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SELF-PERCEPTION OF SCHOOL BASED SPEECH-LANGUAGE PATHOLOGISTS
REGARDING INDIVIDUAL COMPETENCY IN THE ASSESSMENT OF
ENGLISH LANGUAGE LEARNERS

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ABSTRACT

Background

Growing numbers of English Language Learners (ELLs) enrolled in U.S. schools create new challenges for school district professionals, particularly in their attempts to ensure accurate assessment both in the classroom and to qualify for services such as speech-language pathology. Many of the guidelines outlined by the American Speech-Language-Hearing Association (ASHA) to help professionals properly assess ELLs require speech-language pathologists (SLPs) to make decisions based upon their self-perception of competency.

Method

Based upon the nature of ASHA's guidelines, our study surveyed a random sample of school-based SLPs and assessed their self-perception related to assessment of ELLs. The survey asked the professionals to identify their self-perception on a Likert scale in ten specific areas of assessment outlined by ASHA. The online survey also collected data about the SLPs' background and current practices to determine what factors may lead SLPs to have a higher self-perceived competency. Data analysis focused on the relationship between the factors of education, number of ELLs on a SLP's caseload, years of experience, and bilingual ability compared with overall self-perception as well as within the specific areas of assessment surveyed.

Results

Both specific educational experiences and the number of ELLs on a SLP's caseload had a positive relationship with the self-perceived competency of SLPs. Years of experience and bilingual ability did not have a significant relationship with the overall competency reported by

SLPs. However, all of the factors investigated had various associations with higher reported self-perceptions in specific areas of assessment, such as recognizing typical language development patterns of emergent bilinguals and establishing evidence based best practice.

Implications

The results further emphasize the importance of further development in educational opportunities for SLPs regarding the assessment of ELLs. In addition, the positive relationship between the presence of ELLs on a SLP's caseload and the overall self-perception reported by SLP's could suggest the importance of having a designated SLP in each school district who has experience and training for working with ELLs. Overall, each of the four factors examined had a positive relationship with various areas of assessment, suggesting a combination of these factors would lead to the best assessment competency.

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Chapter 1

Introduction

Speech-language pathology is a dynamic discipline constantly evolving based upon research and the changing needs of the individuals served by speech-language pathologists (SLPs). Given the responsive nature of the field, the growing number of English Language Learners (ELLs) currently served in the public school system should capture the attention of SLPs. According to the National Center for Education Statistics (2015), 9.1% of students enrolled in public schools throughout the 2012-2013 school year were ELLs, with trends suggesting this number will continue to increase.

This growing number of ELLs may often find themselves in the office of their school's speech-language pathologist due to the similarity between their speech and language patterns and those of students with specific language impairment or other speech and language related difficulties. Speech characteristics of those learning English can include omissions, substitutions, or additions of various phonemes and/or morphemes, as well as problems with negation and word order. In addition, ELLs may often have grown up with cultural norms for communication, child-rearing practices, and classroom behavior that differ from mainstream culture. For example, some cultures may have contrasting expectations for interpersonal space or speaking with adults (Crago, Genesee, & Paradis, 2011). This combination of speech and language features and cultural influences may result in many referrals to SLPs and make it difficult to distinguish a language disorder from a language difference. Given the overlap in speech and language characteristics, the assessment of ELLs is a unique and intricate process and an SLP

must consider all aspects of the students' language abilities across multiple settings. Typically, standardized assessments are designed for monolingual English speakers and may contain culturally sensitive information, limiting the ability for these tests to produce accurate results when used with ELLs (Gotlieb and Sanchez-Lopez, 2009).

ASHA's Guidelines

Despite these apparent challenges, it is vitally important for ELLs to receive quality service from SLPs to ensure they are not over-identified, losing time in the classroom, or under-identified, and missing the services they require. Based on the American Speech-Language-Hearing Association's (ASHA) Principles of Ethics, all clinicians are required to 'engage in only those aspects of the professions that are within the scope of their professional practice and competence, considering their certification status, education, training, and experience' (ASHA, 2016c). ASHA outlines the knowledge and skills required of a clinician to serve clients with cultural and linguistic differences. Professionals can acquire competencies through personal research, self-awareness assessments, and continued professional development, such as conferences and seminars, or university coursework. A combination of these means should be available and accessed to ensure all clients are receiving the best services possible.

Current Investigation

With this charge given to professionals, it is important to consider how well those in the field currently meet these requirements and what factors may be contributing to success in the area of assessment. Through a survey of current professionals actively involved in assessing ELLs, our aim is to establish a better understanding of their current self-perceived competency levels and contributing factors to this perception. The investigation considered the relationship between the reported self-perceived competency of participants and the factors of education,

number of ELLs on a SLP's caseload, years of experience, and bilingual ability. Investigation into the relationship between these factors and self-perception of competency reported by SLPs can give the field a starting point to build the competency of SLPs in this difficult area of practice. In addition, this investigation may reveal specific areas of assessment with significantly lower reported self-perceptions that require more attention from the field. These results can serve as a stepping-stone for future research and initiatives within the SLP profession.

Research Questions

The overarching research question for the project is, 'What factors within a SLP's background or current practices relate to higher self-perceived competencies in areas related to assessment with ELLs?' Within this primary research question, we investigated the following questions and hypotheses related to the specific factors identified.

Educational Experiences. One factor with the potential to influence the self-perception of competency reported by SLPs is the educational experience a SLP has acquired. To investigate this potential influence we asked, 'Do SLPs who have participated in specific coursework or continuing education experiences related to working with ELLs report higher self-perceptions regarding assessment with ELLs?' Previous research demonstrated an increase in perceptions of competency accompanying increased education within the field of speech-language pathology, particularly with groups with special needs (Root and Culton, 1987). Based upon this result, our hypothesis was that SLPs with specific educational experiences of any kind related to the assessment of ELLs would report higher self-perceptions.

Number of ELLs on Caseload. In a similar way, the investigation considered the potential influence of the characteristics of a SLPs caseload on their reported self-perception with the question 'Do SLPs with more ELLs on their caseload report higher self-perceptions

regarding assessment with ELLs?’ Cross, Bazron, Dennis, and Isaacs (1989) researched the development of cultural competence in health care professionals and created a report outlining important aspects of cultural competence for administrators, practitioners, and consumers. Their report divided cultural competence for practitioners into personal attributes, knowledge, and skills. They suggest that personal attributes increase through exposure, while knowledge and skills increase based upon training and experience. Based on increased exposure to and experience with culturally and linguistically diverse students, our hypothesis was that SLPs with more ELLs on their caseload would report higher self-perceptions.

ASHA (2014b) conducted a survey of SLPs working in the school system that analyzed several factors related to the makeup of a SLP’s caseload. The type of school facility did not have a significant relationship with the number of ELLs on a SLP’s caseload, but geographic region did have a significant relationship with the number of ELLs on a SLP’s caseload. SLPs serving in the Pacific Northwest reported the highest mean number of ELL students, while those in the East South Central area of the country reported the lowest mean number of ELL students. Seeing that various factors may influence the makeup of a SLP’s caseload, we asked a secondary question within the category of caseload. This secondary question was ‘Do factors including educational experiences, years of experience, or bilingual ability relate to the number of ELLs on a SLP’s caseload?’ In this area, our hypothesis was that the presence of specific educational experiences, years of experience, and bilingual ability would all have a positive relationship with the number of ELLs on a SLP’s caseload because these factors would give SLPs the cultural competence required by ASHA to work with ELL students (ASHA, 2004).

