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The Thesis Committee for Jeanan Elena Sfeir
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The Effect of Self-Disclosure on Accented Speech: A Pilot Study

APPROVED BY
SUPERVISING COMMITTEE:

Supervisor:

Barbara L. Davis

Courtney T. Byrd

The Effect of Self-Disclosure on Accented Speech: A Pilot Study

by

Jeanan Elena Sfeir, B.S. C.S.D.

Thesis

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Dedication

This thesis is dedicated to all of the English language learners of the world. You deserve a voice and the confidence to use it. “Do you know what an accent is? It’s a sign of bravery.”

– Amy Chua

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Abstract

The Effect of Self-Disclosure on Accented Speech: A Pilot Study

Jeanan Elena Sfeir, M.A.

The University of Texas at Austin, 2016

Supervisor: Barbara L. Davis

Abstract: Research has indicated negative perceptions of adults with foreign accented speech. These views have implications relative to employment of person's with foreign accented speech. Considering present immigration patterns to the United States, the need for fully intelligible speech will impact the lives of persons who wish to be employed and integrate within US culture. Previous research has indicated that the use of self-disclosure statements may be beneficial in improving listener's perceptions of a speaker who stutters. The goal of this study was to explore the potential benefits of use this strategy among persons with foreign accented speech. Such information could improve treatment delivery in accent modification, a practice within the scope of Speech-Language Pathology. Additionally, the technique of self-disclosure could improve employment outcomes for non-native English speaking individuals. Research goals were explored by exposing participants to two of four videos of foreign accented speakers (a male who self-discloses, a male who does not self-disclose, a female who self-discloses, and a female who does not self-disclose). Directly after viewing the videos, listener participants completed a survey probing for perceptions of the speaker, information about their experience with and

knowledge of accents, and allowing for additional comments on the speakers' communication to be reported. Results for positive effects of self-disclosure achieved significance for the trait of *viewer felt more distracted* and negative effects of self-disclosure achieved significance for the trait of *more outgoing*. In regards to these results, the use of self-disclosure may actually be viewed negatively by listeners of the population in this study.

In summary, results from the current pilot study indicate that self-disclosure does not have a significant effect on increasing positive perception of accented speech. Further research on self-disclosure and accented speech in more diverse speaker cohorts with diverse types of listener participants is needed.

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Introduction

An accent is a distinct manner of pronunciation of sound patterns, where other linguistic levels of analysis (grammatical, syntactical, morphological, and lexical) are more or less comparable with the standard language (Giles, 1970). While a person's accent depends on a variety of factors, accents are usually grouped by regional variations (within the same language group) or foreign accents (when the speaker has a different first language than the listener) (American Speech and Hearing Association, 2016). Within the scope of practice of Speech-Language Pathologists, accents are a natural part of spoken languages and are not considered a speech or language disorder (American Speech and Hearing Association, 2016). However, while some people take pride in their unique accents, others may have difficulties communicating because of them. Some difficulties may include people not understanding them, avoiding social interaction with those who may not understand them, frustration from having to repeat themselves, or people focusing on their accents rather than what they are trying to say (American Speech and Hearing Association, 2016).

Research indicates that these types of communication problems may result in negative effects on job performance, and it is possible that educational advancement, self-esteem, or everyday life activities may be affected as well (American Speech and Hearing Association, 2016). Studies have shown that when an accent is maximally perceived, employability may be affected (Carlson & McHenry, 2006). Carlson and McHenry define maximal perception as speech containing phonetic variations from the target language in

17-22% of utterances. Additionally, research on employability ratings (Kalin & Rayko, 1978) indicates that lower status jobs are more suitable for foreign-accented speakers. The pejorative manner in which accented speech is viewed was described by David Abercrombie (1955):

“*Accent*, as we have seen, is a word which, in its popular use, carries a stigma that speaking *without* an accent is considered preferable to speaking *with* an accent.”

