participant I will close my browser.

[ ] By clicking this button I am indicating that I do not want to participate in this study
Appendix B: Survey for SLPs

https://wmsurveys.qualtrics.com/SE/?SID=SV_cunP5cYUhSAly5e

1. Please indicate your current status:
   - I am an SLP
   - I am a SLP student pursuing a Bachelor’s degree
   - I am a SLP student pursuing a Master’s degree
   - I am a SLP student pursuing a Doctorae

2. Gender
   - Male
   - Female
   - Other ___________

3. Age____

4. In which state do you currently practice? ______

5. Work setting (Select all that apply)
   - Hospital
   - Clinic
   - School
   - Nursing Home
   - Other__________
6. How long have you been practicing? Please only include experience gained after completion of a master’s program

- <2
- 3-5
- 6-9
- 10-15
- 16-20
- >20

7. What age group(s) do you work with? (Select all that apply)

- 0-6mo
- 7mo-2years
- 3-5 years
- 6-11 years
- 12-17 years
- 18-30 years
- 31-50 years
- 51-64 years
- 65-74 years
- >75
8. Is English your first language?
   • No
   • Yes
   • Raised Bilingual/Multilingual

9. If No or raised Bilingual/Multilingual is selected, then: What is your first language? If raised bilingual/multilingual, what language(s) other than English do you speak? ____________

10. Do you provide services to clients in a language other than English?
    • Yes *If yes is selected continue to question # 11
    • No  *If no is selected skip to question # 14

11. Languages that you use to deliver clinical services other than English:
    • Language 1____
    • Language 2____
    • Language 3____

12. Please select the number of ASSESMENT hours/week that you use languages other than English to provide clinical services:
    • 1-5
    • 6-9
    • 10-15
13. Please select the number of INTERVENTION hours/week that you use languages other than English to provide clinical services:

- 1-5
- 6-9
- 10-15
- >15

University of Michigan Speech Intelligibility/Communicability Index: Describing Speech and Evaluating its Impact on Communication (if you modify it, state that Morley, 1996)

<table>
<thead>
<tr>
<th>Level</th>
<th>Description</th>
<th>Impact on Communication</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Speech is basically unintelligible; only an occasional word/phrase can be recognized.</td>
<td>Accent precludes functional oral communication.</td>
</tr>
<tr>
<td>2</td>
<td>Speech is largely unintelligible; great listener effort is required; constant repetitions and verifications are required.</td>
<td>Accent causes severe interference with oral communication.</td>
</tr>
<tr>
<td>3</td>
<td>Speech is reasonably intelligible, but significant listener effort is required due</td>
<td>Accent causes frequent interference with communication</td>
</tr>
<tr>
<td></td>
<td>to speaker’s pronunciation/grammatical errors which impede communication and cause listener distraction; on-going need for repetitions and verifications.</td>
<td>through the combined effect of the individual features of mispronunciation and the global impact of the variant speech pattern.</td>
</tr>
<tr>
<td>---</td>
<td>-------------------------------------------------------------------------------------------------</td>
<td>---------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>4</td>
<td>Speech is largely intelligible; while sound and prosodic variances from NS norm are obvious, listeners can understand if they concentrate on the message.</td>
<td>Accent causes interference primarily at the distraction level; listener's attention is often diverted away from the content to focus instead on the novelty of the speech pattern.</td>
</tr>
<tr>
<td>5</td>
<td>Speech is fully intelligible; occasional sound and prosodic variances from NS norm are present but not seriously distracting to the listener.</td>
<td>Accent causes little interference; speech is fully functional for effective communication.</td>
</tr>
<tr>
<td>6</td>
<td>Speech is &quot;near-native&quot;: only minimal features of divergence from NS can be detected; near-native sound and prosodic patterning.</td>
<td>Accent is virtually nonexistent.</td>
</tr>
</tbody>
</table>
14. Using the scale above please rate your accent in English and any other languages in which you deliver clinical services. You must type the language you are referring to under the "language" column and then provide the rating under the "rating" column. If you are a native speaker of the language please write "NATIVE" under the rating column

- English ___
- Language 1 ___
- Language 2 ___
- Language 3 ___

15. Using the scale above, what should be the minimal level of intelligibility that anyone should have in any language to be an effective clinician in the speech therapy field? Please describe why you believe this.

16. Speech-language pathologists specialize in a variety of areas with many different populations of clients. From the following list please use the sliding scale to indicate how much you think a clinician’s accent would impact the treatment outcomes for each population. (1= Will not matter at all; 10= will matter extremely)

- Accent Modification
- Augmentative and Alternative Communication
- Autism Spectrum Disorders
• Craniofacial Disorders
• Early Intervention
• Elderly
• Disfluencies
• Dysphagia
• Individuals with auditory difficulties
• Neurogenic speech and language disorders
• Voice disorders

17. Please elaborate on your responses. Consider, how much you think English spoken with an accent from another language impacts the effectiveness of the delivery of speech and language services.

