

ACCENT PERCEPTION

by

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### **Abstract**

Accents are important cues for listeners to socially categorize and form impressions of speakers. Previous studies have largely examined the perceptions of native-accented speakers about non-native accented individuals. The current study explored the experiences and perceptions of accented and non-accented individuals towards accents. Using six different scales measuring accent perception, seventeen non-accented and accented participants evaluated their perceptions about other accented individuals as well as their own accent. Results showed that accented individuals perceived other accented individuals to be more socially attractive in comparison to those without accents. The implications of this work suggest that accented individuals may take into consideration judgements from non-accented individuals towards their own accent when evaluating accented individuals.

## ACCENT PERCEPTION

The United States of America (U.S.) is a multicultural society that is composed of people from different backgrounds and ethnicities. As of 2017, more people now live in countries where they were not born. Specifically, about 43.3 million foreign-born people live in the United States (US Census Bureau, 2017). More than 20% percent of the U.S population speaks a language other than English and speaks with an accent that is different from their host country (US Census Bureau, 2017). Moreover, 8.6%, of the American population state that they have limited English proficiency, meaning that they speak English “less than very well.”

Accents are important social cues for listeners as they often aid in social categorization and impression formation. In particular, a substantial amount of research suggests that people who speak with a non-standard accent are perceived to be less credible, less intelligent, have a lower socioeconomic status and, as a result, they experience more bias (Fuentes, Gottdiener, Martin, Gilbert, & Giles, 2012; Lev and Keysar, 2012). For example, a study conducted by Lev-Ari and Keysar (2012) examined the influence of accents on eyewitness statements across two studies. Study one asked English-speaking participants to rate the truthfulness of trivia statements recited by someone with either a heavy, mild, or native accent. It was found that participants rated native-accented statements as more truthful than the mild and heavy accents. A follow-up study examined whether making participants aware about the difficulty in speech would influence accent truthfulness. To examine this, native English participants were separated into two groups. Prior to hearing the recited statements, group one was made aware of the difficulty of accents, while group two received no such information. It was found that there were no statistically significant differences in native and mild truthfulness ratings for those in the difficulty in speech group, that is, when made aware of the difficulty of understanding non-native

accents, participants no longer perceived mild-accented statements as less truthful in comparison to native accents. However, statements made by participants with heavy accents were still rated as less truthful in comparison to native and mild accents. This study suggests that accent strength can influence believability. Knowing about difficulty when listening to accented speech can really influence how the speaker and listener communicate with each other.

More recent research similarly confirms that people form impressions of others based on their accents (Hansen, Rakić, & Steffens, 2017). For example, experimenters examined the influence of both auditory and visual cues on the perceived competence and warmth of a target. German participants were shown photographs of young Turkish and German men paired with short voice samples of either a German voice or a Turkish voice. After each face was presented in random order, participants answered questions regarding how attractive and pleasant each target appeared. The results concluded that participants correctly identified German-looking targets as being Germans than Turkish looking (Hansen, et.al., 2017). In addition, specific accents were perceived as more competent and warmer. Specifically, Turkish-looking German-accented targets were evaluated as more competent and warmer than German-looking Turkish-accented targets. This study suggests that non-native accented individuals can be perceived as less competent and warm in comparison to native-accented individuals.

A related study investigated attitudes, comprehension, and collaborative behavior with non-native speakers (Lindemann, 2012). Twelve native-English speakers responded to questions about their attitudes toward and compensability of Koreans (Lindemann, 2012). To measure collaborative behavior, participants were asked to complete an interactive map task where they were paired with either a native Korean speaker or a native English speaker. It was found that those having negative attitudes toward Koreans experience more problems with their partners

speech during the collaborative behavior task. In addition, participants with positive attitudes believed their interactions with Koreans were successful in comparison to those with negative attitudes. This study suggests positive or negative interactions and behaviors may vary widely depending on native speakers' attitudes towards the non-native speaker (Lindemann 2012). Moreover, it also suggests that miscommunication when interacting with a non-native speaker may be due to the native speakers' own negative attitudes.

