Attitudes Towards American English Speakers with Accents

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Abstract

Previous research has shown that people are more likely to assign favorable characteristics to accents (Ryan, Carranza, & Moffie, 1977) that are similar to their own. Anisfeld & Lambert (1964) claimed bilinguals are more likely than monolinguals to assign favorable characteristics to speakers with a primary language that differs from their own. The current study investigated the attitudes of American English listeners towards various recorded accents. Accent type (Midwestern and Spanish) and multilingualism (monolingual and multilingual) were the independent variables, and the attitudes towards the American English speaker were the dependent variables. Participants listened to a recording of a speaker reading a popular text and were asked to complete a survey. The survey included questions about the participant's background and impressions of the speaker in the recording. There was a significant effect of accent type on judgment of anger, friendliness, and understanding the speaker. There was also a significant effect of multilingualism on judgment of education achieved.

Keywords: Perceptions, Spanish-accent, Accent type, Monolingual, Multilingualism,
INTRODUCTION

General Overview

This study investigated perceptions listeners’ form about a speaker based on the speaker’s accent alone. Much research has been done on accents and the perceptions that they create regarding native accented American English speakers, using varying classes of accents. However, little research has utilized a matched-guise technique investigating listeners’ perceptions of native and non-native American English speakers. The matched-guise technique has participants listen to apparently different speakers representing guises in two or more languages and evaluate those speakers across various personality traits (Stefanowitsch, 2005). The listener was unaware that the speaker in the recording was actually a multilingual, and the reactions elicited by each of her linguistic guises were evaluated and the basis of the current study. Furthermore, this study proposes the number of languages a listener speaks will influence how the listener perceives non-native accented speech.

In the current study, the speaker was a female reading a modern popular culture text. Participants listened to one of the linguistic guises recordings of the female speaker and were then asked to evaluate the personality of the speaker. Specifically, this study examined the relationship of the speaker’s accent (Midwestern accent or Spanish accent) and number of languages spoken (Monolingual or Multilingual) by the listener on attitudes towards the speaker. Topics ranging from language and accent, voice and content, attitudes towards different accents, discrimination, social information and accent, and multilingualism will be discussed in relation to the current study.
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**Language and Accent**

People use language as a way of communicating information. As a result, one of the most important and prevalent sources of information is other people (Yaniv, 2004). Individuals often use their native language to communicate. Native language is the language a person has learned from birth or within the critical period, or it is a language that a person speaks the best. Hakuta, Bialystok & Wiley (2003) explains the Critical Period Hypothesis during language learning is constrained by an acute time period, a specific maturational stage at which language learning potential changes. Researchers have claimed that the age at which the critical period terminates is approximately 5 years old. Often when language learning occurs after this critical period, the speaker has an accent on the newly learned language.

Individuals brought up speaking more than one language can have more than one native language: they are labeled as either bilingual (2 native languages) or multilingual (3 or more native languages). If an individual learns a second language after the critical period, the individual may have an accent on the most recently learned language. The speaker may utilize a second language and need to express herself in this non-native language to a listener. The way an individual speaks and how listeners interpret the communicators’ manner of speaking has important consequences on interactions between people (Ryan, Carraanza, Moffie, 1975).

It is not that some individuals have an accent while others do not. Instead, people of a region will recognize a “local” accent, which is distinct from “foreign” accents of people of other regions. An “accent” refers to a distinctive way of speaking associated with a
particular group of people, typically based on differences in phonology across geographic regions or social groups (Lippi-Green, 1997).

Accentedness is the degree to which the listener perceives speech as being different from a particular variety, such as native-speaker norms. In general, accentedness ratings have proved to be quite reliable (Brennan & Brennan, 1981; Derwing & Munro, 1997; Flege & Fletcher, 1992) in terms of native raters tending to agree with one another on the relative accentedness of non-native speakers. Research on accented speech has focused on the difficulties it might cause for listeners and how the non-native accents may reduce overall comprehension. Clarke and Garrett (2004), however, found that listeners adapt to non-native speech very quickly, as demonstrated by their reduced reaction times to spoken stimuli following even minimal exposure to the speech of a non-native speaker. This study further reinforced the significance of listener factors in research into comprehension of non-native speech (Clarke and Garrett, 2004).

Accentedness is formed when a speaker learned a second language after the critical period. Individuals who learned multiple languages before the critical period are labeled bilingual or multilingual, depending on the number of languages they speak. Non-native accents derive from a speaker learning a second language after the critical period during maturation. Non-native accents are perceived when speech pattern does not follow local accent. Often non-native speech patterns carry preconceived notions about personality traits associated with the non-native accented speaker.

Voice and Content

In addition to perceptions elicited by the speaker’s accent, content that the non-
native accented speaker verbalizes influences the listeners’ perceptions of the speaker. In research completed by Heaton & Nygaard (2011) participants listened to passages differing in topic content spoken in an American Southern English or Standard American English accent. Southern-accented speakers were rated higher in sociality, and lower in social status than standard-accented speakers. However, likability ratings for all speakers varied only as a function of passage topic. Furthermore, Lay (1989) found significant effects of content on perceptions of French-Canadian and standard Canadian accented speakers, and discovered positive ratings for the non-native accented French-Canadian speaker was a function of passage topic. In both Lay (1989) and Heaton & Nygaard (2011) content appeared to influence listeners’ perceptions of speakers.

In addition to content, the perceived gender of the speaker can impact how a listener evaluates the speaker. For example, female and male voices have specific sex stereotypes associated with them. Based on previous research examining perceptions of female and male voices, participants judged male and female speakers and uncovered common sex stereotypes (Linek, Gerjets, & Scheiter, 2010). Furthermore, participants in Nass, Moon & Green’s (1997) study judged computerized male voices as more competent in computer knowledge compared to computerized female voices, and computerized female voices as more proficient in love and relationship issues when compared to computerized male voices. Both studies indicate that perceived female and male voices suggest to listeners unambiguous sex stereotypes associated towards the speakers.

Accent-based Research has been conducted with authentic female voices alone. For example, Ryan & Carranza (1975) explored reactions toward accents by way of taped recordings of standard passages spoken by a female multilingual. The research team
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utilized non-computerized female Mexican-American speakers, and the speaker performed a strong Spanish American English and a Standard American English. The researchers uncovered that Mexican-American speakers were not viewed as favorably as Standard American English speakers.