Years of Experience. Another factor included in this investigation was the years of experience a SLP possessed. To consider this factor our questions was, ‘Do SLPs with more

years of experience working within school districts report higher self-perceptions regarding the assessment of ELLs?’ Similarly to those with a larger number of ELLs on their caseload, SLPs with more years of experience are likely to have increased exposure to culturally and linguistically diverse students. Based upon the research of Cross, Bazron, Dennis, and Isaacs (1989), our hypothesis was that increased years of experience would relate to higher reported self-perceptions.

Bilingual Ability. The final factor included in this investigation was the bilingual ability of SLPs. Survey respondents indicated if they were fluent in another language and competent in assessing in languages other than English. This research question asked ‘Do SLPs who identify as bilingual report higher self-perceptions regarding the assessment of ELLs?’ According to ASHA, a bilingual SLP must be able to speak another language with native or near-native proficiency, select culturally and linguistically appropriate assessment materials, and describe normal language acquisition processes for both monolingual and bilingual children (ASHA, 2016a). Considering the overlap between these qualifications for bilingual SLPs and the qualifications outlined by ASHA for the assessment of ELLs, our hypothesis suggested bilingual SLPs would report higher self-perceptions.

Chapter 2

Literature Review

Current Need

The issue regarding accurate assessment of English Language Learners (ELLs) within the public school systems is one that has been emerging in recent decades. According to the latest findings from the U.S. Department of Education, within the 2012-2013 school year ELLs made up approximately 9.1 percent of public school students. This equates to approximately 4.4 million students throughout the country. This percentage increases to 16.7 in urban area school districts. Other states have an even larger ELL population within their school districts, particularly California where 23.2 percent of students are ELLs (National Center for Education Statistics, 2015). Despite these trends, currently only five percent of ASHA-represented speech-language pathologists, audiologists, and speech and hearing scientists self-identified as bilingual service providers. Only 43 percent of these bilingual service providers work within a school district, with the remainder working in a hospital or health care facility. Based on these statistics, there are just over 3,000 bilingual service providers employed in a school setting throughout the country, and the vast majority of SLPs serving within school districts are monolingual speakers of English (ASHA, 2014a).

Simultaneous Bilinguals

To understand the complexity of assessment and the need for further development in this area, it is important to understand the variation within the scope of bilingual students found in classrooms across the country. The first major distinction is between simultaneous bilinguals

and sequential bilinguals. Simultaneous bilinguals are defined as children who acquire two languages from birth or at least prior to the age of two. Research has shown that simultaneous bilinguals have two separate linguistic systems with areas of influence between these systems. For example, Ingram and Keshavarz (2002) used an in depth phonological analysis of a Farsi-English bilingual to demonstrate that bilingual children were able to develop two separate phonological systems as measured through stress patterns and consonant inventories before the 20-month age marker. However, this study also demonstrated the presence of cross-linguistic influence with several distinct phonemes used across both languages. For example, the subject used the Farsi glottal stop consonant in some English words and several English vowels in Farsi words.

This example of cross-linguistic influence is just part of the body of research that demonstrates a bilingual child is not simply ‘two monolingual children in one body’. Barlow and Fabiano-Smith (2008) demonstrated this influence in their study of Spanish-English bilinguals and their single word productions. Their analysis of the phonological inventories in each child demonstrated both English phonemes in Spanish productions and Spanish phonemes in English productions. However, as seen in previous studies, the majority of the productions confirm the children’s ability to distinguish between the two linguistic systems.

Another result of the study conducted by Barlow and Fabiano-Smith (2008) was insight into the rate of development of simultaneous bilingual children compared to monolinguals. Bilingual children’s phonological inventories were just as complex as the phonological inventories of their monolingual peers. These data should caution SLPs from assuming all bilingual children will experience delayed language or suggesting significant delays experienced by simultaneous bilinguals are simply a result of their dual language exposure. Rather, each

assessment should take into consideration the age of the student, the amount of language input, and other cognitive factors for proper evaluation.

Sequential Bilinguals

According to ASHA, a sequential bilingual is an individual with “significant and meaningful exposure to a second language, usually after the age of three and after the first language is well established” (ASHA, 2004). Within the United States, a common term for these students is English Language Learners (ELLs) (ASHA, 2004). It is hard to generalize research on sequential bilinguals due to their vast variety of language backgrounds, input, and cognitive abilities. Butler, Hakuta and Witt (2000) found ELLs generally take a minimum of three years to develop oral language proficiency, with the majority of learners taking three to five years to achieve oral proficiency. Their study demonstrated the relatively rapid increase in proficiency from beginning to middle levels, with slower progress made between middle and higher-level proficiencies. For example, the mean level of oral proficiency, with fluency being equivalent to one, increased from 0.35 to 0.85 between first and third grade. In contrast, the mean level of proficiency only increased from 0.85 to 0.95 between third grade and fifth grade. In addition, this research distinguished between oral English proficiency and academic English proficiency, with the latter taking longer to acquire. A review of research in this area demonstrated similar trends of development across a variety of different ELL school programs. In addition, this research pointed to the additional challenges for ELLs in terms of developing literacy skills. Difficulties with literacy skills can influence academic achievement, particularly in higher-grade levels where students are required to ‘read to learn’ new academic content, rather than ‘learning to read’ in earlier grade levels (Christian, Genesee, Lindholm-Leary, & Saunders, 2005).

Tabors (2008) described several stages through which ELLs advance as they learn their second language. The first stage is the home-language use stage. During this stage, children continue to speak their home language, but they determine the presence of a new and different language in their environment. The next stage is the nonverbal period, otherwise known as a 'silent period', where children are taking in receptive information on the new language and do not use their home language with those who will not understand them. During this stage, a child may rely on gesture and nonverbal communication to interact with others. The third stage of development is the formulaic stage where a child begins to use the new language, in this case English, in short utterances with minimal original content. This stage may include the use of common phrases and telegraphic speech structure for a child to participate in social contexts. The final stage is the productive language stage, where children have acquired enough vocabulary and are able to construct their own phrases or sentences. This stage continues as the child becomes increasingly confident with the second language. The length of time a child remains in each of these stages varies significantly, and development is far from over when a child enters the productive language stage.

After a child enters the productive language stage, they use interlanguage, a rule based system consisting of development and transfer patterns between the child's two languages. Developmental patterns can include difficulties with phonology, such as consonant clusters, or the omission and/or substitution of morphemes. Interlanguage can also include transfer patterns consisting of phonological, morphosyntactical, and/or syntactical errors in the second language. Phonological errors relate to problems with the articulation of sounds in the new language. Morphosyntactical errors consist of difficulties constructing various word tenses or with putting words together. Syntactical errors consist of mistakes with word order. These errors are often due

to a mismatch between the phonology, morphology, and syntax of the child's first and second language. As a child progresses through the interlanguage period, these issues may naturally resolve or the child may need explicit instruction in certain grammatical forms (Crago, Genesee, & Paradis, 2011). Awareness of all phases of second language development and interlanguage is crucial in making clinical decisions. This awareness can help with the proper placement of ELLs and ensure they do not receive treatment for errors that are naturally occurring throughout this unique language learning process.

Similarities between English Language Learners and Students with Specific Language Impairment

Considering the typical development and language patterns of ELLs, there is a strong potential for the language patterns of ELLs to be confused with a variety of other speech and language impairments. One of the most researched areas of overlap is in the similarities between ELLs and students with specific language impairment (SLI). According to the National Institute of Deafness and Communication Disorders (2011), SLI 'is a language disorder that delays the mastery of language skills in children who have no hearing loss or other developmental delays'. SLI affects nearly seven percent of the general population. Characteristics of the disorder include language delay, smaller vocabularies, shorter mean length utterances, and difficulties with morphosyntax (Crago, Genesee, & Paradis, 2011). Crago, Paradis, Rice and Marquis (2008) demonstrated the similar profiles of ELLs and students with SLI, including low accuracy with verb morphology and a higher accuracy with nominal morphology.

