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Perceptions of English Proficiency Levels:

The Unspoken Expectations of

Native English Speakers

Alison Divett Roberts

A thesis submitted to the faculty of
Brigham Young University
in partial fulfillment of the requirements for the degree of

Master of Arts

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ABSTRACT

Perceptions of English Proficiency Levels:
The Unspoken Expectations of
Native English Speakers

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Master of Arts

This study investigates the relationship between nonnative English speaker (NNES) proficiency level and native English speaker (NES) level of comfort interacting with NNES. The purpose of this study was to discover at what proficiency level NESs feel comfortable interacting with NNES. This study also looked at how communicative task and NES demographic variables affected the proficiency expectations NNESs have for NESs.

Participants included 120 NESs and 7 NNESs. The NESs listened to sound clips from the 7 NNESs and rated how comfortable they would feel (on a scale of 0-10, 10 indicating very comfortable) interacting with the speaker in a variety of communication tasks. Listeners rated intermediate and advanced level speakers significantly higher than the novice speakers. Additionally, there was not a significant difference between mean ratings for the intermediate and advanced speakers. Communication task was revealed as having a significant main effect on task. Listeners rated that they would feel least comfortable communicating with the speakers over the phone while discussing a customer service issue. They also indicated that they would feel least comfortable interacting with the speakers if they were their boss. Listener demographic variables did not have a significant main effect on overall ratings, but were significant for some tasks when task was analyzed individually. Specifically, age and frequency of interaction with NNES had an effect on some tasks; however the reliability of this result is affected by sample size.

These results suggest a threshold relationship between NES comfort ratings and speaker proficiency level. Additionally, the data suggests that task may be more important than proficiency level in some interactions. A larger sample is needed to better understand the role NES demographic variables may play in level of comfort during NES and NNES interaction.

Keywords: immigrants, English proficiency, interaction, proficiency judgments, proficiency level, NES, NNES, native nonnative speaker communication, nonnative speech

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Table of Contents

ABSTRACT ii
ACKNOWLEDGEMENTS iii
Table of Contents iv
Index of Tables vii
Index of Figures viii
Chapter 1: Introduction 1
Immigration and the US 1
Immigrant Language Attainment 2
Toward a Threshold Proficiency Level 3
Research Questions 4
Chapter 2: Review of literature 6
The Pidginization Hypothesis and Social Distance 6
Role of universal influences. 7
Schumann's recent updates 8
More recent research. 9
Social Integration and Interaction 10
Social integration 10
Social interaction 12
NES Perceptions of NNES Proficiency 14
Public knowledge about language acquisition and proficiency. 14
NES judgments of nonnative speech. 15
Summary 17
Chapter 3: Research Design 19
Participants 19
Listeners. 19
Speakers. 21
Materials 22
Speech samples. 22
Survey. 24
Procedure 27
Data collection. 27
Data Analysis. 28

Chapter 4: Results 30
Research Question 1: Effect of speaker proficiency level on listener comfort ratings. 30
Research Question 2: Effect of communication task on mean ratings 31
Research Question 3: Effect of listener variables on mean ratings 36
Task 1: Casual conversation for at least 10 minutes 37
Task 2: Conversation on a topic that you have a strongly held view on 40
Task 4: Ordering food at a restaurant. 41
Task 6: Customer service over the phone. 42
Task 7: Boss. 43
Task 8: Coworker 43
Chapter 5: Discussion 44
Research Question 1: Effect of speaker proficiency level on listener comfort ratings. 44
Research Question 2: Effect of communication task on mean ratings 46
Task 6: Customer service over the phone 46
Task 7: Having this person as your boss 48
Tasks with the highest average ratings 49
Research Question 3: Effect of listener variables on mean ratings 49
Age range. 50
Experiences with NNESs 50
Implications 51
Relationship between NES comfort level and NNES proficiency level. 51
Study abroad students and intensive English schools in the US 54
Importance of task 54
Employers. 55
ESP classes 55
Community ESL programs. 56
Limitations 56
Sampling 56
Survey instrument 56
Self-Report data. 57
Listener's attitudes toward NNESs. 57
Personality and motivation as moderating variables 57
Suggestions for Future Research 58
Conclusion 58

References 61
Appendix A 66
Appendix B 75
Appendix C 76
Appendix D 80

Index of Tables

Table 1 Comparison of ACTFL Proficiency Levels and ELC LAT Speaking Scores for the Speakers 23
Table 2 Speaker LAT Proficiency Scores, Group Classification, and Approximate ACTFL Equivalency 23
Table 3 Communication Tasks 26
Table 4 Dependent and Independent Variables 28
Table 5 Mean Listener Ratings across Proficiency Levels 31
Table 6 Mean Ratings across Task for all Proficiency Levels 32
Table 7 Pairwise Comparison of Post Hoc Tukey Adjusted P-values across Tasks 33
Table 8 Mean Ratings and Standard Error for Task across Proficiency Levels 35
Table 9 Mean Ratings across Age Ranges for Task One 37
Table 10 Pairwise Comparison of Post Hoc Tukey Adjusted P-values across Age Ranges for Task One 38
Table 11 Mean Ratings across NNES Interaction Categories for Task One 39
Table 12 Pairwise Comparison of Post Hoc Tukey Adjusted P-values across NNES Interaction Categories for Task one 39
Table 13 Mean Ratings across NNES Interaction Categories for Task Two 40
Table 14 Pairwise Comparison of Post Hoc Tukey Adjusted P-values across NNES Interaction Categories for Task two 41
Table 15 Mean Ratings across Age Range for Task Four 42
Table 16 Pairwise Comparison of Post Hoc Tukey Adjusted P-values across Age Ranges for Task Four 42
Table 17 Differences between Average Group Proficiency Scores 45
Table 18 Effects of listener variables on mean ratings 80

Index of Figures

Figure 1. Mean Ratings across Tasks and Proficiency Levels..... 36
Figure 2. Representation of Binary Relationship between Speaker Proficiency Level and Listener Comfort Level..... 52
Figure 3. Representation of Direct Linear Relationship between Speaker Proficiency and Listener Comfort..... 53
Figure 4. Threshold Relationship between Speaker Proficiency and Listener Comfort..... 54

Chapter 1: Introduction

Immigration and the US

Immigration has been an issue in the United States since its foundation, often causing periodic conflict. Each new group of immigrants interacts with an already assimilated core population that reacts to the newcomers in various ways. Recent immigrants have met many of the same negative attitudes as other immigrant groups, including fears about their willingness and ability to integrate linguistically (Barkan, Kraut, & Diner, 2007). Possibly as a result of these public fears, politicians are also concerned with the rate and level of English language attainment of nonnative speaking immigrants. This is evidenced by English proficiency requirements in even the most "pro-immigrant" and bipartisan legislation (S. 744, 2013). Low English proficiency levels, or perceived low proficiency levels, can make sections of the dominant population uneasy and lead to anti-immigrant public opinion, legislation, and language policy that perpetuate the isolation of this group (Dickers, 2003).

As of 2011, the US was home to more immigrants than any other country in the world (40.4 million). This number is more than three times higher than that of Russia, the country with the second largest population of immigrants, at 12 million ("A Nation of Immigrants," 2013) . These numbers illustrate the United States' unique situation as "the world's leader . . . as a destination for immigrants" ("A Nation of Immigrants," 2013, p. 2) and the fact that it cannot afford to ignore that immigrant English language attainment levels are shaping experiences between native English speakers (NESs) and nonnative English speakers (NNESs) and ultimately affecting immigrant social integration (Xue, 2007; Jimenez, 2011; Derwing & Waugh, 2012).

Immigrant Language Attainment

NNES immigrants often see gains in their target language proficiency during the first few years they live in the US. They may quickly develop Basic Interpersonal Communication Skills (BICS) (Cummins, 1994) such as greetings, asking for directions, small talk, and other frequent and formulaic social interaction skills. After a few years, the rate at which they acquire the target language often plateaus (Hamilton, 2001; Dicker, 2003). Error fossilization (long-lasting, habitual errors) frequently takes place and a "pidginization" (a simplified, low level, linguistic proficiency) of the target language occurs (Schumann, 1974).

Pidginization is seen as the result of the learner's social and psychological distance from speakers of the target language (Schumann, 1976a). According to Schumann's pidginization hypothesis, the learner's community, rather than the learner, has the greatest amount of control over ultimate language attainment levels. The proficiency level that the learner will acquire is directly related to the degree that they are integrated into the target language group (Schumann, 1986). This suggests that there is a dependent relationship between language proficiency and integration and that ultimate language attainment levels may be controlled by the amount of interaction NESs are willing to have with NNESs.

It is important to note that Schumann's pidginization hypothesis represents one theory of adult second language acquisition. There are a number of "universal influences" (social, educational, environmental, cognitive, psychological, biological and emotional) that affect language acquisition (Ortega, 2009, p. 9) .

Toward a Threshold Proficiency Level

NESs can feel uncomfortable interacting with NNESs who have a low English proficiency level (Derwing & Munro, 2009). As a result of this feeling of discomfort, it is possible that unless an immigrant is already at an acceptable level of English proficiency, they are much less likely to find NESs willing to interact with them. Lack of interaction opportunities could negatively impact the immigrant's ability to integrate linguistically into the target language society, which would reduce opportunities to continue to develop higher levels of English proficiency and prevent them from experiencing the benefits of integration. The level to which an immigrant is able to participate in the target language society is dictated by their level of proficiency in the target language (Masgoret & Gardner, 1999). However, there is little research that informs on what an acceptable threshold level of proficiency might be.

The American Council on Teaching Foreign Languages (ACTFL) attempts to address this issue in their Oral Proficiency Interview rubric. A speaker receiving an advanced rating on their scale should be "understood without difficulty by speakers unaccustomed to dealing with nonnative speakers" (ACTFL, 2012). Most often, English proficiency is presented as a binary option; NNES are either able to speak English or they are not. If degrees of proficiency are brought into the discussion, they are described in vague terms, such as "speaks English well or somewhat well" (Portes & Rumbaut, 2006, p. 222), "achieves an understanding of English" (S. 744, 2013, p. 103), has a "heavy accent" (Lindemann, 2011, p. 224) , or has a "rudimentary knowledge of English" (Derwing & Waugh, 2012, p. 4). The ambiguity of these proficiency descriptors does little to inform on the proficiency expectations of NESs.

In addition, these descriptors also neglect how proficiency expectations may change depending on communication task. It is probable that NES proficiency expectations differ

depending on situation, owing to the fact that even NESs adjust their registers in different environments. Furthermore, there is also the possibility that NES demographic variables, including age and gender, affect expectations. As well, NES that habitually interact with NNES could be more sympathetic and thus have lower proficiency expectations. These variables add another facet to proficiency expectations that needs to be studied.

Research on this expectations differential is needed to inform both language policy makers and society on how to avoid situations that prevent NNESs from integrating into the dominant society and experiencing the accompanying social, educational, and economic benefits. A more concrete and explicit understanding of NES proficiency expectations for NNES is necessary to avoid confusion and facilitate interaction.

Research Questions

This study will attempt to discover at what oral proficiency level NESs feel most comfortable interacting with NNESs. Central questions the study will address include:

1) What proficiency level do NNESs need to achieve in order for NESs to report that they feel comfortable interacting with them?
2) Do NES proficiency expectations for NNESs change depending on communication task?
3) Do NES proficiency expectations for NNESs change based on NES demographic variables?

A closer look at these questions is essential to understand how to better involve NNES adults in English speaking society, which could in turn allow them to develop English language skills at a more advanced level and receive the benefits that accompany social integration.

