

INTERGROUP ANXIETY AND WILLINGNESS TO COMMUNICATE: EXPLORING THE
EFFECTS OF STEREOTYPE THREAT AND SOCIAL ATTRACTION

By

Gretchen P. Montgomery

Submitted to the graduate degree program in Communication Studies
and the Graduate Faculty of the University of Kansas in partial fulfillment of the
requirements for the degree of Master of Arts.

Chairperson, Dr. Yan Bing Zhang

Dr. Jeffrey Hall

Dr. Adrienne Kunkel

Date defended: November 6, 2015

The Thesis Committee for Gretchen P. Montgomery
certifies that this is the approved version of the following thesis:

INTERGROUP ANXIETY AND WILLINGNESS TO COMMUNICATE: EXPLORING THE
EFFECTS OF STEREOTYPE THREAT AND SOCIAL ATTRACTION

Chairperson, Dr. Yan Bing Zhang

Date approved: December 2, 2015

Abstract

Guided by communication accommodation theory (Giles, 1973) and ethnolinguistic identity theory (Giles, Bourhis, Richard, & Taylor, 1977), the current experimental study examined the effect of activation of an outgroup stereotype threat on native English speaking American participants' ($N = 243$) perceptions of the native Spanish speaker, and non-English speakers in general. Specifically, this study investigated the effect of activation of an outgroup stereotype threat on the participants' perceptions of social attractiveness of the speaker, comprehensibility and intergroup anxiety about communicating with the speaker, accentedness of non-native English speakers in general, willingness to accommodate their communication style to non-English speakers, and willingness to communicate with persons whose communication styles were different from their own.

Participants were first randomly assigned to one of two conditions: presence or absence of stereotype threat (e.g., an explicit written message indicating difficulties when communicating in English with individuals who speak English as a second language). In both conditions, participants then listened to a recording of a native Spanish speaker reading a paragraph about academic programs in English with a moderate level of accent. Participants then answered questions measuring the major variables in the current study.

Results indicated that the stereotype threat condition had a significant negative effect on participants' perceived social attractiveness of the speaker. Participants rated the speaker as less socially attractive in the stereotype condition ($M = 4.77$, $SD = .99$) than in the no-threat condition ($M = 4.45$, $SD = .81$), $t(241) = 2.627$, $p < .01$. Using Hayes' (2013) PROCESS for SPSS, results also indicated a significant indirect effect of stereotype threat on intergroup anxiety toward the speaker and willingness to interact with the speaker through social attractiveness. Furthermore,

exposure to stereotype threat had a significant indirect effect on perceived comprehensibility of non-native English speakers, intergroup anxiety toward outgroup members (i.e., individuals who speak English with an accent) in general, and willingness to interact with outgroup members in general through perceived social attractiveness.

Acknowledgements

This research project is the product of endless support. First, to my advisor, Dr. Yan Bing Zhang, thank you for your countless hours of support and advice. You are so giving of your time and knowledge, and I appreciate your encouragement. I am proud to call you my advisor, teacher, and role model. To my committee members, Dr. Adrienne Kunkel and Dr. Jeffrey Hall, I cannot thank you enough for your involvement with this project. Dr. Hall, your guidance and feedback has been indispensable. Through the entire process, you were always available to bounce around ideas or draw models on the board in your office. I sincerely appreciate your time and energy. Dr. Kunkel, it has been such a joy to have your feedback on this project. Your support and advice has been invaluable. Whether discussing conceptualization of variables or self-care through a research endeavor, your wisdom is priceless. Thank you, to each of you, for uniquely shaping my education and growth as a scholar. It truly is an honor to be working in the company of such monumental scholarship.

To my family, for all your love and support, but especially my father, who listened to me recount every meeting, draft, and defense along the way and offered his thoughts and encouragements. From my earliest memories, you have championed me as a student. All of my passion for learning comes from you. Thank you for instilling that in me. To my mother, thank you for teaching me to be determined in the face of obstacles, and for teaching me to be a strong woman. To my siblings, you three are everything. I dedicate this to you.

A comprehensive list of all who contributed their support could be its own chapter, so I will simply say: To all those who offered encouragement, talked through ideas, proofread drafts, helped format surveys, and guided me during data analysis; I sincerely say xie xie, muchísimas gracias, thank you.

Table of Contents

Chapter One: Introduction.....	1
Chapter Two: Review of Literature.....	4
Intergroup Anxiety.....	4
Social Attractiveness.....	5
Stereotype Threat.....	6
Communication Accommodation Theory.....	9
Ethnolinguistic Vitality Theory.....	13
Ethnolinguistic Identity Theory.....	14
Chapter Three: Method.....	18
Pilot Study.....	18
Main Study.....	19
Chapter Four: Results.....	23
Hypothesis 1.....	23
Table 1.....	23
Hypothesis 2.....	23
Table 2.....	24
Figure 1.....	24
Figure 2.....	25
Table 3.....	26
Table 4.....	27
Figure 3.....	27
Table 5.....	28

Figure 4.....	28
Table 6.....	29
Figure 5.....	29
Chapter Five: Discussion.....	31
Summary of Results.....	31
Theoretical Implications.....	35
Future Directions.....	35
Limitations.....	37
Conclusion.....	39
References.....	40
Appendix A.....	47
Appendix B.....	49
Appendix C.....	50
Appendix D.....	51
Appendix E.....	52
Appendix F.....	53
Appendix G.....	54
Appendix H.....	55
Appendix I.....	56
Appendix J.....	57
Appendix K.....	58
Appendix L.....	59

Intergroup Anxiety and Willingness to Communicate: Exploring the Effects of Stereotype Threat and Social Attraction

Introduction and Rationale

With growing diversity in the U.S., scholastic environments have become the mediums through which many intercultural and intergroup interactions occur. More specifically, increased globalization has led to a growing number of international students and faculty at U.S. colleges and universities. The 2012-2013 academic year saw a 7.2% increase in international students in the U.S., reaching a total 819,644 international students (Institute of International Education, 2013). Furthermore, there has been a rapid increase in international faculty at U.S. institutions, which presents intercultural interactions for both students and fellow institutional employees. A New York Times article published in 2011 states that in 2010, the number of international faculty at U.S. universities had risen to 115,000 (up from 86,000 in 2001). With more and more individuals coming to U.S. institutions from abroad, there is ample opportunity for students and faculty to interact, learn, and collaborate with one another.

With the increasing number of people who come to the U.S. from abroad, there is now more opportunity than ever for intercultural and intergroup interaction. However, much of the research about the experiences of international students points to a low satisfaction rate with interactions with American students (Imamura, Zhang, & Shim, 2012; Ruble & Zhang, 2012). Past research has demonstrated that American university students express frustration when communicating with international students (Imamura et al., 2012; Imamura, Zhang, & Harwood, 2011). Imamura et al. (2012) posit that linguistic competency, or an international student's command of the English language, is a strong predictor of relationship satisfaction with American peers (2012). The term linguistic competency is used to address a person's comfort

with speaking, listening, writing and reading a language. When considering the spoken aspect, many studies focus on the grammatical correctness of the language. What becomes problematic, and can cause frustration between interlocutors, is when accent is perceived as an impediment to clear communication (Imamura et al., 2012). However, a person's accent becomes somewhat permanent after adolescence (Scovel, 2000). Therefore, any person learning a new language after this "critical period" will likely speak the new language with an accent influenced by their native language (Piske, MacKay, & Flege, 2001; Scovel, 2000). Attempts to mask or neutralize this accent often come with great effort and can sound unnatural in conversation (Scovel, 2000). Hence, there is a strong need to examine the role that accent plays in intergroup communication, both from the speaker's perspective and the listener's perspective. That is, research is needed both on how a person's own accent affects their willingness to interact, and how a person's willingness to interact is affected by hearing accented speech from others.

While Imamura et al. (2011) examined interactions between Japanese and American students, current trends in international education support the need for other linguistic groups to be examined as well, particularly individuals from Spanish-speaking societies. The Institute of International Education (2013) reports that four of the top 25 countries sending students to study in the U.S. are Spanish-speaking: Spain, Mexico, Colombia, and Venezuela. These four countries alone sent almost 32,000 students to the U.S. in the 2012-2013 academic year (Institute of International Education, 2013).

Aside from the population of Spanish-speaking international students, there exists a large permanent population Hispanics and Latinos in the United States, many of whom are native Spanish speakers. (U.S. Census Bureau, 2013). According to the 2000 U.S. Census data, 31.8 million residents (11%) of the U.S. population identified as Hispanic/Latino. More recent census

data indicates that 62 percent of the resident U.S. population speaks Spanish as their primary language (U.S. Census Bureau, 2013). The number of respondents that claim Hispanic/Latino ancestry and/or Spanish as a native language has grown steadily over the past decade. When considering the existing research on intergroup communication, Hispanics and Latinos are particularly underserved, especially when considering that Spanish is now the second most common language spoken in the United States (U.S. Census Bureau, 2013). Due to this relevance, the current project seeks to examine Hispanic accents, where Hispanic means from any country where Spanish is the primary language.

Furthermore, a key aspect that may contribute to and explain low satisfaction in intergroup interactions is stereotype threat. While past research (Inzlicht & Schmader, 2012; Steele & Aronson, 1995) on stereotype threat has done much to explain achievement gaps in academic and workplace settings, there is little research on the effect that stereotype threat has on other intergroup experiences, such as social interactions outside of school or the workplace. Specifically, there is little research regarding the effect of stereotype threat on a person's willingness to interact with outgroup members in the future.

The purpose of this study is to examine the effects of exposure to stereotype threat and accent on intergroup anxiety, perceptions of social attractiveness, willingness to accommodate, and an individual's intentions toward future intercultural interactions. To begin, an examination of intergroup anxiety and its influences on behavior is discussed, followed by an examination of the cognitive functions of stereotypes and stereotype threat. Finally, communication accommodation theory and ethnolinguistic identity theory provide theoretical support for the relationship between stereotype threat, accent, social attractiveness, willingness to accommodate, and willingness to interact in the future.

Literature Review

Intergroup anxiety may explain the lack of meaningful relationships borne out of intercultural interactions. Ruble and Zhang (2012) explain intergroup anxiety as feelings of worry, uncertainty, or unease that arise from intercultural encounters. Often this anxiety stems from risk of embarrassment during an interaction or from irritation caused by misunderstandings or miscommunication (Imamura et al., 2012). Intergroup anxiety plays a significant role in both the communication patterns of both sojourners and members of the host culture, as demonstrated by past research (Imamura et al., 2012; Ruble & Zhang, 2012).

Although much previous research demonstrates that a myriad of factors contribute to anxiety, there may be some scenarios that cause more anxiety than others. Research by Yashima (2002) posits that communication anxiety increases when linguistic issues are involved. Americans in particular tend to hold negative perceptions of immigrants or sojourners who speak English poorly (i.e., incorrect use of grammar, poor pronunciation) (Imamura et al., 2012). In an intergroup context, a non-native English speaker may sense the frustration or impatience felt by an American interlocutor, thus increasing anxiety (Imamura et al., 2012). These feelings of anxiety may decrease as one's linguistic competence and confidence in communicative abilities increase. For example, Yashima's (2002) study of Japanese students learning English as a second language demonstrated that second language proficiency and communication confidence positively predicted the student's overall willingness to communicate in English.