Paradis (2005) conducted a study demonstrating how the similarities between ELLs and children with SLI may affect assessment. The study investigated the performance of ELLs on a morphosyntactic-focused assessment, typically used to identify and assess children with SLI. Only one of the twenty-four participants received an age appropriate score following one year of

exposure to English. Based on these results alone, 96% of students would likely receive further referral for SLI treatment. This rate is highly unlikely based on population norms for SLI. This study highlights the potential for misdiagnosis of ELLs with disorders such as SLI. In addition, it gives important insight into the development of ELLs and the potential for unrealistic expectations set by educators and other professionals in terms of their language abilities after limited exposure.

Current ASHA Guidelines

ASHA, which oversees the practices and ethics of SLPs, has laid out guidelines for the assessment and treatment of ELL students by SLPs. These guidelines differ based on the language competency of the client. For a client who is determined to be bilingual proficient, with a greater control over English than their minority language, it is not required for the SLP to be proficient in the minority language. The SLP may provide assessment and treatment in English, however, the SLP must be able to recognize dialectal differences and potential influences of the minority language on English. Any children determined to be limited English proficient, suggesting they are proficient in their home language but not English, must receive assessment and instruction in their primary language. In order to provide this service, an SLP should possess language proficiency, cultural sensitivity, and understand the normative processes of the minority language. If a client is limited in both languages, SLPs must conduct an initial assessment in both languages to determine language dominance and the best language for assessment and treatment (ASHA, 1985).

ASHA outlines several strategies to use in the case where an SLP is required to provide assessment or treatment in a home language in which they are not proficient. These include establishing contacts or a network with bilingual SLPs in the area to facilitate the treatment

process. In addition, a bilingual psychologist, bilingual special education teacher, or certified ELL instructor may be able to assist in the assessment and intervention. If there are no bilingual professionals available, an outside translator may be used. In this circumstance, the SLP must provide detailed instruction to the translator regarding the purpose and design of the tests as well as any behaviors to avoid that may negatively affect the assessment (ASHA, 1985).

Qualifications of Competency

Section II Rule A of the ASHA Principles of Ethics, dictates, “Individuals who hold the Certificate of Clinical Competence shall engage in only those aspects of the professions that are within the scope of their professional practice and competence, considering their certification status, education, training, and experience” (ASHA, 2016c). However, Section I Rule C also states, “Individuals shall not discriminate in the delivery of professional services” (ASHA, 2016c). With both standards in mind, professionals are required to dedicate themselves to continued education and training to meet the diverse needs of their clients.

In 2001, ASHA released a statement outlining the competencies needed by professionals to provide appropriate services to culturally and linguistically diverse populations. The first area of competency discussed in this document is the area of cultural competence. The primary role of professionals in this area is to be sensitive to the client’s cultural and linguistic differences. This includes understanding the client’s belief system regarding the importance of effective services, acknowledging the effects of assimilation or acculturation, and making appropriate communication with the client, caregivers, and a cultural informant to gain sufficient cultural proficiency for each client.

The second area addressed in this statement focuses on the language competency of the clinician. Bilingual or multilingual clinicians must demonstrate native or near native proficiency

in any language they practice. In addition, they must have an understanding of any differences between the dialect they speak and the dialects spoken by their clients. Those clinicians without proficiency in the language or dialect spoken by a patient should have the knowledge and skills to obtain information on the features of the language and any sociolinguistic factors influencing the client. Additionally, clinicians are required to develop relationships with translators within the community and ensure any translator has a native proficiency in the language spoken by the client. Translators must uphold the same standards of professional ethics, patient confidentiality, and professional terminology, as well as a basic understanding of assessment and treatment procedures. If a translator is not versed in these procedures, the SLP must educate the translator on these principles and practices before assessing any clients.

For accurate assessment, clinicians need to possess competency in the language used by the client and have the ability to distinguish between typical and disordered speech. This competency includes knowledge of communication environments and cultural norms related to language used of the client and his or her family. An important quality for clinicians is adept and sensitive interviewing skills with both clients and caregivers to gain access to further information in these areas. Additionally, an SLP should have substantial knowledge on the development patterns of simultaneous and sequential bilinguals, including cross-linguistic influence and code switching.

Professionals must be aware of current research on the best practices for the identification and assessment of language disorders, including the appropriate criteria needed to discriminate between a disorder and a difference. In terms of assessment materials, clinicians need the ability to select published materials appropriate for the client, being sensitive to cultural and/or linguistic biases present in some test materials. In addition to or in place of standardized

assessment, professionals should be able to use alternative assessments, such as dynamic testing, portfolios, observations, interviews, and language sampling when standardized tests are not appropriate or as a supplement to these resources (ASHA, 2004).

This statement and the guidelines outlined by ASHA give a broad overview for SLPs to use in their practice with ELLs. However, much of the information contained in these educational documents is vague and many of the determinations are left to the discretion of the SLP based on their self-perceived competency in these various areas. In addition, it places a lot of the responsibility on the professionals to seek out the current research and standards in these various areas of service. While it is important for professionals to dedicate themselves to continued learning, with access to more instructive guidelines professionals could provide improved services to their client and improve assessment accuracy.

Current Practices

Given this vast amount of knowledge and competencies required from SLPs to serve ELLs, it is important to take a closer look at current practices in assessment alongside the best practices, as determined through evidence-based research. Currently, the assessment of students can be divided into the categories of standardized and non-standardized methods. A survey by Brice, Roseberry-McKibbin and O'Hanlon (2005) measuring the current practices used by SLPs across the country, found many professionals use standardized English tests when assessing ELLs to determine whether the client exhibited a language disorder or a language difference. However, the majority of survey respondents indicated the lack of appropriate, non-biased assessment materials was one of the largest issues they faced when working with ELLs, second only to not being able to speak the native language of their client. This lack of appropriate standardized materials is a consistent pattern throughout research on the assessment of ELLs. As

Gotlieb and Sanchez-Lopez (2009) discussed, reliance on standardized materials can be a disservice to the students who are ELLs. The development of standardized tests often occurs without consideration of the cultural and linguistic background of ELLs. In addition, these exams are typically administered in English, and if given in another language, can be inappropriately translated.

Suggested Practices

With this lack of appropriate materials available, SLPs are required to develop and use non-standard forms of assessment to get a complete understanding of their abilities. Clinicians may be able to manipulate standardized assessments tools to obtain information about the client's language ability, but this process eliminates the potential to use the norm-referenced scores. An alternative to standardized assessments may be clinician developed assessments that are criterion referenced based on the specific needs of the student or a group of students. While research is still ongoing in this area, several alternative non-standardized assessment tools are available for SLPs in the assessment process.

An important tool is gathering a complete case history of the student. This includes information from the student's classroom teacher(s) and the child's parents or caregivers. Parent reports have proven to be an important resource with strong validity. Paradis, Schneider, and Duncan (2013) demonstrated the parent report was the strongest indicator of primary language impairment when compared to standardized tests. During this initial phase, the SLP can determine the primary language of the student, as well as their proficiency in each of their languages to determine what language to use for further assessment. An additional resource for SLPs in this initial phase of assessment may be spontaneous language samples in both languages of the student (Kimble, 2013).