Listeners use content to make judgments about speakers. Perceptions of a speaker’s likeability have been shown to be a function of content the speaker communicates (Heaton and Nygaard, 2011). In addition to content, the perceived gender of a speaker can influences listeners’ perceptions of the speakers competencies in relationships to technical skills (Linek, Gerjets, & Scheiter, 2010; Nass, Moon, and Green, 1997). Generally, speakers can influence the content of what they are saying. Common sex stereotypes are associated with vocal tones and pause may or may not be a part of a speaker's control. Regardless of content and perceived gender of the speaker, often speakers cannot control phonological characteristic of their accent on non-native speech.

**Attitudes Towards Different Accents**

People who see others as similar in attitudes and background tend to be treated and evaluated more favorably than those seen as dissimilar (Turban & Jones, 1988). Therefore, a speaker with a non-native accent, or an accent that is not regional, may be perceived less favorably than a native speaker. The Similarity-Attraction Hypothesis states that demographic variables, such as non-native accent, can impact judgments and views a listener has towards similar or dissimilar individuals (Deprez-Sims & Morris, 2010). The ability of word pronunciation to trigger bias highlights the importance of considering the full array of characteristics that can lead to discrimination (Collins & Clément, 2012) such
as accent. Many factors influence the way a person speaks, including the regional origin of speakers, culture, social class, age, and gender (Wardhaugh, 1993). These are characteristics a speaker usually does not have control over and are characteristics a speaker may be judged on. Therefore, language expression has played a central role in prejudice and discrimination.

Prejudice is a preconceived opinion that is not based on reason or actual experience. Because native speakers have been found to be very sensitive to non-native accented speech (Lev-Ari & Keysar, 2010) and are quick to use it as a signal that the speaker is an out-group member, they may form preconceptions of the speaker based on accent alone. Because a non-native accent differs from native accent speech patterns, it is likely the listener perceives the non-native accented speaker as more difficult to understand than the native accent (Munro & Derwing, 1999). Therefore, accent can influence how the listener considers a speaker with a non-native accent, as the accent may promote “out of group” stereotypes and prejudices. Signaling “in group” and “out of group” invokes stereotypes about “outsiders”. This signal promotes prejudice that could impact the perceived credibility of the speaker (Dixon, Mahoney & Cocks, 2002).

A non-native accent can permeate perceptions of credibility of a speaker due to regional, social or cultural stereotypes and prejudices. Dixon, Mahoney & Cocks (2002) examined the relationship between ethnocentrism and perceptions of non-native accents. Ethnocentrism is judging another culture solely by the values and standards of one’s own culture. In this research study, participants were assigned to one of two groups, one that heard the local accented speaker and the other a non-native accent speaker. After completing a measure of ethnocentrism, participants in both groups were exposed to one
of two videos of the same speaker delivering a neutral speech. The video recordings were identical in content except that the speaker viewed by the experimental group spoke with a non-native accent. Results indicated for the experimental group that ethnocentrism was negatively and significantly correlated with perceptions of the speaker’s physical, social, and task attractiveness, and overall credibility. Additionally, none of the correlations were significant for the control group. Therefore, accent affects listener’s evaluations and a speaker and these evaluations can correlate with stereotypes.

Discrimination

The way a person speaks influences the impressions listeners form about that person. Assumptions made about speakers are often based on stereotypes, which, in part, are formed unconsciously due to the uncontrolled aspects of the speaker’s speech. Therefore, accents play an important role in stereotypical categorization, as listeners may use perceived markers to label individuals. Campbell-Kibler, (2007) professed linguistic patterns become associated with certain social and economic positions between groups. That is to say, how a person speaks is associated with social and economic status. Other research has supported the associations between accent type and social and economic status (Campbell-Kibler, 2007).

Ryan & Sebastian (1980) presented recordings of Standard American English male speakers and Spanish accented English male speakers to 80 individual undergraduates. After listening to the recordings, participants were asked to assess the voices as either lower- or middle-class backgrounds. Participants rated each speaker on status, solidarity, stereotype, and speech characteristics and also made social judgments. For all measures,
lower-class accented speakers were perceived much less favorably than the corresponding lower-class standard speakers, whereas the differences associated with speech styles were smaller among middle-class speakers. Results were discussed in terms of the assumptions that listeners presumably made about accented speakers’ social class and beliefs. The work by Ryan & Sebastian (1980) supports the notion that social information of a speaker is relayed by way of accent. Other recent research has also shown that social information transmitted by accent is stronger than that transmitted by appearance (Kinzler, Shutts, Dejesus & Spelke, 2009; Rakic, Steffens & Mummendey, 2011).

Similar to Ryan and Sebastian’s scholarship, research by Munro and Derwing (1995) investigated how native listeners perceive sentences spoken by both non-native accented and native English speakers. They had the listeners judge whether neutral, irrelevant statements were “true” or “false.” These researchers found that accuracy judgments for foreign-accented sentences were significantly less than the judgments for native spoken sentences. Overall, non-native speakers were perceived as less accurate.

Brennan and Brennan (1981) found that judgments of the accentedness of Mexican Spanish–accented American English speech were significantly correlated with the frequencies of several types of pronunciation errors identified in the speech samples. Mexican Americans are the largest bilingual minority group in the United States (Hispanic or Latino Populations, 2014). Gluszek and Dovidio (2010) found non-native accented speakers are often rated as less intelligent, competent, attractive, and as being of lower social status than native accented speakers. People can experience negative perception based on non-native accent (Fuertes, Gottdiener, Martin, Gilbert, & Giles, 2012; Gluszek & Dovidio, 2010; Munro & Derwing, 1995; Ryan & Sebastian, 1980). Non-native accented
speakers are discriminated against in employment in California (Nguyen, 1993), in the housing market in the Southwest (Zhao, Ondrich, & Yinger, 2006), and in the courts in the East coast (Lippi-Green, 1994).