Past research has also found that the presence of anxiety serves to mediate a person's acceptance of stereotypes. For example, Ruble and Zhang (2012) demonstrate that high levels of anxiety correlate with higher acceptance rates of negative stereotypes, while low levels of anxiety correlate with higher acceptance rates of positive stereotypes. Since stereotypes are used

to make sense of the world, they are often relied upon during anxiety-inducing intergroup interactions, in order to ease anxious feelings. Ruble and Zhang (2012) contend that because anxiety is associated with lower rates of deep, meaningful cognitive processing, a person more readily refers to pre-existing stereotypes for guidance during an interaction. In that regard, anxiety is a predictor of stereotyping. However, more research is needed to explore anxiety as an outcome of exposure to stereotypes, which is a goal of the current study. Whether as a precedent or a possible outcome, an individual's level of intergroup anxiety has significant influence on their overall perceptions of outgroup members. Due to this connection between intergroup anxiety and endorsement of stereotypes, it is necessary to understand the cognitive functions served by stereotypes.

Stereotypes are socially constructed concepts that are reinforced through social interactions such as media consumption and intergroup relationships (Fiedler & Schmid, 2003; Harwood & Vincze, 2012). First defined by Walter Lippmann in 1922, stereotypes serve as a basic cognitive function used as a tool for categorization (Operario & Fiske, 2003). In his book, *Public Opinion*, Lippmann (1922), posits, "the real environment is altogether too big, too complex, and too fleeting for direct acquaintance," and that "we have to reconstruct it on a simpler model before we can manage it" (p. 16). Humans reorganize their world in order to manage the wealth of stimuli to which they are exposed (Lippmann, 1922). Aside from categorization, stereotypes may also be used to reduce uncertainty and anxiety.

Past research has demonstrated a role between social attraction and stereotypes (Hogg, 2006; Lee & Giles, 2008). When group saliency is activated during an interaction, attributes are often assessed on a group level, rather than an individual level (Hogg, 2006). In these contexts, perceptions of liking and compatibility indicate social attraction, and reflect a person's

acceptance of an outgroup member (Hogg, 2006). Lee and Giles (2008) differentiate personal attraction, “an individualized liking for another person based on similarities in individual characteristics,” from social attraction, “a depersonalized liking for another person based on group identification and prototypicality.” (p. 4). Social attraction, then, serves as an indicator of acceptance of an outgroup member that matches certain prototypes held by the interlocutor. In the context of this study, social attraction creates a link between stereotypes, willingness to interact, and willingness to accommodate.

While stereotypes serve a cognitive function, there are consequences when their content leads to strained intergroup relations (Operario & Fiske, 2003; Ruble & Zhang, 2012). These consequences manifest themselves in a variety of ways, particularly when an individual’s characteristics are either attributed to a whole group (as in prototype models) or compared to other group members (as in exemplar models). These instances of attribution and comparison demonstrate a larger psychological phenomenon known as stereotype threat.

In their groundbreaking study, Steele and Aronson (1995) examined the intellectual test performance of African Americans when exposed to stereotype threat, or “the social-psychological predicament that can arise from widely-known negative stereotypes about one’s group” (p. 797). Furthermore, Inzlicht and Schmader (2012) define stereotype threat as a setting in which a person feels that they are at risk of confirming a negative stereotype about their ingroup. A person’s perception of this risk, in turn, affects their actions, attitudes, and beliefs about their abilities. Results of Steele and Aronson’s (1995) study indicated that exposure to stereotype threat interferes with cognitive capacities, leading to poorer performance by those who felt they risked confirming a stereotype about their ingroup.

For the better part of a decade, the study of stereotype threat was widespread throughout the social psychological discipline (Inzlicht & Schmader, 2012). Research of stereotype threat serves to explain achievement gaps, both scholastic and professional, among marginalized groups, and also proposes remedies to close these gaps (Inzlicht & Schmader, 2012). The implications of these studies resonate through several areas, including education, sociology, and communication studies, as well as scholastic, career, and workplace settings, and perceptions of social belonging.

Research spanning the past two decades has shown that stereotype threat contributes to low achievement and performance scores within the African-American and Hispanic communities on college entrance exams, standardized tests, and classroom work (Inzlicht & Schmader, 2012; Taylor & Walton, 2011). Furthermore, stereotype threat is shown play a role in lower achievement among women and minorities. Research by von Hippel, Wiryakusuma, Bowden, and Shochet (2011) investigated the effect on stereotype threat and management styles among women. Results of the study indicated that upon exposure to the common stereotype that men are more effective leaders than women, female participants changed their communication style to be more masculine when performing a task in which they delegated a duty to a subordinate (von Hippel et al., 2011).

The results from previous research on stereotype threat demonstrate the effect it can have on a person's social identity. Maintaining a positive social identity is often a primary goal in intergroup interactions (Fiedler & Schmid, 2003; Hamilton, Gibbons, Stroessner, & Sherman, 1992; Jaspal & Cinnirella, 2011; Maass, 1999) and the presence of stereotype threat actively affects a person's evaluation of their social identity, either on a personal level or a group level (Fiedler & Schmid, 2003). Walton and Carr (2012) define social belonging as "people's

perception about the quality of their social relationships” with a major factor of that belonging being “that one’s individual qualities, characteristics, and contributions are recognized and valued by others in a setting” (pp. 90-91). This sense of social belonging is imperative to a person’s identity and psychological well-being. Institutional support, or the feeling that one’s identity is acknowledged and valued by an organization or group, is a significant barometer in the sense of social belonging among minority employees (Cashman, 2009). In instances in school and the workplace, students and adults who have their sense of social belonging challenged show decreased motivation to contribute and exhibit lower performance on tasks (Walton & Carr, 2012).

According to Woodcock, Hernandez, Estrada, and Schultz (2012), little research has been conducted to ascertain the long-term effects of frequent and repeated exposure to stereotype threat. However, these authors found that aside from affecting a person’s sense of social belonging, frequent and repeated exposure to stereotype threat can lead to domain disidentification and abandonment (Woodcock et al., 2012). These phenomena may explain the lack of representation of minorities in areas such as science, math, engineering, and technology, or STEM subjects, and the dearth of minorities in academia and leadership roles (Woodcock et al., 2012).

In addition to the lack of research regarding exposure to ingroup stereotype threat, there is currently a gap in research regarding the effects of exposure to a stereotype threat about outgroup members. That is to say, little is understood about the effects of hearing a stereotypically threatening message about a group to which one does not belong. Furthermore, this research gap can be extended to minority groups, groups with low vitality, or groups whose accent is considered “low status.” As demonstrated by Giles, Wilson, and Conway (1981)

linguistic hierarchies affect perceptions of a speaker, and these perceptions carry implications and consequences for intergroup interactions. For the purposes of fostering more meaningful and positive intergroup interactions, it is important to understand the consequences of hearing, reading, or otherwise consuming stereotype threat messages about cultural groups other than one's own.

As demonstrated by previous research, those who frequently confront instances of stereotype threat feel motivated to either change their behavior or their circumstances so as to avoid future exposure (Woodcock et al., 2012). One way an individual might change their behavior is by altering their speech pattern in order to conform to the expectations of the dominant linguistic majority. Communication accommodation theory and, by extension, ethnolinguistic identity theory, provide theoretical support for the motivations behind change of communication behaviors in linguistic minorities.

Theoretical Framework

Communication accommodation theory (CAT) attempts to explain how individuals perceive and adapt to asymmetry in communication (Hecht, Jackson, & Pitts, 2008). Developed by Giles in 1973, communication accommodation theory seeks to explain the goals behind changes in an individual's communication behaviors. In the original field study, Giles (1973b) examined the speech behaviors of Welsh participants, and posited that there was a struggle between the Standard English (RP) accent and the Welsh accent, and found that different accents elicited different responses from participants (Giles, 1973b; Bourhis & Giles, 1976).

The original theory, known as speech accommodation theory, examined the processes by which an individual creates social identity and understanding with an interlocutor (Gallois, Giles, Jones, Cargile, & Ota, 1995; Harwood, Giles, & Palomares, 2008; Jones, Gallois, Callan, &

Barker, 1999; Llamas, Watt, & Johnson, 2009). The earliest version of the theory exhibited three strategies as a way to create identity. Convergence is used to attune communication patterns, or make them seem more similar, while divergence is used to create distance between interlocutors in order to exaggerate differences (Gallois et al., 1995; Jones et al., 1999). Nonaccommodation, or maintaining one's own communication style, is most often seen as divergence (Jones et al., 1999). Past research has demonstrated that adapting to and learning a new language is a convergent behavior, and often one that is expected of immigrants and sojourners as part of the acculturation process (Giles, Bonilla, & Speer, 2012; McKay-Semmler & Kim, 2014). However, maintaining one's native accent while communicating with outgroup members may be seen as a divergent or non-accommodative measure, especially if communicating with a member of the dominant linguistic group. For the purposes of this study, the speaker maintained their native accent (a divergent behavior) while speaking English (an accommodative measure) with a participant who identifies as a native English speaker, or a member of the dominant language group.

In 1998, Coupland, Coupland, Giles, and Henwood posited that three more scenarios be made part of the theory: interpretability, discourse management, and interpersonal control. Interpretability occurs when the speaker focuses his or her attention on the ability of the listener to understand and interpret the dialogue (Gallois et al., 1995; Jones et al., 1999). Since the current study controlled for accentedness at a moderate level, interpretability should play no role in the interaction. Discourse management refers to the conversational needs of the interlocutor (Gallois et al., 1995; Jones et al., 1999). Finally, interpersonal control focuses on the interpersonal relationship between the two interlocutors, including factors such as role, power, hierarchy, and status (Jones et al., 1999). The addition of these scenarios broadened the scope of

the theory, in turning prompting its name to be change to communication accommodation theory (or CAT) (Coupland et al., 1998; Jones et al., 1999).

Research of CAT typically examines an individual's perception of their communication partner (Hornsey & Gallois, 1998; Giles, 1973). Communicators are perceived differently based on the strategies that they employ. For example, convergence is often seen as positive, demonstrating the person's willingness to adapt to another's speaking style (Hornsey & Gallois, 1998). Divergence and maintenance, however, are often seen as indicative of inflexibility and unfriendliness (Hornsey & Gallois, 1998). That being said, convergence can be seen negatively in instances of overaccommodation, or situations wherein a person goes too far in their convergence toward another's communication style, usually ending in an inappropriate use of language or vocalics, such as speaking so slowly and clearly that it offends the interlocutor (Hornsey & Gallois, 1998). However, Hornsey and Gallois (1998) also contend that how a strategy is perceived is ultimately determined by the predisposition and interpretation of the speaker.

Since communication (both verbal and nonverbal) is one of the most salient markers of group identity, it can be believed that speaking style would serve as a basis for perceptions and evaluations of a speaker. In particular, evaluations of accent carry significant implications for the speaker. In research conducted by Giles et al. (1981), an experiment was used to assess the relationship between accent and perceived suitability for employment. Participants, acting as though they were in charge of hiring a new employee, listened to tapes of speakers with either one of two accents, high status, standard Received Pronunciation (RP) or low-status, nonstandard Welsh. Participants then assessed the speaker's personality and whether or not the speaker was a promising candidate for the job description at hand. Results indicated that in personality

assessments, the low-status accent was perceived more positively. In suitability for employment, the RP speaker was seen as more qualified for high-status jobs, and the Welsh accent was seen as more acceptable for low-status jobs (Giles et al., 1981).