Chapter 2: Review of literature

This chapter reports on the theories, topics, and studies that provide the basis for the rationale of this study. This chapter is divided into three main sections. First, Schumann's Pidginization Hypothesis and adjacent research will be examined in more detail. Second, integration and interaction will be defined and discussed within the context of how both topics interface with language proficiency. Third, current research on how NNES proficiency levels are perceived by NESs will be outlined.

The Pidginization Hypothesis and Social Distance

Pidginization is the creation of a contact vernacular that arises for the purposes of simplified and limited communication between two linguistically different groups. In 1976, Schumann stated that "pidginization is the result of a learner's social and psychological distance from the speakers of a target language" (p. 263). This assertion was in part the result of a study of the language learning experience of a 33-year-old Costa Rican immigrant named Alberto. Alberto had lived in Boston for more than one year but was unable to improve beyond basic English skills, even after attending individualized English instruction. Alberto's linguistic proficiency had stagnated and pidginized, producing an interlanguage that was simplified and reduced.

Schumann developed his Pidginization Hypothesis by viewing Alberto's case study through the lens of Smith (1972), who described language as ultimately having three functions: communicative (transmission or referential, denotative information), integrative (language that marks a speaker as a member of a social group), and expressive (linguistic ability that elevates them to an admired member of the community, such as an author or poet). While this may be an overly simplistic view of language utility, a closer look at the communicative and integrative

functions can provide information about how and why pidginization occurs. While many communicative tasks can be completed without linguistic accuracy, integrative communication requires the use of standard linguistic features in order for the speaker to sound approximately like a member of the target language group. As such, a NNES who can only use the communicative function (like Alberto) will produce a pidginized and restricted version of the target language and will not be accepted as an integrated member of the dominant linguistic community (Schumann, 1976a). In turn, this distance from the target language community will further remove the speaker from opportunities to develop language skills. Schumann (1976a) summarized his findings by stating the following:

> Restriction in function can be seen as resulting from social and or psychological distance between the speaker and the addressee . . . the speech of the second language learner will be restricted to the communicative function if the learner is socially distant from the speakers of the target language. (p. 396)

The assumption is that the greater the social distance that exists between the NES and NNES, the more difficult it will be for the NNES to acquire English. This can become somewhat of a paradox for NNESs. Their language ability prohibits full integrative communication; however, interaction with the target language community is needed to develop integrative communication. High levels of language acquisition are near impossible to achieve while a large social distance exists (Schumann, 1976b).

Role of universal influences. It is important to note that there are a number of "universal influences" (social, educational, environmental, cognitive, psychological, biological and emotional) that affect language acquisition (Ortega, 2009, p. 9) . "Willingness to communicate"

(how willing a second language learner is to seek out opportunities to use the L2) on the immigrant's part is also a key factor in language acquisition (MacIntyre, 2007) . Additionally, Schmidt (1983) found that closing the social distance gap is not enough to ensure acquisition if the learner did not learn to monitor and notice errors. Moreover, the linguistic relationship of the L1 and target language (how linguistically different the two languages are from each other) plays a role in rate and ultimate attainment levels (Derwing & Munro, 2009). In addition, Krashen's input hypothesis theorized that input must be comprehensible (accessible to the language learner by not being too far above their current proficiency level) in order for the learner to benefit from the exposure (Krashen, 1980). The role these influences play in language acquisition cannot be ignored; however they are not the focus of this study.

Schumann's recent updates. Schumann has updated and expanded his theories about language acquisition and social distance over the past 35-40 years. Recently, he connected his research on the evolutionary neurobiology of language acquisition (language acquisition as a biological phenomenon) with his theories on social distance. This research is presented in a coauthored book that discusses a view of language acquisition that takes into account an evolutionary drive to interact with others, or an "interactional instinct" (Lee, Mikesell, Joaquin, Mates, & Schumann, 2009, p. 5) . In this book he presents what he calls a "social behavior feedback loop." He argues that language is dependent on social bonds and vice versa. "Social behaviors and social bonds exist in reciprocal relationship. Social behaviors help to form social bonds, and social bonds often motivate social behaviors. Language is a social behavior" (p. 167).

Even more recently, Schumann addressed how society has attempted to respond to the difficulties faced by adult second language learners. Schumann (2013) outlines 11 strategies societies employ to manage these difficulties (developing lingua francas, forming sprachbunds or

areal languages, practicing exogenous marriage, undergoing language shift, learning the target language imperfectly, developing a pidgin or creole, shifting the language burden to young children, relying on talented learners, developing the art and practice of translation, developing machine transation, and providing instruction). However, he posits that none of these strategies have actually solved the "problem" of adult language learners, but instead, society has merely "coped with it" (p. 191). He concludes with the opinion that "humans are a both monolingual and multilingual species, and it is the way social contexts interact with motivation/attachment, ability/aptitude, and opportunity that produces either a monolingual or a bilingual human" (p. 191). This publication highlights the fact that much research is still needed to inform on social contexts that impede and facilitate adult L2 acquisition.

More recent research. Schumann's social distance and language acquisition theories have been applied in more recent linguistic studies, usually within the context of interaction, social distance, and language proficiency. Masgoret and Gardner (1999) found a positive correlation between increased contact and interaction with NESs and higher English proficiency levels among Spanish immigrants in Canada. A 2009 study of Chinese immigrants to Canada indicated a strong relationship between social closeness with the target language group and higher English proficiency levels (Jiang, Green, Henley, & Masten, 2009). Research also indicates that an increased proficiency level correlates with NNES ability to adjust to the target culture (Kang, 2006) . These studies create a connection between language proficiency, social distance, and interaction with the target language group that Schumann introduced in his original hypothesis.

Social Integration and Interaction

Schumann's research provided a rationale for investigating the effect language proficiency has on social closeness between the language learner and target language group. In this section, two important aspects of social closeness will be discussed: integration and interaction.

Social integration. Jimenez (2011) provides a manageable definition of integration:

> In effect, integration is a culmination of everyday interactions between and among immigrant newcomers and host communities. Integration is also an endpoint reached when individuals only minimally perceive themselves and others in ethnoracial and national terms, when these attributes have, at most, a negligible negative impact on opportunities and life chances. (p. 4)

The term "integration" is used in contrast to "assimilation", a term that usually refers to a minority group's loss of language, culture and identity due to pressure from the dominant group (Berry, 1980; Kraut et al., 2007) . Integration allows for multiculturalism and additive bilingualism. Integration is usually the preferred form of interaction between dominant and non-dominant groups because it can help prevent negative attitudes on the side of the non-dominant group, which attitudes can be detrimental to language acquisition. Also, immigrants who adopt an integrative view of acculturation (the adoption of the behavior patterns of the surrounding culture) may have higher overall proficiency levels than learners who adopt an assimilative mode of acculturation (Masgoret & Gardner, 1999).

***Language skills and social integration*.** In a report titled "Language Skills and the Social Integration of Canada's Adult Immigrants," Derwing & Waugh (2012) cite "racism,

ethnocultural residential concentration and institutional barriers in the health care and education system" (p. 4) as a few of the many factors that can affect the social integration of immigrants. The authors go on to argue that basic language abilities are the most fundamental skills required for integration; however, they are not able to define how proficient an immigrant would need to be:

> There is also an underlying assumption that, for an immigrant to be socially integrated in Canadian society, he or she must be relatively proficient in an official language. The federal Language Instruction for Newcomers to Canada (LINC) is based on the premise that at least a rudimentary knowledge of an official language is central to integration. (p. 4)

The assumption that low linguistic proficiency is a barrier to integration is also supported by Xue (2007) who studied the social integration of 7,700 immigrants to Canada. Xue found that four years after arriving in Canada, immigrants still reported that the "lack of knowledge of one of Canada's official languages was the most serious problem faced by refugees and other economic immigrants (25% and 22% respectively)" (p. 7).

If immigrants are frustrated by their perceived proficiency levels, as Xue's study suggests, then it is possible that native speakers in the country also feel some level of frustration, and these frustration levels could be affecting integration. The benefits of an immigrant's ability to integrate into the dominant society scaffold one another. For example, as linguistic integration improves, education and socioeconomic opportunities improve. Socioeconomic status correlates strongly with intermarriage, which provides access to the dominant society and thus more benefits associated with that connection (Jimenez, 2011).

For most immigrant groups, "full integration is taking more than one generation" (Jimenez, 2011, p. 6). While it is encouraging that integration is possible for second and third generation immigrants, it highlights the fact that first generation immigrants are not receiving the same social and economic benefits that their children will. A better understanding of how integration is affected by language proficiency could decrease the amount of time required to integrate.

Social interaction. Integration is a "culmination of interaction" (Jimenez, 2011, p. 4), and like integration, interaction provides many social and economic benefits. In 1973, Granovetter wrote "The Strength of Weak Ties" which discussed the importance of casual acquaintances in a social system. "Weak ties", or acquaintances, have the power to bridge social networks and provide members of separate communities access to the benefits of another social group. These benefits can include connections to employment opportunities, accelerated spread of information, new ideas and perspectives, and increased political involvement. As people are most likely to create close relationships with those who are most similar to themselves, these acquaintance bridges, or weak ties, between communities connect people who are significantly different from one another (Granovetter, 1983).

Language acquisition can be affected by the development of these acquaintance relationships: "Linguistic change is slow to the extent that the relevant populations are well established and bound by strong ties, whereas it is rapid to the extent that weak ties exist in the population" (Milroy & Milroy, 1985, p. 375). It is possible that if weak ties are fostered between NES and NNES communities through interaction, that language acquisition could be facilitated.

Social interaction and language acquisition. Gareis, Merkin, and Goldman (2011) studied 127 NNES students studying abroad in the US to discover correlations between the number and strength of American friendships, the participants willingness to communicate and their proficiency level. They did not find a significant correlation between willingness to communicate in English and number of American friendships. This suggests that these learners' communities had greater control over their opportunities to create friendship and use language than the learners did. This supports Schumann's 1976 theory that it is the learner's community, rather than the learner, that has the greatest control over ultimate language attainment levels. In addition, the researchers found a positive relationship between number of American friendships, strength of American friendships, and English proficiency. This suggests that proficiency may be a more important variable than willingness to communicate in the development of intercultural friendships.

Hernandez (2010) studied the effect of interaction on oral proficiency gains in a study abroad context. He tested the hypothesis that integrative motivation (wanting to acquire the language in order to interact with members of the target language society) would foster L2 acquisition. Participants were NES university students from the US enrolled in a semester long study abroad in Spain who had at least four semesters of Spanish instruction and did not speak Spanish at home. Pre and post simulated oral proficiency interviews (SOPI) were administered. Using a modified version of the Language Contact Profile created by Freed, Dewey, Segalowitz, and Halter (2004), students reported their level of interaction with the L2 culture. A regression analysis showed that "student interaction with L2 culture was a significant factor in language improvement, accounting for 48% of the variance of pretest to posttest SOPI gains" (p. 606).

There are significant differences between study abroad participants and immigrants in the US, including constraints on time, amount of classroom instruction, and average age. However, these results provide interesting insight into the possible connection between the amount of time spent interacting with the target language group and oral proficiency gains. Additionally, these studies illustrate the important role NESs may play in the interaction opportunities available to NNES.

NES Perceptions of NNES Proficiency

As with any type of communication, interactions between NESs and NNESs require cooperation from both parties. In this section, current research on how NES perceive nonnative speech and the effect this may have on interaction between the two groups is discussed.