An assessment tool growing in popularity is dynamic assessment, also known as the test-teach-retest model. The assessment centers on the child's ability to learn new language information rather than their current language ability. This format helps determine what a child can do or learn with minimal support and what additional skills they can acquire with support that is more intensive. This model also helps SLPs determine what type of support is best suited for the client. In this design, children with language impairment will require more intensive support from their instructors than typically developing children with a language difference. Both SLPs and classroom teachers can perform this dynamic assessment to determine if a more specific form of intervention is needed (Kimble, 2013). The collection of all of this information, along with the student's entire portfolio of performance, can supplement or replace standardized assessments. This informal method of assessment provides SLPs with more accurate, non-biased, and applicable information about their clients. However, there may be difficulty with qualifications for services based on the lack of standardized test scores. This is when it becomes important for SLPs to be advocates for their clients and educate other professionals within their school district.

Opportunities for Continuing Education

As the number of ELLs in the school districts continues to rise, education of current and future professionals is a critical component to ensure accurate assessment of ELLs occurs. According to ASHA's database of schools across the country, currently there are 42 programs offering a bilingual emphasis and 56 programs with a multicultural emphasis as they train future speech-language pathologists. Several of these programs specifically target Hispanic cultures or Native American cultures (ASHA EdFind, 2016). However, ASHA does not have a nationally recognized bilingual or multicultural certificate for professionals to obtain. For current

professionals, there may be possibilities of attending the annual ASHA Convention or local state-based conventions to learn more about the assessment and treatment of ELLs through various lectures or presentations. All professionals are required to continue building their Continuing Education Units (CEUs) and can choose to access different resources, including articles, DVDs, and webinars related to the assessment of ELLs. In addition, there are several Special Interest Groups (SIGs) within ASHA that may be of interest to professionals, including SIG 16, School Based Issues, and SIG 14, Communication Disorders and Sciences in Culturally and Linguistically Diverse Populations. Through SIGs, members have access to specialized educational materials and articles (ASHA, 2016d). Despite the growing number of educational opportunities, there is still a need for more awareness and research in this area because all current and future professionals must share common knowledge and training in the best practices to serve ELLs.

Potential Influences on Self-Perception of Competency

As mentioned, the guidelines set forth by ASHA can be difficult to measure objectively, as they are vague and rely largely on the SLPs self-perception of their cultural and language competence. For this reason, the present study aims to gain a better understanding of the self-perception of competency reported by SLPs in the areas of assessment outlined by ASHA. The study will group SLPs based on their educational experiences related to ELLs, number of ELLs on their current caseload, years of experience, and bilingual ability. Our overarching research question is to determine the relationship between these factors and the self-perception reported by participants. Within this question, we asked about the specific effect of education, the number of ELLs on a SLPs caseload, years of experience, and bilingual ability on the overall perception of SLPs in the assessment of ELLs and within specific areas of assessment. Our hypotheses were

that the presence or increase in these factors would have a positive relationship with the self-perception reported by participants. Our precise research questions and hypotheses are outlined below.

Educational Experience. Considering SLPs with various educational experiences, we asked, ‘Do SLPs who have participated in specific coursework or continuing education experience related to working with ELLs report higher self-perceptions regarding assessment with ELLs? Based upon Root and Culton’s (1987) previous research demonstrating the positive relationship between further education and the self-perception reported by SLPs, our hypothesis was that SLPs with any educational experience in the area of working with ELLs would report higher self-perceptions.

Number of ELLs on Caseload. Our research also aimed to determine if a relationship existed between the number of ELLs on a SLP’s caseload and the reported self-perception of the SLP with the question, ‘‘Do SLPs with more ELLs on their caseload report higher self-perceptions regarding assessment with ELLs?’ Cross, Bazron, Dennis, and Isaacs (1989) demonstrated the importance of exposure and experience in building cultural competence. Given this information, our hypothesis was that SLPs with more ELLs on their caseload would report higher self-perceptions.

Based on the potential for other factors to be related to the makeup of a SLP’s caseload, we asked the secondary question of, ‘Do factors including educational experiences, years of experience, or bilingual ability have a significant relationship to the number of ELLs on a SLP’s caseload? In this area, our hypothesis would suggest the presence of specific educational experiences, years of experience, and bilingual ability would all have a positive relationship with

the number of ELLs on a SLP's caseload because these factors would all develop the cultural competence outlined by ASHA to work with ELLs (ASHA, 2004).

Years of Experience. Another question in our investigation was, 'Do SLPs with more years of experience working within school districts report higher self-perceptions regarding the assessment of ELLs?' Similarly to those with a larger number of ELLs on their caseload, SLPs with more years in the field would likely have increased exposure to and experience with culturally and linguistically diverse students. Based upon the research of Cross, Bazron, Dennis, and Isaacs (1989) demonstrating the value of experience in developing cultural competence, our hypothesis was that increased years of experience would relate to higher reported self-perceptions.

Bilingual Ability. The final factor included in this investigation was the bilingual ability of SLPs with the research questions 'Do SLPs who identify as bilingual report higher self-perceptions regarding the assessment of ELLs?' ASHA (2016a) states that for a SLP to be considered bilingual he or she must be able to speak another language with native or near-native proficiency, select appropriate materials, and understand the language acquisition process for bilingual children. Considering the commonality between the qualifications for bilingual SLPs and those outlined by ASHA for the assessment of ELLs, our hypothesis suggested bilingual SLPs would report higher self-perceptions.

Chapter 3

Methods

Participants

The Institutional Review Board (IRB) at The Pennsylvania State University approved this study and all materials used to collect data prior to the start of the experiment. The American Speech-Language-Hearing Association (ASHA) provided a random mailing list with potential participants. The mailing list included a list of 1,000 speech-language pathologists who currently work in Elementary Schools, Secondary Schools, and Combined School settings. This process helped limit the survey to participants who fulfilled the requirements for the survey, which were to be an ASHA certified speech-language pathologists currently working within the United States in a school setting.

Initial counts produced by ASHA indicate there were 48,510 ASHA members who met these requirements when the mailing list was purchased. From this population, the randomly generated list of 1,000 potential participants included professionals from all 50 states. All potential participants received a recruitment letter in the mail describing the purpose of the project and requesting their participation in the anonymous online survey (see Appendix A). If the recipient chose to complete the survey, they were instructed to enter the URL as written on the recruitment letter (see Appendix B). This URL directed them to the survey, distributed and tracked through the Qualtrics software program. Of the 1,000 letters sent, 120 individuals began the survey and 114 individuals completed it for an 11.4% response rate and 95% completion rate.

Materials

Initially when participants accessed the survey on the Qualtrics program, the instructions asked them to indicate their consent to continue with the survey. The instructions and consent form informed all participants about the confidentiality of the survey and that no record of identifying information was recorded. In addition, the instructions indicated all answers to all questions were voluntary and that participants could end their participation at any time.

The survey consisted of a maximum of 24 questions. The first section of questions focused on the personal background and current practices of the participant. Within this section, the first group of questions requested information about the participants' educational history and professional experience. The following group of questions asked participants several questions about the current ELL population and services provided within their district, and the final group of questions related to personal background asked about graduate level or continuing educational courses the participants had taken related to working with ELLs, as well as their fluency in any additional languages other than English.

The second section of questions asked participants to rate their self-perceived competency in ten different areas related to the assessment of ELLs. The ten areas surveyed were from the areas outlined by ASHA as important skills in the accurate assessment of ELLs. Participants reported their self-perception ratings using a 5-point Likert scale for each of the 10 areas. Participants could select strongly disagree, disagree, neither disagree nor agree, agree, or strongly agree. The data generated from this survey was collected within the Qualtrics software program. All answers were stored anonymously and data analysis occurred both individually and across questions.

