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Parameters that Affect the Comfort Levels of Native English Speakers Communicating with Non-Native English Speakers

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ABSTRACT

Parameters that Affect the Comfort Levels of
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This study explores how native English speakers (NESs) are affected by the backgrounds of non-native English speakers (NNESs) when it comes to being comfortable interacting with then in English.

Speech samples of 12 NNESs were gathered from the Level Achievement Tests conducted at Brigham Young University's English Language Center. There were six speakers who spoke Spanish as their first language (L1) and six speakers who spoke Chinese as their L1. In each L1 group, there were two Low proficiency speakers, two Mid proficiency speakers, and two High proficiency speakers. The speech samples were included in a Qualtrics survey which was completed by 122 American NES participants. The NES participants listened to each speech sample and rated their comfort level interacting with each NNES speaker in six different communication situations categorized as either formal or casual. The results were statistically analyzed in order to determine the effect of proficiency level, L1, and communication situation on NES comfort levels in NNES interactions.

High proficiency speakers were rated significantly higher than Mid proficiency speakers which were in turn rated higher than Low proficiency speakers. Spanish L1 speakers were rated higher than Chinese L1 speakers. The more casual communication situations were ranked higher than the more formal communication situations. A statistical analysis of the interaction between proficiency level and L1 revealed that Spanish L1 speakers were strongly preferred at higher proficiency levels but Chinese L1 speakers were preferred at lower proficiency levels. These results suggest that Spanish L1 speakers have a greater need to be higher than Low proficiency while Chinese L1 speakers have a greater need to achieve High proficiency. NNESs who anticipate being in formal situations should also aim for High proficiency.

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Chapter 1: Introduction

The challenges of language learning

The number of non-native English speakers (NNESs) in the United States is increasing. They enter the country for a variety of reasons: education, career attainment, to escape economic or political hardships, or for personal fulfillment (One America, 2014; The Civil Society, 2014). Despite this growing number, NNESs are still charged with the task of learning English because English remains the *de facto* national language of the country. In order to communicate effectively with native English speakers (NESs), not only must NNESs learn the language but they must also learn it well enough to make themselves understood. In addition, they must attract and maintain the attention of their listeners by making sure they are willing to interact with them. If NNESs are unable to sustain a high enough level of comfort with NESs, they may find it difficult to achieve their communicative goals.

Learning a new language, however, is a daunting task. Knowing the general grammar of a language is not enough to communicate effectively. A learner must also consider such factors as pronunciation, semantics, pragmatics, and word choice. Due to the difficult nature of learning a language and the growing need for NNESs to learn English, many programs that are designed to help NNESs learn and improve their English skills have been established across the United States. While these programs do indeed aid the improvement of English learning, NNESs are still in charge of their own learning. Because each learner is unique with different ambitions and capabilities, learners must establish their own language goals in order to communicate in the way most effective for them.

Establishing language goals is also a daunting task, however. Many NNESs do not know what goals would be realistic for them as individuals, many simply stating that they want to

"sound native" (Jenkins, 2005). Learners all have different reasons for wanting to learn English. Some want to study at a particular English-speaking university, some want to obtain a prestigious job that requires English, and some simply want to expand their cultural awareness. For this reason, not all learners need to attain the same level of English proficiency in order to meet their goals. Learners must recognize what their needs are and set their language goals accordingly.

Another factor to consider when setting language goals is that not all learners speak the same first language (L1). Different L1 backgrounds may influence English L2 learning in different ways (Flege, 1980; Flege, 1981; Zampini, 1994; Ortega, 2009), especially if learners are aware of the differences between their L1 and English (Ortega, 2009). For example, a learner with an L1 that has a similar word order to English may have an easier time learning English than a learner with an L1 that has a different word order. Consequently, some learners need to utilize different strategies than others, thus needing to establish different goals. Deciding what kind of goals to set is therefore an important part of an effective language learning process. This study explored one factor that may influence the goal-setting decision process that learners must face by investigating how varying proficiency levels and L1 backgrounds of NNESs affect the comfort level of NESs in various situations. How NNESs can use this information in the selection of their learning goals will then be discussed. The following section will further explain this study's aims and anticipations.

Research aims, questions, and hypotheses

To determine the proficiency level of learners, several scales have been designed that describe what abilities a language user needs in order to communicate at certain levels. Many

learners aspire to achieve the highest level of any such scale; however, this is not always a realistic goal since not all learners have the capacity or necessity to achieve the highest level of proficiency. Understanding what proficiency level is most desirable for certain learner L1 backgrounds and situations learners will encounter could help learners establish realistic goals.

Achieving a "native-sounding" accent is also a common aspiration for learners (Jenkins, 2005); however, this goal is typically not realistic and often unattainable for English learners. One reason is that learners often speak languages that do not utilize the same segmentals and suprasegmentals as English, creating a barrier that makes it more difficult for learners to produce certain sounds (Esling & Wong, 1983). Another reason is that a native-speaker-like accent is not required for intelligibility, so many instructors only aid learners in attaining an accent that can be understood by native speakers, not a native accent (Haney, 1926; Böhlen, 2008). For this reason, many if not most NNESs in the United States speak English with some kind of foreign accent (Matsuda, 1991), which can be a challenge for them since many NESs report feeling uncomfortable speaking with NNESs (Matsuda, 1991; Rahman, 2009; Han, 2014). However, not all foreign accents are the same since they employ different segmentals and suprasegmentals resulting in differing levels of intelligibility for NESs which in turn may impact the comfort levels of NESs interacting with NNESs. Understanding what foreign accents NESs are more comfortable with could help English learners devise language goals based on their native language backgrounds.

Because NNESs are individual people with varying backgrounds and motivations, not all of them encounter the same situations. For example, a number of NNESs are in high-profile work positions and need to know very formal English while other NNESs are attempting to further their education and need to know how to speak with instructors and classmates in English.

Many NNESs are trying to attain jobs and need to know how to give appropriate customer service in English while some NNESs simply want to become more social and only need to know casual, conversational English. Different situations by nature offer differing levels of comfort, and the comfort level for NESs caused by speaking with NNESs can greatly affect the overall comfort of the situation. Understanding how proficiency levels and L1 backgrounds of NNESs affect the comfort of NESs in various situations could help learners establish language goals based on the situations they anticipate most often encountering.

The following questions will be investigated in this study:

1. Do the comfort levels of NESs vary depending on the proficiency level of NNESs?

2. Do the comfort levels of NESs vary depending on the L1 backgrounds of NNESs?

3. Do the comfort levels of NESs when interacting with NNESs of varying L1 backgrounds and proficiency levels change depending on communication situation?

For the purposes of this study, the proficiency level scale that will be used is the Level Achievement Test (LAT) scores of students enrolled in Brigham Young University's English program at the English Learning Center (ELC). The L1 backgrounds that will be investigated in this study are Spanish and Chinese. The situations that will be investigated are inviting a NNES to a social gathering, speaking to a NNES customer service representative over the phone, interacting with a NNES employee at a grocery store, interacting with a NNES as a boss or supervisor, interacting with a NNES as a coworker, and interacting with a NNES as part of a committee.

Chapter 2: Review of literature

The main objective of this study as described in the previous chapter is to assist NNESs in the United States in the establishment of their unique language learning goals by determining how their proficiency level, native language background, and situations they expect to encounter most often may affect the comfort levels of NESs interacting with them. To provide understanding of the rationale behind this objective and the research questions associated with it, this chapter will define and explain the necessity to learn English in the United States and why learners must be autonomous and develop the ability to create their own learning goals. This chapter will also review and explain the replicated study on which this present study is based in order to demonstrate the importance of the expanded results that this study yielded in comparison to the original.

Immigration

Since the last third of the 20th century, immigrants from all over the world have been entering the United States. The motivations for immigrants to enter this country are numerous: to become more financially secure, to pursue a better life, to attain a better education, or to escape political hardship in their native countries to name a few (One America, 2014; The Civil Society, 2014). Immigration significantly changed the racial and ethnic divide of the country, which was primarily Caucasian and African-American. Today, there are multiple races and ethnic groups that live in this country due to the immigration that is increasing every year (Lee & Bean, 2007; MacDonald & Sampson, 2012). Americans are interacting with these immigrants more often as they become more prevalent in the American landscape. Despite this growing interaction with immigrants, however, many Americans consider immigration to be a "problem."

That is, they feel that there are too many immigrants entering the country, leading to a loss of American identity and values. As the number of immigrants in the United States increases, so does the unease and hostility of Americans toward immigration (Sassen, 1989; Espenshade, 1995; Massey, 2007; Newman, Hartman, & Taber, 2012). While there is a great number of publications discussing the need to aid immigrants in their integration into American culture and to be more accepting of those from foreign countries (Lee & Bean, 2007; Massey, 2007; Peters, 2015; Fang, 2015), immigrants are still largely expected to adopt and adapt to American traditions in order to lessen the contention of Americans toward immigration.

NES biases toward immigrants of specific L1 backgrounds

In addition to the common hostility Americans feel toward immigration (Sassen, 1989; Espenshade, 1995; Massey, 2007), many Americans have biases toward specific L1 groups of immigrants. These biases, which include perceptions of and attitudes toward specific NNES L1 groups, sometimes affect the ability of American NESs to understand NNESs (Perkins & Milroy, 1997; Lindemann, 2002; Lindemann, 2005; Subtirelu & Lindemann, 2014). For example, a NES who has a negative perception of the Spanish-speaking culture but a positive perception of the Chinese speaking culture may report having an easier time understanding Chinese L1 accented English over Spanish L1 accented English.

In her study, Lindemann (2002) demonstrates how such biases affect NES understanding of NNESs. Twelve participants' attitudes toward Koreans were assessed as either relatively positive or relatively negative. The 12 participants were then asked to complete an interactive map task with Korean NNES partners. The interactions during the task between the NESs and their Korean partners were observed and analyzed to determine if the NESs' attitudes toward

Koreans had any influence on how well they were able to complete the tasks with the Korean NNESs. Lindemann found that the participants with negative attitudes toward Koreans tended to use "avoidance" strategies such as not giving necessary feedback to the Korean NNESs that would have enhanced the overall communication, suggesting that they wanted to speak with the Korean NNESs as little as possible. Participants with negative attitudes toward Koreans also "problematized" the Korean NNESs' instructions or explanations by making their frustrations with understanding them clear or by questioning their accuracy. Of all 12 map tasks completed, only two map tasks were not completed successfully, and those two were performed by two NES participants who were assessed to have negative attitudes toward Koreans. Lindemann thus concluded that perception toward a specific L1 may influence an NES's ability to understand and communicate successfully with an NNES who speaks that particular L1.