Aside from assigning attributes to the speaker, communication style can also be used as the basis for assigning attributes to the speaker's group as well. Past research has shown consistent support for correlations between communication style and perceptions about prestige, education, and a variety of other factors (Hamilton et al., 1992; Hornsey & Gallois, 1998; Giles, 1973; .McGlone & Giles, 2011). Research conducted by Giles (1973) indicated that speakers who had a standard, RP accent were seen as more prestigious and educated than speakers who had a Welsh accent. Research by Potowski and Matts (2008) contends that speakers are often aware that their speech patterns and behaviors can be indicative of group norms and stereotypes.

Finally, an individual's communication style and strategies used work in concert with the interlocutor's perceptions as a predictor of future intentions for interaction (Hornsey & Gallois, 1998). When considering Spanish in particular, Hall and Ramírez (1993) found that more consistent exposure to the Spanish language correlates with higher willingness to interact with Spanish-speakers in the future. Hornsey and Gallois (1998) found that there seems to be an interaction effect between ethnicity, sex, and nationality when used as common ground among interlocutors (1998). This research would indicate that when common ground is found, intentions for future interaction are higher.

Communication accommodation theory explains the strategies that individuals use to establish social identity. However, in contexts of perceived intergroup interaction, that social identity relates to both ethnolinguistic vitality theory and, by extension, ethnolinguistic identity theory and their role in creating understanding and recognition between interlocutors (Hecht,

Jackson, & Pitts, 2008). Ethnolinguistic vitality theory (Giles et al., 1977; Harwood, Giles, & Bourhis, 1994), or a linguistic group's demographics, status, and institutional support, certainly plays a role in intergroup dynamics, while ethnolinguistic identity theory directly relates to the current study in its relation to social identity, and the need for ingroup and outgroup identities to be distinguishable.

Ethnolinguistic vitality theory refers to a group's strength within a host culture, or specifically, "the amount of social advantages a group has or has not attained in terms of pride in its history, membership numbers, and the visibility of its culture and communicative codes in society" (Giles et al., 2008, p. 249). This concept is represented quantitatively, through demographic data, and qualitatively, through the groups' relations to others in terms of power and status, and institutional support regarding the group's well-being, assistance, and recognition. As outlined in the introduction, Hispanics/Latinos comprise a large group of the population that continues to grow (McKay-Semmler & Kim, 2014). Measures of status and institutional support are mixed. Socioeconomically, Hispanics are more likely to drop out of school and more likely experience poverty than other ethnic groups in the U.S. (McKay-Semmler & Kim, 2014). School systems in the U.S. comprise one of the many institutions from which ethnolinguistic groups seek support and recognition. While record numbers of Hispanics are pursuing higher education (McKay-Semmler & Kim, 2014), access to academic opportunities still poses a significant barrier to the group's social and psychological well-being, which in turn affects their ethnolinguistic vitality. Language barriers are one of the most common impediments to academic success, especially for young Hispanics, many of whom are immigrants or first-generation U.S. citizens (i.e., children of immigrants) (McKay-Semmler & Kim, 2014). In interviews with Hispanic youths living in the U.S., McKay-Semmler and Kim (2014) found a

positive correlation between host language competence (i.e., English proficiency) and indicators of psychological health (e.g., belonging, satisfaction). The relationship between English proficiency and psychological health suggests that the accommodative, convergent behavior of learning a host language was seen as necessary for academic success. For Hispanic/Latinos living in the U.S., a sense of group vitality is sought through status and recognition. Ethnolinguistic vitality and the extent to which one identifies with their ethnolinguistic group is an indicator of ethnolinguistic identity.

Ethnolinguistic identity occurs as a product of group vitality in that the more vitality a group experiences, the more its members will “invest in their ingroup emotionally, psychologically, and with respect to collective action to foster their own group’s interests” (Giles et al., 2012, p. 250). Ethnolinguistic identity is formed through social and cultural interactions throughout our lives. This identity helps to mold the ways in which we express ourselves linguistically (Reid, Giles, & Harwood, 2008). Ethnolinguistic identity theory (ELIT) (Giles et al., 1977; Giles & Coupland, 1991) focuses on language as the basis for ethnic identity and categorization, both of the self and of others. This theory helps shape the ways in which identity is created through language. Language is one of the most salient markers of group identity (Hamilton et al., 1992; Sachdev & Bourhis, 2008), and it is inundated with a host of both verbal and nonverbal cues that inform listeners about the speaker’s identity (Burgoon, Guerrero, & Manusov, 2011; McGlone & Giles, 2011). In research surrounding bilingualism, Sachdev and Bourhis (2008) found that many studies reveal that language competency affects group identity saliency within an individual. For example, Rumbaut (1994) explains that in research of bilingual adolescents in Florida and California, if an individual is more fluent in English than their native language (or the language spoken by their parents), they are more likely to identify

as American. If there is equal fluency between each language, the individual is more likely to hyphenate their identity (i.e., Mexican-American, Cuban-American) (Rumbaut, 1994).

Ethnolinguistic identity theory stems from Tajfel and Turner's (1979) social identity theory (SIT), which contends that social identities are in competition with one another (Harwood et al., 2008). This competition is born from the need for individuals to be able to distinguish themselves as part of an ingroup and separate from an outgroup (Harwood et al., 2008). Through SIT, Tajfel and Turner outline three different strategies to increase positive perceptions of an ingroup while diminishing positive perceptions of the outgroup: social mobility, social creativity, and social competition. Examples of these strategies can be found in research surrounding ethnolinguistic identity.

Social mobility describes an individual's ability to leave their social identity in favor of a more positive one (Harwood et al., 2008). This process of assimilation, or joining an outgroup in order to achieve a more distinguished social status; can come about through either subtle or drastic measures (Harwood et al., 2008). For example, by subtly altering one's accent, a person's status as an immigrant can be diminished, allowing them to more fully assimilate into mainstream culture. Methods of acculturation occur at different rates and to different degrees for each individual, but learning a host culture's language fulfills a significant step toward adjusting to life in a new place (Giles et al., 2012). With now more than 33 million Hispanics (or 68% of Hispanics age five and older) speaking English proficiently (Pew Hispanic Center, 2015), indicates that there is an two-thirds of the Hispanic population has attempted social mobility through acculturation by learning English.

Social creativity is the act of changing the dimensions that are used to compare the ingroup, taking them from a negative interpretation to a positive one (Harwood et al., 2008). This

process often involves redefining dialects, slurs, and accents that are considered derogatory or low-culture and reappropriating them to be used among ingroup members as terms of endearment and unity (Harwood et al., 2008). A study conducted by Mange, Lepastourel, and Georget (2009) of lexical markers and group identity suggests that individuals will often highlight their accent in order to emphasize an out-group identity. This example of social creativity is further demonstrated among individuals with both Mexican and Puerto Rican parentage in Chicago (Potowski & Matts, 2008). In interviews, Potowski and Matts (2008) found that individuals found their mixed dialects and accents to be a point of pride rather than something they tried to diminish in social interactions. Furthermore, Potowski and Matts contend that many interviewees admitted that changing their dialect in an attempt to “fit in” were often ineffective, which would further motivate the speaker to maintain their own accent (pp. 157). These results imply that in terms of accent, social creativity is a more viable option than social mobility.

Through social competition, the tension between social groups is direct and brought to public attention through political action such as demonstrations and petitions (Harwood et al., 2008). The recent surge of “English-only Movements” in the United States has been met with sizable disagreement, with those of non-English native languages, among other ethnolinguistic groups, advocating for the acknowledgement of more than one “national” language (Giles et al., 1995). The desire for recognition of multiple languages, and multiple routes of ethnolinguistic expression, is common among speakers of minority languages (Giles et al., 1995).

The present study seeks to examine the effects of stereotype threat, social attractiveness, and accent on intergroup anxiety and an individual’s willingness to interact with outgroup

members, and their willingness to accommodate an outgroup member during an interaction.

Based on the review above, the following hypotheses are posited:

H₁: Participants who are exposed to the outgroup stereotype threat message will perceive the speaker as less socially attractive than those who are not exposed to outgroup stereotype threat.

H₂: The experimental condition (i.e., stereotype threat or no threat) will have an indirect effect on all target variables (i.e., intergroup anxiety regarding the speaker, perceived comprehensibility, willingness to interact with outgroup members) through perceived social attractiveness.

Method

Pilot study

The goal of this study was to explore the role of moderate accentedness in intergroup interactions, and, when coupled with stereotype threat exposure, to explore its effect on intergroup anxiety, willingness to interact with outgroup members, and their willingness to accommodate an outgroup member during an interaction. Upon approval from the Institutional Review Board (IRB), data collection began with a pilot test to determine the level of accentedness of the recordings.

The purpose of the pilot study was to assess which recorded messages to play during the survey. The chosen recordings needed to have an accent that was heavy enough to be detected by participants, but not so heavy that it interfered with comprehension. Two native Spanish speakers were recruited to record messages, one woman from Spain (Speaker A), and one man from Peru (Speaker B). Each speaker recorded two takes of the message. As such, there were four recorded messages tested in the pilot study: two for Speaker A and two for Speaker B. The speakers were instructed to read the paragraph aloud, using their normal speech rate and accent. The message that the speakers recorded can be found in Appendix E.

Participants. Forty-eight participants, 24 females and 24 males, were recruited for the pilot study from a convenience sample from a basic public speaking course at a large, midwestern university. Female subjects rated the female speaker, and male subjects rated the male speaker in terms of accentedness. The participants for the pilot study were not exposed to any stereotype threat message prior to listening to the recording.

Procedure. Each subject listened to only one recorded, resulting in 12 responses for each recorded message. Participants listened to the recorded message then answered five questions

about the content of the recorded and the speaker's accent. The paper and pencil questionnaire was completed and turned in to the researcher. There were three items related to the content of the message that were used to measure listening comprehension. Sample items include, "What aspect of the university is being discussed?" and "According to the recording, the university and its academic programs are not nationally ranked." The last two items referred to the speaker's accent. First, the participants were asked if the speaker had an accent, (yes or no). A final scale asked the participant to rate the speaker's accentedness on a scale from one (not heavy at all), to five (very heavy).

Results of the pilot test indicated the following averages on a five-point scale of perceived accentedness of the speaker: Speaker A (first recording), $M = 3.54$, $SD = 0.72$; Speaker A (second recording), $M = 3.58$, $SD = 0.67$; Speaker B (first recording), $M = 4$, $SD = 0.60$; and Speaker B (second recording), $M = 3.67$, $SD = 0.89$. Results of an independent samples t test did not indicate a significant difference between any of the four averages. Each speaker's first recording was chosen for inclusion in the study. A copy of the manipulation check questionnaire can be found in Appendix E.

Main study

Participants. Participants were recruited from the basic public speaking course at a large, midwestern university. Overall, the total sample size was 243 subjects, with 130 males (53.5%) and 113 females ($M_{age} = 21.17$, $SD = 4.36$ range = 17-52). There were 183 (75.3%) White/Caucasian participants, 15 (6.2%) Hispanic/Latino participants, 17 (7.0%) Black participants, 12 (4.9%) Asian participants, two (0.8%) American Indian or Alaskan Native participants, and two (0.8%) Hawaiian or Pacific Islander participants. Additionally, nine (3.7%) participants identified as biracial, and three (1.2%) as multiracial.

Procedure. First, participants filled out a demographic survey to determine ethnicity, language use, and age, among other information. The full demographic survey can be found in Appendix A. Participants were randomly assigned to one of two possible conditions: reading a written message that did or did not contain a stereotypically threatening message about interacting with accented individuals. The stereotype threat message and the no-threat message can be found in Appendices B and C. After reading the written message, the participant listened to a recording about university academic programs. One recording was a female speaker (a native Spanish speaker from Spain), while the second recording was a male speaker (a native Spanish speaker from Peru). Female participants listened to the female recording, and males listened to the male recording. This listening assignment was automated by the selection that the participant made as their gender identification (male or female). A transcript of the recorded message is available in Appendix D.