Public knowledge about language acquisition and proficiency. As a whole, people in the United States are generally uninformed or ill-informed about language acquisition processes. Dicker (2003) suggests that this could be caused by the fact that "Americans rarely need to acquire proficiency in a second language, [so] they find it difficult to understand why recent immigrants struggle so much with learning English" (p. 83). As many Americans are generations removed from their immigrant ancestors, it is easy for someone to imagine their great-grandparents mastering English quickly and by choice. This belief juxtaposed with the reality of millions of immigrants learning English in the US today, can make people skeptical about NNESs' willingness to learn English and create a feeling of impatience with current NNES proficiency levels, perhaps even fostering unrealistic expectations for NNESs.

Adding to public unawareness of language acquisition processes and realities is the fact that despite the large amount of research on the topic, findings are rarely communicated to the

general public (Dicker, 2003). Research on language acquisition is not reported in newspapers as often as research from other fields. When information is communicated to the public, it is often presented with a bias that is at best caused by a misunderstanding of the complexities of second language acquisition and at worst used as a means to promote a specific political platform (Santa Ana, 2002; "The Candidate from Xenophobia," 2010) .

NES judgments of nonnative speech. In general, listeners are highly sensitive to nonnative speech in that they can distinguish a nonnative speaker from a native speaker from only a few seconds of interaction. In fact, Munro, Derwing, and Burgess (2010) found that NESs could detect nonnative speech from listening to a single word.

Beyond the recognition of nonnative speech, NESs also make judgments about the speaker. Certain native languages and foreign accents are viewed as less prestigious and are associated with negative evaluations of proficiency over more prestigious languages (Lindemann, 2005). Research has also showed a connection between low oral proficiency levels and negative personality judgments (Llurda, 1993 & 2000). It is possible that these negative judgments are affecting communication experiences between the two groups. In their research on linguistic stereotyping, Kang and Rubin (2009) stated that "NS judgments of NNS speech are notoriously biased. NS listeners often hear what they expect to hear rather than accurately perceive NNS speech. And what they expect to hear is often quite unsatisfactory" (p. 451). It is possible to assume that these negative associations with NNES could affect interaction between the two groups.

Effect on interaction. Derwing and Munro (2009) took a closer look at how interaction in the workplace is affected by perceived comprehensibility on the part of the NES. Qualitative

data revealed that NNES immigrants in the workplace were being assigned group tasks with other NNES immigrants (Immigrants from Russia and China to Canada) rather than to groups with NES coworkers. The immigrants assumed this happened because of the perceived proficiency and comprehensibility of the NNES.

Lindemann (2002) conducted a study to discover if NESs negative attitudes toward their NNES conversation partner negatively affected their ability to understand the NNES. NESs were put in partnerships with native Korean speakers and asked to complete a task that required interaction. NESs also completed an attitude measurement task to discover if they held generally positive or negative attitudes toward Koreans. All interaction between the partners was recorded and coded. Many of the NESs who reported having negative attitudes toward their NNES partner showed signs of "problematizing their partner's utterances" by "delaying or omitting acknowledgement that they have understood their NNES partner's contribution" (p. 431).

In the same study, Lindemann also found a direct relationship between NES attitude toward Korean speakers and the NES perception of how successfully they were able to accomplish the task as a pair. She found that negative attitudes toward a language group affected a listener's ability to comprehend the non-native speaker, regardless of how proficient the NNES actually was. In the study she states:

> Non-linguists typically attribute any difficulties they have in understanding a non-native speaker to that speaker's language skills. The listener's role, while clearly important, is generally ignored by those who claim that the NNS is unintelligible. The claim that a given NNS is difficult to understand often rests on the assumption that it is solely the speaker's responsibility to get her point across. (p. 419)

Derwing, Rossiter, and Munro (2002) questioned this notion by attempting to discover if it was possible to teach native speakers to listen to and understand foreign-accented speech. Specifically, they focused on the effect of cross-cultural awareness training and explicit accent instruction on attitudes toward and comprehension of nonnative speech. Participants completed listening comprehension passages with Vietnamese-accented speech before and after instruction.

Qualitative data from the study revealed that instruction increased participant's confidence in their ability to comprehend Vietnamese-accented speech. Participants reported actively having used information from the instruction to improve their comprehension. In addition, they reported an increase in empathy for and willingness to talk to people with accented speech. The authors propose that these trainings "unlocked existing ability to comprehend accented speech by reducing their fear" (256). As well, most participants strongly agreed with the statement that accent instruction could help individuals working with NNESs. The authors concluded that "students who received the accent instruction came away with a clearer sense of the immensity of the language learning task faced by L2 newcomers" (256). In sum, they found that accent instruction and cross-cultural awareness training had a strong positive effect on the NESs willingness to interact with NNESs. These findings suggest that it may be possible to relatively quickly teach NES to be more sympathetic listeners while simultaneously improving willingness to communicate between the two groups.

Summary

This chapter reported on the theories, topics, and studies that provide the basis for the rationale of this study. This study will attempt to discover the connection between NNES oral proficiency and NES level of comfort during interaction. The rationale for this study is based on research that establishes a connection between social closeness and ultimate language attainment

levels. Current research on NES perceptions of NNES proficiency were reported to provide context and reveal a gap in research. Specifically, more research is needed to inform on NES proficiency expectations for NNES and how these expectations are affecting level of comfort during interaction. A more concrete and explicit understanding of NES proficiency expectations for NNES is necessary to avoid confusion and facilitate interaction.

Chapter 3: Research Design

As mentioned in Chapter 1, the research questions for this study are three-fold:

1) What proficiency level do NNESs need to achieve in order for NES to feel comfortable interacting with them?
2) Do NES proficiency expectations for NNESs change depending on communication task?
3) Do NES proficiency expectations for NNESs change based on NES demographic variables?

This chapter reports on the methodology employed to address the research questions. Study participants, instruments, data collection, and data analysis procedures are described in detail.

Participants

Participants in this study were classified into two groups: listeners and speakers.

Listeners. Listeners in this study consisted of 120 NESs volunteers: 60 were female and 60 were male. All were native English speakers 18 years of age or older. All listeners reported normal hearing capabilities. This group of participants completed an online survey that included sound clips from the speakers. They were asked to listen to the sound clips and rate their level of comfort if they were to interact with the speakers. The survey is described in more detail in the materials section of this chapter. The complete survey is presented in Appendix A.

Whole group and sampling. Listeners in this study were randomly selected from a panel of native English speakers living inside the US who were 18 years of age or older and had access to a computer and internet connection. The population was comprised of people who had signed

up to complete surveys through a panel creation company, Survey Sampling International (www.surveysampling.com). Each person in this group had an equal chance of being sent the survey link through e-mail.

In order to achieve an equal gender split for data analysis, gender quotas were placed on the survey (60 male and 60 female complete responses). The survey was closed after 120 complete responses had been gathered. Those who were near a computer and internet connection at the time the survey was sent were more likely to have completed their response before the quotas were satisfied. This means that those who were not able to take the quiz at the time the survey link was e-mailed were much less likely to have had the chance to complete the survey before the quotas were fulfilled, and thus not be included in the final data set. Consequently, the selection of survey responses was not completely random.

Survey Sampling International (SSI) dispersed the survey electronically. SSI is the largest panel creation company in the world and serves more than 3,000 companies and research institutions worldwide, including Gallup, Inc., ("FAQs," "Our Company," 2013). SSI is regularly audited by independent third party groups, including a yearly audit by Ernst & Young, a prominent American accounting firm ("Our Company," 2013).

While SSI does not report how much each listener was paid for completing the survey, information from their website states that they attract respondents by "providing participants with customized, motivating incentives" ("Sample," 2013). The website lists the following as incentives for signing up to be available to take surveys: "Win up to $10,000 in our quarterly prize draw; earn prize draw entries every time you participate in a survey, get cash rewards and

more!" ("Join Our Panel," 2013) While these explanations of compensation are not very specific, they give a general idea into how panel participants might be reimbursed for their time.

SSI has policies and procedures in place to increase the integrity of their sampling method. They employ a data validation system that cross-checks and confirms key identity data for participants, including name, address, and date of birth. They attempt to alleviate possible participant bias by offering rewards that agree with the amount of time and work required to complete the survey. In order to determine the best ratio between reward and time spent taking surveys, "SSI conducts continuous research to understand which rewards are most effective in incenting participants while maintaining research data quality" ("Choosing the Right Mode: Online," 2013).

Other specific procedures SSI employs to maintain data integrity include:

- Digital fingerprinting (including validating IP addresses)
- Timestamps to avoid "speeders" (completing the survey quickly and without thought or attention)
- Checks to identify "straight liners" (choosing the same answer for every question)
- Quality control questions to identify inattention

Despite the actions that SSI has taken to provide a quality sample, validity issues still exist with this type of sampling technique. Possible problems with this type of sample are discussed in chapter 5.

Speakers. The speakers in this study were seven English as a Second Language (ESL) learners who were students at Brigham Young University's English Language Center (ELC) during winter semester (January to April) 2012. Speakers were chosen from a group of possible

participants because of their age, native language, gender, and proficiency level. All speakers were between the ages of 18 and 26. Speakers from a homogenous L1 were chosen to reduce judgments based on differing perceptions between languages (Lindemann, 2005). Since immigrants from Spanish-speaking countries comprise the largest group of ESL learners in the US (Jiménez, 2011), only native Spanish speakers were used in this study. To control for gender and to increase feasibility of the study, in terms of survey length, all of the speakers were female.

Materials

Materials used in this study include speech samples and an electronic survey.

Speech samples. All speech samples used in this study were collected from the 2012 winter semester Level Achievement Tests administered in April 2012 at BYU's ELC. In the speech samples the speakers described a hypothetical vacation to Disneyland based on an itinerary given to them. The prompt for this test item can be found in Appendix B. The samples were each rated by at least two trained raters (ESL teachers with a master's certificate or a master of arts in TESOL, who had attended at least two rater calibration meetings). The score given by each rater was converted to a fair average based on rater severity. The rubric used by the trained raters is available in Appendix C.

The Level Achievement Test (LAT) scores are used at the ELC to place students into levels. These scores are equated to the ACTFL Oral Proficiency Interview (OPI) guidelines in Table 1. The seven speakers included in this study are classified into four groups. For the purposes of this study they will be referred to as novice, intermediate, advanced, and discard. The novice group's proficiency scores were 2.09 and 2.13, placing them approximately at an ACTFL Novice High level. The intermediate speakers scored a 3.95 and 4.11, putting them

roughly at an Intermediate Low/Intermediate Mid-level. The most advanced speakers received a 5.11 and 5.47 score, placing them at an Intermediate High. Table 2 provides the scores for each group used in the study.

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	ELC speaking LAT Score	Average group score	Approximate ACTFL equivalency
Novice	2.09	2.11	Novice High
Novice	2.13		
Intermediate	3.95	4.03	Intermediate Mid
Intermediate	4.11		
Advanced	5.11	5.29	Intermediate High
Advanced	5.47		
Discard	4.39	4.39	Intermediate Mid

The fourth group (discard) includes only one speaker and was used for the purpose of control. The proficiency level of this speaker was 4.39, or Intermediate Mid. This speaker was presented first for each listener and was included as a means to control for listener familiarity with speaker prompt and judgment tasks, issues with volume control, and initial acclimation to

nonnative English speech. All ratings for this speaker were discarded before the data analysis. After rating this initial speaker, listeners rated the remaining six speech samples presented in random order.