Analysis

The analysis for this research used a variety of statistical measures to make comparisons between factors and within specific areas of assessment. Throughout the investigation the significance level was set at .05 ($\alpha=.05$). The relationship between the presence or size of these factors and the SLPs' self-perceived competency overall in the assessment of ELLs was determined using t-tests or one-way ANOVAs and planned contrasts between groups. In addition, chi-square analysis was used to determine the relationship between the various factors investigated and specific areas of assessment.

Chapter 4

Results

This goal of this survey was to obtain data on the self-perception of school based SLPs regarding their competency in their assessment practice with ELLs. Within this broad question, the investigation focused specifically on several factors in order to determine if they were related to the self-perceived competency level reported by the SLPs. These factors included educational experiences, the number of ELLs on the SLP's caseload, years of experience, and bilingual ability.

Each question related to self-perceived competency began with the phrase 'I feel competent...' and respondents were required to select from the following categories 'Strongly Disagree'(1), 'Disagree'(2), 'Neither Agree or Disagree'(3), 'Agree'(4), 'Strongly Agree'(5). Within the 114 completed surveys, the majority of responses using the Likert scale (769 out of 1140) fell into the 'Agree' (4) or 'Strongly Agree' (5) category. For all ten areas of assessment where self-perception of competency was measured, the mean response in all areas was above three. Table 1 shows an overall breakdown of the responses given in each of the areas of assessment included in the survey.

Table 1*Initial Categorization of Responses across Surveyed Areas of Assessment*

Areas of Assessment	‘Strongly Disagree’ or ‘Disagree’	‘Strongly Disagree’ or ‘Disagree’	‘Neither Agree or Disagree’	‘Neither Agree or Disagree’	‘Strongly Agree’ or ‘Agree’	‘Strongly Agree’ or ‘Agree’
	N	%	N	%	N	%
‘Developing Non-Standard Assessment Materials’	33	28.95	31	27.19	50	43.86
‘Obtaining a Translator’	27	23.68	14	12.28	73	64.04
‘Recognizing Typically Developing Language Patterns’	22	19.30	28	24.56	64	56.14
‘Educating a Translator’	22	19.30	6	5.26	86	75.44
‘Collaborating with ELL Instructors and Professionals’	6	5.26	7	6.14	101	88.60
‘Advocating for my Clients with School District Administration’	10	8.77	14	12.28	90	78.95
‘Establishing Best Practice based on Scientific Research’	19	16.67	33	28.95	62	54.39
‘Using Classroom Activities/Monitoring to Inform Assessment Decisions’	9	7.89	25	21.93	80	70.18
‘Obtaining a Parent Survey/Home Language Assessment’	18	15.79	10	8.77	86	75.44
‘Finding the latest research related to this issue’	18	15.79	19	16.67	77	67.54

Educational Experiences and Perception of Competence

In our analysis, we asked whether there were relationships between specific coursework or continuing educational experiences and the self-perceived competency reported by the respondents. If the overall self-perception of SLPs with specific coursework and/or continuing educational experiences in the area of assessing of ELLs is higher, then these experiences may contribute to an increased perception of competency. If there was no significant difference between SLPs with specific coursework or continuing educational experiences in the area and those without, this could suggest overall overconfidence in the area across professionals without specific training. This outcome could also suggest that other factors play a stronger role in the self-perception of competency level. From the 114 survey respondents, 36 indicated they had taken specialized coursework at the graduate level, and 59 indicated they had attended continuing educational experiences related to the assessment of ELLs. Within these positive responses, 27 respondents indicated they had taken advantage of both specialized coursework at the graduate level and continuing educational experiences.

For analysis, the overall self-perception of respondents was compared across groups divided between those with either specialized coursework at the graduate level or continuing education experiences, those with both of these educational experiences, and those with neither of these experiences. For each individual response, the average overall perception was calculated. A one-way ANOVA comparing the averages across these three educational groups determined the effect of group to be significant, $F(2,111) = 6.32, p=.003$. Planned contrasts determined the effects of having either specialized coursework at the graduate level or continuing educational experiences related to ELLs compared to having both of these

experiences was not significant, $t(111) = .07, p = .94$. However, the planned contrast comparing those with either specialized coursework at the graduate level or continuing education or both of these experiences, to those without any specific educational experiences related to ELLs was significant, $t(111) = 3.51, p = .001$. These results indicate the higher average overall perception of those with any type of educational experience, as seen in Table 2, is significant compared to those without any educational experience.

Table 2

Relationship Between Educational Experiences and Average Overall Perception

Educational Experience of Respondent	Number of Responses within Category	Average Overall Perception
Either specialized coursework or continuing educational experiences related to ELLs	41	3.89
Both specialized coursework and continuing educational experiences related to ELLs	27	3.87
Without any specific educational experiences related to ELLs	46	3.42

Within the category of education, if SLPs with specific coursework or continuing educational experiences in the area have a higher self-perception in specific areas related to the assessment of ELLs, then these educational experiences may be developing strengths in these areas. Chi-square analysis compared responses with any type of specific coursework or continuing educational experience to those without any education in each individual category of assessment surveyed. Table 3 demonstrates the specific areas of assessment where respondents with any type of specific educational experience related to ELLs demonstrated significantly higher self-perceptions than those without any specific education.

Table 3*Educational Experience Related to Higher Self-Perception of Competence*

Areas with significantly higher self- perception of competence	p-value	Chi-Square value
‘Obtaining a Translator to Perform an Assessment’	.02	11.50
‘Educating a Translator in Assessment Procedures’	.01	14.21
‘Obtaining a Parent Survey/Home Language Assessment’	.04	10.19
‘Collaborating with ELL Instructors/Professionals’	.04	10.30
*Note. Degrees of Freedom = 4		

Caseload and Perception of Competence

Another potential factor related to the self-perception of SLPs was the number of ELLs on their caseload. If SLPs with a higher number of ELLs on their caseload have a higher self-perceived competency it could suggest one of two situations. Either speech-language pathologists with a higher self-perceived competency take more ELL students on their caseload, or speech-language pathologists with higher number of ELLs on their caseload feel more competent with their experience.

The numbers of ELLs on a SLPs caseload were broken down into the following categories: 0, 1-5, 6-10, 11-20, greater than 20. These categories were created based on the results of the survey demographics reported by ASHA (2014c) from their survey of school based SLPs. This survey found the overall mean number of ELLs on a SLPs caseload across the country to be 8.4 with the median falling at 4.0. Areas with high populations of ELLs had a mean number of ELLs on their caseload ranging between 11.3 and 19.0 students. With these statistics in mind, the categories aimed to distribute the respondents who would fall between 1-10 ELL students on their caseload into two categories, but the majority of respondents from the survey fell into the category of 1-5 ELL students on their caseload. Table 4 demonstrates the overall perception findings when comparing self-perception and the number of ELLs on the caseload.

Table 4

Relationship Between Number of ELLs on SLP's Caseload and Average Overall Perception

Category	Number of Responses within Category	Average of Overall Perception
0 ELL Students	21	3.47
1-5 ELL Students	49	3.62
6-10 ELL Students	20	4.06
11-20 ELL Students	10	3.75
Over 20 ELL Students	12	3.88

Based on a one-way ANOVA comparing these groups, the main effect of group was significant $F(4,108) = 2.00, p=.04$. A planned contrast between all SLPs with any ELL students on their caseload compared to those with no ELL students on their caseload was significant $t(108) = 2.37, p=.02$. However, a planned contrast comparing SLPs with 1-10 ELL students with those who had 11 or more ELL students was not determined to be significant, $t(108)=.03, p=0.98$. This information suggests the presence of any ELL students on a SLPs caseload relates to higher self-perceived competency.