Social information and Accent

Understanding the impact of non-native accents is important because the social information transmitter by a non-native accent can be significant in the same way as ethnicity, age, gender, and skin color and may be a source of discrimination (Deprez-Sims & Morris, 2010). As a result, accent-based discrimination can exist wherever there are non-native accents and associated negative stereotypes, such as in the United States. However, accent-based discrimination is not as socially potent as other forms of discrimination, such as racial or religious discrimination. Giles and Watson (2013) claimed that because language-based discrimination seems to be weaker than racial or gender discrimination, non-native accent bias is more acceptable and less noticed than other types of discrimination.

Accent-based discrimination can saturate multiple facets of non-native accented speaker life, such as employment. Deprez-Sims and Morris (2010) considered the influence of accentedness on the evaluation of job applicants during an interview for a human resource manager position in the Midwest. They found the applicants with the Midwestern accent on American English were evaluated more positively than the applicants with the French accent on American English when applicant qualifications remained even (2010). Additionally, Lev-Ari and Keysar (2014) found participants perceive Turkish accented job-candidates as less qualified than a native accent when credentials remained the same.
Accented speech is systematically discriminated against throughout the world. In Germany, Hansen (2013) researched Turkish-accented speakers, and found accented speakers were perceived as less competent than standard German and Swedish speakers. In South Africa, DeKlerk and Bosch (1995) performed a study to determine if and how people used language and accents to form judgments about social groups. Their results indicated that language and accent-type does result in stereotyped perceptions of social groups throughout South Africa.

**Effects of Multilinguals**

As previously mentioned, prejudice is a preconceived opinion that is not based on reason or actual experience. Individuals or groups may discriminate against others based on “out of group” categorization. Ogunnaike, Dunham and Banaji, (2010) demonstrated an interconnection between language and identity in their research on how language can signal one’s own group membership. In their study, bilingual participants completed the same Implicit Association Task (IAT) for their two native languages, and found that using a specific language activated shared cultural beliefs and encouraged identification with the social group associated with it. Language, then, primed the bilingual participants to identify, associate and react to other groups with an “in group” mindset.

Rubenfeld et al. (2007) explained that learning a second-language past the critical period could be a mechanism for language to serve as an anti-prejudice tool, because learning a second language requires learning a second culture and forming an identity associated with the second language group. Therefore, multilinguals may be less prone to assigning “in-group” and “out-of-group” categories to non-native accented speakers. For
example, Major (2010) claimed bilingual participants, when evaluating pronunciation by a non-native accented speaker, accepted more variations in pronunciation than the monolingual speakers. This supports past research, which indicated multilinguals perceive accents differently than monolinguals (Major, 2010; Rubenfeld et al., 2007). Furthermore, Wright & Bougie (2007) found that bilingual education can reduce prejudice by majority students and heritage–language education can mitigate the negative effects of prejudice. Kulick (1992) explained that languages are socio-historical in nature, and are bound up with contradictory and disputed ideologies that are shaped by the speakers. This may be a result of bilinguals being able to identify and associate with at least two cultures.

The intricate interactions between language and culture shape psychological responses to social contexts (Mayberry, Chen, Witcher, & Klein, 2011). As a result, language carries cultural scripts, practices, and ideals, which can be triggered by situational cues. Mayberry et al. (2011) found, while in the process of managing two acquired languages, that bilinguals shift their self-perception and self-presentation to accommodate the prototypical norms characteristic of the culture being primed by language use. Mayberry et al. (2011) work suggested that it is possible for alternation and interaction of multiple cultural identities to coexist within the same individual. That is to say, individuals who speak two or more languages are able to use their language experience to create two identities based on the cultural context of their language knowledge. Therefore, the multilingual individual may be more open to another unknown culture and accent because they have multiple cultural identities.

Hult (2014) showed that the suppression of linguistic abilities, what Hult calls “covert bilingualism,” can serve as a resource to support the self during social encounters
while moderating the obscurity of being simultaneously an insider and outsider. This shows that bilinguals often face the challenge of negotiating a range of insider and outsider positions when interacting in intercultural settings. Therefore, the ambiguity some multilinguals face may fuel their reception of accented speech.

*The Current Study*

Non-native accentedness is formed when a speaker learns a second language after the critical period, a period during maturation. Non-native accents are perceived when speech patterns do not follow local accent. Often non-native speech patterns carry preconceived notions about personality traits of the non-native accented speaker. People who see others as similar in attitudes and background tend to be treated and evaluated more favorably than those seen as dissimilar (Turban & Jones, 1988). As a result, a speaker with a non-native accent may be perceived less favorably than a native speaker. Furthermore, the Similarity-Attraction Hypothesis states that demographic variables, such as a non-native accent, can impact judgments and views a listener has towards similar or dissimilar individuals (Deprez-Sims & Morris, 2010). Therefore, a non-native accent can signal dissimilarity to a native accented listener. A speaker with a non-native accent can influence how the listener considers the speaker, as the accent may promote “out of group” stereotypes and prejudices.

The current research explores accent-based research. In the current study, the listeners were unaware that the female speaker in the recording was actually a multilingual, and the reactions elicited by each of her linguistic guises were evaluated and were the basis of this study. Participants listened to one of the linguistic guises recordings of the female speaker and were then asked to evaluate the personality of the speaker.
Specifically, this study examined the relationship of the speaker’s accent (Midwestern accent or Spanish accent) and number of languages spoken (Monolingual or Multilingual) by the listener on attitudes towards the speaker.

**METHOD:**

**Participants**

A total of 107 participants were recruited from a small-sized Midwestern university (40=Males and 67=Females). Participants ranged in age from 18 to 25 (M=19.30, SD=1.33). Based on self-report, there were 83 monolinguals and 24 multilinguals. Monolinguals ages ranged from 18 to 25 (M=19.32 and SD=1.36). Multilingual ages ranged from 18 to 22 (M=19.4, SD=1.21). There were 55 participants that listened to the Midwestern accent and 52 participants that listened to the Spanish accent. There were 14 multilingual participants that listened to the Midwestern accent recording, and 10 multilingual that listened to the Spanish accent recording. The study was advertised in psychology classes and through the university’s electronic recruiting system (i.e., Sona Systems participant management software). Participants were recruited from introductory psychology courses. Participants volunteered for this study and received course credit as compensation for participation.