In order to maintain conformity, the proficiency levels used in this study will be referred to as novice, intermediate, and advanced. However, these labels are for organization purposes only and are not meant to be interpreted as being equivalent to ACTFL proficiency levels. ACTFL equivalencies are provided only as a reference. Teachers who rated the speech samples were not ACTFL certified raters, thus equivalencies are only approximate. It is important to note that although the highest proficiency group studied is referred to as "advanced", the speakers in this group were rated at an Intermediate High level on the ACTFL scale.

Stimulus preparation. In order to control for judgments based on differences in pitch and intensity (volume) levels, these samples were perceptually analyzed using Audacity (a sound analysis and editing software). Pitch and intensity levels were adjusted as necessary to achieve similar levels. To decrease survey length and increase listener participation and survey practicality, the first 15 seconds of each sound file was used instead of the complete 45 second file. In order to be compatible with most computer devices, files were converted to both WAV and MP3 format using Audacity.

Survey. A survey was created through Qualtrics, an electronic survey service (www.qualtrics.com). A copy of the survey is available in Appendix A. Participants were asked to listen to each speaker and rate how comfortable they would feel communicating in English with the speaker in a variety of situations or tasks (presented in Table 3). A scale of 0-10 was used; a rating of 10 indicated the listener reported that they would be "very comfortable"

interacting with the speaker. The tasks included were created by the researcher under the advisement of the thesis committee. The first three tasks are based on questions in the Montréal Inventory of Linguistic Integration (Segalowitz & Ryder, 2006). Tasks were chosen to represent a variety of communication and interaction situations, settings, and relationships.

After listening to each sound clip and rating their comfort level, the listeners were asked if they had any problems with the sound clip. If participants selected that they could not play the sound clip, or the sound clip was too quiet, their ratings were discarded.

Demographic information pertinent to the research questions was also collected. This included the listener's gender, age-range, highest level of education, frequency of interactions with NNESs, foreign language study, and time spent living abroad. Although not a variable mentioned in the research questions, information on state of residency was also collected. This served two purposes. First, this helped ensure that the survey was being sent out to and answered by people from a variety of regions in the US. Second, since the survey was dispersed across the US, data on listener location was gathered in the event that state of residency was a variable that could be analyzed in a future study.

Open-ended questions were included to gather qualitative data on the research questions. The two open-response questions are as follows: 1) 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)? 2) How are you interactions with non-native English speakers affected by their language abilities? In-depth analysis of these responses was beyond the scope of the current

research. Force validation (requiring the listener to provide a response) was employed on all of questions, with the exception of the two open-response items.

Table 3

Communication Tasks

Task #	Task in question form as presented in survey
	Question stem: please indicate how comfortable or uncomfortable you would feel participating in the following tasks (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

Rationale for communication tasks. Communications tasks in this study were chosen to represent a variety of possible interactions between NESs and NNESs. The purpose of task one

was to represent a casual conversation, however a minimum time limit (10 minutes) was included to exclude basic greetings and routine and formulaic conversations. Task two introduced the variables of topic and emotion within the context of a casual conversation. Task three was chosen to discover if the listener would feel comfortable interacting with speaker while surrounded by the listener's own friends and family. Segalowitz & Ryder (2006) found these three aforementioned communication tasks to be indicative of linguistic integration.

Tasks four through six were aimed at customer service situations, as many immigrants work in customer service positions. Moreover, the variable of face to face versus over the phone interaction is addressed in this block of questions. Tasks seven through nine focus specifically on interaction in the workplace, as this is an area of current interest and research (Derwing & Munro, 2009). Power relationships are explored in task seven. Task eight returns to the topic of casual conversations, albeit with the added variable of a shared workplace. Task nine was chosen to investigate how shared responsibilities between NESs and NNESs in a work setting affect proficiency expectations. Finally, task ten was chosen to inform on expectations for proficiency level during group or committee work, regardless of setting.

Procedure

Data collection. Data were collected over two days, April 4th – 5th 2013. A soft launch of the survey took place on April 4th. 11 responses were gathered that day. The purpose of the soft launch was to bring attention to any unforeseen issues with the survey. The survey fully launched on April 5th. After all quotas were met, the survey was closed. The survey was distributed by Survey Sampling International (described in the participants section).

Participants were screened out of the study if they did not give their informed consent, were not a native English speaker, were younger than 18 years of age, did not have normal hearing capabilities, and/or if they responded that they were not able to play the sound clips.

Data Analysis. This section will outline the procedures used to analyze the quantitative data obtained from the survey. First, the variables of the study will be defined. Then, the statistical treatments used to address the research questions will be described.

The variables. Table 4 describes the variables in this study.

Table 4

Dependent and Independent Variables

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
Listener (NES) Variables	Listener demographic information, including gender, age range, highest level of education attained, frequency of interaction with NNESs, foreign language study, and time spent living abroad	Independent
Communication tasks	Hypothetical communication and interaction settings that listeners rated their level of comfort participating in with the NNES. These tasks are described in detail in Table 3	Independent

Statistical treatments. Under the advisement of Dr. Egget, director of BYU's Statistics Consulting Center, a statistical analysis model was chosen that could best address the research questions. A mixed model analysis of variance was used to compare the means across variables. Due to the fact that each listener rating was not independent of each other, (each listener rated six different speakers) blocking on listeners was employed for all responses. This allowed each speaker to act as their own control in the model.

First, backwards selection was used to discover which, if any, listener variables (described in table 3) interacted significantly with mean ratings. A p-value of .15 or higher was used as criteria for assuming a listener variable was not significant. This p-value was used as a preliminary screening of significance to ensure that any potentially significant variables were not ignored. The least significant variable was discarded from the equation until all non-significant listener variables were removed from the model. Next, level and task were analyzed along with any significant listener variables. For the variables in each final model, post hoc Tukey adjusted pairwise comparisons were examined to discover where significant differences existed. Since there were multiple dependent variables, (described in table 3) a pseudo Bonferroni adjustment was employed by using a p-value of .01 to determine significance. The results of these analyses are presented in the following chapter.

Chapter 4: Results

This chapter reports the results of the statistical treatment employed to analyze the quantitative survey responses. The statistical analyses used in this study are described in Chapter 3. A discussion and interpretation of these results is found in Chapter 5.

The results are organized by research question. There were three main research questions for this study:

1) What proficiency level do NNESs need to achieve in order for NES to feel comfortable interacting with them?
2) Do NES proficiency expectations for NNESs change depending on communication task?
3) Do NES proficiency expectations for NNESs change based on NES demographic variables?

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

1) What proficiency level do NNESs need to achieve in order for NESs to feel comfortable interacting with them?

The first research question focused on discovering if listeners have a preferred, or threshold, proficiency level, regardless of communication task. NES listeners rated their comfort level (ratings were on a scale of 0-10; 0 = very uncomfortable, 10 = very comfortable) interacting with NNESs in 10 communication tasks. A mixed models analysis of variance was completed on mean ratings for all tasks to discover if speaker proficiency level was significant. A statistically significant difference was found between the three proficiency levels, $F(2, 3448) = 114.01$, $p=<.0001$. Post hoc Tukey tests indicated that mean ratings for the novice proficiency

group differed significantly from the intermediate (p=<.0001) and advanced proficiency groups (p=<.0001). There was not a significant difference found between mean ratings for the intermediate and advanced speakers (p=.02). Table 5 shows the mean ratings (adjusted for task) and standard error for the three proficiency groups. The data in table 5 suggest that the intermediate speakers may represent a threshold level.

Table 5

Mean Listener Ratings across Proficiency Levels

Speaker proficiency level group	Mean rating across all tasks	Standard error
Novice	6.00	.073
Intermediate	7.18	.074
Advanced	7.46	.072

Note: Means are adjusted for task

Research Question 2: Effect of communication task on mean ratings

2) Do NES proficiency expectations for NNESs change depending on communication task?

The second research question was concerned with the effect of communication task on mean ratings. Mean ratings for each communication task across all proficiency levels were analyzed to discover if ratings were significantly different between tasks (ratings were adjusted for proficiency level). Post hoc Tukey tests revealed a statistically significant difference between tasks, F (9, 2448) = 7.81, p=<.01, indicating that certain tasks had a main effect on mean rating. Table 6 shows the mean ratings and standard error for the 10 communication tasks. Tasks are

presented from highest mean rating to lowest mean rating. Table 7 provides the adjusted p-values for the pairwise comparisons between tasks.

Table 6

Mean Ratings across Task for all Proficiency Levels

Task #	Abbreviated task descriptor	Mean rating	Standard error
8	Coworker	7.33	.13
3	Home Invite	7.28	.13
4	Ordering food	7.19	.13
1	Casual conversation	7.16	.13
5	Asking for help in person (grocery store)	6.99	.13
9	One-on-one	6.76	.13
10	Committee	6.73	.13
2	Strongly held view	6.62	.13
7	Boss	6.46	.13
6	Customer service over the phone	6.25	.13

Note: Means are adjusted for proficiency level

Table 7

Pairwise Comparison of Post Hoc Tukey Adjusted P-values across Tasks

Task #	Task #	Adj. P-values
1	2	0.1172
	3	0.9993
	4	1.0000
	5	0.9967
	6*	**<.0001***
	7*	**0.0077***
	8	0.9953
	9	0.5287
	10	0.4025
2	3	0.0119
	4	0.0754
	5	0.6230
	6	0.6242
	7	0.9975
	8*	**0.0058***
	9	0.9990
	10	0.9999
3	4	0.9999
	5	0.8315
	6*	**<.0001***
	7*	**0.0004***
	8	1.0000
	9	0.1243
	10	0.0765
4	5	0.9884
	6*	**<.0001***
	7*	**0.0041***
	8	0.9989
	9	0.4143
	10	0.3002
5	**6***	**0.0034***
	7	0.1280
	8	0.7152
	9	0.9719
	10	0.9320
6	7	0.9844
	8*	**<.0001***
	9	0.1631
	10	0.2445

(Table 7 continues)

(Table 7 continued)

Task #	Task #	Adj. P-values
7	**8***	**<.0001***
	9	0.8374
	10	0.9143
8	9	0.0732
	10	0.0429
9	10	1.0000

Note: *indicates significance at p<.01 level
Means used to discover adjusted p-values were adjusted for proficiency level

There was a significant main effect for proficiency level on mean ratings for task, in that the advanced and intermediate speakers were rated significantly higher than the novice level speakers for each task (p<.01). The only exception to this was task three (inviting the speaker to your home), which showed a significant difference between mean ratings for the advanced and novice level speakers (p<.0001), but not the intermediate and novice level speakers (p=.011). Table 8 provides the mean rating and standard error for each task across the three proficiency levels. Certain task ratings are adjusted for listener variables that showed possible significance at p<.15 during model creation. Figure 1 is a visual representation of how mean ratings for each proficiency level changed depending on task.

Table 8

Mean Ratings and Standard Error for Task across Proficiency Levels

		Novice		Intermediate		Advanced	
Task #	Abbreviated task descriptor	Mean	Std. Error	Mean	Std. Error	Mean	Std. Error
1*†	Casual conversation	6.01	.289	7.09	.288	7.42	.285
10	Committee	5.82	.230	7.05	.234	7.31	.230
2†	Strongly held view	5.53	.258	6.73	.261	7.08	.257
3	Home Invite	6.57	.337	7.55	.334	7.77	.336
4*‡	Ordering food	5.61	.285	6.73	.289	7.00	.284
5	Asking for help in person (grocery store)	6.10	.228	7.24	.232	7.63	.227
6*	Customer service over the phone	4.68	.282	6.09	.285	6.41	.280
7*	Boss	4.84	.292	6.13	.295	6.40	.291
8‡	Coworker	6.27	.241	7.45	.244	7.66	.240
9	One-on-one	5.89	.230	7.09	.234	7.31	.230

Note: Some task ratings were adjusted for listener variables that appeared significant at a $p<.15$ level during the model creation stage. * indicates ratings were adjusted for age, † indicates that ratings were adjusted for amount of interaction with NNES, ‡ indicates ratings were adjusted for foreign language learning experience.