Chi-square analysis between the designated categories and the areas of assessment surveyed demonstrated that individuals with larger number of ELLs on their caseload tended to have significantly higher self-perceptions in several specific areas of assessment. Table 5 contains these specific areas of assessment.

Table 5

Number of ELLs on Caseload Related to Higher Self-Perception of Competence

Area with significantly higher perception of competence	p-value	Chi-Square Value
‘Obtaining a Translator’	.036	27.54
‘Recognizing Typically Developing Language Patterns in Emergent Bilinguals’	.002	37.18
‘Using Classroom Activities to Inform Assessment Decisions’	.039	27.20
‘Establishing Best Practice Based on Research’	.002	37.52
‘Advocating for Clients to School District Administration’	.047	26.56
<i>Note.</i> Degrees of Freedom = 16		

Potential Factors Affecting Number of ELLs on a SLP’s Caseload

In 2014, the ASHA conducted a School Survey that revealed geography had a significant relationship with the number of ELLs on a SLP’s caseload, but the type of school facility a SLP worked in did not have a significant relationship with the number of ELLs on a SLP’s caseload. To get a better understanding of what additional factors may contribute to the number of ELLs on a SLP’s caseload, we asked a secondary question about the influence of educational experiences, years of experience, and bilingual ability on the number of ELLs on a SLP’s caseload. A chi-square analysis between the educational experience and the number of ELLs on a SLP’s caseload found that individuals with further education including either graduate level or continuing education courses tended to have more ELLs on their caseload ($\chi^2(12) = 38.30$, $p=.0001$). A chi-square analysis between the years of experience and number of ELLs on a SLP’s caseload found the years of experience did not have a significant relationship with the number of ELLs on a SLP’s caseload ($\chi^2(24)=20.30$, $p=.07$). Lastly, a chi-square analysis comparing the bilingual ability and number of ELLs on a SLP’s caseload found bilingual SLPs

had a positive relationship with higher number of ELLs on their caseload ($\chi^2(8)=29.36$, $p=.0003$).

Years of Experience and Competency Perception

The years of experience a SLP had working in a school district was another factor investigated as a potential influence on the self-perception of competency related to the assessment of ELLs. If individuals with more years of experience reported higher self-perceptions, this would indicate that years of experience related to increased self-perceived competency in SLPs. However, if there was not a significant relationship between years of experience and the reported self-perceived competencies, then we could conclude that other factors exhibit more influence on the self-perceived competencies reported. Our hypothesis predicted that SLPs with more years of experience would report higher self-perceived competency scores. The ASHA Schools Survey conducted in 2014 found SLPs working in school districts averaged 15 years of experience, with a median of 13 (ASHA, 2014). Based on the ASHA Schools Survey results, we expected the majority of respondents to fall between 1-20 years of experience. Five of the seven categories created for the survey fell within the range of 1-20 years to investigate potential relationships between experience and self-perception that emerged at a particular period within this range. These were the categories used for analysis purposes. Table 6 displays the average overall perception of respondents within these categories.

Table 6*Relationship Between Years of Experience and Average Overall Perception*

Years of Experience within a School Setting	Number of Responses within Category	Average Overall Perception of Competency
1-3 years	16	3.73
4-7 years	20	3.93
8-10 years	12	3.63
10-15 years	26	3.93
16-20 years	11	2.91
21-25 years	10	3.65
25+ years	19	3.68

Based on these results of the one-way ANOVA, the effect of the group was determined to be significant $F(6, 107) = 3.35, p = .01$. However, from this initial data, there is no obvious trend indicating that more years of experience leads to a higher self-perceived competency. Chi-square analysis between the given categories and specific areas of assessment surveyed indicated several areas where more years of experience related to higher self-perceptions. Table 7 lists these specific categories of assessment with higher reported self-perception.

Table 7*Years of Experience Related to Higher Self-Perception of Competence*

Area with significantly higher perception of competence	p-value	Chi-Square Value
'Recognizing typical language patterns in emergent bilinguals'	.04	37.38
'Developing non-standard assessment materials'	.03	38.33
'Establishing evidence based best practice from research'	.03	38.75
<i>Note.</i> Degrees of Freedom = 24.		

Bilingual Ability and Perception of Competence

Survey respondents were asked to indicate if they were bilingual and able to assess in their second language, bilingual but not able to assess in this second language, or not bilingual. Our hypothesis predicted individuals who were bilingual and able to assess would report higher self-perceived competencies based on the cultural and linguistic knowledge required to be a bilingual SLP. If bilingual ability does not relate to higher reported self-perceived competency, it could suggest a lack of training for bilingual SLPs or overconfidence from SLPs who are not bilingual.

The average self-perceptions of competency within these three categories are listed in Table 8. The one-way ANOVA analysis of this data was not significant $F(4, 108) = 2.19, p = .08$, indicating the level of bilingual ability alone does not significantly contribute to a higher self-perceived competency. However, the data was marginally significant and there was an increase in overall perception for those with bilingual ability.

Table 8*Relationship Between Bilingual Ability and Average Overall Perception*

Bilingual Ability	Number of Responses	Average Perception of Competency
Bilingual and able to assess in second language(s)	13	4.08
Bilingual but not able to assess in second language	9	3.72
Not Bilingual	92	3.66

Chi-square analysis between these categories of bilingual ability and the areas of assessment surveyed demonstrated higher reported self-perceptions in the areas listed in Table 9.

Table 9

Bilingual Ability Related to Higher Self-Perception of Competence

Area with significantly higher perception of competence	p-value	Chi-Square value
'Advocating for clients to school district administration'	.05	15.76
'Recognizing typical language patterns in emergent bilinguals'	.00003	35.08
<i>Note.</i> Degrees of Freedom = 8.		

Chapter 5

Discussion

The purpose of this investigation was to determine what factors in a school based SLP's background or current practices related to higher reported self-perceptions of competency in the assessment of ELLs. With our survey instrument and statistical analysis, we were able to determine the relationship between the presence of or increase in the four factors investigated and the average overall perception of SLPs. In addition, we were able to determine if these specific factors had a significant relationship with specific areas of assessment surveyed.

Educational Experience

Our question was 'Do SLPs who have participated in specific coursework or continuing education experience related to working with ELLs report higher self-perceptions regarding assessment with ELLs? The investigation determined the presence of any type or combination of a specific educational experience related to the assessment of ELLs had a positive relationship with the self-perception reported by participants, aligning with our initial hypothesis. With 40% of respondents reporting they had not taken advantage of either of these opportunities, it is an important area for further development along with research to determine what educational experiences prove to be the most beneficial.

Number of ELLs on Caseload

In terms of the makeup of an SLP's caseload, our investigation asked 'Do SLPs with more ELLs on their caseload report higher self-perceptions regarding assessment with ELLs?' Our hypothesis was that SLPs with more ELLs on their caseload would report higher self-

perceptions based on increased exposure and experience with this specific population. The data collected from the survey instrument indicated there was a significant increase in the self-perception reported by SLPs with any ELLs on their caseload compared to those without any ELLs. These results indicate it is not necessarily the number of ELLs that relate to higher self-perceptions, but the presence of any ELLs on a SLP's caseload that relate to higher self-perceptions.

Variables Related to Caseload Makeup

Given the variability within the number of ELLs on the participant's caseloads, our investigation asked if any factors related to higher numbers of ELLs placed on a SLP's caseload. For this secondary question, our question was 'Do the factors of educational experiences, years of experience, and bilingual ability relate to increased numbers of ELLs on a SLP's caseload?' Originally, our study aimed to investigate geographic region as a potential factor influencing the caseload makeup of an SLP, but the sparse sample size across regions did not allow for this investigation. However, previous research indicated that geographic region did have a significant impact on the number of ELLs on a SLP's caseload (ASHA, 2014). Our data revealed a significant relationship between the presence of educational experiences and bilingual ability in SLPs and the number of ELLs on their caseload. This relationship could suggest the majority of ELLs are already referred to speech-language pathologists with specific education in their background and/or bilingual abilities, making these professionals more qualified to serve these students.