Please note all analyses were based on self-reported scales of monolingual or multilingual identification. There were a total of 24 (n=24) multilingual participants in the study (see Table 1). There were 14 multilingual participants that listened to the Midwestern accent recording, and 10 multilingual participants that listened to the Spanish accent recording. There were 17 of the multilingual participants that identified one of their primary languages as American English with an average years of M = 17.10 of American
English language experience. Spanish was the second most common language spoken by multilinguals (n= 10) with an average years of experience being M = 14.50.

Materials

Due to the matched guise of the speaker by which voice characteristics did not vary, it is expected that any differences in competency ratings for the speaker can be attributed to the manipulation of accent. Based on a modified version of Lambert et al.’s (1960) matched-guise technique, the same speaker read an identical passage in both the Midwestern accent and the Spanish accent. Excluding accent, the speaker was asked to make each recording equivalent in tone and pace. The speaker was a bilingual (American English and Spanish) Hispanic woman born and raised in the Midwestern United States. The speaker spoke in both a Midwestern and a Spanish accent. Vocal tone and pauses remained consistent in both recordings, and in turn the speaker’s voice differed only in accent.

After instructing participants to listen quietly, the audio presentation was played. The audio presentation was presented on a standard computer monitor, located in the research room. The recorded passage for both the Midwestern and the Spanish accented speaker was 30 seconds in duration and identical in content—a short passage out of popular young adult literature. There were 75 total words in the passage, and the passage was previously recorded on an iPhone voice recording application. Participants were asked to take out a pen or pencil prior to the beginning of the experiment, and were offered a pencil if they did not have one.
Design and Procedure

The design was a 2X2 between-subjects experimental design. Participants were given an informed consent form at the beginning of the study. Participants were then asked to read the informed consent form and given the opportunity to ask questions about the study. Participants that agreed to take part in the experiment signed the informed consent form. A copy of the informed consent form is included in the Appendix section.

Participants listened to an audio recording and completed the questionnaire. A questionnaire is also included in the Appendix. Two digital recordings were made of a multilingual female reading a passage from *Harry Potter and the Sorcerer's Stone* in American English. A copy of the passage can be found in the Appendix. In one of the recordings the woman read the passage with a Midwestern Accent and in the other the woman read the passage with a Spanish accent. The type of accent (Midwestern or Spanish) was a between-subjects independent variable. Multilingualism (Monolingual or Multilingual) was a non-manipulated variable. Monolingual was defined as a person who spoke only one language. Multilingual was defined as a person who self-identified as fluent in two more languages. Participants were asked to self-report the number of languages they spoke fluently. Participants signed up for the study in groups of 9, however not all groups were filled during the course of data collection. Each group was randomly assigned to listen to one of two digital recordings. Approximately half of the participants listened to the Midwestern accent and other half listened to the Spanish accent.

Following the audio presentation, participants rated the recording on 6 personality traits. The traits used were: friendliness, unreliability, helpfulness, harshness, education achieved, and anger. Participants were also asked to determine how much they agree to
the following statements: *I do not understand the speaker well* and *I am familiar with the speaker’s accent*. All the responses were made in the participant’s experimental packet using a Likert scale ranging from 1 (Strongly Agree) to 5 (Strongly Disagree).

Upon completion of the questionnaire, the participants were debriefed on the true nature of the study. Participants were provided with a debriefing form that describes the purpose of the study. A copy of the debriefing form can be found in the Appendix section. Furthermore, experimenters described the independent and dependent variables used in the study. Then the participants were thanked and dismissed.

**RESULTS:**

*Overview*

All statistical analyses were performed using IBM’s SPSS statistical software package (version 20). The sample size was $n=107$, 40=Males and 67=Females. There were 55 participants exposed to Midwestern accent recording (Monolinguals = 41 ; Multilinguals = 14). There were 52 participants exposed to the Spanish accent recording (Monolinguals = 42; Multilinguals = 10).

A 2 (Accent Type: Midwestern and Spanish) X 2 (Number of Languages Spoken: Monolingual and Multilingual) analysis of variance was conducted to evaluate the effects of accent type and multilingualism for each of the six personality characteristic judgments about the recorded speaker of interest in this study (i.e., friendliness, unreliability, helpfulness, harshness, education achieved, and anger) and a composite variable at a $p<.05$. A low mean score indicated a favorable attitude to a personality characteristic and a high score indicated an unfavorable attitude toward a personality characteristic. All
responses to negative characteristics (i.e. unreliability, harshness and anger) were reverse coded. Reverse coded items are items phrased in a semantically opposite direction. Examples of reverse coded items are as follows: The speaker sounds harsh. Reverse coding permits researchers to balance the dependent measure wording, as half the personality trait phases are negatively worded (i.e. unreliability) and half are positivity worded (i.e. friendliness).

Level of Education Achieved

In this analysis, judgments of achieved level of education were recorded, with possible answers ranging from 1 (strongly agree) to 5 (strongly disagree). It was hypothesized monolingual participants would rate the Midwestern accent on average more favorably than the Spanish accent, and multilinguals would rate Midwestern accent and Spanish accent similarly. Results of an ANOVA test showed that on average there was a marginally significant effect of accent type (Midwestern accent: M=3.25 SD = .865; Spanish accent: M = 3.50, SD = .865) on judgments about achieved level of education, F(1,103) = 3.493, p = .064. There was also a significant effect of multilingualism (Monolingual: M = 3.50, SD = .804; Multilingual: M = 2.85, SD = .727) on judgments about achieved level of education, F(1,103) = 13.06, p = .001. Additionally, there was not a significant interaction between accent type and multilingualism F(1,103) =.059, p = .809.

Therefore, Multilinguals on average rated both accents as having achieved higher education status than monolinguals, however, Multilinguals rated Midwestern accent as having achieved higher education than Spanish accent (see Figure 1). Planned post hoc comparisons of Monolinguals revealed the groups (participants exposed to the Midwestern
accent recording and participants exposed to the Spanish accent recording) did not differ
significantly in evaluations of level of education, $t(23) = -1.29$ $p = .684$. Planned post hoc
comparisons of Multilinguals revealed the groups (participants exposed to the Midwestern
accent recording and participants exposed to the Spanish accent recording) did not differ
significantly in evaluations of education achieved, $t(23) = -.679$ $p = .457$.