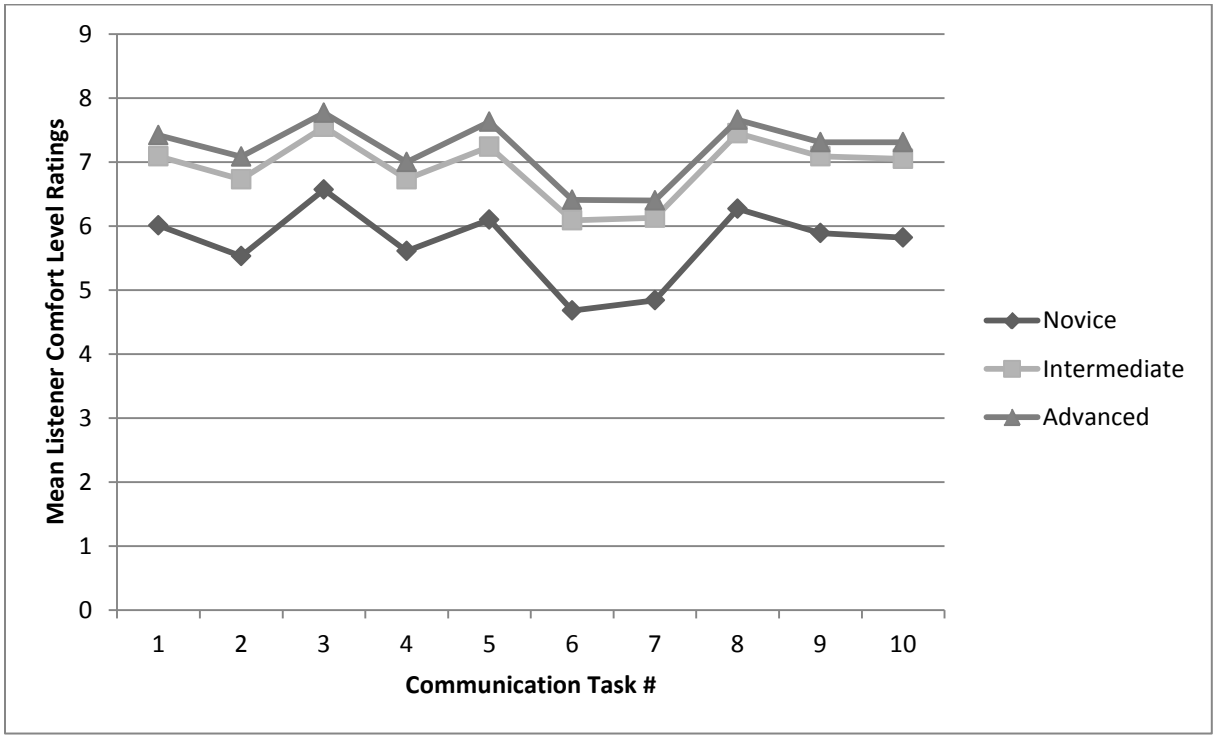


Figure 1. Mean Ratings across Tasks and Proficiency Levels

Research Question 3: Effect of listener variables on mean ratings

3) Do NES proficiency expectations for NNESs change based on NES variables?

A mixed model analysis of variance revealed that listener variables did not have a significant effect on overall ratings across proficiency levels when all tasks were averaged (p-value range .2 - .97). Appendix D provides a table with the degrees of freedom, F-values, and p-values for the insignificant main effect of listener variables on mean ratings. Some listener variables had a main effect on mean ratings when task was looked at individually. Specifically, analysis of mean ratings for tasks 1, 2, 4, 6, 7, and 8 revealed certain listener demographics to be moderating variables. These results are discussed in order of task.

Task 1: Casual conversation for at least 10 minutes. The listener demographic variables of age range and frequency of interaction with NNESs had a significant effect on mean ratings for task one, $F(5, 332) = 4.65$, $p=.0004$; $F(6, 332) = 5.79$, $p<.0001$.

Age range. Post-hoc Tukey tests revealed that listeners in age range 26-35 rated speakers significantly higher than speakers in age range 36-45, $F(5, 332) = 4.65$, $p<.0001$). Table 9 presents the mean rating and standard of error for each age range for task one. Table 10 provides the adjusted p-values for the pairwise comparisons between age ranges.

Table 9

Mean Ratings across Age Ranges for Task One

Age Range	N	Mean rating on task	Standard Error
18-25	25	7.03	.297
26-35	39	7.69	.239
36-45	22	5.93	.300
46-55	23	6.99	.314
56-65	9	6.70	.475
66+	2	6.76	.945

Table 10

Pairwise Comparison of Post Hoc Tukey Adjusted P-values across Age Ranges for Task One

Age Range	Age Range	Adj. P-values
18-25	26-35	0.5250
	36-45	0.0505
	46-55	1.0000
	56-65	0.9888
	66 +	0.9997
26-35	**36-45***	**<.0001***
	46-55	0.4812
	56-56	0.4188
	66+	0.9431
36-45	46-55	0.0914
	56-65	0.7328
	66+	0.9597
46-55	56-65	0.9940
	66+	0.9999
56-65	66+	1.0000

Note: *indicates significance at p<.01 level
Means used to discover adjusted p-values were adjusted for proficiency level and communication task

Frequency of interaction with NNESs. Post hoc Tukey tests showed that listeners who reported interacting with NNESs once a month rated speakers significantly lower than listeners who reported interacting with NNESs once a week, 2-3 times a week, and daily, $F(6, 332) = 12.74$, $p<.0001$, $p=.001$, $p<.0001$ respectively). Table 11 reports the mean ratings and standard error across interaction categories for task one. Table 12 provides the adjusted p-values for the pairwise comparisons across interaction categories.

Table 11

Mean Ratings across NNES Interaction Categories for Task One

Interaction category (How often do you interact with NNESs?)	N	Mean rating on task	Standard error
Never	2	6.31	.932
Less than Once a Month	21	6.55	.306
Once a Month	12	5.44	.412
2-3 Times a Month	23	6.66	.312
Once a Week	19	7.79	.350
2-3 Times a Week	20	7.40	.344
Daily	23	7.74	.336

Table 12

Pairwise Comparison of Post Hoc Tukey Adjusted P-values across NNES Interaction Categories for Task one

Interaction Category	Interaction Category	Adj. P-values
Never	< Once a Month	1.0000
	Once a Month	0.9742
	2-3 Times a Month	0.9998
	Once a Week	0.7272
	2-3 Times a Week	0.9171
	Daily	0.7520
< Once a Month	Once a Month	0.2280
	2-3 Times a Month	1.0000
	Once a Week	0.0572
	2-3 Times a Week	0.3981
	Daily	0.0619
Once a Month	2-3 Times a Month	0.1347
	Once a Week*	**<.0001***
	2-3 Times a Week*	**0.0010***
	Daily*	**<.0001***
2-3 Times a Month	Once a Week	0.1302
	2-3 Times a Week	0.6048
	Daily	0.1533
Once a Week	2-3 Times a Week	0.9697
	Daily	1.0000
2-3 Times a Week	Daily	0.9697

Note: *indicates significance at p<.01 level
Means used to discover adjusted p-values were adjusted for proficiency level and communication task

Task 2: Conversation on a topic that you have a strongly held view on. The listener demographic variable of frequency of interaction with NNESs had a significant effect on mean ratings for task two, $F(6, 337) = 4.50$, $p=.0002$

Frequency of interaction with NNESs. Post hoc Tukey tests showed that listeners who reported interacting with NNESs less than once a month rated speakers significantly lower than listeners who reported interacting with NNESs once a week and daily, $F(6, 337) = 4.50$, $p=.0058$, $p=.0031$ respectively). Table 13 reports the mean ratings and standard error across interaction categories for task two. Table 14 provides the adjusted p-values for the pairwise comparisons across interaction categories.

Table 13

Mean Ratings across NNES Interaction Categories for Task Two

Interaction category (How often do you interaction with NNESs?)	N	Mean rating on task	Standard error
Never	2	5.67	.982
Less than Once a Month	21	5.75	.307
Once a Month	12	5.67	.407
2-3 Times a Month	23	6.47	.304
Once a Week	19	7.38	.328
2-3 Times a Week	20	6.82	.315
Daily	23	7.39	.302

Table 14

Pairwise Comparison of Post Hoc Tukey Adjusted P-values across NNES Interaction Categories for Task two

Interaction Category	Interaction Category	Adj. P-values
Never	< Once a Month	1.0000
	Once a Month	1.0000
	2-3 Times a Month	0.9867
	Once a Week	0.6461
	2-3 Times a Week	0.9224
	Daily	0.6342
< Once a Month	Once a Month	1.0000
	2-3 Times a Month	0.6357
	Once a Week*	**0.0058***
	2-3 Times a Week	0.1850
	Daily*	**0.0031***
Once a Month	2-3 Times a Month	0.6968
	Once a Week	0.0195
	2-3 Times a Week	0.2768
	Daily	0.0134
2-3 Times a Month	Once a Week	0.3922
	2-3 Times a Week	0.9848
	Daily	0.3310
Once a Week	2-3 Times a Week	0.8797
	Daily	1.0000
2-3 Times a Week	Daily	0.8513

Note: *indicates significance at p<.01 level
Means used to discover adjusted p-values were adjusted for proficiency level and communication task

Task 4: Ordering food at a restaurant. The listener demographic variable of age range had a significant main effect on mean ratings for task four, F (5, 337) = 4.74, p=.0003. Foreign language learning experience was included in this model as it was significant during model creation at p<.15. However, post hoc Tukey analysis revealed that foreign language learning experience did not have a significant main effect on ratings, F (1, 337) = 4.91, p=.0273.

Age range. Post hoc Tukey tests revealed that listeners in age range 46-55 rated speakers significantly higher than listeners in age range 66+, F (5, 337) = 4.74, p=.0057. Table 15 reports

the mean ratings and standard error across interaction categories for task four. Table 16 provides the adjusted p-values for the pairwise comparisons between age ranges.

Table 15

Mean Ratings across Age Range for Task Four

Age Range	N	Mean rating on task	Standard error
18-25	25	6.92	.303
26-35	39	7.32	.242
36-45	22	6.37	.306
46-55	23	7.72	.299
55-65	9	6.27	.468
66+	2	4.09	.981

Table 16

Pairwise Comparison of Post Hoc Tukey Adjusted P-values across Age Ranges for Task Four

Age Range	Age Range	Adj. P-values
18-25	26-35	0.8642
	36-45	0.7565
	46-55	0.3864
	56-65	0.8359
	66+	0.0577
26-35	36-45	0.1076
	46-55	0.8944
	56-56	0.3160
	66+	0.0160
36-45	46-55	0.0189
	56-65	1.0000
	66+	0.2170
46-55	56-65	0.0926
	66+*	**0.0057***
56-65	66+	0.3248

Note: *indicates significance at p<.01 level
Means used to discover adjusted p-values were adjusted for proficiency level and communication task

Task 6: Customer service over the phone. The listener demographic variable of age had a significant main effect on mean ratings for task 6, when all age ranges were combined, F

(5, 338) = 4.31, p=.0008. Post hoc Tukey analyses showed that differences between individual age ranges were not significant (p-value range .0147 – 1.000).