NES perceptions of Spanish and Chinese L1 backgrounds

Because the L1s on which this study focuses are Spanish and Chinese, it is necessary to understand what biases and attitudes toward each L1 may influence the results. In the United States, the most frequent L1 of immigrants is Spanish (Ryan, 2013). For this reason, Americans are perhaps most familiar with Spanish L1-accented English. This does not mean, however, that attitudes toward Spanish L1-accented English in the United States are necessarily favorable. In fact, America's current hostility toward unauthorized immigration from Mexico (Espenshade, 1995; Alarcón & Heyman, 2013; Fernández, 2013) may account for the negative attitudes many American NESs have toward Spanish L1 immigrants. In another study conducted by Lindemann (2005), the NES participants frequently reported that Spanish L1-accented English sounded uneducated and indiscernible. In fact, most comments made were relatively negative. This

suggests that although American NESs may hear Spanish L1-accented English more commonly than other types of foreign accented English due to the much greater number of Spanish immigrants in the U.S. over other types of immigrants, Spanish L1-accented English is still often perceived negatively.

The number of Chinese-speaking immigrants in the U.S. is substantially smaller than the number of Spanish-speaking immigrants by over 76% (Ryan, 2013). For this reason, Americans may not encounter Chinese L1 immigrants very often and therefore may not have a strong perception of Chinese L1-accented English. Lindemann (2005) offers some perceptions about Chinese L1-accented English that NESs reported in her study. Many NES participants reported that Chinese L1-accented English sounded indiscernible, irregular, and jarring. Some even compared it to Spanish L1-accented English according to its rhythm and overall sound. Similar to the comments made about Spanish L1-accented English, most comments about Chinese L1-accented English were relatively negative. These reported perceptions of both L1s suggest that Spanish L1 and Chinese L1 immigrants must battle biases that may not affect other immigrants when attempting to gain acceptance in American society.

The need to learn English

One of the most important facets of any culture is its language, and the American culture is no different. Although the United States has no official language, the language most commonly spoken in the country is definitely English (Ryan, 2013). Of all the features of American culture, immigrants in the United States are perhaps most expected to learn and use English in order to communicate. Aside from physical appearance, the most apparent aspect of foreigners is their language abilities, and poor communication often creates discomfort, hostility,

and cessation of interaction (Murray, Jr., 1967; Bienvenu, Sr., 1970; Bienvenu, Sr., 1975; Caulcutt, 1987; Tucker & McCarthy, 2001; Maguire & Pitceathly, 2002). Thus, NNESs in the United States must communicate efficiently in order to appease the NESs of the country.

Immigrants entering the United States typically come from countries where English is not the dominant language (Lee & Bean, 2007; Massey, 2007;). Many immigrants therefore do not speak English very well or at all, making it difficult for them to communicate with NESs. Making it more difficult for NNES immigrants is that many NESs tend to be unforgiving when dealing with those who have low English proficiencies. If NESs feel too uncomfortable speaking with low proficiency NNESs, they are typically more likely to cease interaction with the NNESs, making it difficult for NNESs to communicate and get the assistance they may need (Derwing & Munro, 2009; Newman, Hartman, & Taber, 2012). The need for NNESs living in the United States to learn English is therefore quite high since their ability to succeed in a country where they cannot communicate is significantly hindered.

Newman, Hartman, and Taber (2012) discuss the hostility many Americans feel toward immigration in their study. Drawing upon information from a national survey, the authors found that the more contact a participant had with low proficiency NNES immigrants, the greater their resentment toward immigration was. In other words, frequent interaction with NNES immigrants who do not speak English well appeared to heighten the feelings of cultural threat and anti-immigration in participants. These results suggest a strong need for immigrants to learn English well in order to lessen the severity of or perhaps even eliminate these negative sentiments of American NESs.

Learning a new language, however, is not a simple task. There are numerous facets of any language that must be studied; that is, not only must NNESs learn the syntax and vocabulary

of English but also the phonetics, phonology, semantics, pragmatics, and culture of the language. Language learning is a time-consuming process that often takes many years to master (Foley & Thompson, 2003; Harmer, 2007; Ortega, 2009). Many NNESs might therefore be discouraged in their language studies or else might find it difficult to develop effective learning strategies.

ESL programs in the United States

A great difficulty for many NNESs living in the United States is that many of them begin learning English as adults. Stevens (1999) investigated how age affects English proficiency in adult immigrants moving to America who speak English as a second language and found that the likelihood of immigrants reporting that they spoke English "very well" decreased the older they were at the time of immigration. She also reported that the likelihood of immigrants reporting that they spoke English "very well" increased the longer the length of their stay in the United States.

Because of the difficulty adult learners face when attempting to learn a new language, many educational programs designed to help adult NNESs learn English have been established all across the United States. These programs are intended to prepare NNESs to be successful English speakers in whatever environment they desire to use English, such as employment, further academic work, or everyday situations. In order to provide the most efficient assistance to NNESs, these programs offer many different courses focusing on specific skills at different proficiency levels. Due to the complexity of English and the difficulty adults experience when learning a language, ESL programs in the United States are typically quite intensive, and many NNESs are enrolled in such programs for several semesters before they are finally deemed "proficient" (Dehghanpisheh, 1987; Guth, 1993). Such programs therefore do not necessarily

decrease the amount of time it might take to learn a language, but they might relieve some of the confusion and anxiety learners may have about the best methods for language learning.

The responsibility of learners

Although these ESL programs are designed to help NNESs learn English, NNESs enrolled in such programs are still largely responsible for their own learning. As with any student in a course, NNESs must regulate and measure their own learning in order to achieve their desired mastery of the English language. That is, they cannot expect their instructors to do all of the work for them and must be self-directed in their English studies. Many researchers have suggested the importance of learner autonomy and how it inspires better performance (Zimmerman & Paulsen, 1995; Young, 1996; Lee, 1998; Breeze, 2002; Butler, 2002; Little, 2004; Bown, 2009; Van Loon, Ros, & Martens, 2012).

A study that determined the effect of learner autonomy on learner performance was conducted by Young (1996). Participants in the study were middle school students whose self-regulated learning strategies (SRLS) already possessed were classified as either high or low. Once their SRLS were assessed, they were then divided evenly into two groups. In one group, the experimental group, the students were presented with a computer-based instructional (CBI) program that allowed them to have control over the sequence and content of the program's lesson. In other words, the students were able to choose what content they wanted to view and the order in which they viewed the content. In the other group, the control group, the students were presented with a CBI program that did not allow them to control the sequence or content of the program's lesson. In other words, the lesson was presented in a linear sequence that students had to follow. The students with high SRLS performed significantly better than students with low

SRLS in both groups, but the difference in performance was higher in the experimental group than in the control group. This suggests that not only do students with high SRLS perform better than students with low SRLS in general, but students with high SRLS who are also able to utilize those SRLS perform at an even higher capacity. The importance and effectiveness of autonomous learning are therefore emphasized by the results of this study.

The importance of learning goals

Once the value of learner autonomy has been established, the next question is how learners can regulate their own learning. Because learners are all different with different abilities, capacities, and motivations, learners may want to begin with determining their goals for learning English in the first place. Indeed, many educational researchers suggest well-specified learning goals will result in better learning and performance (Eppler & Harju, 1997; Seijts & Latham, 2005; Harmer, 2007; Myers, 2008; Jansen, Bartell, & Berk, 2009). Although a group of NNESs may be taking the same ESL class, their goals are likely to vary depending on their individual needs.

To establish learning goals, NNESs must first understand what a learning goal is. Many students wish to simply "master the English language;" however, this goal is quite vague, making it difficult for learners to determine how best to reach this goal or when they have reached the goal. A specific goal that can be mapped and clearly defined will better assist learners in their studies (Harmer, 2007). For example, an Asian NNES may initially set a goal of "achieving native-like pronunciation." This goal is ambitious but probably too broad since that NNES may become overwhelmed by all of the many facets of English pronunciation and then may not know when this goal has been achieved. A better goal might be "producing the 'r' sound correctly."

This learning goal is concrete and can be more easily determined when it has been achieved.

Learning goals have been shown to be extremely important in the learning process, but many NNES learners do not know what goals to set for themselves as individuals with different circumstances and needs. Just as NNESs live in the United States for a variety of reasons (One America, 2014; The Civil Society, 2014), so do they have a variety of reasons to learn English. Because different levels and types of English are needed in different circumstances, NNESs do not all need to achieve the same level and type of English proficiency in order to succeed in their own individual circumstances. NNESs must therefore understand what level and type of English proficiency they need as individuals in order to set appropriate language goals.

In addition to different circumstances and needs, NNESs also have different backgrounds, perhaps most notably different L1 backgrounds. Since L1 features may influence the production of an NNES's L2 (Flege, 1980; Flege, 1981; Zampini, 1994; Ortega, 2009), an NNES must understand these influences in order to set appropriate language goals. For example, an NNES with an L1 that has a different word order from English might struggle more with grammar than an NNES with an L1 that has a similar word order to English. Another NNES with an L1 that has different phonetic features from English might struggle more with pronunciation than an NNES with an L1 that has similar phonetic features to English.

In a study conducted by Flege (1980), Arabic speakers were recorded producing English sentences that included words with voiced and voiceless stop consonants. Flege analyzed the resulting spectrograms of the words with stop consonants in terms of vowel duration, stop closure duration, and voice onset time. The results indicated that the stop consonants produced by the Arabic speakers were strongly influenced by their L1 as their English stops had phonemic features similar to that of Arabic stops, suggesting that a learner's L1 is a strong factor in his L2

pronunciation.

Another study that investigates how L1 features can transfer to L2 production was conducted by Zampini (1994). Zampini investigated how phonetic aspects of the English language affected the pronunciation of L2 Spanish speakers with English as their L1. The researcher first describes how the stop consonants /b/, /d/, and /g/ are part of the phonetic inventories of Spanish and English, but the consonants are sometimes spirantized in Spanish (i.e., undergo a phonological process that results in the consonant changing its manner of articulation depending on its phonetic context) while the same consonants are rarely spirantized in English. The researcher then explored the ability of English L1 Spanish speakers to produce these spirantized consonants when speaking Spanish. English L1 university students enrolled in second- and fourth-semester Spanish courses were recorded answering questions in Spanish and reading aloud a Spanish passage. The occurrences of /b/, /d/, and /g/ in each participant's audio responses were then transcribed and analyzed. Zampini found that the students failed a majority of the time to produce the proper spirantized consonants. She concluded that L1 transfer was affecting the L2 pronunciation abilities of the participants.

Both studies suggest that L1 traits do indeed influence L2 production, and since languages often vary greatly from each other, L2 production will differ depending on the specific L1 from which traits are being transferred. Consequently, since English learners have a vast variety of L1 backgrounds, not all learners will have the same struggles with learning English and will thus need to devise their own learning goals based on what they specifically need to learn.

Because the proper establishment of learning goals is essential to learner autonomy and language learning, it would be useful to NNESs to understand the most effective ways to

communicate with NNESs in their own individual circumstances. In order to achieve this, NNESs must know what factors affect the comfort level of NESs as they interact with them. This study will focus on three of these factors: proficiency level, L1 background, and communication situation. If NNESs can determine the language abilities they need in their individual circumstances in order to communicate effectively with NESs, they will perhaps be more likely to succeed as language users.