A brief questionnaire following the recorded message was used to measure participants' perceptions of the heaviness of the speaker's accent. This questionnaire, the same as was used in the pilot study, was later used to assess the listener's attention to and comprehension of the recorded message. Also, the listener rated the heaviness of the speaker's accent. This rating ensured that the listener was able to detect the accent. The listening questionnaire can be found in Appendix E.

Intergroup Anxiety. After the listening quiz, participants responded to a questionnaire regarding their intergroup anxiety. The 11-item questionnaire ascertained the level of anxiety that participants have about hypothetically interacting with the speaker. Sample items included, "When interacting with the speaker, I would feel awkward," "When interacting with the speaker, I would be impatient," and "When interacting with the speaker, I would feel happy." The

reliability for these items was rated using Cronbach's alpha ($\alpha = .87$). The Intergroup Anxiety Scale, adapted from Ruble and Zhang (2011) is listed in Appendix F.

Social Attractiveness. Next, participants rated the speaker's social attractiveness. The Social Attractiveness Scale (Imamura, 2011) assessed the listener's perceptions of the speaker. This scale includes nine items, for example, "I think the speaker could be a friend of mine," and "I could become close friends with the speaker." The reported reliability for these items was .86. This scale is included in Appendix G.

Willingness to Interact. Then, participants responded regarding their willingness to interact with the speaker. This four-item scale, (Imamura et al., 2012), includes the following questions. "How willing are you to talk to the speaker?" "How willing are you to initiate conversation with the speaker?" "How willing are you to chat with the speaker?" "How willing are you to communicate with the speaker?" The reliability for these items was rated using Cronbach's alpha ($\alpha = .95$). The Willingness to Interact Scale can be found in Appendix H.

Perceived Accentedness. Next, the participants responded to a questionnaire regarding their perceptions about the accentedness of non-native English speakers. This four-item scale included the following questions. "Generally speaking, non-native English speakers are comprehensible," "Generally speaking, non-native English speakers speak clearly," "Generally speaking, non-native English speakers are difficult to understand," and "Generally speaking, non-native English speakers mispronounce words." The Cronbach's alpha for these items was .72. The Perceived Accentedness Index, adapted from Brennan and Brennan (1981), can be found in Appendix I.

Willingness to Accommodate. Next, participants answered a 9-item questionnaire regarding their willingness to accommodate their communication style when interacting with a

person whose accent or communication style is different from their own. The Willingness to Accommodate questionnaire includes items that ask about what potential accommodations a speaker would make to facilitate conversation. Sample items included “I would speak slower,” “I would avoid interrupting this person,” and “I would simplify my vocabulary.” Cronbach’s alpha for these items was .84. The questionnaire can be found in Appendix J.

Willingness to Interact. Then, participants responded regarding their willingness to interact with outgroup members in general. This four-item scale includes the following items. “I would like to participate in a program to help immigrant students and international students adapt to University life.” “I would be willing to meet with the speaker heard on the recording.” “I would like to communicate with the speaker face-to-face.” “I would be hesitant to talk to the speaker.” The reliability for these items was rated using Cronbach’s alpha ($\alpha = .78$). The Willingness to Interact Scale can be found in Appendix K.

Intergroup Anxiety. Finally, the Intergroup Anxiety Scale was administered a second time, but with different instructions. Instead of answering the questions regarding the speaker, participants were told to answer when thinking about outgroup interactions in general. The 11-item questionnaire assessed the level of anxiety that participants have about hypothetically interacting with an outgroup member. Sample items included, “When interacting with someone from a different cultural group, I would feel awkward,” “When interacting with someone from a different cultural group, I would be impatient,” and “When interacting with someone from a different cultural group, I would feel happy.” The reliability for these items was rated using Cronbach’s alpha ($\alpha = .82$). The Intergroup Anxiety Scale, adapted from Ruble and Zhang (2011) is listed in Appendix L.

Results

Data analysis focused on the effects of exposure to the experimental conditions (i.e., stereotype threat or no threat) on participant perceptions of the speaker and social attractiveness. Hypothesis 1 predicted that exposure to the outgroup stereotype threat message would result in participants rating the speaker as less socially attractive. An independent-samples *t*-test was conducted to compare the effects of the experimental conditions on the participants' perceptions of the social attractiveness of the speaker. Results indicated that participants in the stereotype threat condition rated the speaker as less socially attractive ($N = 110$, $M = 4.46$, $SD = .811$) than participants in the no threat condition ($N = 133$, $M = 4.77$, $SD = .986$); $t(241) = 2.627$, $p < .01$. Hypothesis 1 was fully supported. The total means and standard deviations for all variables are shown in Table 1.

Table 1. Total Means and Standard Deviations of all Variables

Criterion Variable	Stereotype Threat Condition		No Stereotype Threat Condition	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
Intergroup Anxiety (toward Speaker)	2.86	0.96	2.87	0.86
Social Attraction (of Speaker)	4.77**	0.99	4.45**	0.81
Willingness to Interact (with Speaker)	5.33	1.22	5.30	1.16
Willingness to Accommodate (to Outgroup)	4.38	0.95	4.45	0.91
Intergroup Anxiety (toward Outgroup)	3.02	0.99	3.09	0.90
Willingness to Interact (with Outgroup)	4.59	1.25	4.65	1.16
Perceived Accentedness (of Outgroup)	4.00	0.82	3.94	0.88

Note: The only significant difference between the conditions was found for perceived social attractiveness, $t(241) = 2.627$, $p < .01$

Hypothesis 2 predicted that the experimental conditions (i.e., stereotype threat or no threat) would have an indirect effect on all target variables (i.e., anxiety toward outgroup members, anxiety toward the speaker, comprehension of outgroup members, willingness to interact with the speaker, and willingness to interact with an outgroup member) through perceived social attraction. Results demonstrated mixed support for Hypothesis 2. The first

variable analyzed was intergroup anxiety. Model 4 of Hayes' (2013) PROCESS for SPSS was used for this analysis (see Figure 1) and all subsequent analyses.

Results indicated that the overall model was significant, $R^2 = .334$, $F(3, 238) = 41.594$, $p < .001$ (see Table 2). Results indicated that there was a significant indirect effect of exposure to stereotype threat on intergroup anxiety through social attractiveness ($\beta = .17$, $SE = .07$, $z = 2.31$, $p < .05$). Consistent with Hypothesis 1, participants who were exposed to the stereotype threat condition perceived the speaker as less socially attractive ($\beta = -.28$, $SE = .12$, $t = -2.39$, $p < .05$), which then was associated with more intergroup anxiety, ($\beta = -.60$, $SE = .06$, $t = -10.21$, $p < .0001$). Results indicated that there was a non-significant direct effect of stereotype threat exposure on intergroup anxiety, ($\beta = -.12$, $SE = .103$, $t = -1.178$, $p > .05$).

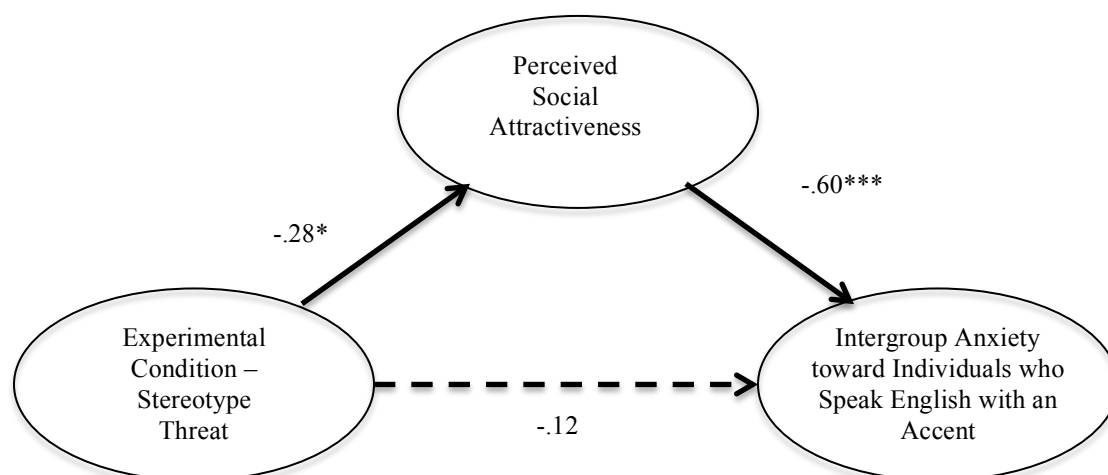


Figure 1. The direct and indirect effects of experimental condition on intergroup anxiety through perceived social attractiveness.

Table 2. The Effects of Experimental Conditions on Intergroup Anxiety through Perceived Social Attractiveness

Criterion Variable	Predictor Variables	β	SE	t	p	LLCI	ULCI
Condition	Social Attractiveness	-.28	.12	-2.39	.000*	-.52	-.05
	Anxiety	-.12	.10	-1.18	.24	-.33	.08
Social Attractiveness	Anxiety	-.60	.06	-10.21	.000***	-.72	-.49

Model Summary: $R^2 = .334$, $F(3, 238) = 41.594$, $p < .001$; *** $p < .001$, ** $p < .01$, * $p < .05$

The second variable analyzed for Hypothesis 2 was anxiety toward interacting with the speaker. Model 4 of Hayes' (2013) PROCESS for SPSS was used for this analysis (see Figure 2).

Results indicated that the overall model was significant, $R^2 = .59$, $F(3, 237) = 46.94$, $p < .001$ (see Table 3). Results indicated that there was a significant indirect effect of exposure to stereotype threat on anxiety toward interacting with the speaker through social attractiveness ($\beta = .17$, $SE = .07$, $z = 2.35$, $p < .05$). Consistent with Hypothesis 1, participants who were exposed to the stereotype threat condition perceived the speaker as less socially attractive ($\beta = -.29$, $SE = .12$, $t = -2.41$, $p < .05$), which then was associated with anxiety toward interacting with the speaker, ($\beta = -.60$, $SE = .05$, $t = -11.38$, $p < .0001$). Results indicated that there was a non-significant direct effect of stereotype threat exposure on anxiety toward the speaker, ($\beta = -.18$, $SE = .10$, $t = -1.77$, $p > .05$).

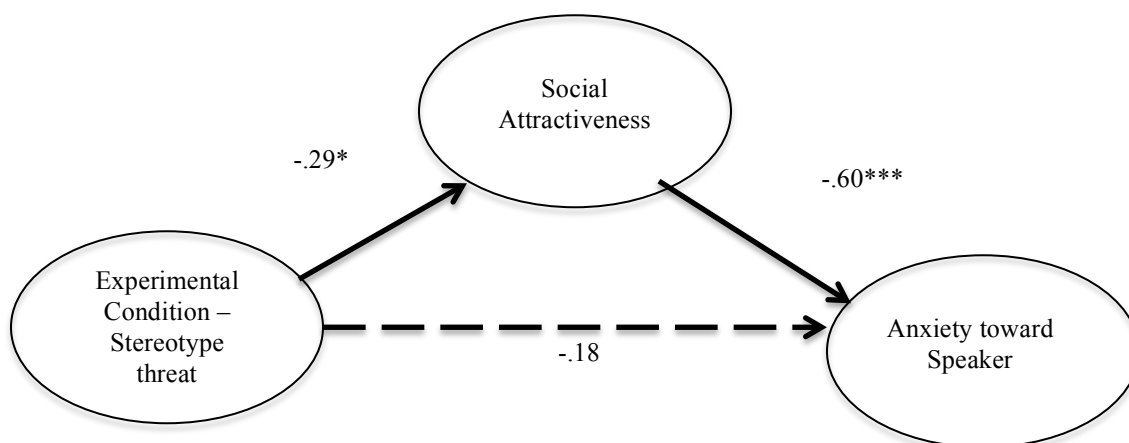


Figure 2. The direct and indirect effects of experimental condition on anxiety toward the speaker through perceived social attractiveness.