Task 7: Boss. The listener demographic variable of age had a significant main effect on mean ratings for task 7, when all age ranges were combined, F (5, 338) = 4.94, p=.0002. However, post hoc Tukey analysis revealed that differences between individual age ranges were not significant (p-value range .0101 – 1.00).

Task 8: Coworker. The listener demographic variable of foreign language learning experience was analyzed for task 8 because it revealed a p-value of <.15 during model creation. However, post hoc Tukey analysis showed that this variable did not have a significant main effect on ratings, F (1, 342) = 5.72, p=.0173

Chapter 5: Discussion

The results of this study provide a number of insights into how NNES proficiency level, communication task, and NES variables affect NES level of comfort during interaction. Discussion of results is organized by research question. Implications, study limitations, and suggestions for future research are also discussed.

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

1) What proficiency level do NNESs need to achieve in order for NESs to feel comfortable interacting with them?

Statistical analyses showed that the mean rating (ratings were on a scale of 0-10; 0 = very uncomfortable, 10 = very comfortable) for the advanced level speakers (M=7.46) and intermediate level speakers (M=7.18) were significantly different from the mean ratings for the novice speakers (M=6.00), when ratings for all communication tasks were combined. This does not necessarily indicate that listeners were completely comfortable interacting with the advanced level speakers, but that they were significantly more comfortable interacting with the advanced and intermediate level speakers compared to the novice speakers.

The lack of a significant difference between the intermediate and advanced speakers might be partially explained by similarity of proficiency levels between the groups. Table 13 shows that the proficiency scores for the intermediate group were closer to the scores for the advanced group than to the novice group. This occurred due to the limited pool of speakers available that matched the necessary demographic variables (female, 18-26, native Spanish speaker, ELC student during winter 2012). However, NES mean comfort ratings increased as

proficiency level increased, suggesting that as the speaker's proficiency increased, the listener's comfort level increased as well.

Table 17

Differences between Average Group Proficiency Scores

Speaker group classification	Average proficiency score	Difference from other groups
Novice	2.11	Intermediate:1.92 Advanced: 3.18
Intermediate	4.03	**Novice:1.92** **Advanced:1.26**
Advanced	5.29	Novice: 3.18 Intermediate:1.26

Additionally, the significant difference between ratings for the novice proficiency group and the intermediate and advanced proficiency groups could be due to the communicative bridge that is crossed when a speaker progresses from a novice proficiency level to an intermediate proficiency level (on the ACTFL scale). As a reminder, the novice speakers in this study roughly correlated with a Novice High proficiency level, the intermediate speakers were approximately equivalent to the Intermediate Mid proficiency level, and the advanced speakers were similar to the Intermediate High proficiency level (on the ACTFL scale). According to ACTFL's 2012 rubric, one major distinction between novice and intermediate level speakers is that intermediate level speakers have the ability to "create with the language", while novice speakers use "formulaic and rote utterances" (ACTFL, 2012, p. 12). It is possible that the higher ratings for the intermediate and advanced groups were due to listeners perceiving their ability to create novel utterances.

The survey instrument neglects to discover a connection between reported level of comfort and willingness to communicate or interact with the speaker and operates under the

assumption that the higher level of comfort a NES listener reports, the more willing they would be to interact with the NNES speaker. Due to this, there is no "goal" or "standard" comfort level to use as a standard. One listener may feel that a reported comfort level of 6 indicates that they would be willing to communicate with the speaker. On the other hand, another listener may not be willing to communicate in any circumstance where there reported comfort level is less than 10. With this limitation in mind, the data suggests that since there was not a significant difference between ratings for the intermediate and advanced proficiency groups, that a minimum expected proficiency level might be at least an Intermediate-Mid level (equivalent to the score for the intermediate group) on the ACTFL scale. At this level the comfort ratings began to conflate. However, this conclusion is limited by the aforementioned problems with the survey instrument.

Research Question 2: Effect of communication task on mean ratings

2) Do NES proficiency expectations for NNESs change depending on communication task?

In this study, communication task had a significant effect on the listener ratings. Several communications tasks were rated significantly different from each other. Specifically, task 6 (M=6.25) and 7 (M=6.46) were rated significantly lower than other tasks. Additionally, task 3 and 8 received the highest mean ratings. Possible explanations for these ratings are discussed by task.

Task 6: Customer service over the phone. Listeners rated task 6 (M=6.25, all proficiency levels combined) significantly lower than tasks 1 (Casual conversation) (M=7.16), 3 (Home invite) (M=7.28), 4 (Ordering food) (M=7.19), 5 (Asking for help) (M=6.99), and 8 (Coworker) (M=7.33). Even the most advanced speakers received a relatively low mean rating

(M=6.41, adjusted for the listener variable of age) for this task, suggesting a high proficiency expectation for this task compared to other tasks in the survey. Interestingly, task 6 was rated lower than other customer service related tasks (4 & 5) as well. There are several possible explanations for this lower rating.

First, task 6 was the only task that did not allow for face to face interaction. This would prevent listeners from relying on facial cues and gestures to aid comprehension. Several listeners mentioned lack of visual cues and gestures in the open response questions as reasons why they would feel uncomfortable completing this communication task with the speaker: "If I am trying to communicate with someone on the phone, it is vital that they pronounce words correctly and clearly, since I have no visual cues to help give context to the conversation." Another listener said, "If the person is at the beginning stages of learning the language, you have to watch for facial cues and hand gestures to help with understanding their meaning. It is easier for me to understand a non-native English speaker in person, vs. over the phone."

Second, customer service issues over the phone can often deal with expensive or high stakes topics, such as problems with a credit card or insurance claims. Miscommunication in these situations would have more serious repercussions than miscommunications in other customer service situations. A communication break-down at a restaurant or at a grocery store may result in an incorrect order or loss of time, but probably would not have serious repercussions on the consumer. One participant noted the high stress of this type of customer service situation as the reason for their lower comfort level rating: "My biggest hurdle would be remaining comfortable while trying to resolve a customer service issue I may be having. I am already in a stressful situation and feel as if the company I am calling should have someone on the other end that can communicate effectively."

Third, past negative experiences with NNES customer service representatives over the phone could have affected listener's ratings. Recently, many US corporations have set up customer service call centers in foreign-speaking countries in order to reduce costs (Forey & Lockwood, 2007). This would increase the likelihood that a listener would have had interacted with a NNES in this type of communication task in the past. Several listeners cited previous experiences as reasons why they would feel uncomfortable interacting with NNES in this communication task: "When telemarketers call, and I cannot understand them because they do not speak English well, it is frustrating, because I often must make them repeat something several times". Another listener stated that "I couldn't understand their [the speakers'] accent and I don't like dealing with people on the phone who sound like this". One listener even said they avoid calling companies that employ NNES customer service representatives at their call centers: "I avoid calling places when I know that the people do not speak English very well because they are very difficult to understand."

It could be argued that this particular communication task is not worth investigating in this study, since the communication does not take place between two members of the same community with opportunities for future communication and integration. However, these negative interaction experiences could affect a NES willingness to communicate with NNESs in the future, specifically if these negative experiences cause them to associate low proficiency levels with feelings of frustration.

Task 7: Having this person as your boss: Listeners rated task 7 (M=6.46, all proficiency levels combined) significantly lower than tasks 1 (Casual conversation) (M=7.16), 3 (Home invite) (M=7.28), 4 (Ordering food) (M=7.19), and 8 (Coworker) (M=7.33). These lower ratings suggest a higher proficiency expectation for this communication task compared to other

tasks. This might be explained by the fact that the repercussions of miscommunication in this situation are more serious than in the other situations. If an employee is not able to communicate effectively with their boss, their performance could be affected, which could ultimately have a negative impact on their livelihood. One listener mentioned concerns about mutual intelligibility in the open response questions: “I wasn't sure that I would understand their directions if they were my boss, and I might not be able to make myself understood by them as I was expressing myself.”

Additionally, ratings for task 8 (interacting with a NNES coworker) were significantly higher than ratings for task 7. Tasks 6 and 7 had a similar setting (the workplace), but different power relationships between the two interlocutors. This suggests that power relationship may have a significant effect on ratings.

Tasks with the highest average ratings. Task 3 (Home invite) (M=7.28) and task 8 (Coworker) (M=7.33) had the highest mean ratings of all tasks (adjusted for proficiency level). In addition, these tasks also had highest comfort ratings for novice proficiency speakers (M=6.57, M=6.27, respectively, task 8 was adjusted for the listener variable of foreign language learning experience). These results indicate an overall lower proficiency expectation for these tasks. This is worth noting because both tasks (inviting the speaker to your home for a social gathering, talking with speaker if they were your coworker, respectively) bode well for the creation of “weak ties” and friendships within a community.

Research Question 3: Effect of listener variables on mean ratings

3) Do NES proficiency expectations for NNESs change based on NES demographic variables?

Statistical analysis revealed that listener variables did not have a significant effect on overall ratings across proficiency levels when all tasks were looked at together. However, some listener variables affected mean ratings when a task was looked at individually. Specifically, the listener demographic variables of age and frequency of interaction with NNES had a significant main effect on specific ratings.

Age range. The listener demographic variable of age had a significant main effect on ratings for task 1 (Casual conversation) and 4 (Ordering food). The effect of age was initially analyzed for tasks 6 (Customer service over the phone) and 7 (Boss) in addition to tasks 1 and 4 because analyses during model creation revealed a p-value of <.15. However, post hoc Tukey tests revealed that age was not significant for tasks 6 and 7 (p-value range .0147-1.000, .0101 – 1.000, respectively).

Mean ratings for age range 26-34 (M=7.69) were significantly higher than age range 36-45 (M=5.93) for task 1 (Casual conversation). For task 4 (Ordering food), mean ratings for age 46-55 (M=7.72) were significantly higher than ratings for age range 66+ (M=4.09). Generally, older listeners had lower ratings than younger raters, suggesting that younger listeners may be more comfortable interacting with NNES than older listeners. However, the data did not reveal a quantifiable relationship between age and mean comfort ratings and task. This result could be due to sampling, as there were not an equal number of listeners across all age ranges.

Experiences with NNESs. The listener demographic variable of experience with NNESs had a significant main effect on ratings for task 1 (Casual conversation) and 2 (Strongly held view).

Post-hoc Tukey tests showed that listeners who reported interacting with NNESs once a month rated speakers significantly lower (M=5.44) on task 1 than listeners who reported interacting with NNESs once a week, 2-3 times a week, and daily, (M=7.79, 7.40, 7.74, respectively). For task 2, post hoc Tukey tests revealed that listeners who reported interacting with NNESs less than once a month rated speakers significantly lower (M = 5.75) than listeners who reported interacting with NNESs once a week and daily, (M= 7.38, 7.39, respectively). These data suggest that an increase in frequency of interaction with NNESs may correlate with decreased proficiency expectations for NNESs.

The qualitative data also supports this assumption. Listeners perceived that they were able to understand speakers better due to previous interactions with NNESs. One listener responded by saying that "I feel comfortable [communicating with] all since I have many experiences with people that have broken English." Another listener discussed their marriage to a NNES as rationale for their higher ratings, "Since I am married to a nonnative English speaker I feel I am more likely to listen and try to understand."