18. Have you ever attended an accent reduction or accent modification class?
   • Yes *If yes is selected continue to question 19
   • No *If no is selected continue to question 20

19. Was this class specifically taken for professional reasons?
   • Yes
   • No

20. When you were a student, has a clinical supervisor ever made a comment about your accent? Please describe.
21. When you were a student has a classmate ever made a comment about your accent? Please describe?

22. Has any client ever made a comment about your accent in English or another language? Please describe.

23. Has any client ever withdrawn from your services because of your accent in English or another language?

24. Has anyone ever discouraged you from pursuing speech pathology? Please describe.

25. Has there ever been an instance where you felt that a fellow student or fellow professional should not be providing clinical services because of their accent in English or in another language?” If yes, please elaborate.

26. In your experience, if any, do you feel that speech-pathologists who speak English as a second language are looked at the same as bilingual speech pathologists whose native language is English?”
It is the position of the American Speech-Language-Hearing Association (ASHA) that students and professionals in communication sciences and disorders who speak with accents and/or dialects can effectively provide speech, language, and audiological services to persons with communication disorders as long as they have the expected level of knowledge in normal and disordered communication, the expected level of diagnostic and clinical case management skills, and if modeling is necessary, are able to model the target phoneme, grammatical feature, or other aspect of speech and language that characterizes the client's particular problem. All individuals speak with an accent and/or dialect; thus, the nonacceptance of individuals into higher education programs or into the professions solely on the basis of the presence of an accent or dialect is discriminatory. Members of ASHA must not discriminate against persons who speak with an accent and/or dialect in educational programs, employment, or service delivery, and should encourage an understanding of linguistic differences among consumers and the general population.

27. Have you read or been informed of the above position statement before?

- Yes *If yes continue to question 28
- No  *If no continue to question 39
28. If Yes: How did you learn about the above statement and how long ago was this? 

_____

29. Do you think there needs to be more discussion about the accent of speech pathologists in the field?

- Yes
- Maybe
- No

This is the last page of the survey. Once you click the next arrow button at the bottom of the page you will not be able to edit any answers. Please go back at this time and review your answers, if you would like.

30. Comments: Please feel free to add comments

31. Check the following if they apply:

- I would like to receive an executive summary of the results of this survey.
- I would like to be entered into a raffle for a $25 gift card
- I am willing to be contacted in the future for a face-to-face-, phone, or skype interview, if needed
- I am willing to participate in a brief follow up study, if needed.

32. If one of the above is selected: Please include your email so you can be contacted.
Appendix C: Survey for SLP Students

https://wmsurveys.qualtrics.com/SE/?SID=SV_cCHDX7btHPyXzdq

1. Please indicate your current status:
   - I am an SLP
   - I am a SLP student pursuing a Bachelor’s degree
   - I am a SLP student pursuing a Master’s degree
   - I am a SLP student pursuing a Doctorate

2. Gender
   - Male
   - Female
   - Other ___________

3. Age____

4. In which state do you currently attend school? ______

5. Have you logged any observation hours?
   - Yes *If yes continue to question 6
   - No *If no continue to question 7

6. How many hours of observation have you done? ______
7. Have you logged any clinical hours?
   - Yes *If yes continue to question 8
   - No   *If no continue to question 9

8. How many clinical hours have you logged?

9. In which settings have you observed or gained clinical experience? (Select all that apply)
   - Hospital
   - Clinic
   - School
   - Nursing Home
   - Other (Please Specify Below) __________

10. If question 5 or 6 is “yes”:

    What age group(s) have you observed or worked with? (Select all that apply)
    - 0-6mo
    - 7mo-2years
    - 3-5 years
    - 6-11 years
    - 12-17 years
    - 18-30 years
    - 31-50 years
    - 51-64 years
• 65-74 years
• >75

11. Is English your first language?
   • No
   • Yes
   • Raised Bilingual/Multilingual

12. If “No” or “Raised Bilingual/Multilingual” is selected, then: What is your first language? If raised bilingual/multilingual, what language(s) other than English do you speak? ____________

13. Do you anticipate that you might provide services to clients in a language other than English?
   • Yes
   • No
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<td>Rating</td>
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28. If Yes: How did you learn about the above statement and how long ago was this?
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29. Do you think there needs to be more discussion about the accent of speech pathologists in the field?
   - Yes
   - Maybe
   - No

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