Table 3. The Effects of Experimental Conditions on Anxiety toward the Speaker through Perceived Social Attractiveness

Criterion Variable	Predictor Variables	β	SE	t	p	LLCI	ULCI
Condition	Social	-.29	.12	-2.41	.02*	-.52	-.05
	Attractiveness						
	Anxiety	-.18	.10	-1.77	.08	-.37	.02
Social	Anxiety	-.60	.05	-11.38	.000***	-.70	-.49
Attractiveness							

Model Summary: $R^2 = .59$, $F(3, 237) = 46.94$; *** $p < .001$, ** $p < .01$, * $p < .05$

The third variable analyzed was perceived comprehensibility of outgroup members. Results indicated that the overall model was significant, $R^2 = .45$, $F(2, 240) = 29.95$, $p < .001$ (see Table 4). Results indicated that there was a significant indirect effect of exposure to stereotype threat on perceived comprehensibility of outgroup members through social attractiveness ($\beta = -.43$, $SE = .05$, $z = 2.47$, $p < .001$). Consistent with Hypothesis 1, participants who were exposed to the stereotype threat condition perceived the speaker as less socially attractive ($\beta = -.30$, $SE = .12$, $t = -2.63$, $p < .01$), which then was associated with perceived comprehensibility of outgroup members, ($\beta = -.43$, $SE = .06$, $t = -7.71$, $p < .001$). Results indicated that there was a non-significant direct effect of stereotype threat exposure on perceived comprehensibility, ($\beta = -.19$, $SE = .10$, $t = -1.91$, $p > .05$).

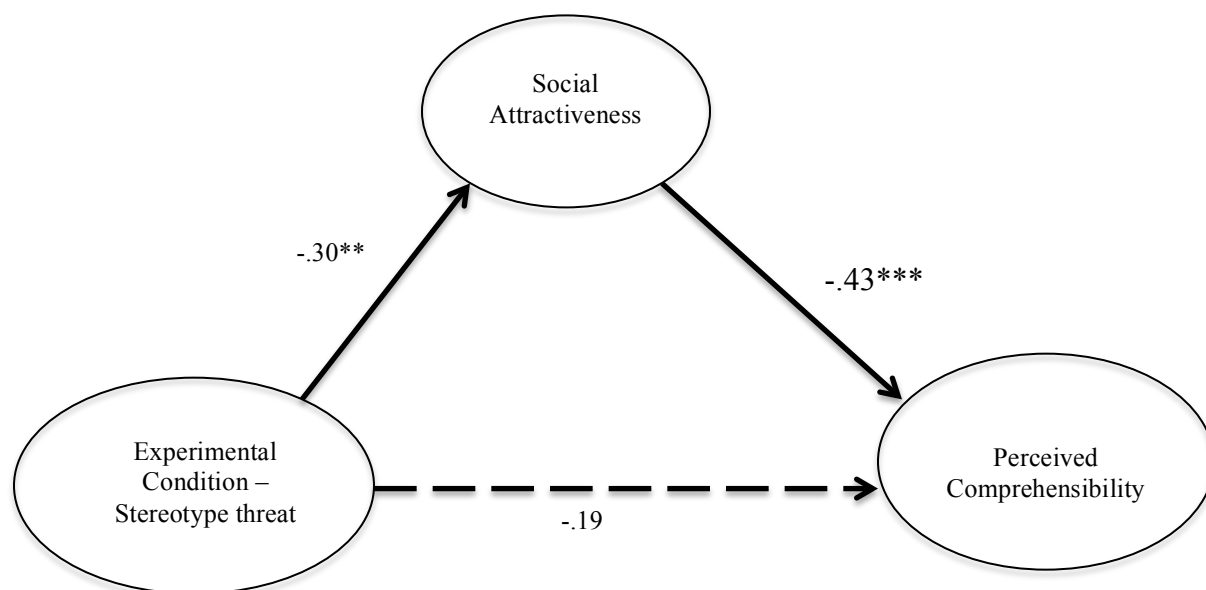


Figure 3. The direct and indirect effects of experimental condition on perceived comprehensibility of non-native English speakers through perceived social attractiveness.

Table 4. The Effects of Experimental Conditions on Perceived Comprehensibility of Outgroup through Perceived Social Attractiveness

Criterion Variable	Predictor Variables	β	SE	t	p	LLCI	ULCI
Condition	Social Attractiveness	-.30	.12	-2.63	.01**	-.53	-.08
	Comprehensibility	-.19	.10	-1.91	.06	-.39	.01
Social Attractiveness	Comprehensibility	-.43	.06	-7.71	.000***	-.53	-.32

Model Summary: $R^2 = .45$, $F(2, 240) = 29.95$; *** $p < .001$, ** $p < .01$, * $p < .05$

For willingness to interact with the speaker, results indicated that the overall model was significant, $R^2 = .37$, $F(2, 240) = 71.61$, $p < .001$ (see Table 5). Results indicated that there was a significant indirect effect of exposure to stereotype threat on willingness to interact with the speaker through social attractiveness ($\beta = -.25$, $SE = .10$, $z = -2.56$, $p < .01$). Consistent with Hypothesis 1, participants who were exposed to the stereotype threat condition perceived the speaker as less socially attractive ($\beta = -.30$, $SE = .12$, $t = -2.63$, $p < .01$), which then was associated with willingness to interact with the speaker, ($\beta = .81$, $SE = .07$, $t = 11.96$, $p < .001$).

Results indicated that there was a non-significant direct effect of stereotype threat exposure on willingness to interact with the speaker, ($\beta = .22$, $SE = .12$, $t = 1.75$, $p > .05$).

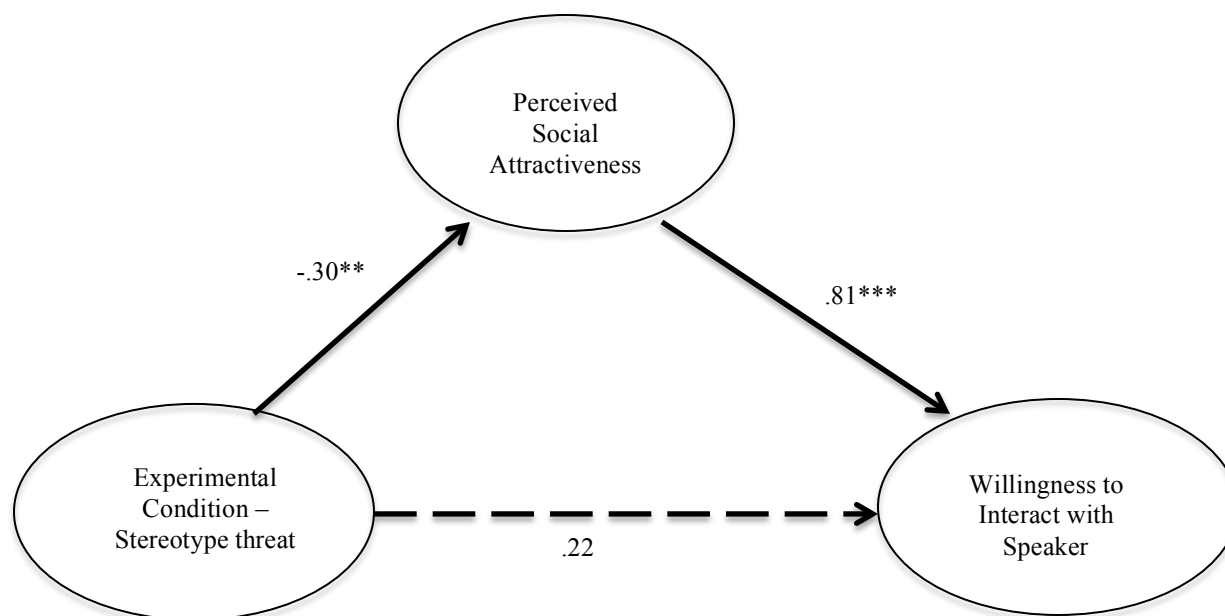


Figure 4. The direct and indirect effects of experimental condition on willingness to interact with the speaker through perceived social attractiveness.

Table 5. The Effects of Experimental Conditions on Willingness to Interact with the Speaker through Perceived Social Attractiveness

Criterion Variable	Predictor Variables	β	SE	t	p	LLCI	ULCI
Condition	Social Attractiveness	-.30	.12	-2.63	.01**	-.53	-.08
	Will. to Interact	.22	.12	1.75	.08	-.03	.46
Social Attractiveness	Will. to Interact	.81	.07	11.96	.000***	.68	.95

Model Summary: $R^2 = .37$, $F(2, 240) = 71.61$; *** $p < .001$, ** $p < .01$, * $p < .05$

The last variable to be analyzed was willingness to interact with outgroup members.

Results indicated that the overall model was significant, $R^2 = .34$, $F(2, 240) = 62.37$, $p < .001$ (see Table 6). Results indicated that there was a significant indirect effect of exposure to stereotype threat on willingness to interact with outgroup members through social attractiveness ($\beta = -.24$, $SE = .09$, $z = -2.55$, $p < .05$). Consistent with Hypothesis 1, participants who were exposed to the stereotype threat condition perceived the speaker as less socially attractive ($\beta =$

$-.30, SE = .12, t = -2.63, p < .01$), which then was associated with willingness to interact with outgroup members, ($\beta = .79, SE = .07, t = 11.16, p < .001$). Results indicated that there was a non-significant direct effect of stereotype threat exposure on willingness to interact with the outgroup, ($\beta = .06, SE = .15, t = .41, p > .05$).

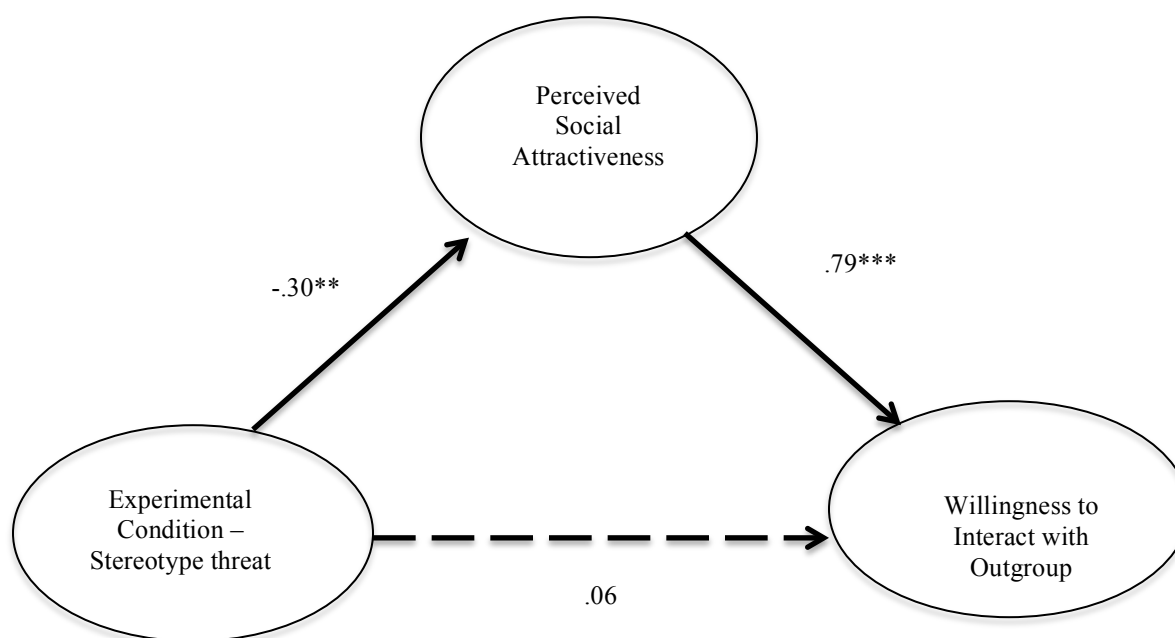


Figure 5. The direct and indirect effects of experimental condition on willingness to interact with non-native English speakers through perceived social attractiveness.