Unreliability

In this analysis, judgments of unreliability were recorded, with possible answers
ranging from 1 (strongly agree) to 5 (strongly disagree). It was hypothesized Monolingual
participants would rate the Midwestern accent on average more favorably than the Spanish
accent, and Multilinguals would rate Midwestern accent and Spanish accent similarly.
Results of an ANOVA test showed that on average there was not a significant effect of
accent type (Midwestern accent: $M = 2.93$ $SD = .942$; Spanish accent: $M = 2.826$, $SD = .964$)
on judgments about unreliability, $F(1,103) = .980$, $p = .325$. Furthermore, there was not a
significant effect of Multilingualism (Monolingual: $M = 2.86$, $SD = .972$; Multilingual: $M =$
$3.04$, $SD = .864$) on judgments about unreliability, $F(1,103)=1.07$, $p=.302$. Also, there was
not a significant interaction between accent type and multilingualism, $F(1,103)=.221$,
$p=.639$.

The results indicate there was no statistically significant difference of ratings of
participants (Monolinguals or Multilinguals) of either accent type (Midwestern accent or
Spanish accent) in ratings of unreliability of the speaker (see Figure 2). Planned post hoc
comparisons of Monolinguals revealed the groups (participants exposed to the Midwestern
accent recording and participants exposed to the Spanish accent recording) did not differ
significantly in evaluations of unreliability, $t(82) = -.600\, p = .585$. Planned post hoc comparisons of Multilinguals revealed the groups (participants exposed to the Midwestern accent recording and participants exposed to the Spanish accent recording) did not differ significantly in evaluations of unreliability, $t(23) = -.889\, p = .157$.

**Helpfulness**

In this analysis, judgments of helpfulness were recorded, with possible answers ranging from 1 (strongly agree) to 5 (strongly disagree). It was hypothesized Monolingual participants would rate the Midwestern accent on average more favorably than the Spanish accent, and Multilinguals would rate Midwestern accent and Spanish accent similarly. Results of an ANOVA test showed that on average there was not a significant effect of accent type (Midwestern accent: $M = 3.49\, SD = .766$; Spanish accent: $M = 3.38,\, SD = .843$) on judgments about helpfulness, $F(1,103) = .286,\, p = .594$. Additionally, there was not a significant effect of Multilingualism (Monolingual: $M = 3.46,\, SD = .835$; Multilingual: $M = 3.33,\, SD = .658$) on judgments about helpfulness, $F(1,103) = .248,\, p = .619$. There was not a significant interaction between accent type and multilingualism, $F(1,103) = .024,\, p = .878$.

The results showed there was no statistically significant difference of participants (Monolingual or Multilingual) on either accent type (Midwestern or Spanish) on ratings of helpfulness (see Figure 3). Planned post hoc comparisons of Monolinguals revealed the groups (participants exposed to the Midwestern accent recording and participants exposed to the Spanish accent recording) did not differ significantly in evaluations of helpfulness, $t(23) = .459\, p = .346$. Planned post hoc comparisons of Multilinguals revealed the groups (participants exposed to the Midwestern accent recording and participants exposed to the
Spanish accent recording did not differ significantly in evaluations of helpfulness, $t(23) = .251 p = .549$.

**Anger**

In this analysis, judgments of anger were recorded, with possible answers ranging from 1 (strongly agree) to 5 (strongly disagree). It was hypothesized Monolingual participants would rate the Midwestern accent on average more favorably than the Spanish accent, and Multilinguals would rate Midwestern accent and Spanish accent similarly. Results of an ANOVA test showed that on average there was a significant effect of accent type (Midwestern accent: $M = 2.47, SD = 1.03$; Spanish accent: $M = 1.88, SD = 1.04$) on judgments about anger, $F(1,103) = 6.33, p = .013$. However there was not a significant effect of Multilingualism (Monolingual: $M = 2.26, SD = 1.08$; Multilingual: $M = 1.86, SD = .963$) on judgments about anger, $F(1,103) = .814, p = .369$. There was not a significant interaction between accent type and multilingualism $F(1,103) = .507, p = .478$.

The results indicate participants rated the Midwestern accent, regardless of the number of languages they spoke, as statistically more angry than the Spanish accent (see Figure 4). Planned post hoc comparisons of Monolinguals revealed the groups (participants exposed to the Midwestern accent recording and participants exposed to the Spanish accent recording) did not differ significantly in evaluations of anger, $t(82) = 2.06 p = .813$. Planned post hoc comparisons of Multilinguals revealed the groups (participants exposed to the Midwestern accent recording and participants exposed to the Spanish accent recording) did not differ significantly in evaluations of anger, $t(23) = 2.07 p = .611$. 
Friendliness

In this analysis, judgments of friendliness were recorded, with possible answers ranging from 1 (strongly agree) to 5 (strongly disagree). It was hypothesized Monolingual participants would rate the Midwestern accent on average more favorably than the Spanish accent, and Multilinguals would rate Midwestern accent and Spanish accent similarly. Results of an ANOVA test showed that on average there was a significant effect of accent type (Midwestern accent: $M = 3.23$, $SD = .792$; Spanish accent: $M = 2.51$, $SD = .851$) on judgments about friendliness, $F(1,103) = 10.0$, $p = .002$. Yet, there was not a significant effect of Multilingualism (Monolingual: $M = 2.96$, $SD = .887$; Multilingual: $M = 2.57$, $SD = .870$) on judgments about friendliness, $F(1,103) = .1.36$, $p = .245$. Furthermore, there was not a significant interaction between accent type and multilingualism $F(1,103) =.014$, $p = .908$.