As caseload sizes are growing for many school-based SLPs, some school districts are implementing the 'use of staff specialists', where SLPs are hired for specific jobs or specializations. For example, an individual or group of professionals could be hired to as a

‘diagnostic team’ to complete assessments and write reports (ASHA, 2016b). If this system is not already in place within a school district or region, these data could point to the positive impacts of designating one or two SLPs within a school district or geographic area, if possible, who specialize in assessing ELLs. These SLPs would preferably have specific education and training in this area and would likely have increased self-perception of competency due to their education and exposure to working with ELLs.

Years of Experience

The next factor investigated was the relationship between the years of experience an SLP had and their reported self-perception. Our research question for this factor was ‘Do SLPs with more years of experience working within school districts report higher self-perceptions regarding the assessment of ELLs?’ While the difference between the average overall perceptions between groups was significant, there were no clear patterns of increasing self-perception of competency over time. This could suggest that education and exposure have a more significant impact on competency levels than experience, further supporting the need for more development in these areas. Another potential reason for these findings could stem from an increased focus on cultural and linguistic competence in recent years due to the transforming demographics of the country. Those SLPs who received the majority of their training prior to this shift in focus within the field may not have exposure to the same educational opportunities or discussions as those with training that is more recent.

Bilingual Ability

The final factor examined in this investigation was the bilingual ability of participants. For this factor we focused on the question ‘Do SLPs who identify as bilingual report higher self-perceptions regarding the assessment of ELLs?’ Our hypothesis was that individuals with

bilingual ability would report higher self-perceptions of competency. Having the ability to assess children bilingually did not have a significant impact on the self-perceived competency of an SLP. However, the overall perception followed the expected trend and was marginally significant. This ability is still highly regarded and necessary based upon ASHA's guidelines for assessment of ELLs whose dominant language is not English. This data could suggest the need for further education and training in order to best utilize this unique and important ability.

Specific Areas of Influence

Each of the factors examined had various relationships with specific areas related to the assessment of ELLs. In our initial analysis, 'Developing Non-Standard Assessment Materials', 'Obtaining a Translator', 'Recognizing Typically Developing Language Patterns', and 'Educating a Translator' were the areas with the most 'disagree' or 'strongly disagree' responses. These initial counts would suggest that these are the areas with the most need for training and specific education. Each of the four factors investigated had a unique influence on various areas of assessment. However, each of the four factors demonstrated an impact on at least one of the areas with the most responses of 'disagree' or 'strongly disagree'. This suggests that the influence of these factors is what could set SLPs apart in these crucial areas of assessment.

There was no single factor from the four investigated with a significant influence on the majority of the important areas of assessment of ELLs. In addition, there was no specific area of assessment influenced by all of the factors. The higher number of ELLs on a SLP's caseload appeared to have the largest influence, with higher self-perceptions in five of the ten areas of assessment surveyed. 'Recognizing Typically Developing Language Patterns' was the area impacted by the most factors, with higher self-perceptions reported by those with higher numbers of ELLs on their caseload, increased years of experience, and bilingual ability in this area. These

results suggest a strong combination of a variety of these factors would provide the best preparation for SLPs to assess ELLs. Some of these areas influenced by various factors were specific to the assessment of ELLs, such as obtaining and educating a translator or recognizing typical language patterns of emergent bilinguals. However, other areas such as using classroom activities for assessment and establishing evidence based best practice from research are skills that would serve SLPs working with a variety of populations.

Limitations of the Study

This analysis of self-perceived competencies offers a glimpse into potential factors that can have a positive effect on the services provided by SLPs in the school system. However, this investigation faces limitations as it relies on the responses of SLPs and their perceptions about the services they provide. Assessment of ELLs is a very complicated process and the basis of many of the decisions an SLP must make regarding their ability to serve particular clients stems from self-perceptions of their cultural and language competencies. However, self-perception is difficult to quantify and could be highly influenced by personality. Respondents could easily over or under estimate their actual competency. Despite these limitations, these questions offer an interesting look at how SLPs make these judgments in their everyday practice.

Chapter 6

Conclusion

The issues associated with the assessment of ELLs will not be easily resolved. Rather, the difficulties associated with this area require the help of all related professionals and family members. Each client deserves to be treated as an individual and requires the sensitivity and conscientiousness of everyone involved. SLPs play a huge role in this process as key individuals responsible for administering assessment to differentiate language differences and disorders, as well as advocates for children misrepresented by the current system.

With such an important role in this growing concern, the field of speech-language pathology must adapt to the needs of current clients. While the data collected and analyzed from this survey merely scratches the surface of future research and development in this area, it does suggest several areas of importance for future development. Overview of the literature and the wide range of responses in the areas of assessment surveyed suggest the need for more direct guidelines set by ASHA for professionals to follow. In addition, it is crucial for specific education and training in this area to be widely available through both graduate level coursework and continuing education courses. While this education is available to some extent throughout the country, there is a need for increased access and improvement to meet the needs of ELL clients. This education should center on the key areas as outlined by ASHA to ensure all professionals are not only familiar with the cultural and linguistic competence qualifications required to work with ELLs, but are able to perform them with excellence.

In addition, it is important for education and training in this area to be standardized across the country. Currently, there are a handful of university programs offering bilingual certificates or specialization in the area of working with bilingual children. It may be beneficial for ASHA to develop standards for a curriculum for bilingual or multicultural certificate programs to educate well-trained professionals in this important area who can serve in designated and critical positions throughout the country.

Our investigation into the number of ELLs on a SLP's caseload suggests the possible benefits of designating specific SLPs within a school district to assess ELL students. Self-perceived competency scores grew in those with any ELLs on their caseload. In addition, there was a positive relationship between SLPs with educational experiences and bilingual ability and the number of ELLs on their caseload. Based upon the increase in competency with those who have ELLs on their caseload, ideally each school district would have at least one well-trained and bilingual SLP to specialize in assessing ELLs. In rural regions where this may be difficult, each county or cluster of schools could have at least one of these well-trained SLP who traveled to see the clients requiring assessment in the area. School systems who followed this referral system would best serve the needs of their clients by providing assessment from the most qualified professionals.

As suggested by the initial survey results, the ability to assess bilingually does not have a direct significance in comparison to the self-perceived competency of SLPs. However, the survey results also demonstrated the lack of bilingual SLPs in the country with only 13 of 114 respondents indicating they were able to assess bilingually. It is important to stress the importance of developing bilingual SLPs able to assess children in their primary languages other than English, as this eliminates the need to obtain and educate translators and maintains the most

natural clinical experience possible. However, specific training is required for bilingual SLPs to utilize their ability to serve clients well. Well-trained bilingual SLPs have the ability to ensure accurate assessment of ELLs, but it will require the development of a strong education program to ensure these skills are most beneficial for the client.

The assessment of ELLs requires much further research to solidify both these results and to make informed decisions about the best plan of action for the field of speech-language pathology and other fields related to the assessment of ELLs. However, this initial data offers several suggestions for the field, particularly in terms of the need for specific education and training programs and referral systems for those who specialize in working with ELLs. Further investigation and development could also occur with additional factors including professional support within the school system, classroom structure for ELL children within school districts, and assessment tools used. While progress in this area is necessary to meet the needs of current students, it is crucial to develop a full picture depicting the entirety of this issue and the factors influencing the assessment process. With this knowledge, SLPs can collaborate with all professionals, families, and children involved to create guidelines and establish the best practices to serve ELLs throughout the country.