Previous research has also shown that people use language and accents as cues for social grouping (Kinzler, et al., 2009). In an examination of these ideas, 5-year-old children were asked about their friendship preferences among children that were either native or non-native accented. Specifically, they were asked with whom they wanted to be friends and indicated their response by placing a Velcro sticker below the face of their choice. The results concluded that children preferred those who spoke in a native accent compared to a non-native accent. A second study investigated children's friendship preferences based on language spoken and accent. Children were presented with foreign-language and foreign-accented voices and then were asked who they understood by placing a Velcro sticker below the face of their choice. Similar to study 1, children were also asked about their friendship preferences among speakers who spoke a foreign language and among those who spoke with a foreign accent. The results indicated that in terms of comprehension, children chose individuals with a foreign accent rather than a foreign language. Additionally, when asked about friendship however, children choose not to be friends with speakers who spoke in a foreign language or a foreign accent. This research implies that native-accented individuals may have a higher preference to communicate with other native-accented individuals. Thus, native-accented individuals may see accent as a language barrier and are less likely to engage with those accented speakers (Kinzler, et al.,2009).

In line with these ideas, some studies suggest that there may be bias against non-native-speaking teachers who teach a foreign language. One study examined the extent to which the presence or absence of a teacher's accent impacted student's perception of the teacher as a language teacher (Williamson & Kelch, 2002). Participants recruited for this study were ESL students whose native languages were Spanish, Korean, and Vietnamese. Students listened to audio-recordings of female teachers speaking six varieties of English: native standard English, a southern US English accent, British English, and English with a Portuguese, Japanese or German accent. Afterwards, students completed an attitude questionnaire (Williamson & Kelch 2002). The attitude questionnaire asked participants to judge the speaker on experience, teacher likability, teaching expertise, desirability of speaker, empathy for students, overall teaching ability, which language skill students preferred to learn from the speaker, and to identify the speakers as a native or non-native English speaker. The results concluded that participants did judge those with a native English-speaking accent as more educated, experienced, and skilled in comparison to non-native English accents. Students also preferred to study listening, speaking, and pronunciation from native speakers. This study suggests that students may be biased about what makes a good teacher based on different types of accents. Students may have bias tendencies towards teachers whose accents are different from their own therefore judging them more harshly.

Biases and stereotypes about non-native English accents have also been shown to influence native-accented speaker's willingness to accommodate individuals with non-native English accents. In particular, previous research suggests that accents are seen as an interference to clear communication and can be a source of anxiety and frustration for both the speaker and the listener (Imamura et al., 2011). A recent study examined the effects of stereotype threat,

social attractiveness, intergroup anxiety, and willingness to interact and accommodate with an outgroup member whose accent was different from their own (Montgomery & Zhang, 2018). Participants were either exposed to stereotyped messages about accented outgroup members or exposed to no stereotyped messages. They then responded to a series of questions regarding intergroup anxiety, comprehensibility, willingness to interact, and the social attractiveness of accented speakers. The results indicated that participants who were exposed to the stereotype threat message, rated the accented speakers as less socially attractive and associated with more intergroup anxiety than those in the no threat condition (Montgomery & Zhang, 2018).

Past research has focused on attitudes and perceptions of non-native accented individuals with limited research on the experiences of non-native accented speakers. One exception was a two-part study conducted by Gluszek & Dovidio (2010) that investigated the role of non-native accented individual's perceptions of stigma, problems communicating, discrimination, and feelings of social belonging. The results indicated that participants with stronger accents reported experiencing greater difficulties communicating. Study two expanded upon study one comparing native and non-native accented individuals. The results suggested that having a non-native accent was related to lower levels of sense of belonging in comparison to those without a non-native accent. Non-native accented individuals were also more likely to question their acceptance in a community and reported a weaker sense of belonging in the U.S. than those with native accents (Gluszek & Dovidio 2010).