Table 6. The Effects of Experimental Conditions on Willingness to Interact with Outgroup Members through Perceived Social Attractiveness

Criterion Variable	Predictor Variables	β	SE	t	p	LLCI	ULCI
Condition	Social Attractiveness	-.30	.12	-2.63	.01**	-.53	-.08
	Will. to Interact	.06	.15	.41	.68	-.03	.46
Social Attractiveness	Will. to Interact	.79	.07	11.16	.000***	.68	.95

Model Summary: $R^2 = .34, F(2, 240) = 62.37; *** p < .001, ** p < .01, * p < .05$

Results revealed a non-significant relationship between social attraction and willingness to accommodate to outgroup members. ($\beta = .04, SE = .03, z = 1.53, p > .05$). Furthermore, there was no significant direct effect of experimental condition on willingness to accommodate.

Specifically, participants who were exposed to stereotype threat ($N = 110$, $M = 4.38$, $SD = .95$) were not significantly more or less willing to accommodate than participants in the no threat condition ($N = 133$, $M = 4.45$, $SD = .91$); $t(241) = -.631$, $p > .05$.

Results of the data analysis revealed important relationships between three major variables. First, exposure to stereotype threat was associated lower perceived social attractiveness of the speaker. Second, through social attractiveness, exposure to the stereotype threat condition had a significant indirect effect on several criterion variables, including perceived comprehensibility of the speaker, anxiety about interacting with the speaker, and willingness to accommodate with outgroup members. These themes will be further examined in the discussion.

Discussion

Summary of Results

Findings in this study indicated that the stereotype threat condition had a significant and negative effect on participants' perceived social attractiveness of the native Spanish speaker. That is to say, participants who read the stereotype threat message about difficulties communicating with accented individuals rated the speaker lower on measures of social attractiveness than participants who did not read the stereotype threat message. Previous research has investigated the role of linguistic competency in communication and relationship development (Imamura et al., 2011). Results of this study indicate that participants perceived accent as an impediment to clear communication.

Furthermore, as demonstrated by previous research, exposure to stereotype threat, even if the threat was targeted toward an outgroup member, affected the interlocutor's attitudes toward the speaker. In this study, the stereotype threat message was manipulated toward a minority linguistic group. This finding implies that although this is still a developing area of research, there is a relationship to be explored regarding exposure to, or awareness of, outgroup stereotype threat. These results suggest that even if the stereotype threat does not refer to a person's ingroup, it may prime them to approach intergroup interactions differently.

Next, stereotype threat, through social attractiveness, had a significant indirect effect on several criterion variables. First, lower social attractiveness was associated with lower perceived comprehensibility of non-native English speakers in general, which perhaps can be explained by higher intergroup saliency during the interaction. That is, when a participant perceived the speaker as an outgroup member toward whom they felt low social attraction, they also perceived them as less comprehensible. When considering the model as a whole, it stands to reason that

after being exposed to the stereotype threat message proclaiming increased communication difficulties with accented individuals, participants who perceived the speaker as less socially attractive would also perceive non-native English speakers the speaker as less comprehensible.

Second, perceived social attractiveness was a significant and negative predictor of anxiety toward interacting with the speaker. That is, when a participant viewed the native Spanish speaker as less socially attractive, they also felt more anxious about interacting with the speaker. Consistent with previous research, exposure to stereotype threat would logically affect the anxiety felt toward the speaker through perceived social attractiveness. As demonstrated by Hogg (2001; 2006), social attractiveness refers to a person's perceptions of similarity and liking based on group identity markers. In the current study, the stereotype threat condition most likely made the participants more aware of the accent of the speaker, thus the speaker was perceived as less attractive. When the participant perceived the speaker as less socially attractive, it implies the participant perceived less similarity and liking, which would prime them to feel more anxiety about interacting with the speaker,, consistent with previous research around intergroup anxiety (Ruble & Zhang, 2012).

Lastly, there was no significant direct or indirect effect between experimental condition and willingness to accommodate toward outgroup members. For both the stereotype threat condition, and the no-threat condition, the means centralized around the midpoint of the seven-point scale. As shown in Table 1, the average score for participants exposed to stereotype threat was 4.38 ($SD = .95$), while the average for those not exposed to stereotype threat was 4.45 ($SD = .91$), which was not found to be significantly higher. These results suggest that all participants were somewhat willing to accommodate toward outgroup members, and that experimental

condition did not make a difference in making participants either more or less willing to accommodate.

These results demonstrate consistency with the mixed results found by Lee and Giles (2008) when studying social attraction and communication accommodation. Since the initial accommodation orientation of the participant is unknown, there are several possible causes of this non-significance. First, it could be related to maintenance of positive ingroup identity, in that participants who perceived the speaker as an outgroup member were not willing to accommodate their communication style. The participants perhaps saw these group boundaries as rigid and impermeable, and as such did not consider accommodation to be a viable option (Giles et al., 2012), or felt there was no need for high accommodation. Furthermore, the indifference of willingness to accommodate may be a manifestation of individualistic culture, wherein participants considered their own communication styles and goals over other factors. Perhaps participants perceived a shared cultural identity with the speaker (i.e., English-speaking), and as such did not see a need for high accommodation. Lastly, because accent was controlled at the moderate level, this again may have primed participants to not perceive a need for high accommodation.

Second, an important concept that affects accommodation and ethnolinguistic identity is power differential in intergroup interaction. As evidenced by previous research (Giles et al., 1981), higher status languages are associated with dominant social groups who wield more power over lower status social groups. When asserting a dominant social position, one might feel less inclined to accommodate, or attune their communication style to be more similar to that of the interlocutor, thus keeping the power differential intact. Furthermore, when attempting to ascend to a higher social status, one will alter their communication style to match that of the

high-status group. As discussed by Giles et al. (2012), speaking a second language proficiently is seen as a convergent accommodative behavior. In the circumstance of this study, a participant hears a “low-status,” accent other than Standard English, and is prone to maintain their high status, thus electing not to accommodate their communication style.

Lastly, since the stereotype threat was not targeted toward the participant, perhaps they felt more open to the intergroup interaction. This openness could be due to social desirability or cultural norms dictated by individualist society. Giles et al. (2012) contend that individualistic societies approach and perceive accommodation differently since individual goals and identities are prioritized over group goals. In this regard, perhaps the participants did not feel that accommodation would be appropriate, considering the circumstances, and felt that doing so might create a negative experience.

Ethnolinguistic vitality and ethnolinguistic identity offer other theoretical explanations. When considering ethnolinguistic vitality, the status of the linguistic group dictates expectations in interactions. A group with low status is expected to attune to the linguistic patterns of the dominant group (Giles et al., 1977). Again, a member of the dominant group, native Standard English speakers, would expect other linguistic groups to adapt to their communication style, not the other way around. Ethnolinguistic identity theory would indicate that maintenance of positive ingroup identity affects how individuals would act in an intergroup interaction. Social competition might motivate a person to maintain their own accent in the face of a dominant outgroup member, in order to solidify their ethnolinguistic identity and show solidarity with their ingroup. Similarly, social creativity could provide avenues to reappropriate and reclaim “low status” linguistic styles, in order to change public perception. Lastly, social mobility may lead an individual to converge toward the dominant group’s communication style. More research is

needed in this area to explore which accommodation style is most commonly associated with social attraction.

Theoretical Implications

The relationship between communication accommodation and accent exists within a linguistic hierarchy. As demonstrated by Giles et al. (1981), certain accents are viewed as higher status than others. In the case of Giles et al. (1981), a Received Pronunciation (RP) accent was perceived as higher status than Welsh, and the same relationship could be at play within the confines of the current study. In the United States, where there is no national language, different accents are valued over others, and commonly held in higher status. For participants who identify as European-American, native English speakers, hearing a person speaking with a Spanish accent might induce feelings of linguistic hierarchy, wherein they are more attuned to mispronunciations, grammatical errors, or problems with comprehension and clarity. Future research might explore perceptions about the status of various accents, which could lead to new research that demonstrates with accents would be considered socially attractive.

Directions for Future Research

This study provides many possibilities for future studies. Most importantly, more research is needed about the stereotype threat experienced by ethnolinguistic minorities, especially Hispanics and Latinos, often underserved in research, as they represent a growing demographic in the U.S. First of all, considering the large permanent population of native Spanish speakers, it stands to reason that there is a burgeoning social group that speaks English as a second language, with an accent that has been influenced by their native language. A deeper understanding of the linguistic experiences of minority populations would further enrich this area

of research. Future research should investigate the stereotype threat that minority groups experiences regarding their use of language and accent.

Much research exists regarding stereotype threat in the context of academic and work performance, but there is little understanding about how stereotype threat affects social contexts, including intergroup interactions. The current study was framed within a university setting, but future research might focus on social interactions that take place outside of work or school. Certainly universities offer opportunities for intergroup interaction, especially with international students and faculty, but these interactions are somewhat limited by their context. For example, an intergroup interaction between an international faculty member and a U.S. student operates under different cultural norms and power differentials than an intergroup interaction between two people waiting for the bus, between whom there is no overt power dynamic.

This area of research could be extended to understand the ways in which stereotype threat affects both ingroup members (or who the stereotype threat is targeting) and outgroup members. Reflecting on the relationship between awareness of outgroup stereotype threat and its effects on attitudes toward outgroup members, there is an indication that intergroup interactions are approached differently simply because the dominant group member knows there are stereotypes that affect the minority group member.

Lastly, a key area of future research is to explore the effect of accent heaviness. For the current study, speaker recordings were chosen based on a moderate level of accentedness, wherein the speaker's accent was noticeable, but did not interfere with comprehension. In the present study, the stereotype threat condition probably made the participants more aware of the accent of the speaker, thus the speaker was perceived as less attractive. Future studies would add a great deal to this area of research if lighter or heavier accents were employed. Past research

(Imamura et al., 2011; Imamura et al., 2012) indicates that accent is seen as interference to clear communication and a source of anxiety and frustration. This research should be extended to other linguistic groups and varying levels of accent to explore these phenomena further.