Appendix A

Survey Instrument

You are being invited to volunteer to participate in a research study. This summary explains information about this research.

- You are being asked to participate in this research because you are currently employed as a school-based speech pathologist and a member of the American Speech-Language Hearing Association.
- This research is being done to learn more about the self-perception carried by school-based speech-language pathologists related to the assessment of English Language Learners. Approximately 1,000 people will be asked to take part in this research study nationwide.
- For this study, you are being asked to complete an online survey through Qualtrics, an online research software program. The survey consists of 24 questions and should take approximately 10 minutes to complete.
- Your participation in this study is voluntary with no foreseeable risks in participating. All responses to questions will be kept anonymous and confidential. You do not have to answer any question(s) that you do not want to answer.
- If you have questions or concerns, you should contact Alaina Eck at ace5133@psu.edu. If you have questions regarding your rights as a research subject or concerns regarding your privacy, you may contact the Office for Research Protections at 814-865-1775.
- Your participation is voluntary and you may decide to stop at any time. You do not have to answer any questions that you do not want to answer. Your participation in this online survey implies your voluntary consent to participate in the research.

Please indicate if you would like to continue with the remainder of the survey.

- Yes (1)
- No (2)

If Yes is Selected, Then Skip To What year did you become a CCC-SLP? If No is Selected, Then Skip to End of Survey

Q2 What year did you become a CCC-SLP?

Q3 Approximately how many years total have you been employed in a school district as a SLP?

- 1 year - 3 years (1)
- 4 years-7 years (2)
- 8 years-10 years (3)
- 10 years-15 years (4)
- 15 years-20 years (5)
- 20 years-25 years (6)
- 25 or more years (7)

Q4 In what state are you currently employed?

Q5 Please name the institution you attended to receive your Master's Degree.

Q6 What grade level(s) do you predominantly work with? (Check all that apply.)

- PreK-2nd grade (1)
- 3rd-6th grade (2)
- 7th -12th grade (3)

Q7 Approximately, how many English Language Learners (ELL students) are on your current caseload?

Q8 Approximately, how many English Language Learners (ELL students) have been referred for your services within the last year?

Q9 What ELL services are offered in your school district? Check all that apply.

- Resource Room (1)
- ELL Classroom/Instruction (Pull Out) (2)
- Classroom Supports/Aide (3)
- After School Programs (4)
- Bilingual Programs (5)
- Dual Language Programs (6)
- No Services are Offered (7)
- Other (Please Describe) (8) _____

Q10 What are your current means for the assessment of English Language Learners (ELL students)?

Check all that apply.

- Standardized Assessments (1)
- Criterion Referenced Assessments (2)
- Dynamic Assessment (3)
- Interviews with Primary Communication Partners (4)
- Translators (5)

Q11 Have you ever taken any specialized courses related to the assessment of ELL students? If so, please share the name(s) or theme(s) of the course(s) below.

- Yes (1) _____
- No (2)

Q12 Have you ever attended any continuing educational experiences related to the assessment of English Language Learners (ELL students)? If so, please share the name(s) or theme(s) below.

- Yes (1) _____
- No (2)

Q13 Do you receive support in the assessment of English Language Learners (ELL students) from other teachers/staff at your school district? If yes, please indicate their position(s) below.

- Yes (Please indicate their position below) (1) _____
- No (2)

Q14 Would you be interested in learning more about the role of SLPs in the assessment of English Language Learners (ELL students)?

- Yes (1)
- No (2)

Q15 Are you fluent in any languages other than English? If so, do you feel competent assessing students in this language?

- Yes, and I feel competent to assess students in this language. (1)
- Yes, but I do not feel competent to assess students in this language. (2)
- No (3)

Q16 Please indicate your perceived competency in the following areas. Complete the following sentence with the choices given and select your level of agreement with each statement.

	Strongly Disagree (1)	Disagree (2)	Neither Agree nor Disagree (3)	Agree (4)	Strongly Agree (5)
(1) I feel competent obtaining a translator to perform an assessment.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(2) I feel competent educating a translator on assessment procedures.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(3) I feel competent obtaining a parent survey/home language assessment.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(4) I feel competent collaborating with ELL instructors/professionals.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(5) I feel competent recognizing typically developing language patterns in emergent bilinguals.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(6) I feel competent developing non-standardized assessment materials.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(7) I feel competent using classroom activities/monitoring to inform assessment decisions.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(8) I feel competent finding the latest research related to the issue.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(9) I feel competent establishing the best practice based on scientific research.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(10) I feel competent advocating for my clients to school district administration.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Appendix B

Recruitment Letter

Dear

My name is Alaina Eck and I am an undergraduate student in the Communication Sciences and Disorders Department at The Pennsylvania State University. I am writing to invite you to participate in my research study about the self-perception carried by school based speech-language pathologists in terms of their assessments involving English Language Learners. This area is of growing interest to me as I conduct my undergraduate thesis and one that I see having a large impact on our field.

You are eligible to participate in this study because you are a school-based speech-language pathologist within the United States. If you decide to participate in this study, you will simply need to enter the link given below in your web browser and complete the survey regarding your professional background, educational experiences, current practices, and self-perceived competency levels. The survey should take approximately 10 minutes to complete. There are no perceived risks for participating in this survey and all answers will be kept completely confidential with no identifying information recorded. Please remember, your participation in this study is completely voluntary. If you'd like to participate please follow the link below.

Survey Link: <http://tinyurl.com/pzyw3gf>

If have any questions about the study, please email me at ace5133@psu.edu.

Thank you very much. I look forward to working with professionals such as you in the near future. Your support and interest is greatly appreciated as I complete my undergraduate education.

Sincerely,

Alaina Eck
The Pennsylvania State University
Schreyer Honors College, College of Health and Human Development
B.S. Communication Sciences and Disorders, 2016

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Academic Vita

Alaina C. Eck

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- EDUCATION** **The Pennsylvania State University, University Park, PA**
B.S. in Communication Sciences and Disorders, May 2016
Academic Minors in Spanish, Special Education
- HONORS** **Dean's List**
College of Health and Human Development Honor Society
Schreyer Honors College Scholar
Women's Leadership Initiative Participant
- AWARDS** **President's Freshman Award, Evan Pugh Scholar Award,**
HHD Alumni Recognition for Student Excellence
- THESIS** **Title:** 'Self-Perception of School Based Speech-Language Pathologists Regarding
Individual Competency in the Assessment of English Language Learners'
Supervisor: Dr. Carol Miller
- GRANTS** **John T. and Paige S. Smith Endowment for Undergraduate Research in the**
College of Health and Human Development
- COMMUNITY** **National Student Speech Language Hearing Association, *Executive Board***
ACTIVITIES **Penn State Dance Mara-THON, *Family Relations THON Chair, Volunteer***
CSD Multicultural Interest Group, *Co-Leader*
- WORK** **Office of Student Orientation and Transition Programs, University Park, PA**
EXPERIENCE *New Student Orientation*
- Assisted students with questions and materials for a successful orientation
- Student Support Services Program, University Park, PA**
Language Tutor
- Devised strategies and practice activities to improve on the emerging skills of the student
- Mercersburg ESL+ Summer Program, Mercersburg, PA**
Teaching Assistant
- Collaborated and developed activities to enhance the experience of international students
- Rush-Henrietta School-Age Child Care Program, Henrietta, NY**
Classroom Assistant
- Provided a safe and enjoyable atmosphere for school-age children