Previous research has examined the perceptions of native-accented speakers about non-native accented individuals and demonstrated that accents influence social preferences and perceptions (Kinzler, Shutts & Dejesus 2009). In particular, different accent strengths were linked to truthfulness with the heaviest accents perceived as the least truthful (Kinzler, et al.,

2009; Lev & Keysar, 2012). Scarce attention, however, has been paid to how accented individuals perceive accents and their experiences of having an accent in the world. One exception comes from a recent study described above that found that participants with stronger accents reported experiencing greater difficulties communicating and lower levels of belonging in comparison to non-accented participants (Dovidio, 2010). The current study explored the experiences and perceptions of non-native accented and non-accented individuals towards accents. It was hypothesized that non-native accented individuals would perceive accents more positively and have more positive interactions with accented individuals in comparison to native accented individuals.

## **Method**

### **Participants**

For this study, a total of 18 participants were recruited (7 non-native accented and 11 native-accented) from Purchase College and outside sources. The outside participants were recruited through word of-mouth using snowball sampling methods to maximize sampling. Participants were paid either \$5 for their participation or received credit (if enrolled in the Psychology participant pool). All participants (4 Male, 13 Female, and 1 Queer gender) Age range 18-25 ( $M = 21.3$ ,  $SD = 1.9$ ) consented to the terms and conditions of the study. 64% of participants spoke one or more language with 33% of these participants speaking Spanish. There were 22% of participants that identified their ethnic background as Hispanic, 30 % Caucasian and 48% other. Among participants who had accents, their self-perceived accent strength was below the midpoint indicating that participants perceived their accent to be strong ( $M = 2.84$ ,  $SD = .98$ ).

### **Materials**

The questions for this study were adapted from previous studies. Individuals with accents and without accents were given questionnaires with slightly different questions. All participants received a demographic questionnaire that asked participants about their age, ethnicity, and ethnic background. Accented participants were asked questions about their own experiences of having an accent and their perceptions of accented individuals. The questionnaire contained a self-perceived accent strength scale, accents and communication problems scale, willingness to interact, intergroup anxiety, willingness to accommodate, and a social attractive scale (Montgomery & Gretchen 2018). Non-accented individuals were asked about accents in general and how they perceive accented individuals. The questionnaire contained a perceived accentedness scale, accents and communication problems scale, willingness to interact scale, intergroup anxiety scale, willingness to accommodate scale, and a social attractive scale (Montgomery & Gretchen 2018).

*Self-perceived Accent Strength Scale.* Only accented-individuals were asked about how they perceive their own accent using the self-perceived accent strength scale. An example item was: “I feel my accent is very strong. According to this, a higher number indicated stronger disagreement. (1 = Strongly Agree, 4 = Neutral, 7 = Strongly Disagree; See Appendix A).

*Accents and Communication Problems Scale.* All participants were asked about their experiences interacting with accented individuals. An example question was: “When interacting with accented individuals do you experience problems communicating; “When others speak with accents do you find this to be difficult?” According to this, a higher number indicated stronger disagreement (1 = Strongly Agree, 4 = Neutral, 7 = Strongly Disagree; See Appendix B).

*Perceived comprehensibility.* All participants were asked questions regarding their perceptions about the accentedness of non-native English speakers. Example questions were:

“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.” According to this, a higher number indicated stronger disagreement (1 = Strongly Agree, 4 = Neutral, 7 = Strongly Disagree; See Appendix C).

*Willingness to Interact Scale.* All participants were asked questions about interacting with accented individuals. Example questions were: “How willing are you to talk to the speaker?” “How willing are you to initiate conversation with the speaker?” According to this, a higher number indicated a stronger willingness to interact (1 = Extremely unwilling, 4 = Neutral, 7 = Extremely willing; See Appendix D).

*Level of Anxiety.* All participants were asked questions about their anxiety when hypothetically interacting with an accented speaker. Example questions were: “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.” According to this, a higher number indicated a stronger disagreement (1 = Strongly Agree, 4 = Neutral, 7 = Strongly Disagree; See Appendix E).