The replicated study

The study on which this present study expands was carried out by Alison Roberts in an unpublished Master's thesis in 2013. Roberts investigated the comfort level that NESs felt when interacting with NNESs at various proficiency levels (novice, intermediate, and advanced), the comfort level that NESs felt when interacting with NNESs in various situations, and the demographic variables of NESs that might affect their reported comfort levels. The participants in this study were 60 male NESs and 60 female NESs all living in the United States. The participants completed an online survey in which they listened to pre-recorded samples of seven NNESs and answered questions about the sound clips detailing their level of comfort they would feel if they were to interact with the NNESs based solely on these sound clips. The seven NNESs featured in the sound clips were students enrolled in English classes at BYU's ELC. The NNESs all had the same L1, Spanish, and were all female. This was done to control for judgments based on different language backgrounds and gender.

Roberts (2013) found that NESs reported that they would have a significantly higher level of comfort interacting with intermediate and advanced NNESs than with novice NNESs, suggesting that proficiency level does indeed have an effect on the comfort level of NESs. The

author also found that the situation in which interaction would take place also had a significant effect on NESs' comfort. In general, NESs reported that they would feel the least comfortable interacting with NNESs in work and customer service situations and most comfortable in casual and friendly situations. Finally, the author also found that although NES's ages and the NES's reported frequency of interaction with NNESs in their daily lives did noticeably affect some comfort ratings, overall, the demographics of the NESs had no significant bearing on comfort ratings. Roberts concludes that the comfort of NESs interacting with NNESs is strongly impacted by proficiency level and situation and that an understanding and awareness of this threshold among these areas could lessen frustrations in NNES and NES interaction and create stronger societal ties.

Roberts's (2013) study yields compelling results that suggest how NNESs should establish their learning goals. For example, based on these results, it would appear that NNESs need to be aware of their level and the situations in which they find themselves but do not need to be concerned with the actual background of their NES listeners. The original study, however, was limited in that it only considered NNESs of a homogenous L1 background. These results do not reveal if these comfort levels would be the same for various L1 backgrounds. Understanding how L1 differences in addition to proficiency level affect NES comfort ratings could shed light on how NNESs of various L1s can reflect on their language needs.

The present study, like the original study, will attempt to determine how proficiency level of NNESs and different circumstances affect the comfort of NESs interacting with them. The present study will also attempt to expand on the original study and determine if the L1 backgrounds of NNESs also affect the comfort of NESs interacting with them.

Chapter 3: Methodology

Overview of aims and research questions

This study is a replication and expansion of Roberts's (2013) study dealing with how the comfort levels of NESs are affected by the proficiency levels of NNESs. The methodology of the present study is largely identical to the original study. However, some changes were made to accommodate the expanding research questions of the present study. Most notably, this study focuses on L1 background in addition to proficiency level and types of communication situations. Since Roberts concluded that NES demographics such as age and region did not significantly affect comfort ratings, the present study does not focus on any possible judgments based on NES background information in order to make the expanded scope more manageable.

As mentioned previously, the following questions were investigated in this study:

1. Do the comfort levels of NESs vary depending on the proficiency level of NNESs?

2. Do the comfort levels of NESs vary depending on the L1 backgrounds of NNESs?

3. Do the comfort levels of NESs when interacting with NNESs of varying L1 backgrounds and proficiency levels change depending on communication situation?

Speech samples

The speech samples used in this study included sound clips of 12 NNESs enrolled in English classes at BYU's ELC for the Winter 2014 semester. There were six learners who had Spanish as their L1 and six learners who had Chinese as their L1. In both L1 categories, there were two speakers of Low proficiency, two speakers of Mid proficiency, and two speakers of

High proficiency. All speakers were between the ages of 22 and 40. To control for judgments based on gender, all speakers were female. As part of a placement test for BYU's English language program (Level Achievement Test or LAT), each speaker was given a prompt and was instructed to speak about it. The prompt, which is presented in Appendix B, asked speakers to compare their personalities at the present time to their personalities back in high school. The prompt was classified by BYU to be of Mid proficiency (about 3.5 on the BYU LAT rating scale).

BYU's ELC LAT scale. Trained raters at BYU'S ELC used a standardized rubric to determine the LAT scores of all the NNES speakers featured in this study. The speakers were given numerical LAT scores that corresponded to a specific proficiency level in BYU's English language program. Details of the specific proficiency levels used in this study are discussed in this section. Full details of each proficiency level at BYU's ELC can be found in Appendix D.

The NNESs in this study who were categorized as Low proficiency had an average LAT score of 1.43. Characteristics of this level of proficiency include isolated words and phrases, formulaic and memorized language, short answers consisting of only two to three words, limited vocabulary, frequent pausing, repetition, and little comprehensibility even by those who are accustomed to speaking with NNESs.

The NNESs in this study who were categorized as Mid proficiency had an average LAT score of 3.45. Characteristics of this level include using simple sentences to express personal meaning, ability to successfully handle a limited number of uncomplicated language tasks, highly varied general vocabulary, errors that sometimes obscure meaning, self-corrections, and generally good comprehensibility by those who are accustomed to speaking with NNESs although some effort is required.

The NNESs in this study who were categorized as High proficiency had an average LAT score of 5.34. Characteristics of this level of proficiency include simple discourse of paragraph length with sustained though perhaps formulaic discourse markers used for organizational purposes, ability to comfortably complete uncomplicated language tasks relating to routine or personal interests, some hesitation with more complicated language tasks, a moderate amount of academic vocabulary, a variety of time frames and sentence structures, and good comprehensibility even by those who are not accustomed to speaking with NNESs.

BYU's LAT scores and ACTFL OPI levels comparison. The LAT scores are used to place students enrolled in classes at BYU'S ELC into appropriate classes based on their proficiency. In order to make the LAT scores understandable, the scores are related to a widely-used and more familiar scale, the American Council on the Teaching of Foreign Language's (ACTFL) Oral Proficiency Interview (OPI) levels. These levels are compared to the BYU LAT scores in Table 1. Specific details about the ACTFL OPI levels can be found at ACTFL's website (http://actfl.org). The classification of each recorded sample for this study is based on their scores determined by trained raters at BYU's ELC. The rubric used to determine the scores of each recorded sample is provided in Appendix D. For this study, each of the 12 recorded samples used were identified as either Low proficiency, Mid proficiency, or High proficiency. These labels were chosen instead of Novice, Intermediate, and Advanced (as they were used in Roberts's 2013 study) to avoid any confusion with the ACTFL OPI levels. The classifications of each group in this study are compared to their LAT scores and associated ACTFL OPI levels in Table 2.

Table 1

Comparison of ACTFL Proficiency Levels and ELC LAT Speaking Scores for the Speakers

ACTFL Level	ELC Speaking LAT Scores
Novice Low	0
Novice Mid	1
Novice High	2
Intermediate Low	3
Intermediate Mid	4
Intermediate High	5
Advanced Low	6

Table 2

Speaker LAT Proficiency Scores, Group Classification, and Approximate ACTFL Equivalency

Group Classification for the present study	ELC speaking LAT Score	Average group score	Approximate ACTFL equivalency
Spanish Low	1.17	1.22	Novice Mid
Spanish Low	1.26		
Chinese Low	1.37	1.64	Novice Mid
Chinese Low	1.91		
Spanish Mid	3.43	3.37	Intermediate Low
Spanish Mid	3.30		
Chinese Mid	3.50	3.52	Intermediate Low
Chinese Mid	3.53		
Spanish High	5.23	5.29	Intermediate High
Spanish High	5.23		
Chinese High	5.67	5.39	Intermediate High
Chinese High	5.10		

The Low proficiency group's LAT scores were 1.17, 1.26, 1.37, and 1.91, placing them approximately in the Novice Mid ACTFL level. The Mid proficiency group's LAT scores were 3.43, 3.30, 3.50, and 3.53, placing them approximately in the Intermediate Low ACTFL level. The High proficiency group's LAT scores were 5.23, 5.23, 5.67, and 5.10, placing them

approximately in the Intermediate High ACTFL level. It must be noted, however, that the associated ACTFL levels are meant to only be taken as references and should not be considered the true equivalent levels for any of the samples since the raters were not trained in ACTFL OPI guidelines.

Speakers with LAT scores corresponding to the ACTFL OPI levels Novice High and Intermediate Mid were not included in order to create a larger gap between the proficiency levels. Speakers with LAT scores corresponding to the Advanced ACTFL OPI levels were not included because there are very few students enrolled at BYU's ELC with LAT scores that high.

Each recorded speech sample was screened for any information that identified the native language of the speaker such as a mention of her home country. Any sample that included such information was not used. The samples were edited to remove background noise and to adjust pitch and intensity levels in order to achieve uniformity. Each speech sample was about 45 seconds long.

Participants

There were 122 NESs living in the United States participating in this study as raters. All raters were at least 18 years of age and reported having normal hearing capabilities. Regional and gender information about each participant were collected to ensure that an even number of men and women answered the survey and that there was an equal number of participants from each region. Participants were distributed nearly equally in five different regions of the country: the Northwest, the Southwest, the Northeast, the Southeast, and the Midwest. The effect of these NES variables on their ratings, however, were not included in the focus of this study since the results of the original study conducted by Roberts (2013) suggested that region, age, and gender

had no bearing on ratings.

Materials

To summarize the description of the speech samples previously given, there were six recordings of English sentences produced by the Spanish L1 speakers and six recordings of English sentences produced by the Chinese L1 speakers for a total of 12 recordings. Each recording was about 45 seconds long, and each group of recordings featured variations in proficiency level. All recordings were collected from BYU's Winter 2014 Level Achievement Test archive. For the specific recordings retrieved, each student spoke based on the same prompt. Each recording was rated by trained raters to be at a certain proficiency level. The proficiency levels determined by the raters were assumed to be each student's true proficiency level for the purposes of this study.

An electronic survey and consent form, shown in Appendices A and B, were devised to be completed by rating participants, the NES listeners. The survey featured the recordings previously mentioned. After listening to each recording, listeners rated how comfortable they would feel interacting with the NNESs featured in the recordings in specific communication situations. The listeners were also asked open-response questions requesting more information about the ratings they gave (i.e. the reasons for their ratings).

The communication situations were chosen based on the results presented in Roberts's (2013) study on which this study expanded. Roberts's results showed that of the ten communication situations given to the listeners, only four were significantly different. The ten communication situations in Roberts's study are presented in Table 3.