The results indicate that regardless of number of languages spoken by the listener, the results indicate Spanish accent was rated as more friendly when compared to ratings of the Midwestern accents (see Figure 5). Planned post hoc comparisons of Monolinguals revealed the groups (participants exposed to the Midwestern accent recording and participants exposed to the Spanish accent recording) did not differ significantly in evaluations of friendliness, $t(82) = 3.87$, $p = .121$. Planned post hoc comparisons of Multilinguals revealed the groups (participants exposed to the Midwestern accent recording and participants exposed to the Spanish accent recording) did not differ significantly in evaluations of friendliness, $t(23) = 1.66$, $p = .157$. 
Harshness

In this analysis, judgments of harshness were recorded, with possible answers ranging from 1 (strongly agree) to 5 (strongly disagree). It was expected that monolingual participants would rate Midwestern accent more favorably than Spanish accent, and Multilinguals would rate Midwestern and Spanish accent similarly. Results of an ANOVA test showed that on average there was not a significant effect of accent type (Midwestern accent: $M = 3.32$, $SD = 1.01$; Spanish accent: $M = 4.19$, $SD = .841$) on judgments about harshness, $F(1,103) = 17.9$, $p = .001$. Yet, there was not a significant effect of Multilingualism (Monolingual: $M = 3.68$, $SD = 1.04$; Multilingual: $M = 4.00$, $SD = .948$) on judgments about harshness $F(1,103) = .054$, $p = .816$. There was not a significant interaction between accent type and multilingualism, $F(1,103) = 1.24$, $p = .268$.

The results indicate Spanish accent was rated as less harsh than the Midwestern accent, however there was not a statistically significant difference between how Monolinguals and Multilingual rated the harshness of either accent type (see Figure 6). Planned post hoc comparisons of Monolinguals revealed the groups (participants exposed to the Midwestern accent recording and participants exposed to the Spanish accent recording) differed significantly in evaluations of harshness, $t(82) = 3.53$, $p = .048$. Planned post hoc comparison of Multilinguals revealed the groups (participants exposed to the Midwestern accent recording and participants exposed to the Spanish accent recording) did not differ significantly in evaluations of harshness, $t(23) = 3.77$, $p = .283$. 
Understanding the Speaker

In this analysis, judgments of understanding the speaker were recorded, with possible answers ranging from 1 (strongly agree) to 5 (strongly disagree). It was hypothesized that monolingual participants in both conditions would rate Midwestern accent more favorably than Spanish accent, and Multilinguals would rate Midwestern and Spanish accent similarly. Results of an ANOVA test showed that on average there was a significant effect of accent type (Midwestern accent: $M = 3.36 \; SD = 1.14$; Spanish accent: $M = 2.11 \; SD = .942$) on judgments about understanding the speaker, $F(1,103) = 9.05, p = .003$. Also, there was not a significant effect of Multilingualism (Monolingual: $M = 2.81, \; SD = 1.29$; Multilingual: $M = 2.52, \; SD = .813$) on judgments about understanding the speaker $F(1,103) = .530, p = .468$.

The data suggest that regardless of the number of languages spoken by the listener, the Spanish accent was rated as more understandable when compared to ratings of the Midwestern accents (see Figure 7). There was a significant interaction between accent type and multilingualism $F(1,103) = 7.49, p = .007$. Additionally, planned post hoc comparisons of Monolinguals revealed the groups (participants exposed to the Midwestern accent recording and participants exposed to the Spanish accent recording) did not differ significantly in evaluations of understanding, $t(82) = -1.52 \; p = .220$. Planned post hoc comparisons of Multilinguals revealed the groups (participants exposed to the Midwestern accent recording and participants exposed to the Spanish accent recording) did not differ significantly in evaluations of understanding, $t(23) = -.185 \; p = .746$. 
**Familiarity**

In this analysis, judgments of understanding the speaker were recorded, with possible answers ranging from 1 (strongly agree) to 5 (strongly disagree). It was expected that Monolingual participants would rate Midwestern accent more favorably than Spanish accent, and Multilinguals would rate Midwestern and Spanish accent similarly. Results of an ANOVA test showed that on average there was not a significant effect of accent type (Midwestern accent: \( M = 2.50, SD = 1.08 \); Spanish accent: \( M = 2.88, SD = 1.18 \)) on judgments about familiarity, \( F(1,103) = 2.70, p = .103 \). Also, there was not a significant effect of Multilingualism (Monolingual: \( M = 2.73, SD = 1.17 \); Multilingual: \( M = 2.52, SD = 1.03 \)) on judgments about familiarity \( F(1,103) = 1.25, p = .265 \). There was not a significant interaction between accent type and multilingualism, \( F(1,103) = .103, p = .749 \).

The results indicated there was no statistical difference between ratings of either accent type based on Multilingualism (see Figure 8). Planned post hoc comparisons of Monolinguals revealed the groups (participants exposed to the Midwestern accent recording and participants exposed to the Spanish accent recording) did not differ significantly in evaluations of familiarity with accent, \( t(82) = -1.52, p = .307 \). Planned post hoc comparisons of Multilinguals revealed the groups (participants exposed to the Midwestern accent recording and participants exposed to the Spanish accent recording) did not differ significantly in evaluations of familiarity, \( t(23) = -1.21, p = .189 \).

**DISCUSSION:**

*The Current Study*

The present study demonstrated there are various presumptions that listeners form of non-native and native accented speakers based on accent alone. Specifically, this
research investigated the perceptions listeners form when making judgments on accent by utilizing a matched-guise technique. A modified version of Lambert et al. (1964) matched-guise technique was implemented, as a multilingual female speaker was recorded reading a neutral text while speaking in a Midwestern accent and in a Spanish accent. Accent type (Midwestern and Spanish) and multilingualism (Monolingual and Multilingual) were the independent variables, and the attitudes towards the speaker were the dependent variables. Participants listened to a recording of a female speaker reading a popular text and were asked to complete a survey. The survey included questions about the participant’s background, such demographic information, and impressions of the speaker in the recording. The survey also asked participants to report the number of languages they spoke; this information was later used to identify each of the participants as Monolingual or Multilingual.

Listeners formed ideas about the speaker’s personality by evaluating the speaker on six personality traits and two broad questions. The six personality traits examined were education achieved, unreliability, helpfulness, anger, friendliness, and harshness. The experimental packet also included two questions about the impressions of the speaker. The questions were: I understand the speaker, and I am familiar with the speaker’s accent. All dependent measures were based on a modified version of Ainsfeld & Lambert’s (1964) report of monolingual and bilingual French-Canadian children of speaker’s personality.

Summary of Findings

Based on the results, accent type (Midwestern accent and Spanish accent) had a significant effect on listeners’ perceptions of the speaker. Listeners’ perceptions of the speaker were dependent on accent type for evaluation of education achieved, anger and
harshness. For example, all participants perceived Midwestern accent (M=3.25) as having achieved a higher level of education than Spanish accent (M=3.50). Recall, higher average results indicate a low mean score which indicated a favorable attitude towards a personality characteristic. A high score indicated an unfavorable attitude toward a personality characteristic.