*Social Attractiveness Scale.* All participants were asked questions about the social attractiveness of accented individuals. Example items were: “I think the speaker could be a friend of mine,” and “I could become close friends with the speaker.” According to this, a higher number indicated a stronger disagreement (1 = Strongly Agree, 4 = Neutral, 7 = Strongly Disagree; See Appendix F).

*Willingness to Accommodate.* All participants received this measure which contained a 9-item questionnaire regarding their willingness to accommodate their communication style when

interacting with a person whose accent or communication style was different from their own. Example questions were: “I would speak slower,” “I would avoid interrupting this person,” and “I would simplify my vocabulary.” According to this, a higher number indicated a stronger disagreement (1 = Strongly Agree, 4 = Neutral, 7 = Strongly Disagree; See Appendix G).

*Demographics questionnaire.* All participants were asked questions about their age, gender, ethnic background, language or languages spoken, and residence status. This was put at the end of the questionnaire to avoid any bias (See Appendix H).

### **Procedure**

After consenting, participants were given the demographic questionnaire and asked to indicate whether they had an accent or no accent. All participants were then given the appropriate questionnaire depending on whether they have an accent or not. Accented individuals were asked questions about their own accent strength and their perceptions about other accented individuals. Their survey contained slightly different questions measuring different variables that included the self-perceived accent strength scale, accents and communication problems scale, willingness to interact scale, intergroup anxiety, willingness to accommodate scale, and social attractiveness scale. Non-accented individuals took a separate survey asking questions about their perceptions of people with accents, willingness to interact, intergroup anxiety and, willingness to accommodate.

### **Results**

It was hypothesized that those who have accents would perceive accents more positively (e.g., social attractiveness, anxiety, comprehensiveness) in comparison to non-accented individuals. To test this hypothesis, a series of independent samples t-tests were conducted comparing accented and non-accented participants on the perceived comprehensibility, anxiety, and social attractiveness measures. In contrast to what was hypothesized, there were no

significant differences between accented ( $M = 4.82, SD = .82$ ) and non-accented ( $M = 4.5, SD = 1.1$ ) participants on perceived comprehensibility,  $t(17) = .65, p = .52$ . However, the means were in the expected direction such that those with non-native accents perceived others with accents as more comprehensible. In contrast to what was hypothesized, there were also no statistically significant differences between accented ( $M = 5.83, SD = 1.0$ ) and non-accented ( $M = 5.27, SD = .50$ ) participants' reports of anxiety,  $t(16) = 1.44, p = .17$ , but did fall in the expected direction where accented individuals experienced less anxiety than non-accented. Somewhat in line with what was hypothesized, there was a marginally significant difference between accented and non-accented participants' reports of social attractiveness,  $t(17) = 2.05, p = .058$ . In particular, accented participants ( $M = 6.23, SD = .92$ ) perceived accented individuals as more socially attractive than the non-accented participants perceived them to be ( $M = 5.35, SD = .84$ ).

It was also hypothesized that those who have accents would have more positive interactions (e.g. willingness to accommodate and willingness to interact) in comparison to non-accented individuals. To test this hypothesis, a series of independent samples t-tests were conducted comparing accented and non-accented participants on a willingness to interact and accommodate measures. In contrast to what was hypothesized, there were no significant differences between accented ( $M = 5.75, SD = 1.5$ ) and non-accented ( $M = 6.17, SD = .44$ ) participants' reports of willingness to interact,  $t(16) = -.82, p = .42$ . In contrast to what was hypothesized, there was also no significant difference between accented ( $M = 2.84, SD = .98$ ) and non-accented ( $M = 3.42, SD = .80$ ) participants' willingness to accommodate scores,  $t(17) = -1.34, p = .200$ .