Table 3

Communication Situations in Roberts's (2013) Study

Situation #	Situation in question form as presented in survey
	Question stem: Please indicate how comfortable or uncomfortable you would feel participating in the following situations (in English):
1	having a casual conversation in English with this speaker for at least 10 minutes
2	speaking with this person in English for at least 10 minutes about a topic on which you have some strongly held views (such as religion or current events)
3	inviting this person to a social gathering at your home, such as a barbecue or birthday party
4	ordering food from this person at a restaurant
5	asking this person for help at a grocery or department store
6	discussing a customer service issue with this person over the phone (example: a customer service call center)
7	having this person as a boss or supervisor who you had to communicate with on a daily basis
8	talking to this person during your lunch break if they were your coworker
9	working with this person one-on-one to complete a project or task at work
10	working on a committee together that requires you to communicate often (several times a week) with this person

In order to make this study more manageable, only six of Roberts's (2013) communication situations were used. Four of the chosen situations were the situations that Roberts found to have statistically significant influence on NES comfort ratings. Those four situations are represented by numbers 1, 2, 3, and 4 in Table 4. Although they did not have statistical significance in Roberts's study, the situations represented by numbers 5 and 6 were

also used in this study in order to provide a broader range of types of situations. The

communication situations were chosen based on their formal or informal natures, such as work

circumstances or casual social situations. The six chosen communication situations are shown in

Table 4.

Table 4

Communication Situations Used in Present Study

Situation #	Situation in question form as presented in survey
	Question stem: Use the slider to indicate how comfortable or uncomfortable you would feel participating in the following situations (in English):
1	inviting this person to a social gathering at your home, such as a barbecue or birthday party
2	talking to this person during your lunch break if they were your coworker
3	working on a committee together that requires you to communicate several times a week
4	asking this person for help at a grocery or department store
5	discussing a customer service issue with this person over the phone (example: a customer service call center)
6	having this person as a boss or supervisor who you had to communicate with on a daily basis

Roberts's (2013) results suggest that situations involving either work, customer service,

or being around friends and family have the most significant impact on comfort in interactions

between NESs and NNESs. The first communication situation asks listeners how comfortable

they would feel interacting with NNESs around their friends and family. The fourth and fifth

communication situations ask listeners how comfortable they would feel interacting with NNESs

in customer service (i.e. the NNES is the customer service representative). The second, third, and sixth communication situations ask listeners how comfortable they would feel interacting with NNESs in work environments. Roberts's results only revealed how proficiency level affected the comfort levels in each of these communication situations. The present study also investigated how L1 background affects the comfort levels in each of these situations.

Procedure and analysis

The electronic survey was created using Qualtrics, an electronic survey tool (http://qualtrics.com). The survey was distributed by Qualtrics to participants across the United States who are paid by Qualtrics to complete surveys. Participants listened to the recordings, which were presented to them in a random order, and rated their level of comfort if they were to interact with the speakers in the recordings in various situations on a scale from 0 to 10, with 0 signifying that they would feel least comfortable interacting with a certain speaker and 10 signifying that they would feel most comfortable interacting with a certain speaker. After giving their comfort ratings, listeners were asked to elaborate on the reasons for their low ratings (i.e. if they reported they would feel uncomfortable or less comfortable interacting with a featured speaker).

In order to ensure the most valid and highest quality responses, attention filters were placed within the survey to screen for conscientious and accurate responses. During the survey, participants were asked to choose specific ratings to demonstrate that they were paying attention and were not just randomly choosing ratings in an attempt to finish the survey as quickly and effortlessly as possible. For example, some participants might have decided to not listen to a recording and then selected arbitrary comfort ratings that therefore did not reflect their true

feelings. An attention filter then asked those participants to choose a specific comfort rating

such as 10. If the participants chose a rating other than 10, they were determined to not have

been paying full attention, and their ratings were determined to be inaccurate portrayals of their

true feelings. The participants who did not fulfill the requirements of these attention filters were

not included in the final results of the survey because the validity of their responses could not be

determined. Although more than 500 participants answered the survey, only 122 proved that

they were actually paying attention throughout the survey and were thus selected to be part of the

study.

Upon completion of the entire survey, the comfort ratings of the participants were

gathered and categorized in order to answer each research question. First, the comfort ratings for

each level of proficiency were examined in order to determine if proficiency level has an effect

on the comfort of NESs interacting with NNESs. Then, the comfort ratings for each L1

background were examined in order to determine if L1 background has an effect on the comfort

of NESs interacting with NNESs. Finally, the comfort ratings for each circumstance were

examined in order to determine if situation has an effect on the comfort of NESs interacting with

NNESs.

The open-response questions asking listeners to explain their low comfort ratings

provided qualitative data and insight, but analysis of these responses is beyond the scope of this

study and will not be explicitly discussed or reported.

Variables

There were four variables that were accounted for and measured in this study. Table 5

lists and describes each of these variables.

Table 5

Dependent and Independent Variables in this Study

Variable Name	Description	Type
Listener (NES) ratings	Listeners' ratings of their level of comfort interacting with speaker (on a scale of 0-10)	Dependent
Speaker (NNES) proficiency level	Speakers' approximate proficiency level, based on the ELC's LAT scores	Independent
Speaker (NNES) L1 background	Speakers' native language, either Spanish or Chinese	Independent
Communication situations	Hypothetical communication and interaction settings that listeners rated their level of comfort participating in with the NNES. These situations are described in detail in Table 3	Independent

Statistical analysis

The dependent variable score, the NES listener ratings, was analyzed using mixed models analysis of variance. The independent variables were the proficiency level of the NNES speakers, the L1s of the NNES speakers, and the communication situations. The independent variables were analyzed separately and interactively. That is, the interaction between NNES proficiency level and NNES L1, between NNES proficiency level and communication situation, between NNES L1 and communication situation, and among all three variables were examined in addition to the separate results of each variable. The analysis was blocked on participant to account for the multiple scores on each subject. Statistically significant effects were retained in the model. Where interactions were significant, the main effects were retained in the model. Post hoc Tukey adjusted pairwise comparisons were performed on the variables retained in the model. An alpha of 0.05 was used to determine statistical significance. All analyses were performed in SAS Proc Mixed, version 9.3 (SAS Inc, Cary, NC).

Chapter 4: Results

The results of the procedure and analysis described in Chapter 3 are presented and organized by research question. The three research questions investigated in this study, which were described in Chapter 1, were:

1. Do the comfort levels of NESs vary depending on the proficiency level of NNESs?

2. Do the comfort levels of NESs vary depending on the L1 backgrounds of NNESs?

3. Do the comfort levels of NESs when interacting with NNESs of varying L1 backgrounds and proficiency levels change depending on communication situation?

Research question 1: Effect of speaker proficiency level on listener comfort ratings

The first research question focused on the proficiency levels with which NESs feel the most comfortable interacting. The proficiency levels of the speakers were categorized as either Low, Mid, or High proficiency. The mean ratings and standard error for each proficiency level are presented in Table 6.

Table 6

Mean Listener Ratings Across Proficiency Levels

Speaker proficiency level	Mean rating across all situations and L1s	Standard error
Low	3.59	.055
Mid	5.84	.053
High	6.27	.050

Note: Means are adjusted for L1 and situation. Levels are statistically significantly different.

A mixed models analysis of variance revealed a statistically significant difference among the three proficiency levels (F=90.22, p=<.0001). Post hoc Tukey test results showed that the Mid proficiency level was given a significantly higher comfort rating than the Low level (p=<.0001) and that the High level was given a significantly higher comfort rating than the Mid level (p=.0003) and the Low level (p=<.0001).

Research question 2: Effect of speaker L1 background on listener comfort ratings

The second research question focused on the L1 backgrounds with which NESs feel the most comfortable interacting regardless of proficiency level or communication situations. The L1s of the speakers were either Spanish or Chinese. The mean ratings and standard error for each L1 are presented in Table 7.

Table 7

Mean Listener Ratings Across L1 Backgrounds

Speaker L1 background	Mean rating across all proficiency levels and situations	Standard error
Spanish	5.39	.047
Chinese	4.88	.046

Note: Means are adjusted for proficiency levels and situations. L1s are statistically significantly different.

A mixed models analysis of variance revealed a statistically significant difference between the L1s (F=7.97, p=0.0049). Spanish speakers were rated significantly higher than Chinese speakers.

The effect of L1 backgrounds on proficiency level comfort ratings was also investigated. The mean ratings and standard error across all L1 backgrounds and proficiency levels are

presented in Table 8.

Table 8

Mean Listener Ratings Across Proficiency Levels and L1s

Speaker proficiency level	Speaker L1 background	Mean rating across all situations	Standard error
Low	Spanish	2.92	.216
Low	Chinese	3.47	.216
Mid	Spanish	5.74	.216
Mid	Chinese	4.70	.216
High	Spanish	6.50	.216
High	Chinese	5.50	.216

Note: Means are adjusted for situation. The interaction between proficiency and L1s is statistically significantly different.

A mixed models analysis of variance revealed a statistically significant interaction effect for proficiency level and L1 (F=9.08, p=0.0001). Although Spanish speakers were given higher comfort ratings than Chinese speakers in general, the results of the mixed models analysis in Table 8 show that Chinese Low speakers were rated higher than the Spanish Low speakers. Spanish Mid speakers were rated higher than the Chinese Mid Speakers, and Spanish High speakers were rated higher than the Chinese High speakers. Further, not only were the Spanish Mid speakers rated higher than the Chinese Mid speakers, but they were also rated higher than the Chinese High speakers.

Research question 3: Effect of communication situation on listener comfort ratings

The third research question focused on the communication situations in which NESs feel

the most comfortable interacting with NNESs.

Communication situation ratings. A mixed models analysis of variance revealed a

statistically significant difference among the six communication situations (F=185.14, p=<.0001).

The mean ratings and standard error for each communication situation are presented in Table 9.

Table 9

Mean Listener Ratings Across Situation (Sorted From Highest Rating to Lowest)

Situation #	Abbreviated situation descriptor	Mean rating	Standard error
2	Coworker	5.92	.077
1	Home Invite	5.62	.077
4	Asking for help in person (grocery store)	5.34	.081
3	Committee	5.02	.078
5	Customer service over the phone	4.59	.079
6	Boss	4.32	.080

Note: Means are adjusted for proficiency level and L1. Situations are
statistically significantly different.

Table 9 shows that the Coworker situation was given the highest comfort rating followed

by the Home Invite situation, the Grocery Store situation, the Committee situation, the Customer

Service situation, and the Boss situation respectfully.

Pairwise comparisons between situation p-values are presented in Table 10.

Table 10

Pairwise Comparison of Post Hoc Tukey Adjusted P-Values Across Situations

Situation #	Situation #	Adj. p-values
Home Invite	Coworker	<.0001
	Committee	<.0001
	Grocery Store	<.0001
	Customer Service	<.0001
	Boss	<.0001
Coworker	Committee	<.0001
	Grocery Store	<.0001
	Customer Service	<.0001
	Boss	<.0001
Committee	Grocery Store	<.0001
	Customer Service	<.0001
	Boss	<.0001
Grocery Store	Customer Service	<.0001
	Boss	<.0001
Customer Service	Boss	<.0001

Note: Means used to discover adjusted p-values were adjusted for proficiency level and L1. Situations are statistically significantly different.

Effect of L1 and level on situation ratings.   The effect of the interaction between proficiency level and L1 on the comfort ratings of each situation were also investigated. A mixed models analysis of variance did not reveal a statistically significant difference among the interactions between all three categories (F=1.04, p=.4051). That is, each situation demonstrated the same trends in the ratings given to speakers according to their proficiency levels and L1s.