In addition to accent type, Multilingualism had a significant effect on participants’ ratings of the education achieved by the speaker. Particularly, monolinguals reported the Spanish accent as having significantly less education than the Midwestern accent. Multilinguals reported the Midwestern accent as higher in education than Spanish accent. However, Multilinguals rather than Monolinguals rated both accents as having achieved higher education. The results of the perception of education are particularly significant, because the implications of this research are applicable to education, job and social interactions.

Remarkably, listeners’ perceived the Midwestern accent as more angry and harsh than the Spanish accent. Regardless of the number of languages they spoke, participants on average rated the Midwestern accent as significantly more angry (M = 2.47) and more harsh (M = 3.32) than the Spanish accent (M = 1.88; M = 4.19). The results of participants’ perceptions of harshness and anger of the speaker are valuable, because the implications of research that explores perceptions of accents are applicable to native and non-native speakers in a variety of workplace environments – individuals may be culturally informed about their accent when entering a potential workplace. However, the results are incongruent with past research which states that people who see others as similar in attitudes and background tend to be treated and evaluated more favorably than those seen
as dissimilar (Turban & Jones, 1988). Based on this research, the Spanish accent recording should have been perceived less favorably than the Midwestern accent. Furthermore, the Similarity-Attraction Hypothesis states that demographic variables, such as non-native accent, impact judgments and views a listener has towards similar or dissimilar individuals (Deprez-Sims & Morris, 2010). The discrepancies that arise between the current study and previous studies may be due to the small sample size and the possibility of disfluency of the recording used.

**Limitations of the Study, Future Directions, Implications**

The current study has several limitations. Primarily, there was a relatively small sample size of Multilinguals (n = 24) from the total number of participants (N=107). The total number of Multilinguals could have been greater had participants been given an operational definition of monolingual and multilingual. A more robust definition of multilingual should be applied in future research, as six of the total number of Multilinguals (n = 24) that reported less than four years of experience in the second language learning. Furthermore, future research can divide multilingual individuals into multiple categories based on number of years of language experience. The present study had several additional limitations beyond a small sample size. For example, the speaker was asked to speak in neutral tone and pace for both recordings. However, more advanced techniques for evaluating the differences between the voices can be implemented in future studies. The results of the current study provide a platform for the next steps in accent-based research. In future research, tonal qualities and pauses should be critical assessed and by an
Independent source. Furthermore, a strong definition of Monolingual and Multilingual should be presented to listeners after listening to the recording.

Undesirable preconceptions of accented speech may have an enormous impact on millions of people who routinely communicate in a non-native language. While everyone exudes an accent, often local and foreign accents have specific preconceptions associated with each. Based on the current study, accent type can influence how listeners perceived the speaker. Speakers with non-native accents may recognize the stigma(s) associated with their accent, and may want to eliminate their non-native accents. As a result, many immigrants take steps to make their speech seem less like a foreigner and more native (Shah, 2012).
References


Table 1
*Frequency of Languages Spoken and Years of Experience by Multilingual Participants*

<table>
<thead>
<tr>
<th>Languages Spoken</th>
<th>Frequency of Language</th>
<th>Average Years of Experience</th>
</tr>
</thead>
<tbody>
<tr>
<td>English</td>
<td>24</td>
<td>17.10</td>
</tr>
<tr>
<td>Spanish</td>
<td>10</td>
<td>14.50</td>
</tr>
<tr>
<td>French</td>
<td>3</td>
<td>5.30</td>
</tr>
<tr>
<td>Italian</td>
<td>1</td>
<td>18.0</td>
</tr>
<tr>
<td>Vietnamese</td>
<td>3</td>
<td>19.0</td>
</tr>
<tr>
<td>German</td>
<td>1</td>
<td>4.0</td>
</tr>
<tr>
<td>Japanese</td>
<td>1</td>
<td>5.0</td>
</tr>
</tbody>
</table>

Note: Identification of Multilinguals (n=24) was based on self-report.
Evaluations of Speakers with Accents on Perceptions of Education Achieved

Figure 1.
Participants’ evaluation of Education Achieved of native (Midwestern) and non-native (Spanish) accented speech. There were marginally significant effects of Accent Type on perceptions of Education achieved by the speakers, and there was a significant effect of Multilingualism on perceptions of Education Achieved by the speaker.
Figure 2.
Participants’ evaluation of Unreliability of native (Midwestern) and non-native (Spanish) accented speech. No significant effect of Accent Type or Multilingualism on perceptions of Unreliability of the speaker.
Evaluations of Speakers with Accents on Perceptions of Helpfulness

Figure 3.
Participants’ evaluation of Helpfulness of native (Midwestern) and non-native (Spanish) accented speech. No significant effects of Accent Type or Multilingualism on perceptions of Helpfulness of the speaker.
Figure 4.
Participants’ evaluation of Anger of native (Midwestern) and non-native (Spanish) accented speech. There was a significant effect of Accent Type on perceptions of Anger of the speaker, but no significant effect of Multilingualism on perceptions of Anger of the speaker.
Evaluations of Speakers with Accents on Perceptions of Friendliness

Figure 5.
Participants’ evaluations of Friendliness of native (Midwestern) and non-native (Spanish) accented speech. There was a significant effect of Accent Type on perceptions of Friendliness of the speaker, however there were no significant effects of Multilingualism on perceptions of the speaker.
Evaluations of Speakers with Accents on Perceptions of Harshness

Figure 6.
Participants’ evaluation of Harshness of native (Midwestern) and non-native (Spanish) accented speech. There was a significant effect of Accent type on perceptions of Harshness of speaker, however there was no significant effect of Multilingualism on perceptions of Harshness of the speaker.
Evaluations of Speakers with Accents on Perceptions of Understanding the Speaker

![Bar chart showing evaluations of understanding the speaker for native (Midwestern) and non-native (Spanish) accented speech. There is a significant effect of Accent Type on perceptions of understanding the speaker, but no effect of Multilingualism.]

Figure 7.