Implications

Relationship between NES comfort level and NNES proficiency level. There are several ways to view the relationship between listener comfort level and speaker proficiency. First, the relationship can be viewed as binary. Figure 2 provides a visual representation of this type of relationship. NES comfort level is very low until a specific proficiency level is reached by the NNES. At that point, NES comfort level is elevated and the change is immediate. This represents the assumption by some policy makers that second language proficiency is a binary judgment; either a speaker is proficient, or they are not proficient, and there is little room for varying degrees of proficiency (S. 744, 2013).

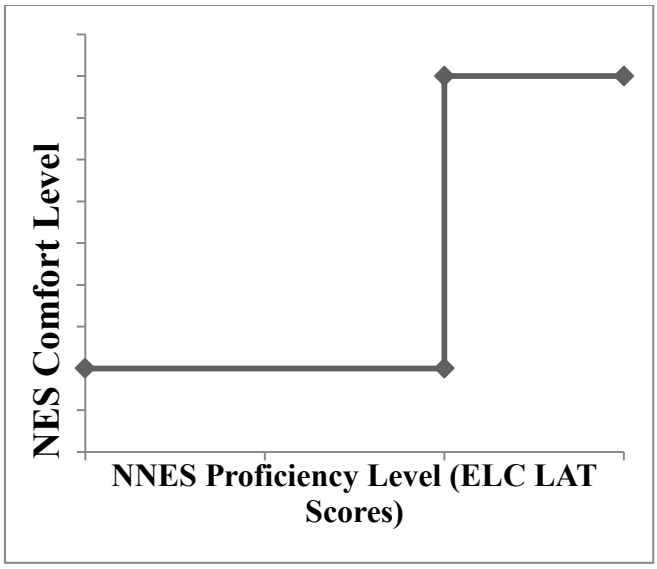


Figure 2. Representation of Binary Relationship between Speaker Proficiency Level and Listener Comfort Level

Another way to view the relationship between these two variables is to assume that they have a direct linear relationship. This would mean that NES comfort level and NNES proficiency levels are directly correlated. A visual representation of this relationship is shown in figure 3. As NNES proficiency level increases, NES comfort level increases at approximately the same rate. This model does not take into account plateaus for either variable.

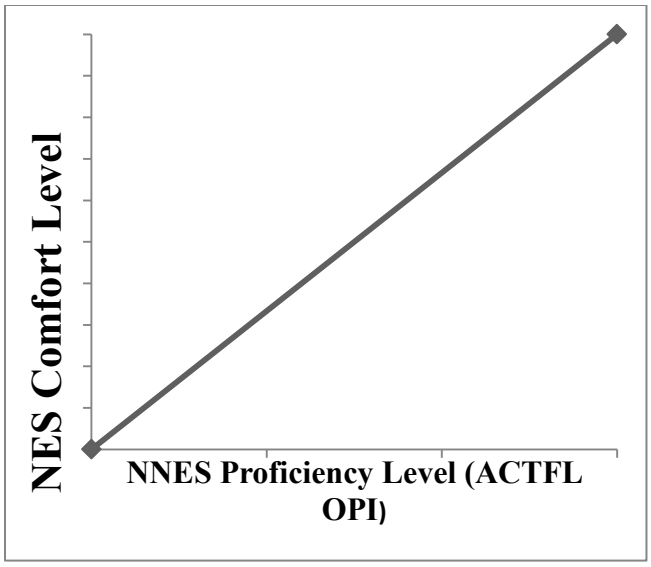


Figure 3. Representation of Direct Linear Relationship between Speaker Proficiency and Listener Comfort

The results of this study suggest that a threshold relationship may exist between the variables of NES comfort level and NNES proficiency level. Figure 4 provides a visual representation of this possible relationship. The three data points in the figure represent the three proficiency levels studied. Since there was not a significant difference between ratings for the intermediate and advanced speakers, it is possible that comfort ratings could plateau around this proficiency level. This could indicate an upper threshold, in that there may exist a "ceiling" for NES comfort level. Future studies that include more proficiency levels would improve the understanding of this threshold relationship.

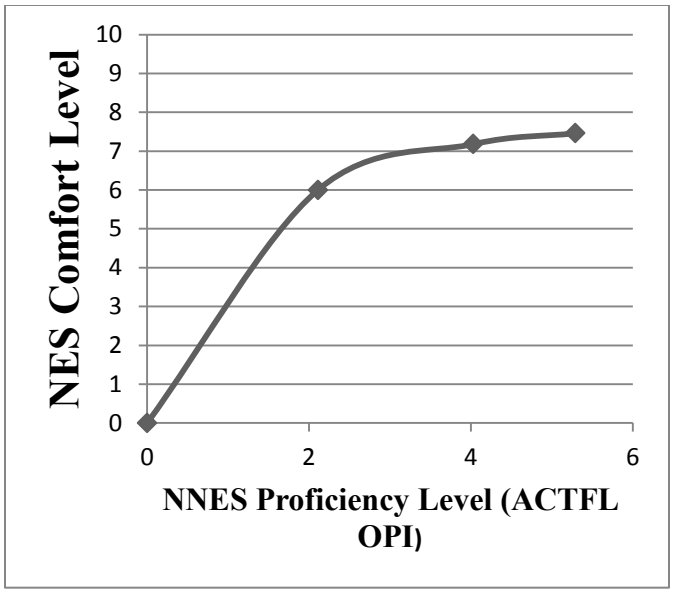


Figure 4. Threshold Relationship between Speaker Proficiency and Listener Comfort

Study abroad students and intensive English schools in the US. The results of this study suggest that NNESs in the US would need to achieve an Intermediate-Mid proficiency level (on ACTFL's scale) in order for NES to feel comfortable interacting with them. Study abroad participants cite a desire to develop friendships with members of the target language community as a motivating factor in their decision to study abroad (Isabelli-Garcia, 2006). English schools could use this information to help their NNES students set realistic goals and expectations for interaction with NESs depending on their proficiency level.

Importance of task. A result of this study was that task showed to have a significant main effect on comfort ratings. Ratings were more varied across tasks than across proficiency levels, suggesting that task may be a more important variable than proficiency level when trying to predict NES comfort levels.

Employers. Increasingly, companies are outsourcing customer service call center jobs to NNES countries to reduce costs. Task 6 specifically dealt with this type of customer service and was rated significantly lower than other tasks, including other customer service tasks. This suggests that NES have especially high proficiency expectations for NNES in these types of positions. Employers, who recognize this expectation and hire employees according, may be able to decrease frustration of their employees and customers.

Moreover, these results could inform employers on what to expect in terms of interaction between their NES and NNES employees. This information is especially important in countries with declining birthrates such as Canada. It is predicted that the majority of their labor market growth over the next decade will come from immigration (as cited in Derwing & Munro, 2009). In their 2009 study on workplace interaction in Canada, Derwing and Munro found that "Although the recently hired newcomers (immigrants) have superb technical skills, their use of oral and written language sometimes causes communication breakdowns" (p. 182). An understanding of the minimum proficiency level these skilled workers will need to succeed in a mixed language environment could inform employers about the language support, including instruction, that they may need to provide to these employees.

ESP classes. The curriculum for ESP (English for specific purposes) classes is meant to prepare learners for specific communication tasks or settings. For example, English classes for nurses or automobile mechanics prepare students to use English in situations specific to those occupations. The results of this study could inform ESP curriculum, regarding target proficiency levels, providing students with a concrete proficiency goal necessary to be able to successfully complete a job that requires interaction with NESs.

Community ESL programs. The goal of most community ESL programs is to help students improve their English skills and ultimately improve their quality of life by opening doors to opportunities outside of the classroom. These opportunities could include a better job or salary, increased involvement in their children's school, and/or a sense of belonging in the NES community. A goal for proficiency level that is tailored to specific jobs or communication tasks could improve motivation by providing a concrete objective for learners.

Limitations

There are many limitations to the validity and reliability of this study.

Sampling. Sampling procedures for both groups of participants, speakers and listeners, affect the generalizability of this study. The fact that all speakers in this study were female, native Spanish speakers, and were between the ages of 18-26, prevents results from being generalizable to all NNESs. Moreover, any validity in the sampling of listeners relies on the assumption that the survey sampling company (SSI) provided a quality random sample.

Survey instrument. Ratings were not independent of each other, in that listeners' ratings for a specific speaker may have been affected by the listener's perception of another speaker in the survey. This could have caused the listeners to give higher ratings to the advanced speakers because they sounded more proficient in comparison to the novice speaker. Randomization of sound clips was used to attempt to mitigate these effects. However, if the listeners had heard a speaker in isolation, they may have rated them differently.

Listener processing time was not measured or controlled in the survey. Considerably more processing time was available to listeners in this survey than in a typical conversation or

interaction. There was also no control over how many times a listener played the sound clips. These facts may negatively affect the authenticity of the instrument.

Self-Report data. All data from listeners in this study was collected through self-report. This type of data collection is subject to the social acceptability bias and the halo effect. In addition, self-report data only reveals how the listeners *think* they would react in a certain situation, which may or may not be how they would actually perform.

Listener's attitudes toward NNESs. Lindemann (2002) studied the correlation between NES attitudes toward a language group and their ability to understand speakers from that language group. She found that NESs' perceived ability to understand NNESs correlated with their attitudes toward the language group of the NNESs, regardless of the NNESs' proficiency level. It is probable that attitudes toward the perceived language group of the speaker affected listener judgments; however, no data was collected on language attitudes in this study.

Personality and motivation as moderating variables. This study did not take into account the affect that NNES personality and motivation has on NES comfort level during interaction. Llurda (1993, 2000) found that NES make judgments about NNES personalities based on proficiency. It is logical that personality judgments could have an effect on NES level of comfort interacting with NNESs. Moreover, Macyntire, Dornyei, Clement and Noels (1998) suggest that there are many variables that affect willingness to communicate, including motivation, personality, intergroup climate/attitudes, desire to communicate with a specific person, self-confidence, social situation and communicative competence. Of the variables they mention, this study only looks at two: social situation and communicative competence (communicative competence is simplified as proficiency level for this study). The current study

did not attempt to measure or analyze the effect of these other variables and thus cannot report if the NES listener comfort ratings are a result of NNES speaker proficiency level and communication task, or are the result of another, moderating variable.

Suggestions for Future Research

The results and limitations of this study provide ample ideas for future research. Future studies could address study limitations by including speakers from both genders, different native languages, and a wider variety of proficiency levels, and by measuring participants' language attitudes, personality, and motivation. Future studies could also use a more inclusive testing measure and/or multiple instruments. This could involve observing and coding actual conversations between NESs and NNESs and asking the NESs to rate their comfort level after the interaction. Moreover, a larger sample size could allow for a better understanding of how NES demographic variables affect NES level of comfort during interaction. In addition, future studies could study the effect of a wider variety of communication tasks on comfort ratings.

Conclusion

In a recent publication, Schumann stated that "because adult L2 acquisition is not universal, communicating with individuals who speak another language has continued to be a challenge for our species" (Schumann, 2013, p. 191). This study investigates one aspect of this "challenge": NES proficiency expectations for NNESs. A lack of a clear understanding of these expectations can lead to frustration between the two groups.

Immigrant English language attainment levels are shaping experiences between NESs and NNESs and ultimately affecting immigrant social integration (Xue, 2007; Jimenez, 2011; Derwing & Waugh, 2012). NESs can feel uncomfortable interacting with NNESs who have a

low English proficiency level (Derwing & Munro, 2009). As a result of this feeling of discomfort, it is possible that unless an immigrant is already at an acceptable level of English proficiency, they are much less likely to find NESs willing to interact with them. Lack of interaction opportunities could negatively impact the immigrant's ability to integrate linguistically into the target language society, which would reduce opportunities to continue to develop higher levels of English proficiency and prevent them from experiencing the benefits of integration.