Limitations

There are several limitations to this study that merit discussion. First, the sample of participants for this study consisted of a majority of English-speaking, white subjects. Had the sampling demographics been different, for example, a higher percentage of minority individuals such as Hispanics and Latinos, the experimental conditions might have yielded different results for a number of reasons. First, the stereotype threat message might have functioned differently, especially if the listener was a member of an ethnolinguistic minority group. This individual might have more experience with communicating with accented individuals, and therefore feel less of a threat when reading about possible communication difficulties. Or, perhaps that individual has heard a similar stereotypically threatening message in the past, priming them to feel anxiety about confirming that negative stereotype about their group, and leading to less perceived social attractiveness and more anxiety.

Second, participants who identify as ethnolinguistic minorities may perceive the speaker's accentedness differently. As mentioned earlier, ethnolinguistic minority group members might have more experience interacting with accented individuals, especially individuals whose accented is heavier than the moderately accented speakers used in the current study. These perceptions might have significant effects on the perceptions of the speaker's accentedness and comprehensibility, which would affect the participants' willingness to interact and, perhaps, their willingness to accommodate.

A third limitation to the study was the sampling technique. The convenience sample that was accessed perhaps does not truly represent the population parameters. For example, previous census data indicates that in 2000, 31.8 million residents of the U.S. identified as Hispanic/Latino, and that number continues to steadily increase (U.S. Census Bureau, 2013). The sample for this study only yielded a 6.7% response rate from Hispanic/Latino individuals, which is a little more than half the proportion of the population. More rigorous sampling techniques might yield different, more generalizable results.

Finally, an important limitation to consider is the effect of social desirability on responses. Since the stereotype threat scenario discussed interactions within a university setting, the participants might have been primed to answer in a socially desirable manner. Despite measures to ensure anonymity and privacy while responding, they perhaps were less inclined to answer truthfully if the honest answer was in any way racist or xenophobic. Responses that are purely socially desirable are possible for several of the metrics, including intergroup anxiety, willingness to interact, willingness to accommodate, and perceived accentedness of the speaker. While tracking socially desirable answers can be difficult, ensuring that respondents have answered honestly will yield the most meaningful results.

Conclusion

In summary, the research surrounding stereotype threat has focused on academic and workplace settings, demonstrating the effects that threat exposure has on cognitive functions, performance, and group identity. However, given the rise in globalization and increased intergroup contact, it is important to understand the effects that stereotype threat has on social interactions as well. Additionally, more research is needed regarding the effects of stereotype threat exposure on dominant group members. That is, if an individual hears a stereotype message about an outgroup member, what effects does this have on future intergroup interactions or attitudes toward this outgroup?

Furthermore, there are benefits to understanding the effects that accent has on intergroup interactions, from perceptions of social attraction, to willingness to interact, and willingness to accommodate in intergroup interactions. This study sought to examine the relationship between stereotype threat, accent, intergroup anxiety, and willingness to interact and willingness to accommodate in intergroup interaction. Stereotype threat was found to significantly predict intergroup anxiety, and social attraction mediated the relationship between stereotype threat at perceived comprehensibility of outgroup members.

Future research must focus on ethnolinguistic minorities' confrontations with stereotype threat messages, as well as the effects this has on their ethnolinguistic vitality and perceptions toward intergroup interactions. Furthermore, stereotype threat might be explored in purely social contexts outside of workplace and academic settings.

References

- Bourhis, R. Y. & Giles, H. (1976). The language of cooperation in Wales: A field study. *Language Sciences*, 42, 13-16.
- Brennan, E. M., & Brennan, J. S. (1981). Accent scaling and language attitudes: Reactions to Mexican American English speech. *Language and Speech*, 24(3), 207-221.
- Burgoon, J. K., Guerrero, L. K., & Manusov, V. (2011). Nonverbal signals. In M. L. Knapp & J. A. Daly (Eds.), *The SAGE handbook of interpersonal communication* (pp. 239-280). Thousand Oaks, California: SAGE Publications, Inc.
- Cashman, H. R. (2009). The dynamics of Spanish maintenance and shift in Arizona: Ethnolinguistic vitality, language panic and language pride. *Spanish In Context*, 6(1), 43-68. doi: 10.1075/sic.6.1.04cas
- Fiedler, K. & Schmid, J. (2003). How language contributes to persistence of stereotypes as well as other, more general, intergroup issues. In R. Brown & S. Gaertner (Eds.), *Blackwell handbook of social psychology: Intergroup processes* (pp. 262-280). Malden, MA: Blackwell Publishers, Ltd.
- Foderaro, L. W. (2011, March 9). More Foreign-Born Scholars Lead U.S. Universities. *The New York Times*. Retrieved from:
http://www.nytimes.com/2011/03/10/education/10presidents.html?_r=0
- Gallois, C., Giles, H., Jones, E., Cargile, A. C., & Ota, H. (1995). Accommodating intercultural encounters: Elaborations and extensions. In R. L. Wiseman (Ed.), *Intercultural communication theory* (pp. 115-147). Thousand Oaks, CA: Sage Publications.
- Giles, H. (1973a). Accent mobility: A model and some data. *Anthropological Linguistics*, 15(2), 87-105.

- Giles, H. (1973b). Communicative effectiveness as a function of accented speech. *Speech Monographs*, 40, 330-331.
- Giles, H. Bonilla, D., & Speer, R. B. (2012). Acculturating intergroup vitalities, accommodation and contact. In J. Jackson (Ed.), *The Routledge handbook of language and intercultural communication*. Routledge.
- Giles, H., Bourhis, R., Richard, Y., & Taylor, D. M. (1997). Towards a theory of language in ethnic group relations. In H. Giles (Ed.), *Language, ethnicity, and intergroup relations* (pp. 307-348). London, England: Academic Press.
- Giles, H., & Coupland, N. (1991). *Language: Contexts and consequences*. Belmont, CA: Thomson Brooks/Cole Publishing.
- Giles, H., Williams, A., Mackie, D. M., & Rosselli, F. (1995). Reactions to Anglo- and Hispanic-American speakers: Affect, identity, persuasion, and the English-only controversy. *Language & Communication*, 15(2), 107-120.
- Giles, H., Wilson, P., & Conway, A. (1981). Accent and lexical diversity as determinants of impression formation and perceived employment suitability. *Language Sciences*, 3(1), 91-103.
- Hamilton, D. L., Gibbons, P. A., Stroessner, S. J., & Sherman, J. W. (1992) Stereotypes and language use. In G. R. Semin & K. Fiedler (Eds.), *Language, interaction and social cognition* (pp. 102-128). Thousand Oaks, CA: Sage Publications.
- Harwood, J., Giles, H., & Bourhis, R. (1994). The genesis of vitality theory: Historical patterns and discursal dimensions. *International Journal of Society and Language*, 108, 167-206. doi: 0165-2516/94/0108-0167.

- Harwood, J., Giles, H. & Palomares, N. A. (2008). Intergroup theory and communication processes. In J. Harwood & H. Giles (Eds.), *Intergroup communication: Multiple perspectives* (pp. 1-17). New York: Peter Lang Publishing, Inc.
- Harwood, J., & Vincze, L. (2012). Undermining stereotypes of linguistic groups through mediated intergroup contact. *Journal of Language and Social Psychology, 31*(2), 157-175. doi: 10.1177/0261927X12438358
- Hayes, A. F. (2013). *Introduction to mediation, moderation, and conditional process analysis*. New York, New York: Guilford Press.
- Hecht, M. L., Jackson, R. L., & Pitts, M. J. (2008). Culture: Intersections of intergroup and identity theories. In J. Harwood & H. Giles (Eds.), *Intergroup communication: Multiple perspectives* (pp. 21-42). New York: Peter Lang Publishing, Inc.
- Hornsey, M., & Gallois, C. (1998). The impact of interpersonal and intergroup communication accommodation on perceptions of Chinese students in Australia. *Journal of Language and Social Psychology, 17*(3), 323-347.
- Hogg, M. A. (2006). Social identity theory. In P. J. Burke (Ed.), *Contemporary Social Psychological Theories* (pp. 111-136). California: Stanford University Press.
- Hogg, M. A. (2001). A social identity theory of leadership. *Personality and Social Psychology Review, 5*(3), 184-200.
- Imamura, M., Zhang, Y. B., & Harwood, J. (2011). Japanese sojourners' attitudes toward Americans: Exploring the influences of communication accommodation, linguistic competence, and relational solidarity in intergroup contact. *Journal of Asian Pacific Communication, 21*(1), 115-132.

- Imamura, M., Zhang, Y. B., & Shim, C. (2012). US host nationals' attitudes toward Japanese: the role of communication and relational solidarity in the intergroup contact hypothesis. *Asian Journal of Communication*, 1-17. doi: 10.1080/01292986.2012.717096
- Institute of International Education (2013). *Open Doors 2013 "Fast Facts PDF*. Retrieved from the Institute of International Education website: <http://www.iie.org/Research-and-Publications/Open-Doors/Data/Fast-Facts>
- Inzlicht, M., & Schmader, T. (2012). Stereotype threat. In M. Inzlicht & T. Schmader (Eds.), *Stereotype threat: Theory, process, and application* (pp. 3-14). New York: Oxford University Press, Inc.
- Jaspal, R. & Cinnirella, M. (2011). The construction of ethnic identity: Insights from identity process theory. *Ethnicities*, 12(5), 503-530.
- Jones, E., Gallois, C., Callan, V., & Barker, M. (1999). Strategies of accommodation: Development of a coding system for conversational interaction. *Journal of Language and Social Psychology*, 18, 123-151.
doi: 10.1177/0261927X99018002001
- Lee, C. & Giles, H. (May, 2008). *Attraction in context: How contextual differences in personal and social attraction affect communication accommodation behavior*. Paper presented at the International Communication Association, Montreal, Quebec.
- Llamas, C., Watt, D., & Johnson, D. E. (2009). Linguistic accommodation and the salience of national identity markers in a border town. *Journal of Language and Social Psychology*, 28(4), 381-407. doi: 10.1177/0261927X09341962
- Lippmann, W. (1922). *Public opinion*. New York: MacMillan.

- Maass, A. (1999). Linguistic intergroup bias: Stereotype perpetuation through language. *Advances in Experimental Social Psychology, 31*, 79-121.
- Mange, J., Lepastourel, N., & Georget, P. (2009). Is your language a social clue? Lexical markers and social identity. *Journal of Language and Social Psychology, 28*(4), 364-380. doi: 10.1177/0261927X09341956
- McGlone, M. S., & Giles, H. (2011). Language and interpersonal communication. In M. L. Knapp & J. A. Daly (Eds.), *The SAGE handbook of interpersonal communication* (pp. 201-237). Thousand Oaks, California: SAGE Publications, Inc.
- Operario, D. & Tiske, S. T. (2003). Stereotypes: Content, structures, processes, and context. In R. Brown & S. Gaertner (Eds.), *The Blackwell Handbook of Social Psychology: Intergroup Processes* (pp. 22-44). Malden, MA: Blackwell Publishers, Ltd.
- Pew Hispanic Center. (2015). *English proficiency on the rise among Latinos: U.S. born driving language changes*. Retrieved from the Pew Hispanic Center website:
<http://www.pewhispanic.org/2015/05/12/english-proficiency-on-the-rise-among-latinos/>
- Piske, T., MacKay, I. R. A., & Flege, J. A. (2001). Factors affecting degree of foreign accent in an L2: A review. *Journal of Phonetics, 29*, 191-215.
- Potowski, K., & Matts, J. (2008). MexiRicans: Interethnic language and identity. *Journal of Language, Identity, and Education, 7*, 137-160.
 doi: 10.1080/15348450801970688
- Reid, S. A., Giles, H. & Harwood, J. (2008). A self-categorization perspective on communication and intergroup relations. In J. Harwood & H. Giles (Eds.), *Intergroup communication: Multiple perspectives* (pp. 241-263). New York: Peter Lang Publishing, Inc.