Participants’ evaluation of Understanding the Speaker of native (Midwestern) and non-native (Spanish) accented speech. There was a significant effect of Accent Type on perceptions of Understanding the Speaker, however, there was no effect of Multilingualism on perceptions of Understanding the Speaker.
Figure 8.
Participants’ evaluation of Familiarity with Accent of native (Midwestern) and non-native (Spanish) accented speech. There were no significant effects of Accent Type or Multilingualism on perceptions of Familiarity with Accent.
Appendix A: Experiment Informed Consent

CONSENT FORM Study Title: Evaluating Personalities Using Voices Alone

**Purpose of the research**
To better understand how people evaluate others.

**What you will do in this experiment**
You will listen to a recording of an excerpt from the Harry Potter series. After the recording, you will be asked to complete a survey. The survey will include questions about your background and impressions of the speaker in the recording.

**Time required**
The study will take less than 30 minutes to complete.

**Risks**
There are no anticipated risks.

**Benefits**
You will receive credit in your psychology class for participating in this study. At the end of the experimental session, the experimenter will provide you with a thorough explanation of this research study. If you wish, you can send an email message to Olivia Lopez at orlopez@noctrl.edu and she will send you a summary of the results of this experiment once it is complete.

**Confidentiality**
Your participation in this research will remain confidential, and your identity will not be stored with your data.

**Participation and withdrawal**
Your participation in this study is voluntary. You may withdraw from the study at any time without penalty. You may withdraw by informing the experimenter that you no longer wish to participate.

**Contact**
If you have questions about this study, please contact Olivia Lopez at orlopez@noctrl.edu.

**Agreement**
The purpose and nature of this research have been sufficiently explained, and I agree to participate in this study. I understand that I am free to withdraw at any time without incurring any penalty. I certify that I am 18 years of age or older ____.

Signature: ___________________________ Date: ____________

Name (print): _______________________________
Appendix B: Study Questionnaire

Please fill-in your information by checking the corresponding boxes.

1. Age:

   

2. Biological Sex:

   Male | Female

3. How many languages do you speak fluently?

   Number of Languages Spoken
   
   1 | 2 +

4. Please list the number of languages you speak fluently and the number of years of experience with that language.

   EXAMPLE:

   1. _______English________  Years: _______18____
   2. _______Japanese________  Years: _______14____

   1. _________________________  Years: _____________
   2. _________________________  Years: _____________
   3. _________________________  Years: _____________
   4. _________________________  Years: _____________
   5. _________________________  Years: _____________
A speaker will read a few lines out of the first volume of Harry Potter.

Please remember to focus on the personality of the speaker.
**Instructions**: Please indicate your level of agreement with each of the following statements by checking the appropriate box.

<table>
<thead>
<tr>
<th>Statement</th>
<th>Agreement Scale</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1 Strongly Agree</td>
</tr>
<tr>
<td>The speaker sounds friendly.</td>
<td></td>
</tr>
<tr>
<td>The speaker sounds unreliable.</td>
<td></td>
</tr>
<tr>
<td>The speaker sounds helpful.</td>
<td></td>
</tr>
<tr>
<td>The speaker sounds harsh.</td>
<td></td>
</tr>
<tr>
<td>The speaker sounds well educated.</td>
<td></td>
</tr>
<tr>
<td>The speaker sounds angry.</td>
<td></td>
</tr>
</tbody>
</table>

PLEASE STAY ON THIS PAGE UNTIL INSTRUCTED TO GO ON.
Instructions: Please indicate your level of agreement with each of the following statements by checking the appropriate box.

<table>
<thead>
<tr>
<th>Statement</th>
<th>Agreement Scale</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1 Strongly Agree</td>
</tr>
<tr>
<td>I do not understand the speaker well.</td>
<td></td>
</tr>
<tr>
<td>I am familiar with the speaker’s accent.</td>
<td></td>
</tr>
</tbody>
</table>

3. Does the speaker have an accent? Please check one.

   Yes   No

4. If YES, what accent does the speaker have? ______________________________

5. What is the biological sex of the speaker? Please check one.

   Male   Female

THIS IS THE END OF THE SURVEY.

Thank you for your participation!
Appendix C: Passage Read by Multilingual Female Speaker

Passage read by female speaker:

“Mrs. Dursley was thin and blonde and had nearly twice the usual amount of neck, which came in very useful as she spent so much of her time craning over garden fences, spying on the neighbors. The Dursleys had a small son called Dudley and in their opinion there was no finer boy anywhere. The Dursleys had everything they wanted, but they also had a secret, and their greatest fear was that somebody would discover it.” (Rowling, 1997)

WC:76
Appendix D: *Experiment Debriefing Form*

**DEBRIEFING**

**Study Title: Evaluating Personalities Using Voices Alone**

Thank you for participating in our study!

We are using experimental research to explore people's attitudes towards different accents within American English. We are using a between-subjects design. American English accent type (American English with a Midwestern accent and American English with a Spanish accent) and bilingualism (monolingual and bilingual) are our independent variables. Our dependent measures are attitudes towards the American English speaker. Each participant in this study listens to a recording of an American English speaker with an accent reading an excerpt from the Harry Potter series. After listening to the recording, participants complete a survey. The survey includes questions about the participant's background and impressions of the American English speaker in the recording.

Previous research has shown that participants are more likely to assign favorable characteristics to spoken languages (Anisfeld & Lambert, 1964) and accents (Ryan, Carranza, & Moffie, 1977) that are similar to their own. Therefore, we expect participant attitudes towards an American English speaker with a Midwestern accent will be more positive (e.g., speaker seems more intelligent) than their attitudes towards a speaker of American English with a Spanish accent. Research also indicates bilinguals are more likely to assign favorable characteristics to speakers with a primary language that differs from their own than monolinguals (Anisfeld & Lambert, 1964). Therefore, we expect the attitudes of our bilingual participants to be more positive towards speakers of American English with a Spanish accent than our monolingual participants.

If you would like to receive a summary of the results at the end of the term, please contact Olivia Lopez at orlopez@noctrl.edu. If you have concerns about your rights as a participant in this experiment, please contact Dr. Daniel VanHorn (637-5327, drvanhorn@noctrl.edu) or Dr. Mary Jean Lynch (637-5363, mlynch@noctrl.edu) in the psychology department. If you are interested in learning more about this research topic, then you may want to consult:


Again, thank you for your participation!