These negative connotations, along with the ever-increasing population of non-native English speakers due to long-term historic and recent immigration patterns (U.S. Census Bureau, 2011), and the pattern of adversely affected employability in non-native English speakers lend support for the investigation of a clinical tool to improve the perception of accented speech. The practice of using self-disclosure as a clinical tool has been considered for persons who stutter with positive results relative to listener perception (Cappellini, 2012). This study will replicate the methods implemented by Cappellini, by evaluating listener perceptions of accented speech in non-native speakers of English. Given that Cappellini found the use of self-disclosure positively influenced listener perceptions, the hypothesis of the present pilot study is that self-disclosure will enhance positive listener perceptions of accented speech. This pilot study will investigate self-disclosure by accented speakers as a method to decrease negative perceptions of accented speech, as well as a tool that will allow persons with accented English to feel confident using their voices by empowering them to take ownership of their speech.

Literature Review

EFFECT OF ACCENT AND DIALECT ON EMPLOYABILITY

Employability is a major issue for persons who immigrate to the US who wish to obtain jobs of varied types. Carlson and McHenry (2006) studied the effect of ethnicity, accent, and job status in an interview. The study was designed to determine how speaker's potential employability was affected based on their ethnicity, amount of perceived accent, and comprehensibility. The "job applicants" of the study represented speakers of Spanish-influenced English, Asian-influenced English, and African American Vernacular English. The three female speakers were members of the ethnic groups they represented and were all born in the United States. They each read a prepared script (the same statement, giving a brief description of their skills) and included variations of their accents in different amounts for each condition. Prior to reading the script, they were given a guide containing suggested phonemic variations associated with their respective language group for each of the conditions (i.e. minimally and maximally perceived accent usage). To quantify minimally versus maximally perceived accent markers, one of the authors transcribed, analyzed, and coded the speech samples. Based on the total number of phonological variations within each speech sample, maximally perceived accent or dialect speech samples contained phonetic variations in 17-22% of the utterances and minimally perceived samples had variations in 8-10% of the utterances. One of the authors chose two speech samples based on how well they represented each of the two

accents (Spanish-influenced English and Asian-influenced English). These 35-40 second long recordings were then randomized and transferred onto audiocassette tapes and were played for audiences during the course of the study.

Sixty adults working in the field of human resource management served as raters. The ethnicities of the raters were African American, Hispanic, or European North American and the educational level of the participants ranged from high school diplomas to doctoral degrees. Descriptions of entry-level positions were not provided, and the raters were instructed to assume that each applicant's basic qualifications such as experience or education were equally suited for the job. The raters then judged the applicants by selecting a rating on a scale of 1 to 7 on the dimensions of employability and comprehensibility. For employability, a rating of 1 equaled "least likely to employ," and a rating of 7 equaled "most likely to employ." For comprehensibility, a rating of 1 equaled "difficult to understand," and a rating of 7 equaled "easy to understand."

Statistical analysis of the results revealed that for amount of perceived accent, $p < .0001$. These results suggest that there was a significant effect for speakers whose accents were maximally perceived. The expectation was that the amount of perceived accent of the speaker was expected to influence employability ratings, thus, all speakers with maximally perceived accents were given a lower employability rating.

LANGUAGE ATTITUDES IN THE EMPLOYMENT INTERVIEW

Hopper (1977) studied the effects of employment decisions based on the interviewee's speech characteristics during the job interview, and of employers' attitudes

towards these speech characteristics. The hypothesis behind this study was that nonstandard speech would make the candidates less employable as salespersons or supervisors.

Participants in this study included four males aged between 20 and 30 years old, interviewing in both “formal and standard” English, and “informal and nonstandard” English. 105 employers listened to the recordings while examining a document detailing each speaking participant’s qualifications for each particular position. Following the tape, the employers completed a survey on how the speaker sounded, and the probability of whether they would be hired.