- Ruble, R.A. & Zhang, Y. B. (2013). Stereotypes of Chinese international students held by American students. *International Journal of Intercultural Relations*, 37, 202-211.
- Ruble, R.A. & Zhang, Y. B. (2012). The impact of stereotypes on American students' willingness to communicate with Chinese international students. *The Bulletin of the Association of College Unions International*, 80(6), 30-34. Available at <http://www.acui.org/publications/bulletin/article.aspx?issue=36083&id=19376>
- Rumbaut, R. G. (1994). The crucible within: Ethnic identity, self-esteem, and segmented assimilation among children of immigrants. *International Migration Review*, 28, 748-794.
- Sachdev, I., & Bourhis, R. Y. (2008). Multilingual communication and social identification. In J. Harwood & H. Giles (Eds.), *Intergroup communication: Multiple perspectives* (pp. 65-91). New York: Peter Lang Publishing, Inc.
- Scovel, T. (2000). A critical review of the critical period research. *Annual Review of Applied Linguistics*, 20, 213-223.
- Steele, C. M. & Aronson, J. (1995). Stereotype threat and the intellectual test performance of African Americans. *Journal of Personality and Social Psychology*, 69(5), 797-811.
- Taylor, V. J., & Walton, G. M. (2011). Stereotype threat undermines academic learning. *Personality and Social Psychology Bulletin*, 37(8), 1055-1067.
doi: 10.1177/0146167211406506
- U.S. Census Bureau (2013). *Language use in the United States: 2011*. Retrieved <http://www.census.gov/content/dam/Census/library/publications/2013/acs/acs-22.pdf>

- von Hippel, C., Wiryakusuma, C., Bowden, J., & Shochet, M. (2011). Stereotype threat and female communication styles. *Personality and Social Psychology, 37*(10), 1312-1324. doi: 10.1177/0146167211410439
- Walton, G. M., & Carr, P. B. (2012). Social belonging and the motivation and intellectual achievement of negatively stereotyped students. In M. Inzlicht & T. Schmader (Eds.), *Stereotype threat: Theory, process, and application* (pp. 89-106). New York: Oxford University Press, Inc.
- Woodcock, A., Hernandez, P. R., Estrada, M., & Schultz, P. W. (2012). The consequences of chronic stereotype threat: Domain disidentification and abandonment. *Journal of Personality and Social Psychology*, Advance online publication. doi: 10.1037/a0029120
- Yashima, T. (2002). Willingness to Communicate in a Second Language: The Japanese EFL Context. *The Modern Language Journal, 86*(1), 54–66. doi: 10.1111/1540-4781.00136

APPENDIX A: DEMOGRAPHIC SURVEY

1. Year in university

- Freshman/First Year
- Sophomore
- Junior
- Senior
- Graduate
- Other (Please specify) _____

2. Please indicate your age. (Example, 25 years) _____

3. Are you a nontraditional student?

- Yes
- No
- Other (Please specify) _____

4. Please indicate your sex.

- Male
- Female

5. Please indicate your race/ethnicity.

- Hispanic/Latino
- Black
- White/Caucasian
- American Indian or Alaskan Native
- Asian
- Hawaiian or Pacific Islander
- Biracial (Please specify in the space below.) _____
- Multiracial (Please specify in the space below.) _____

6. What is your native language? _____

7. Do you speak any other language? If yes, please specify.

- Yes

- No

8. At what age did you begin to learn the language(s) indicated in the question above?

APPENDIX B: STEREOTYPE THREAT MESSAGE

Dear Participant,

In order to cultivate a better environment at the university, we are exploring ways to better accommodate the needs of our diverse students and faculty. We are interested in exploring the ways in which we can facilitate understanding and cooperation between all students and faculty. Past research indicates that communication difficulties are common in interactions with non-native English speakers, particularly concerning heavily-accented speech. We understand that accented speech and languages other than Standard English often cause barriers to effective encounters among students and faculty. As part of the initiative to facilitate understanding, we have asked you here to provide feedback about your experience as a student. You will listen to a recorded message about the university, and then you will fill out questionnaires to provide your feedback.

Thank you for your time.

APPENDIX C: NO THREAT MESSAGE

Dear Participant,

In order to cultivate a better environment for our students, we are exploring ways to better accommodate the needs of our diverse students and faculty. We are interested in exploring the ways in which we can facilitate understanding and cooperation between all students. As part of the development of this environment, we have asked you here to provide us feedback about your experience as a student. You will listen to a recorded message about the university, and then you will fill out several questionnaires to provide your feedback.

Thank you for your time.

APPENDIX D: TRANSCRIPT OF RECORDED MESSAGE

The University is known for the high quality of its academic programs. We have more than 190 undergraduate majors in the sciences, arts, and humanities that provide a firm foundation for almost any career choice. We offer professional education in medicine, nursing, pharmacy, engineering, music, law, social welfare, journalism, business, and architecture. [Many] of our graduate programs are nationally ranked, and our University Honors Program is among the best in the United States. You may deepen and enrich your academic experience by participating in study abroad, doing original research, or becoming involved in special programs in languages, indigenous studies, history, environmental policy or a dozen other topics.

APPENDIX E: MANIPULATION CHECK

1. What aspect of the university is being discussed?

- A. Layout of campus
- B. Academic programs
- C. Athletics
- D. Clubs and organizations
- E. Unsure

2. According to the recorded message, the university offers many options for studying abroad.

True False

3. According to the recorded message, the university and its academic programs are not nationally recognized.

True False

4. Does the speaker have an accent?

Yes No

5. If you answered yes to the previous question, how heavy is the speaker's accent?

1	2	3	4	5
Not heavy at all		Neutral		Very heavy

APPENDIX F: INTERGROUP ANXIETY REGARDING SPEAKER

The following statements ask you to think about how you would feel if you were interacting with the speaker. Please indicate the degree to which you agree or disagree with the following statements. A higher number indicates stronger agreement with each statement. (1 = Strongly Disagree, 4 = Neutral, 7 = Strongly Agree)

If I were to interact with the speaker,

*I would feel certain.	1	2	3	4	5	6	7
I would feel awkward.	1	2	3	4	5	6	7
I would be self-conscious.	1	2	3	4	5	6	7
*I would feel happy.	1	2	3	4	5	6	7
*I would feel accepted by her/him.	1	2	3	4	5	6	7
*I would feel confident.	1	2	3	4	5	6	7
I would be irritated.	1	2	3	4	5	6	7
I would be impatient.	1	2	3	4	5	6	7
I would be defensive.	1	2	3	4	5	6	7
I would feel suspicious.	1	2	3	4	5	6	7
I would be careful.	1	2	3	4	5	6	7

APPENDIX G: SOCIAL ATTRACTIVENESS OF SPEAKER

The following statements as you to think about your perceptions about socializing with the speaker heard on the recording. Please indicate the degree to which you agree or disagree with the following statements. A higher number indicates a stronger agreement. (1 = Strongly Disagree, 4 = Neutral, 7 = Strongly Agree)

I think the speaker could be a friend of mine.	1	2	3	4	5	6	7
*It would be difficult to meet and talk with the speaker.	1	2	3	4	5	6	7
The speaker would be pleasant to be with.	1	2	3	4	5	6	7
The speaker would be sociable to me.	1	2	3	4	5	6	7
I could become close friends with the speaker.	1	2	3	4	5	6	7
The speaker would be easy to get along with.	1	2	3	4	5	6	7

APPENDIX H: WILLINGNESS TO INTERACT WITH SPEAKER

The following questions ask you to think about how willing or unwilling you are to communicate with the speaker. Please indicate the degree to which you are willing or unwilling to engage in each behavior. A higher number indicates more willingness. (1 = Extremely unwilling, 4 = Neutral, 7 = Extremely willing)

How willing are you to... talk to the speaker?	1	2	3	4	5	6	7
...initiate conversation with the speaker?	1	2	3	4	5	6	7
...chat with the speaker?	1	2	3	4	5	6	7
...communicate with the speaker?	1	2	3	4	5	6	7

APPENDIX I: PERCEIVED COMPREHENSIBILITY OF OUTGROUP

The following questions ask you to reflect on your experiences speaking English with individuals who are not native English speakers. Please choose the number that best corresponds with your response. A higher number indicates a stronger level of agreement. (1 = Strongly Disagree, 4 = Neutral, 7 = Strongly Agree)

*Generally speaking, non-native English speakers are comprehensible.	1	2	3	4	5	6	7
Generally speaking, non-native English speakers are difficult to understand.	1	2	3	4	5	6	7
Generally speaking, non-native English speakers mispronounce words.	1	2	3	4	5	6	7
*Generally speaking, non-native English speakers speak clearly.	1	2	3	4	5	6	7

APPENDIX J: WILLINGNESS TO ACCOMMODATE WITH OUTGROUP

The following statements ask you to think about communicating with a Hispanic American or Latino-American who has an accent. Please choose the number that indicates the degree to which you agree or disagree with the following statements. A higher number indicates a stronger agreement. (1 = Strongly Disagree, 4 = Neutral, 7 = Strongly Agree)

I would speak slower.	1	2	3	4	5	6	7
I would simplify my vocabulary.	1	2	3	4	5	6	7
I would make sure to pause to give this person time to process what I am saying.	1	2	3	4	5	6	7
I would carefully choose topics to talk about in our conversation.	1	2	3	4	5	6	7
I would repeat myself often to be sure this person understands me.	1	2	3	4	5	6	7
I would use more gestures and nonverbal cues.	1	2	3	4	5	6	7
I would avoid interrupting this person.	1	2	3	4	5	6	7
I would make sure to give this person an opportunity to speak during conversation.	1	2	3	4	5	6	7
It would take more work to communicate with this person.	1	2	3	4	5	6	7

APPENDIX K: WILLINGNESS TO INTERACT WITH OUTGROUP

Please indicate your agreement with the following statements. A higher number indicates a higher level of agreement. (1 = Strongly Disagree, 4 = Neutral, 7 = Strongly Agree)

I would like to participate in a program to help immigrant and international students adapt to University life.	1	2	3	4	5	6	7
I would be willing to meet with the speaker heard on the recording.	1	2	3	4	5	6	7
I would like to communicate with the speaker face-to-face.	1	2	3	4	5	6	7
*I would be hesitant to talk to the speaker.	1	2	3	4	5	6	7

APPENDIX L: INTERGROUP ANXIETY REGARDING OUTGROUP

The following statements ask you to think about how you would feel if you were interacting with the an outgroup member. Please indicate the degree to which you agree or disagree with the following statements. A higher number indicates stronger agreement with each statement. (1 = Strongly Disagree, 4 = Neutral, 7 = Strongly Agree)

When I interact with a person from a different cultural group,

*I would feel certain.	1	2	3	4	5	6	7
I would feel awkward.	1	2	3	4	5	6	7
I would be self-conscious.	1	2	3	4	5	6	7
*I would feel happy.	1	2	3	4	5	6	7
*I would feel accepted by her/him.	1	2	3	4	5	6	7
*I would feel confident.	1	2	3	4	5	6	7
I would be irritated.	1	2	3	4	5	6	7
I would be impatient.	1	2	3	4	5	6	7
I would be defensive.	1	2	3	4	5	6	7
I would feel suspicious.	1	2	3	4	5	6	7
I would be careful.	1	2	3	4	5	6	7