The mean ratings and standard error across all L1s and situations are presented in Table 11.

Table 11

Mean Listener Ratings Across Situations and L1s

Situation #	Abbreviated situation descriptor	Speaker L1 background	Mean rating	Standard error
1	Home Invite	Spanish	5.87	.170
		Chinese	5.38	.170
2	Coworker	Spanish	6.19	.170
		Chinese	5.63	.170
3	Committee	Spanish	5.25	.170
		Chinese	4.78	.170
4	Asking for help in person (grocery store)	Spanish	5.60	.170
		Chinese	5.08	.170
5	Customer service over the phone	Spanish	4.84	.170
		Chinese	4.34	.170
6	Boss	Spanish	4.57	.170
		Chinese	4.08	.170

Note: Means are adjusted for proficiency level. The interaction between situation and L1 is not statistically significant.

A graphical representation of the data in Table 11 is shown in Figure 1.

The results from the mixed models analysis of variance revealed that the interaction between situation and L1 is not statistically significant (F=.07, p=.9968). That is, each situation showed the same trend in comfort ratings regardless of L1, and vice versa. In each situation, according to Table 11 and Figure 1, the speakers who had Spanish as their L1 were given higher comfort ratings than the speakers who had Chinese as their L1.
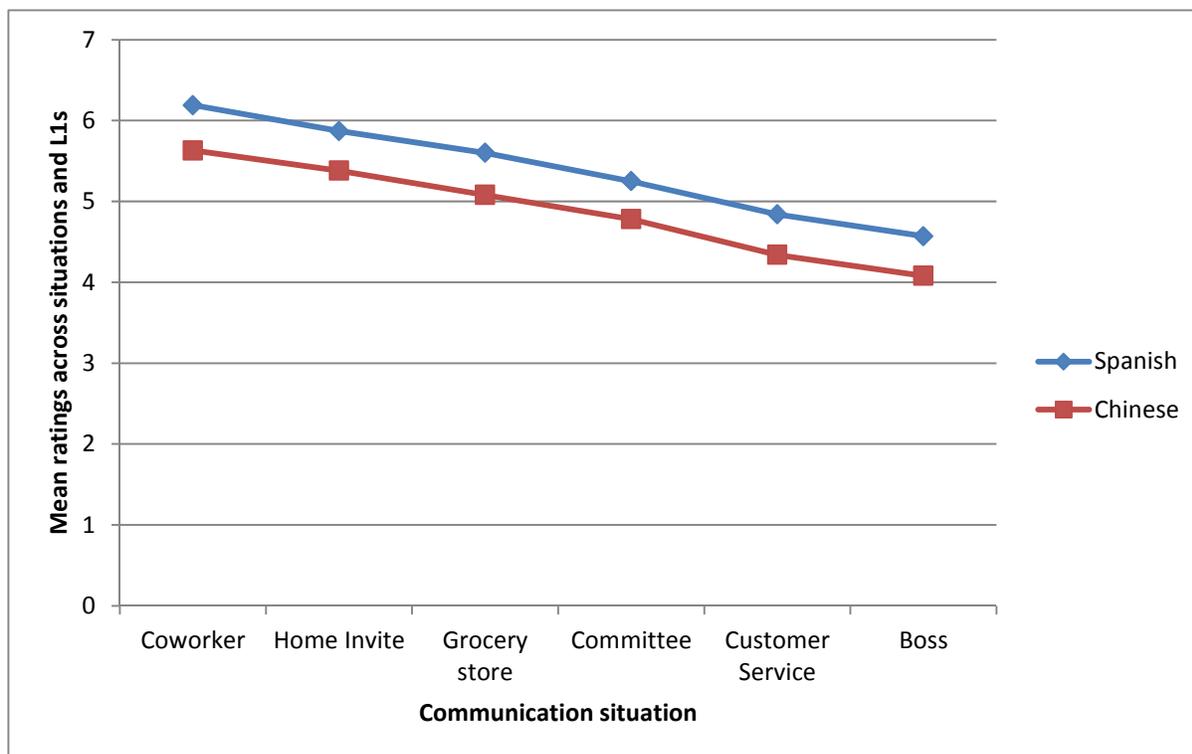
Figure 1. Mean listener ratings across situations and L1s. The interaction between situations and L1s is not statistically significant.

The mean ratings and standard error across all proficiency levels and situations are presented in Table 12. A graphical representation of the data in Table 12 is shown in Figure 2.

The results from the mixed models analysis of variance revealed that the interaction between situation and proficiency level is not statistically significant (F=1.21, p=.2792). That is, each situation showed the same trend in comfort ratings regardless of proficiency level, and vice versa. For each situation, according to Table 12 and Figure 2, comfort ratings increased as the proficiency level increased. High speakers received higher comfort ratings than Mid speakers who in turn received higher comfort ratings than Low speakers.

Table 12

Mean Listener Ratings Across Situations and Proficiency Levels

Situation #	Abbreviated situation descriptor	Speaker proficiency level	Mean rating	Standard error
1	Home Invite	Low	4.07	.180
		Mid	6.09	.180
		High	6.71	.180
2	Coworker	Low	4.34	.180
		Mid	6.39	.180
		High	7.02	.180
3	Committee	Low	3.42	.180
		Mid	5.42	.180
		High	6.21	.180
4	Asking for help in person (grocery store)	Low	3.73	.180
		Mid	5.79	.180
		High	6.52	.180
5	Customer service over the phone	Low	3.05	.180
		Mid	4.99	.180
		High	5.73	.180
6	Boss	Low	2.91	.180
		Mid	4.64	.180
		High	5.42	.180

Note: Means are adjusted for L1. The interaction between situation and proficiency level is not statistically significant.
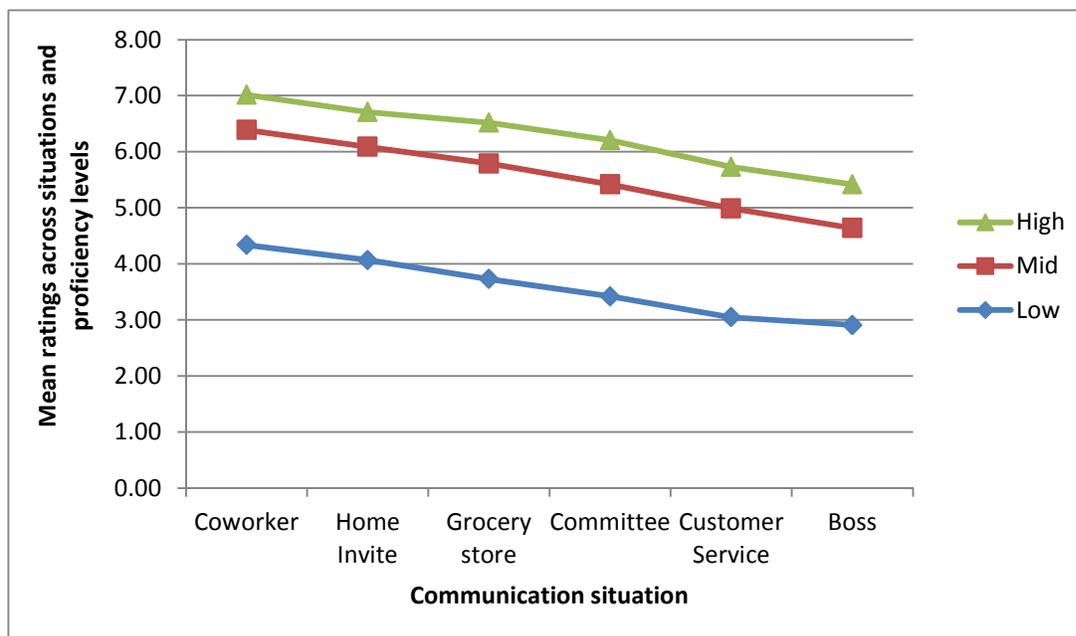
Figure 2. Mean listener ratings across situations and proficiency levels. The interaction between situations and proficiency levels is not statistically significant.

The results from the mixed models analysis of variance revealed that the interaction between situation and proficiency level is not statistically significant (F=1.21, p=.2792). That is, each situation showed the same trend in comfort ratings regardless of proficiency level, and vice versa. For each situation, according to Table 12 and Figure 2, comfort ratings increased as the proficiency level increased. High speakers received higher comfort ratings than Mid speakers who in turn received higher comfort ratings than Low speakers.

The mean ratings and standard error across all L1s, proficiency levels, and situations are presented in Table 13. A graphical representation of the data in Table 13 is shown in Figure 3.

According to Table 13 and Figure 3, Chinese low speakers received higher ratings than all Spanish low speakers in each situation, but Spanish Mid and Spanish High speakers received higher ratings than Chinese Mid and Chinese High speakers in each situation. Although Spanish

Novice speakers received the lowest comfort ratings, Spanish Mid and High speakers both

received higher ratings than Chinese High speakers.

Table 13

Mean Listener Ratings Across Situations, L1s, and Proficiency Levels

Situation #	Abbreviated situation descriptor	Speaker proficiency level	Speaker L1 background	Mean rating	Standard error
1	Home Invite	Low	Spanish	3.61	.243
		Low	Chinese	3.87	.243
		Mid	Spanish	6.30	.243
		Mid	Chinese	5.31	.243
		High	Spanish	6.88	.243
		High	Chinese	6.09	.243
2	Customer service over the phone	Low	Spanish	2.25	.243
		Low	Chinese	2.99	.243
		Mid	Spanish	5.20	.243
		Mid	Chinese	4.05	.243
		High	Spanish	6.01	.243
		High	Chinese	4.91	.243
3	Committee	Low	Spanish	2.72	.243
		Low	Chinese	3.34	.243
		Mid	Spanish	5.60	.243
		Mid	Chinese	4.56	.243
		High	Spanish	6.46	.243
		High	Chinese	5.44	.243

Table 13 (cont.)