The results in this study were scored on a scale of 1-7. A score closer to 1 indicated that the speaker participants would not be hired and a score closer to 7 was a more favorable rating. For speaker participants speaking in a standard, formal speech pattern, the mean score was 5.00, while for a nonstandard, informal speech pattern, the mean score was a 3.80. These scores indicate that a standard, formal speech pattern yielded a more positive effect for employability.

EMPLOYMENT INTERVIEWERS’ REACTIONS TO MEXICAN AMERICAN SPEECH

De La Zerda and Hopper (1979) studied the effect of varying degrees of accented speech in simulated employment interviewers on hiring predictions. This study investigated whether a regionally stigmatized Mexican accent limited an applicant’s employment prospects for different level positions (supervisor, skilled technician, and

semi-skilled worker). The hypotheses formulated for this study were standard-sounding samples of Mexican American speech would receive more positive evaluations than non-standard-sounding (accented) Mexican American speech samples. Additionally, the difference in employability between accented and unaccented speakers would be greater in higher status (supervisory) positions than in lower status (technical, unskilled) positions.

The participants included 67 employers (listeners) and eight Mexican American speakers with varying degrees of accented speech. Listeners were given three speech samples and were then asked to evaluate the speaker's speech on a set of a scales and record a hiring decision for each of the three level positions using a seven-point scale. A *t*-test revealed that a significant difference ($p < .001$) according to accent, supporting the hypothesis that standard-sounding speech would receive more positive results than non-standard-sound speech. For the skilled technician hiring decision, a *t*-test revealed no significant difference according to accent ($p = .167$), which is consistent with the hypothesis that the difference in employability between accented and unaccented speakers would be less in lower level positions as opposed to the higher level position. The results in this study indicated that language attitude toward the speech samples was the strongest predictive power for whether the speaker would be hired.

DISCRIMINATION IN EVALUATIVE JUDGMENTS AGAINST FOREIGN-ACCENTED JOB CANDIDATES

Kalin and Rayko (1978) studied discrimination against foreign-accented job candidates. The purpose of this study was to establish the relationship between listeners' attitudes and evaluation of accented speech.

This study included 203 English-Canadian listener participants and 10 speaker participants. Five of the speaker participants spoke English with a standard English-Canadian accent, while the other five students spoke foreign-accented English. Each listener participant listened to thirty second, irrelevant excerpts of colloquial English speech from the speaker participants. Following the audio recordings, the listener participants rated each speaking candidate based on a 9-point scale in terms of potential job performance.

The results of this study indicated correlations of discrimination with ethnocentrism ranging from .05 to .26 ($df = 201$, $p < .001$). These results suggest that discrimination was in favor of English-Canadian standard-speech and against foreign-accented speakers. Additionally, the results revealed that foreign-accented applicants were rated higher for lower status jobs, and lower for higher status jobs.

Purpose

As indicated in available research, employment discrimination is prominent as a factor in hiring non-native speakers of English. Successful employment favors speakers with more standard speaking patterns of English. With the burgeoning population of

immigrants in the United States, the need for a clinical tool such as self-disclosure to assist in changing the perception of accented speech is critical.

Perceptions of accented speech can be negative and affect the quality of life for persons with accented speech. Employability ratings for non-native English speakers with maximally perceived accents are lower (Carlson & McHenry, 2006) than those of native English speakers. The purpose of this study was to examine the perceptions that native speakers of English have of nonnative speakers of English who speak with an accent when the nonnative speakers did or did not self-disclose that they speak with an accent. This goal is to explore the influence of self-disclosure on perceptions of accented speech in hopes that these data can lend empirical support to using self-disclosure as a clinical tool in accent modification therapy.