In 1976 Schumann theorized that the learner's community, rather than the learner, has the greatest amount of control over ultimate language attainment levels. The proficiency level that the learner will acquire is directly related to the degree that they are integrated into the target language group (Schumann, 1986). This suggests that there is a dependent relationship between language proficiency and integration and that ultimate language attainment levels may be controlled by the amount of interaction NESs are willing to have with NNESs. Often, the level to which an immigrant is able to participate in the target language society is dictated by their level of proficiency in the target language (Masgoret & Gardner, 1999). However, there is little research regarding what an acceptable threshold level of proficiency might be.

This study investigated the relationship between nonnative English speakers' proficiency level and native English speakers' level of comfort interacting with NNESs. The purpose of this study was to discover at what proficiency level native English speakers feel most comfortable interacting with non-native English speakers. This study also looked at how communicative task and NES demographic variables affected the proficiency expectations NNESs have for NESs.

Participants included 120 NESs listened and 7 NNESs. The NESs listened to sound clips from the NNESs and rated how comfortable they would feel (on a scale of 0-10, 10 indicating

very comfortable) interacting with the speaker in a variety of communication tasks. Each listener rated the same speaker first and the ratings for this speaker were discarded as a means to control for familiarity with prompt. The remaining six speakers were presented randomly with equal representation. A mixed models analysis of variance was utilized to analyze the data.

The results indicated that an Intermediate-Mid proficiency level (on ACTFL's scale) may be the minimum proficiency level NNES need to achieve in order for NES to feel comfortable interacting with them. However, more proficiency levels need to be studied to confirm this hypothesis. Communication task was revealed as having a significant main effect on task. Listeners rated that they would feel least comfortable communicating with the speakers over the phone while discussing a customer service issue. They also indicated that they would feel least comfortable interacting with the speakers if they were their boss. Listener demographic variables did not have a significant main effect on overall ratings, but were significant for some tasks when task was analyzed individually. Specifically, age and frequency of interaction with NNES had an effect on some tasks; however, the reliability of this result is affected by sample size.

These results suggest a possible threshold relationship between NES comfort ratings and speaker proficiency level. Additionally, the data suggest that task may be more important than proficiency level in some interactions. Future studies could address limitations by including speakers from both genders and different native languages, wider variety of proficiency levels, and measuring participants' language attitudes, personality, and motivation.

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Appendix A

Survey Instrument

Informed Consent

I am a graduate student at Brigham Young University and I am conducting this research under the supervision of Professor Eggington, from the Department of Linguistics. You are being invited to participate in this research study because you are a native English speaker. This research will focus on interaction between native and non-native English speakers. Your participation in this study will require the completion of this electronic survey. This should take approximately 10-15 minutes of your time. Your participation will be anonymous and you will not be contacted again in the future.

This survey involves minimal risk to you. The benefits, however, may impact society by helping increase knowledge about interaction 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 question 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, Alison Roberts at AlisonDRoberts@gmail.com, or my advisor, Bill Eggington at William_Eggington@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

begin the survey. I greatly appreciate the time you are taking to complete this survey. Thank you!

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 What is your highest level of education?

- ❍ Some high school or less
- ❍ High school graduate
- ❍ Some college
- ❍ College graduate
- ❍ Postgraduate/professional

Q6 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)

Q8 You will listen to a total of 7 sound clips. Each clip is 15 seconds long. In each sound clip the speaker is describing a trip the speaker will take to Disneyland. 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 tasks (in English):

	Very Uncomfortable 0	1	2	3	4	5	6	7	8	9	Very Comfortable 10
having a casual conversation in English with this speaker for at least 10 minutes											
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)											

inviting this person to a social gathering at your home, such as a barbecue or birthday party										
ordering food from this person at a restaurant										
asking this person for help at grocery or department store										
discussing a customer service issue with this person over the phone (example: a customer service call center)										
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										
working with this person one-on-one to complete a project or task at work										
working on a committee together that requires you to communicate often (several times a week) with this person										

Q9: 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

Q10 – Q21: These questions have the same format and wording as Q8 and Q9 (for each respective sound clip).

Q22: 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)?

Q23: How are your interactions with non-native English speakers affected by their language abilities?

Q24: How often do you interact with non-native English speakers?

- ❍ Never
- ❍ Less than Once a Month
- ❍ Once a Month
- ❍ 2-3 Times a Month
- ❍ Once a Week
- ❍ 2-3 Times a Week
- ❍ Daily

Q25: How many close friends or family members do you have that are non-native English speakers?

- ❍ None
- ❍ 1-3
- ❍ 4-6
- ❍ 7-9
- ❍ 10 +

Q26: Have you ever lived outside the US?

- ❍ Yes
- ❍ No

Q27: Please write the countries and check the amount of time you lived in each country:

	Less than 6 months	6 months to 11 months	1 - 3 years	4 + years
Name of country: _____	❍	❍	❍	❍
Name of country: _____	❍	❍	❍	❍
Name of country: _____	❍	❍	❍	❍
Name of country: _____	❍	❍	❍	❍
Name of country: _____	❍	❍	❍	❍

Q28: Have you ever studied any foreign languages? (example: Spanish, Chinese, Arabic, etc.)

❍ Yes
❍ No

Q29: What language(s) have you studied?

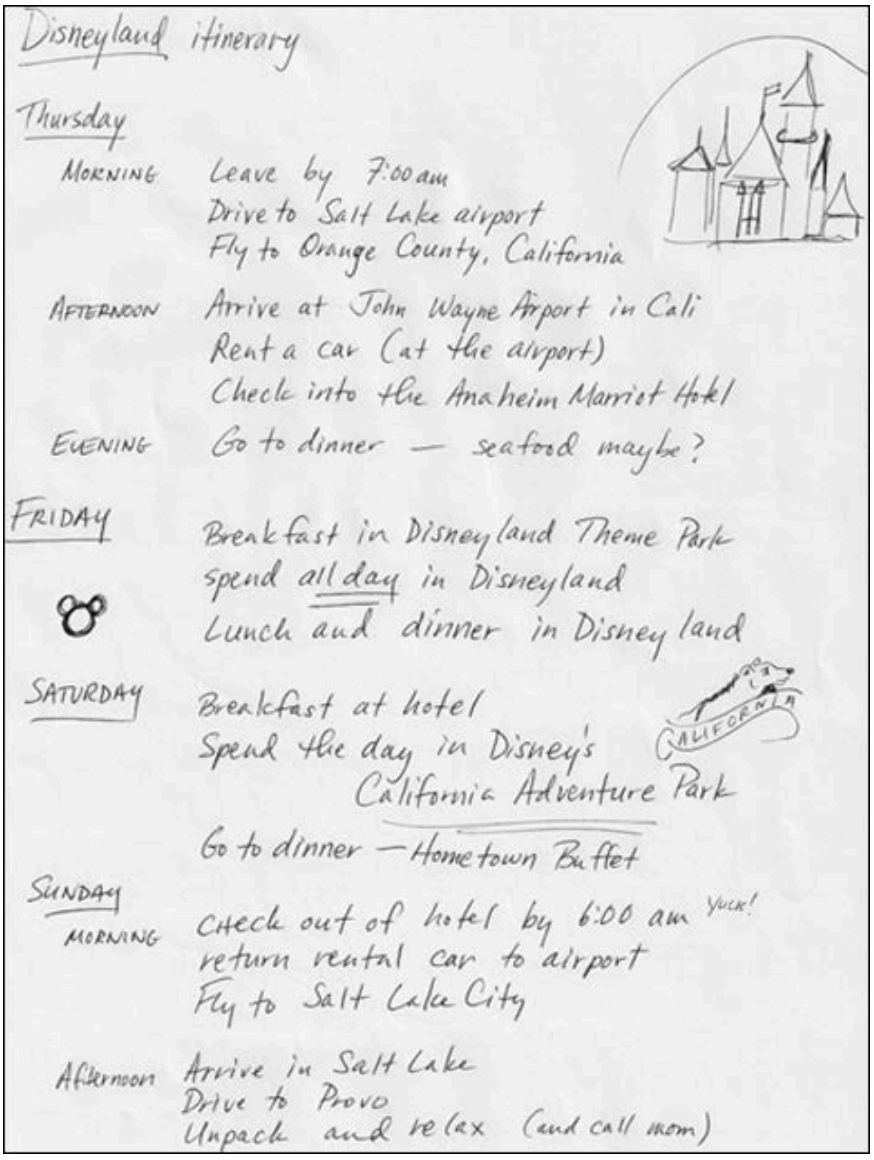
	Have you studied any of these languages? Check all that apply	How would you describe your proficiency level?				
		No ability	Conversational (basic)	Intermediate	Advanced	Near-native
French	❑	❍	❍	❍	❍	❍
Spanish	❑	❍	❍	❍	❍	❍
German	❑	❍	❍	❍	❍	❍
Chinese	❑	❍	❍	❍	❍	❍
Portuguese	❑	❍	❍	❍	❍	❍
Japanese	❑	❍	❍	❍	❍	❍
Korean	❑	❍	❍	❍	❍	❍
Other (Please specify)	❑	❍	❍	❍	❍	❍

Appendix B

Speaking Prompt

You and a friend are planning a vacation to Disneyland. Your mother calls and wants to know about your upcoming trip. Prepare by reading through your itinerary, then in your response use complete sentences to discuss some of the activities.

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



Appendix C

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 Academic C **(Advanced**	Fairly organized paragraph-like speech with appropriate discourse markers (transitions, conclusion, etc.) Will not be as organized as level 7,	• Can speak comfortably with concrete topics, and discuss a few topics abstractly; • Academic	• Grammar errors are infrequent and do not affect comprehension; no apparent sign of grammatical avoidance;

Low)	but meaning is clear.	vocabulary often used appropriately in speech;	• 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 ideas. Sentences may be	• Able to handle a variety of uncomplicated tasks with	• Strong command of basic structures; error patterns with complex grammar;

(Intermediate Mid)	strung together, but may not work together as cohesive paragraphs.	concrete meaning; • Expresses meaning by creating and/or combining concrete and predictable elements of the language; • Uses sparse academic vocabulary appropriately;	• 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 **(Novice High)**	Short and sometimes incomplete sentences.	• Restricted to a few of the predictable topics necessary for survival (basic personal information, basic objects, preferences, and immediate needs) • Relies heavily on learned phrases	• Attempt to create simple sentences, but errors predominate and distort meaning; • Avoids using complex structures. • Speaker's 1st language strongly influences syntax; • Generally understood by

		or recombination of phrases and what they hear from interlocutor; • Limited general vocabulary	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 cues, may be able to exchange greetings, give their identity and name a number of familiar objects from their immediate environment;	• Cannot participate in true conversational exchange; • Length of speaking sample may be insufficient to assess accuracy; • Nearly incomprehensible even by those used to dealing with non-natives

Appendix D

Effect of listener variables on mean ratings

Table 18

Effects of listener variables on mean ratings

Effect	Num DF	Den DF	F Value	Pr > F
Gender	1	95	1.37	.24
Age range	5	95	1.31	.27
Education level	4	95	0.14	.97
Habitual interaction with NNESs	6	95	1.47	.20
Amount of NNES friends and family	4	95	0.50	.73
Lived outside the US	1	95	0.08	.78
Studied a foreign language	1	95	0.63	.43