Mean Listener Ratings Across Situations, L1s, and Proficiency Levels

Situation #	Abbreviated situation descriptor	Speaker proficiency level	Speaker L1 background	Mean rating	Standard error
4	Boss	Low	Spanish	2.12	.243
		Low	Chinese	2.81	.243
		Mid	Spanish	4.62	.243
		Mid	Chinese	3.75	.243
		High	Spanish	5.62	.243
		High	Chinese	4.44	.243
5	Coworker	Low	Spanish	3.82	.243
		Low	Chinese	4.22	.243
		Mid	Spanish	6.69	.243
		Mid	Chinese	5.60	.243
		High	Spanish	7.27	.243
		High	Chinese	6.36	.243
6	Asking for help in person (grocery store)	Low	Spanish	3.01	.243
		Low	Chinese	3.60	.243
		Mid	Spanish	6.03	.243
		Mid	Chinese	4.96	.243
		High	Spanish	6.74	.243
		High	Chinese	5.73	.243

Note: The interaction among situations, proficiency levels, and L1s is not statistically significantly different.
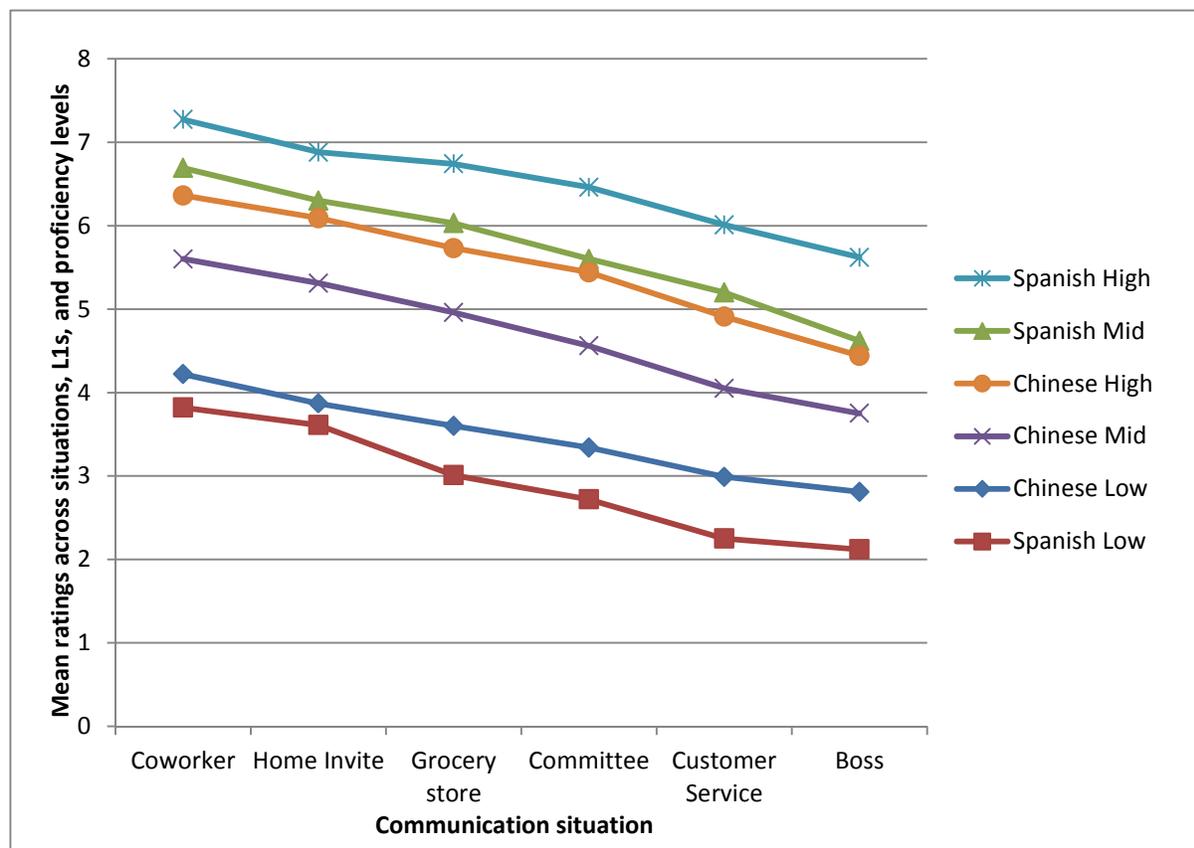
Figure 3. Mean listener ratings across situations, L1s, and proficiency levels. This three-way interaction is not statistically significant.

Other results

Listener demographics were collected in this study, but because Roberts's study suggested that listener variables had no significant effect on comfort ratings, the effect of the variables were not directly investigated in this study. The listener demographics collected were age, gender, and region. According to the statistical analysis, gender and region had no significant influence on comfort ratings. The higher ages, however, did appear to have a significant effect on ratings. That is, listeners over the age of 66 rated the NNES speakers significantly lower than all other age ranges ((F=5.96, p=<.0001) except for the age range of 56-

65. These results will not be discussed since the research design of this study does not cover

them, but it is interesting to note and can perhaps be further investigated in future research.

Chapter 5: Discussion

The results presented in Chapter 4 are interpreted and discussed in this chapter. Implications, limitations, and suggestions for future expansions on the present study are also included in this discussion.

Research question 1: Effect of speaker proficiency level on listener comfort ratings

The results indicate that the Mid speakers were given significantly higher comfort ratings than the Low speakers, and High speakers were given significantly higher comfort ratings than Mid and Low speakers. In other words, higher comfort ratings correlated with higher proficiency levels, suggesting that NESs are more comfortable interacting with NNESs with higher English proficiency than NNESs with lower English proficiency. This does not necessarily mean that the NES listeners would be comfortable interacting with the High NNESs or uncomfortable interacting with the Low NNESs but that the NES listeners would be more comfortable interacting with the High NNESs over the Mid and Low NNESs and more comfortable interacting with the Mid NNESs over the Low NNESs.

The proficiency levels of each NNES speaker in this study were determined by trained raters at BYU according to a standardized rubric presented in Appendix D using the NNESs' LAT scores. Of the three proficiency levels, it can be suggested that the High proficiency level is most similar to native English proficiency while the Low proficiency level is least similar to native English proficiency. The preference for higher proficiency over lower proficiency could be due to the ease of comprehensibility being greatest for High proficiency as the BYU ELC speaking rubric shown in Appendix D suggests. NESs might therefore have an easier time conversing with NNESs with higher English proficiency thus making NESs more comfortable

interacting with High proficiency NNESs over Mid and Low NNESs and more comfortable interacting with Mid NNESs over Low NNESs.

Research question 2: Effect of speaker L1 background on listener comfort ratings

The results indicate that speakers with Spanish as their L1 were given significantly higher comfort ratings than speakers with Chinese as their L1. The Spanish High speakers were rated higher than the Chinese High speakers, and the Spanish Mid speakers were rated higher than the Chinese Mid speakers. It is interesting to note that the Spanish Mid speakers were also rated higher than the Chinese High speakers, suggesting a strong preference for Spanish L1 backgrounds over Chinese L1 backgrounds. Despite this strong preference at the Mid and High levels, however, the Spanish Low speakers actually scored lower than the Chinese Low speakers. This suggests that at lower levels of proficiency, NESs prefer to interact with Chinese NNESs over Spanish NNESs, and at higher levels of proficiency, NESs prefer to interact with Spanish NNESs over Chinese NNESs.

The preference for Chinese Low speakers over Spanish Low speakers could be due to the current bias against Mexican immigration in the U.S. in that American NESs are hostile toward illegal Mexican immigrants (Espenshade, 1995; Alarcón & Heyman, 2013; Fernández, 2013), and about a quarter of these illegal immigrants do not speak English very well (Ryan, 2013). The preference for Spanish Mid and High speakers over Chinese Mid and High speakers, on the other hand, could be due to the familiarity American NESs have with Spanish speakers over Chinese speakers in that there are far more Spanish L1 immigrants in the U.S. than there are Chinese L1 immigrants (Ryan, 2013). Therefore, American NESs are more familiar with Spanish L1 accented English and thus might be more comfortable with hearing it and

understanding it over Chinese L1 accented English. Another possible explanation is that Spanish

is more linguistically similar to English than Chinese is (Defense Language Institute, 2015).

Therefore, Spanish L1-accented English may be easier for American NESs to comprehend.

Research question 3: Effect of communication situation on listener comfort ratings

        Communication situation ratings. The results indicate that the Coworker situation was

given the highest comfort rating followed by the Home Invite situation, the Grocery Store

situation, the Committee situation, the Customer Service situation, and the Boss situation.

According to the mixed models analysis, all situations had significantly different ratings from

one another, which suggests that the specific circumstance in which an interaction with an NNES

occurs has a strong bearing on the comfort level of the NES engaging in the interaction.

Specifically, the results suggest that NESs are more comfortable interacting with NNESs in more

casual encounters (i.e. the Home Invite situation and the Coworker situation) than in service or

work encounters (i.e. the Grocery Store situation, the Committee situation, the Customer Service

situation, and the Boss situation). This could be due to the informal nature of the casual

encounters versus the formal nature of the service or work encounters. The informal encounters

do not necessarily require clear, coherent, or complex communication; they are generally relaxed,

so even NNESs of lower proficiency can still engage in these interactions successfully. The

formal encounters, however, often do require clear, coherent, and complex communication, and

NNESs are less likely than NESs to be able to successfully engage in these communicative

interactions simply due to English being their foreign language rather than native language.

        It is interesting to note that both of the work situations, the Coworker situation and the

Boss situation, received ratings on the opposite ends of the scale (i.e. the Coworker situation

received the highest rating while the Boss situation received the lowest rating). This suggests that NESs would be significantly more comfortable working with NNESs as colleagues of equal status than they would be working with NNESs in superior positions. Further, although the Coworker situation was related to a work situation, the situation itself was considered to be informal because interaction with the NNES as a coworker would have occurred during a lunch break and may or may not have involved work-related discussions at all.

The Customer Service situation received the second lowest comfort ratings. This suggests that NESs are less comfortable having NNESs giving them instructions or assistance. This could be because good customer service relies on clear and precise communication, and NNESs are less likely to provide that high level of communication.

Effect of L1 on situation ratings. In each situation, the Spanish speakers were rated higher than the Chinese speakers. The preference for Spanish L1 over Chinese L1 could be due to the greater familiarity American NESs have with Spanish speakers over Chinese speakers in that there are far more Spanish L1 immigrants in the U.S. than there are Chinese L1 immigrants (Ryan, 2013). American NESs are therefore more accustomed to hearing Spanish L1 accented English and thus might be more comfortable with Spanish speakers over Chinese speakers regardless of the situations in which they encounter the Spanish or Chinese NNESs. This preference could also possibly be explained by Spanish being more linguistically similar to English than Chinese is (Defense Language Institute, 2015).

Effect of proficiency level on situation ratings. In each situation, comfort ratings increased as the proficiency level of the featured speaker increased. High speakers received higher comfort ratings than Mid speakers who in turn received higher comfort ratings than Low speakers. Like the potential explanation for preference for higher proficiency over lower

proficiency given previously, this could be due to higher proficiency English being closer to native English proficiency than lower proficiency English. NESs might therefore have an easier time understanding and conversing with NNESs with higher proficiency English thus making NESs more comfortable interacting with High NNESs over Mid and Low NNESs and more comfortable interacting with Mid NNESs over Low NNESs.

Effect of L1 and proficiency level on situation ratings. The results indicate that in each situation, Chinese Low speakers received higher ratings than Spanish Low speakers. However, Spanish Mid speakers received higher ratings than Chinese Mid speakers, and Spanish High speakers received higher ratings than Chinese High speakers in each situation. Further, Spanish Mid speakers received higher ratings than Chinese High speakers in each situation. Like the potential explanation given previously for Spanish Low speakers in general receiving lower ratings than Chinese Low speakers in general, the preference for Chinese Low speakers over Spanish Low speakers in each situation could be due to the current bias against Mexican immigration in the U.S. in that American NESs are hostile toward illegal Mexican immigrants (Espenshade, 1995; Alarcón & Heyman, 2013; Fernández, 2013), and about a quarter of these illegal immigrants do not speak English very well (Ryan, 2013). The preference for Spanish Mid and High speakers over Chinese Mid and High speakers in each situation could be due to the familiarity American NESs have with Spanish speakers over Chinese speakers in that there are far more Spanish L1 immigrants in the U.S. than there are Chinese L1 immigrants (Ryan, 2013). Therefore, American NESs are more familiar with Spanish L1 accented English and thus might be more comfortable with hearing it and understanding it over Chinese L1 accented English. Another possible explanation is that Spanish is linguistically closer to English than Chinese is (Defense Language Institute, 2015).