## Discussion

The current study sought to examine accented and unaccented individual's perceptions of accents. Accented participants were asked questions about their own perceptions of accented individuals and the experience of having an accent while non-accented individuals were asked questions about accents in general. Accented participants were asked to consider how they felt about their own accent and both accented and non-accented participants rated their comprehensibility, anxiety, social attractiveness, and willingness to accommodate and interact when interacting with an accented speaker. It was hypothesized that those who have accents will perceive accents more positively and have more positive interactions in comparison to non-accented individuals. In general, there were no statistically significant differences on these measures, although many were in the expected direction. However, there was a marginally significant difference between accented and non-accented participants on social attractiveness ratings. In particular, accented participants rated accented individuals as more socially attractive in comparison to non-accented participants.

The findings of this study suggest that accented individuals may have more positive interactions when interacting with other accented individuals due to their experience of also having an accent in the world. In other words, because accented individuals have an accent, they might not perceive other accented individuals as negatively as those without an accent do. Furthermore, accented individuals may take into consideration the judgement they receive from non-accented individuals when evaluating accented individuals. Those with a non-standard English accent may be more receptive and understanding when interacting with other accented individuals. It is likely that non-native accented individuals may be less judgmental and have less

biases towards other non-native accented because they may take in their own experiences of having an accent in the world and apply it when interacting with other accented speakers.

This study is limited in several ways. First, the sample size consisted of only 17 people. Perhaps a larger sample size might yield different results. In addition, most of the participants were recruited from SUNY Purchase. A better representation of the population in the US should be used for this study. Furthermore, New York City is really diverse but very liberal-leaning and this might have led participants to have more positive views on accented individuals than is true for most Americans. Another limitation was the unequal number of participants in each condition, as more non accented participants were recruited than accented participants. It is also important to take into account that all the data collected was self-reported which may have led to self-report bias. There was a possibility that participants who actually had non-native accents may have interpreted their own accent as being native English accented. For future research, this study should be replicated with participants from different areas that are racially diverse to get a clear representation of real-life daily interactions with accented individuals.

In closing, the increasing population of foreign-born people suggest that there will be more interactions with people of different ethnic, racial, and linguistic backgrounds. The current research suggests that there needs to be greater emphasis on alternative ways to facilitate communication between all speakers and letting go of bias tendencies.

#### APPENDIX A: SELF-PERCEIVED ACCENT STRENGTH

The following statements ask you to think about how you perceive your own accent. 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 Agree, 4 = Neutral, 7 = Strongly Disagree)

I feel my accent is very strong	1	2	3	4	5	6	7
I don't think my accent is noticeable	1	2	3	4	5	6	7
I feel like my accent prevents others from understanding me	1	2	3	4	5	6	7
I don't see my accent as a problem	1	2	3	4	5	6	7

**APPENDIX B: Accent and Communication Problems Scale.**

The following statements ask you to think your experience communicating with others with an accent. 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 Agree, 4 = Neutral, 7 = Strongly Disagree)

When interacting with accented individuals do you experience problems communicating	1	2	3	4	5	6	7
When others speak with accents do you find this to be difficult	1	2	3	4	5	6	7

**APPENDIX C: 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 Agree, 4 = Neutral, 7 = Strongly Disagree)

*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 D: 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 a stronger level of agreement. A higher number indicates more willingness. (1 = Extremely unwilling, 4 = Neutral, 7 = Extremely willing)

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

**APPENDIX E: 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 Agree, 4 = Neutral, 7 = Strongly Disagree)

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

**APPENDIX F: 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 G: WILLINGNESS TO ACCOMMODATE

The following statements ask you to think about communicating with 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 H: Demographic Survey**

Q1. Please indicate your age.

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Q2. What is your gender?

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Q3. What ethnic background do you identify with?

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Q5. Please indicate your race ?

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Q6 Do you speak more than one language?

- Yes (1)
- No (2)

Q5. If yes, please specify

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Q7. Are you a traditional student?

- No(1)
- Yes(2)
- Other (Please specify) \_\_\_\_\_

Q8. What is your native language? \_\_\_\_\_

Q9. At what age did you begin to learn the language(s) indicated in the question above?

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