Despite the preference for the Chinese Low speakers over the Spanish Low speakers in each situation, the Spanish speakers in general were given significantly higher comfort ratings in each situation than the Chinese speakers in general as mentioned previously. This could overall be attributed to the familiarity Americans have with Spanish-speaking immigrants over Chinese-speaking immigrants (Ryan, 2013) or that Spanish is linguistically closer to English than Chinese is (Defense Language Institute, 2015).

Summary. Although each communication situation had significantly different comfort ratings for each speaker, L1 and proficiency level appeared to have the same influence on the comfort ratings for each situation. This suggests that regardless of the circumstances in which an interaction with an NNES occurs, the proficiency level and L1 of the NNES are perhaps the more prominent factors.

Differences in results from the replicated study

This study was a replication and expansion of a research study conducted by Alison Roberts in 2013. The expanded procedure of this study yielded new results beyond what the original study offered due to the inclusion of L1 backgrounds which did not exist in the original study. The directly replicated parts of the procedure produced different results than what was reported in Roberts's original research. Most notably, Roberts reported that there were no significant differences between the comfort ratings given to the Mid speakers and the comfort ratings given to the High speakers. Roberts concluded that this indicated a possible threshold level of comfort at the Mid levels. In the present study, there was indeed a significant difference between the comfort ratings of the Mid and High speakers in that High speakers were given significantly higher ratings than the Mid speakers. This may indicate a higher threshold level of

comfort than what Roberts concluded.

These differences could possibly be explained by the greater number of speech samples included in the present study compared to the number used in Roberts's (2013) study. This study used 12 speech samples while Roberts only used seven samples—therefore, the present study featured four speakers from each proficiency level while Roberts's study only featured two speakers from each proficiency level. Furthermore, the speech samples in the present study were longer than Roberts's samples. The greater number of and length of samples may have allowed for clearer or more obvious differences in ratings between each level.

Implications

The results of the analysis performed have several implications for the goals that English learners should set for themselves in order to increase the comfort level of NESs interacting with them.

For learners with Spanish L1. Low NNESs with Spanish L1 received the lowest comfort ratings out of all of the L1 and proficiency level groups in all communication situations. It can then be suggested that English learners who have Spanish as their L1 have a greater need than learners who have Chinese as their L1 to progress beyond the Low level of English proficiency in order to make American NESs most comfortable interacting with them. English learners with Spanish L1 should therefore set goals that enable and encourage them to reach levels beyond Low. Because Mid and High NNESs with Spanish L1 received the highest comfort ratings of all of the L1 and proficiency level groups, learners with Spanish L1 do not necessarily have as high a need as Chinese L1 speakers to set goals to become more proficient than Mid. Other factors, such as communication situation situations in which learners with Spanish L1 anticipate being in

most often, must be taken into account by Spanish L1 learners when deciding what proficiency goals to set.

For learners with Chinese L1. Both Mid and High NNESs with Chinese L1 received lower comfort ratings than Mid NNESs with Spanish L1 in all communication situations. It can then be suggested that English learners who have Chinese as their L1 have a greater need than learners who have Spanish as their L1 to be at a High level of English proficiency in order to achieve the highest possible levels of comfort in American NESs interacting with them. English learners with Chinese L1 should therefore set goals that enable and encourage them to reach a High level of proficiency. Other factors, such as communication situation situations in which learners with Chinese L1 anticipate being in most often, should also be taken into account when determining appropriate proficiency level, but generally, Chinese L1 learners of English have a greater need than Spanish L1 learners of English to become highly proficient.

For learners in customer service or authoritative positions. The communication situations that received the lowest ratings were the Customer Service situation and the Boss situation. This suggests that learners of English who intend to be in circumstances which require them to give instructions, assistance, or orders to NESs have a higher need to be of more advanced proficiency in English and should set goals that enable and encourage them to reach more advanced levels.

For learners in formal work situations. The communication situations that received the second lowest ratings were the Grocery Store situation and the Committee situation. This suggests that learners of English who intend to seek employment that requires them to work with NESs have a higher need to be beyond a Low level of proficiency. The need to reach a High level of proficiency further depends on what kind of employment learners seek (i.e., customer

service aiding NESs or authoritative positions over NESs). Learners intending to be employed among NESs should therefore set goals that will enable and encourage them to reach at least a Mid level of proficiency.

For learners in casual interactive work or home situations. The communication situations that received the highest ratings were the Coworker situation and the Home Invite situation. This suggests that learners of English who intend to interact with NESs in only casual or informal situations have a lower need to progress beyond a Low level of English proficiency. This does not mean that learners engaging in only casual communication situations have no need at all to become highly proficient at English. Such learners should weigh their true need to become highly proficient when setting their language goals.

It should be noted that these implications only provide small pieces of information that may help learners develop their language goals. Further expansion and investigation is needed in order to fully understand how comfort level of NESs interacting with NNESs is influenced by NNES variables and thus provide learners with more complete information as to how to establish optimal learning goals related to communicating successfully with NESs.

Limitations

Although care was taken to maximize the validity of this study, some limitations do exist.

Sampling. In order to make the scope of the study more manageable, all NNESs were female to control for any biases in listener ratings toward one gender or the other. All NNESs were also from only two L1 backgrounds, Spanish and Chinese. This affects the generalizability of the results, since ratings may have differed for male speakers or speakers of other L1 backgrounds.

The selection of listeners was from a panel of participants who are paid to take Qualtrics surveys. Although Qualtrics aimed to provide a quality selection of listeners from across the country, there was limited control on the part of the researchers over the selection of listeners in the study. The researchers set the parameters for gender, region, and age of the participants, but no other controls for possible intervening variables were included, and data concerning such variables were not collected. The selection of listeners therefore may not be representative of the native English speaking population in the United States.

Survey instrument. Ratings were not independent of each other; that is, listeners rated all speakers and so may have been affected by perceptions of the preceding speakers when rating. Sound clips of speakers were presented in a random order to listeners in order to minimize this effect, but listeners may have rated each speaker differently if they were heard in isolation.

The amount of time that listeners had to spend on the survey was not controlled. Listeners were free to use as much time as they needed to rate each sound clip. They were also free to listen to each sound clip as many times as they wanted. Because listeners would have considerably less processing time in a genuine encounter with an NNES and would be less able to ask the NNES to repeat himself as many times as desired, the authenticity of this study may be negatively affected.

Data was limited to the preset responses from which listeners could choose. Although listeners were able to give open responses explaining their reasons for their chosen comfort levels, these responses were not within the scope of this study. The results of this study rely on the assumption that the scale on which listeners chose their comfort ratings is reliably indicative of the listeners' true comfort levels.

Self-reported data. All data was self-reported by the listening participants in this study.

Potential caveats to this type of data collection include the halo effect (i.e., participants report what they think the researcher wants to hear) and perceptual distortions (i.e., participants report how they *think* they would feel when interacting with the speakers, but their reports may not reflect how they would actually feel) (Mackey & Gass, 2005). This may have affected the validity of the data.

Personality of NNES speakers. In any conversation, the personality of a conversation partner often has an effect on the comfort of the other conversation partner interacting with the first (Chauhan & Chauhan, 2006; Fulmer, Gelfand, Kruglanski, Kim-Prieto, Diener, Pierro, & Higgins, 2010). This is perhaps no different in a conversation between an NES and an NNES in that the personality of the NNES may have an effect on how comfortable the NES feels interacting with the NNES. Although listeners did comment that personality influenced their ratings, the effect of this variable was not specifically investigated.

Suggestions for future research

While this study was an expansion on previously existing research, the results and limitations of this study could provide many ideas for even further expansion.

Speaker variables. Future research could include both male and female speakers. Speakers could also be from a larger variety of L1 backgrounds and proficiency levels. This would provide insight as to how gender, more L1 backgrounds, and more proficiency levels affect the comfort level of NESs interacting with NNESs.

Procedure. Instead of data being collected through a survey, data could be collected through observation of NESs and NNESs interacting with each other. After a controlled interaction, NESs could then be asked to rate their level of comfort interacting with a specific

NNES. This could increase the validity of the NES comfort ratings since NES participants would have more authentic encounters on which to base their judgments.

Qualitative approach. Due to the intended scope of the study, an analysis of listeners' open responses explaining their comfort ratings could not be completed. Future research could focus on qualitatively analyzing these explanations and discussing any trends. This could provide insight as to why NESs feel more or less comfortable in certain interactions with NNESs which may include NES attitudes toward specific L1 backgrounds or NNES personality variables.

Conclusion

The number of NNESs living in the United States is increasing everyday (Lee & Bean, 2007; MacDonald & Sampson, 2012), but their need to learn English remains strong considering the *de facto* status of English in the United States (Ryan, 2013). NNESs in the United States must learn English in order to successfully reside and flourish (Derwing & Munro, 2009; Newman, Hartman, & Taber, 2012). Interacting with NESs is a large part of daily living for NNESs in the United States, so NNESs must not only learn English but learn it well enough to create and maintain successful communication with NESs.

As the existence of many ESL programs in the United States might suggest, learning English as an L2 is an overwhelming undertaking (Harmer, 2007; Ortega, 2009). Further, English language learning is not an identical process for each learner, since learners come from different backgrounds and circumstances and have different needs for learning a new language. An essential part of English language learning is determining the unique goals that an individual learner must set (Eppler & Harju, 1997; Seijts & Latham, 2005; Harmer, 2007; Myers, 2008; Jansen, Bartell, & Berk, 2009). Different situations which learners anticipate being in call for

different language skills and proficiencies. To make English language learning optimally

manageable, learners must assert minimal effort for maximum results, which requires them to

determine what aspects of English are most beneficial to them. Recognizing their individual

needs as English learners, however, can also be an overwhelming task.

 In order to inform the establishment of appropriate language goals for English learners,

this study investigated factors and situations that maximize the comfort level of NESs interacting

with NNESs. The purpose was to determine how proficiency level (Low, Mid, or High) of

English affects the comfort level of NESs, how L1 (Spanish or Chinese) affects the comfort level

of NESs, and how communication situations (informal or formal) affect the comfort level of

NESs.

 Participants were 122 NESs across the United States who reported their level of comfort

interacting with 12 NNESs of varying proficiency levels and L1 backgrounds. NNESs were

either of Low, Mid, or High proficiency and spoke either Spanish or Chinese as their L1. NES

participants were asked to rate how comfortable they would feel interacting with NNESs in six

different communication situations (two informal situations and four formal situations).

 The results indicated that NESs reported they would feel most comfortable interacting

with High NNESs and least comfortable interacting with Low NNESs. Of the two L1s, NESs

gave higher comfort ratings to Spanish L1 NNESs over Chinese L1 NNESs. Upon combination

of the two variables, however, NESs gave higher comfort ratings to Chinese Low speakers over

Spanish Low speakers. Despite this preference at the lower level, both Spanish Mid and High

speakers received significantly higher comfort ratings than Chinese High speakers. These

preferences trended similarly in ratings for each communication situation, but the formal

situations, especially the Boss and Customer service situations, received significantly lower

comfort ratings than the informal situations.

The implications of these results are that Chinese L1 learners of English have a higher need to reach a High level of proficiency while Spanish L1 learners of English have a higher need to go beyond a Low level of proficiency. The circumstances which a learner anticipates encountering most often also have a strong bearing on English learners' language needs because learners who intend to seek employment or interact with NESs in formal situations have a higher need to attain a higher level of proficiency than do learners who intend to only interact with NESs in casual situations. Understanding these influences and how they relate to learners as individuals could assist learners in their establishment of appropriate English language learning goals.

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Appendix A

Implied consent

My name is Kayla Nymeyer, and I am a graduate student at Brigham Young University. I am conducting this research under the supervision of Dan P. Dewey PhD from the Department of Linguistics. You are being invited to participate in this research study because you are a native English speaker. I am interested in investigating interactions between native and non-native English speakers.

Your participation in this study will require the completion of this electronic survey. This should take approximately 15-30 minutes of your time. Your participation will be anonymous and you will not be contacted again in the future. You will receive monetary compensation, an amount which will be decided by Qualtrics, for participating in this study. This survey involves minimal risk to you. The benefits, however, may impact society by helping increase knowledge about interactions between native and non-native English speakers.

You do not have to be in this study if you do not want to be. You do not have to answer any questions that you do not want to answer for any reason. We will be happy to answer any questions you have about this study. If you have further questions about this project or if you have a research-related problem, you may contact me, Kayla Nymeyer, at kaylanymeyer@gmail.com or my advisor, Dan P. Dewey PhD, at ddewey@byu.edu.

If you have any questions about your rights as a research participant you may contact the IRB Administrator at A-285 ASB, Brigham Young University, Provo, UT 84602; irb@byu.edu; (801) 422-1461. The IRB is a group of people who review research studies to protect the rights and welfare of research participants.

The completion of this survey implies your consent to participate. If you choose to participate, please continue to the next page and complete the survey. Thank-you!

Appendix B

Survey questions

Q1 I have read and understand the above consent form and desire of my own free will to participate in this study.
○ Yes
○ No

Q2 Are you a native English speaker?
○ Yes
○ No

Q3 What is your gender?
○ Female
○ Male

Q4 What is your age range?
○ 17 and under
○ 18-25
○ 26-35
○ 36-45
○ 46-55
○ 56-65
○ 66 +

Q5 Please select the state in which you currently reside:
○ Alabama (AL)
○ Alaska (AK)
○ Arizona (AZ)
○ Arkansas (AR)
○ California (CA)
○ Colorado (CO)
○ Connecticut (CT)
○ Delaware (DE)
○ Florida (FL)
○ Georgia (GA)
○ Hawaii (HI)
○ Idaho (ID)
○ Illinois (IL)
○ Indiana (IN)
○ Iowa (IA)
○ Kansas (KS)
○ Kentucky (KY)
○ Louisiana (LA)
○ Maine (ME)

- ⭘ Maryland (MD)
- ⭘ Massachusetts (MA)
- ⭘ Michigan (MI)
- ⭘ Minnesota (MN)
- ⭘ Mississippi (MS)
- ⭘ Missouri (MO)
- ⭘ Montana (MT)
- ⭘ Nebraska (NE)
- ⭘ Nevada (NV)
- ⭘ New Hampshire (NH)
- ⭘ New Jersey (NJ)
- ⭘ New Mexico (NM)
- ⭘ New York (NY)
- ⭘ North Carolina (NC)
- ⭘ North Dakota (ND)
- ⭘ Ohio (OH)
- ⭘ Oklahoma (OK)
- ⭘ Oregon (OR)
- ⭘ Pennsylvania (PA)
- ⭘ Rhode Island (RI)
- ⭘ South Carolina (SC)
- ⭘ South Dakota (SD)
- ⭘ Tennessee (TN)
- ⭘ Texas (TX)
- ⭘ Utah (UT)
- ⭘ Vermont (VT)
- ⭘ Virginia (VA)
- ⭘ Washington (WA)
- ⭘ West Virginia (WV)
- ⭘ Wisconsin (WI)
- ⭘ Wyoming (WY)

Q6 Do you have normal hearing capabilities?
- ⭘ Yes
- ⭘ No

Q7 You will listen to a total of 12 sound clips. Each clip is 45 seconds long. In each sound clip, the speaker is describing what her personality and interests were when she was in high school. This is the first sound clip. Listen to the sound clip and answer the questions below. (The sound clip is presented in two formats, MP3 and WAV, in order to be compatible with most computers. You only need to listen to one of the options)
Use the slider to indicate how comfortable or uncomfortable you would feel participating in the following situations (in English):

	Very Uncomfortable								Very Comfortable		
	0	1	2	3	4	5	6	7	8	9	10
inviting this person to a social gathering at your home, such as a barbecue or birthday party											
discussing a customer service issue with this person over the phone (example: a customer service call center)											
working on a committee together that requires you to communicate several times a week											
having this person as a boss or supervisor who you had to communicate with on a daily basis											
talking to this person during your lunch break if they were your co-worker											
asking this person for help at a grocery or department store											

Q8: Did you have any problems with the sound file? (Select all that apply)
- ❑ Sound clip did not play
- ❑ Sound clip was too quiet
- ❑ I had no problems with the sound clip

Q9 – Q30: These questions have the same format and wording as Q8 and Q9 (for each respective sound clip).

Q31: If you answered that you would feel uncomfortable (or less comfortable) interacting with one or more of the speakers in certain tasks or situations, what was it about their speech that made you feel uncomfortable (or less comfortable)?

Appendix C

Speaking prompt

Describe your interests and personality when you were in high school. How were you different? How are you the same? What events have happened between then and now?

You have 15 SECONDS to prepare your answer and 45 SECONDS to speak.

Appendix D

BYU'S ELC speaking rubric

Available at (http://elc.byu.edu/teacher/skill_areas/LS/index.php)

Level	Text Type	Content	Accuracy
	• Fluency • Development • Organization	• Functional Ability with the Language (Abstract vs. Concrete or Self-centric Language) • Vocabulary	• Grammar & Verb Tense • Communication Strategies • Native-like Comprehensibility
7—ready for university courses **(Advanced Mid)**	Exemplified speaking on a paragraph level rather than isolated phrases or strings of sentences. Highly organized argument (transitions, conclusion, etc.). Speaker explains the outline of topic and follows it through.	• Discusses some topics abstractly (areas of interest or specific field of study); • Better with a variety of concrete topics; • Appropriate use of a variety in academic and non-academic vocabulary;	• Grammar errors are extremely rare, if they occur at all; wide range of structures in all time frames; • Able to compensate for deficiencies by use of communicative strategies—paraphrasing, circumlocution, illustration—such that deficiencies are unnoticeable; • Readily understood by native speakers unaccustomed to non-native speakers;
6—ready for	Fairly organized	• Can speak	• Grammar errors

Academic C **(Advanced Low)**	paragraph-like speech with appropriate discourse markers (transitions, conclusion, etc.) Will not be as organized as level 7, but meaning is clear.	comfortably with concrete topics, and discuss a few topics abstractly; • Academic vocabulary often used appropriately in speech;	are infrequent and do not affect comprehension; no apparent sign of grammatical avoidance; • Able to speak in all major time frames, but lacks complete control of aspect; • Often able to successfully use compensation strategies to convey meaning; • Easy to understand by native speakers unaccustomed to non-native speakers
5—ready for Academic B **(Intermediate High)**	Simple paragraph length discourse with sustained, though possibly formulaic, discourse markers that help maintain some organization.	• Able to comfortably handle all uncomplicated tasks relating to routine or daily events and personal interests and experiences; • Some hesitation may occur when dealing with more complicated tasks; • Uses a moderate amount of academic vocabulary;	• Uses a variety of time frames and structures; however, speaker may avoid more complex structures; • Error patterns may be evident, but errors do not distort meaning; • Exhibits break-down with more advanced tasks—i.e. failure to use circumlocution, significant hesitation, etc. • Understood by native speakers unaccustomed to dealing with non-natives, but 1st language is evident;
4—ready for Academic A	Uses moderate-length sentences with simple transitions to connect	• Able to handle a variety of uncomplicated	• Strong command of basic structures; error patterns with

(Intermediate Mid)	ideas. Sentences may be strung together, but may not work together as cohesive paragraphs.	tasks with concrete meaning; • Expresses meaning by creating and/or combining concrete and predictable elements of the language; • Uses sparse academic vocabulary appropriately;	complex grammar; • Frequent use of compensation strategies with varied success; • Generally understood by sympathetic speakers accustomed to speaking with non-natives;
3—ready for Foundations C **(Intermediate Low)**	Able to express personal meaning by using simple, but complete, sentences they know or hear from native speakers.	• Able to successfully handle a limited number of uncomplicated tasks; • Concrete exchanges and predictable topics necessary for everyday life without unexpected complications; • Highly varied general vocabulary;	• Errors are not uncommon and sometimes obscure meaning; • Limited range of sentence structure; • Characterized by ineffective reformulations and self-corrections; • Generally understood by speakers used to dealing with non-natives, but requires more effort;
2—ready for Foundations B	Short and sometimes incomplete sentences.	• Restricted to a few of the predictable topics necessary	• Attempt to create simple sentences, but errors predominate and

(Novice High)		for survival (basic personal information, basic objects, preferences, and immediate needs) • Relies heavily on learned phrases or recombination of phrases and what they hear from interlocutor; • Limited general vocabulary	distort meaning; • Avoids using complex structures. • Speaker's 1st language strongly influences syntax; • Generally understood by sympathetic speakers used to non-natives with repetition and rephrasing;
1—ready for Foundations A **(Novice Mid)**	Isolated words and memorized phrases.	• Relies almost solely on formulaic/memorized language; • Two or three word answers in responding to questions; • Very limited context for vocabulary;	• Communicate minimally and with difficulty; • Frequent pausing, recycling their own or interlocutor's words; • Resort to repetition, words from their native language, or silence if task is too difficult; • Understood with great difficulty even by those used to dealing with non-natives
0—ready for Foundations prep **(Novice Low)**	Isolated words.	• No real functional ability; • Given enough time and familiar	• Cannot participate in true conversational exchange; • Length of speaking

	cues, may be able to exchange greetings, give their identity and name a number of familiar objects from their immediate environment;	sample may be insufficient to assess accuracy; • Nearly incomprehensible even by those used to dealing with non-natives