Methods

Participants

Participant Speakers

Two nonnative speakers of English participated. Participant A is a 26 year old female from Taiwan, China currently earning her Masters in Nursing at the University of Texas at Austin. She began learning English at age 24 and spoke English in college. She has lived in the US for two years and speaks English daily, switching to Mandarin when she speaks to her family over the telephone. Participant B is a 25 year old male from Hong Kong, China currently earning his Doctorate in Communication Sciences and Disorders at the University of Texas. He began learning English at age 12 and spoke English at school and Mandarin at home. He has lived in the US for four years and speaks English daily, switching to Cantonese when he speaks to his family over the telephone. Participant B has not attended accent modification therapy, while Participant A attended accent modification therapy for one month during graduate school. Both participants reported no outstanding medical history affecting their ability to learn English as a second language. Informed consent was obtained for both participants.

Participant Raters (Viewers)

Participant raters were recruited from both the University of Texas at Austin and the general population in Austin, Texas. Participants were recruited via distribution of recruitment flyers and by word of mouth. All participants were English speakers and were at least 18 years of age. A total of 50 participants rated the speech of the participant-speakers to determine the effects of self-disclosure. Participant raters were

provided with a vague purpose of the study, and were later debriefed with details of the study following completion of the survey to avoid any bias. Informed consent was obtained for each participant.

Data Collection

Participant Speakers

Stimulus tapes for this study were recorded by the author. The male and female nonnative participant-speakers were filmed individually, sitting in a gray chair in the same room looking directly at the camera. The chair was placed in front of a white wall. The camera used in filming the stimulus tapes was a Canon Vixia HFM500 with an additional Audio-Technica Lavalier Microphone clipped to the participants' shirts.

Both speakers were video-recorded while reading a modified version of the Rainbow Passage (Appendix A). The script of the passage was adapted with only the disclosure statement. Both speakers reviewed and practiced reading the passage several times prior to filming so they were familiar with it.

Each speaker was filmed alone on the set and facing the camera. At the beginning of the recording, each speaker greeted the viewer and introduced themselves by their first name. Each speaker then recited the following self-disclosure statement: "Just so you know, I learned English as a second language, so I might sound different than what you may be used to hearing." The wording of this disclosure statement was chosen so that it did not sound like an apology, following procedures in Cappellini's (2012) study. After making this statement, the speakers stated they were going to read a passage about rainbows and proceeded to read the script. Each speaker recorded two different videos,

one in which they self-disclosed their accent, and one where they simply introduced themselves and continued with the script.

Participant Raters (Viewers)

The videos produced by the two speakers were downloaded to Qualtrics to allow for participant-rater viewing on a desktop computer. The participant-raters viewed two of four possible tapes: 1) *male who self-discloses*, 2) *male who does not self-disclose*, 3) *female who self-discloses*, and 4) *female who does not self-disclose*. They were required to complete a survey questionnaire immediately following the viewings. Participants were debriefed after completing the viewing and survey on the purpose of the study as it serves to enhance the understanding of potential benefits of self-disclosure. Participant-raters ranged ages 18-27, and were predominantly female. Additionally, 60% of raters indicated that they have been told they speak with an accent. A total breakdown of raters by age and gender can be found in Table 1.

Table 1 – Participant Raters By Age and Gender

	Ages 18- 23	Ages 24-27	Total
Females	39	6	45
Males	2	3	5
Total	41	9	50
Percentage	82%	18%	

Survey

The survey (Appendix B) was comprised of two parts. Part I consisted of ten two-alternative choice questions that assessed the viewer's perception of the speakers' personality traits using familiar adjectives and their dichotomous opposite. For example, "In which tape did you think the speaker appeared more confident? Two-alternative

choices: Tape 1 or Tape 2.” The following personality traits and their foils replicated from the previous research paradigm were assessed: *more friendly; more unfriendly* (kind and pleasant; less kind and less pleasant), *more outgoing; more shy* (social; reserved), *more intelligent; more unintelligent* (smart; less smart), *more confident; more insecure* (self-assured; less self-assured), and *viewer felt more distracted; viewer felt less distracted* (unable to focus on video; able to focus on video). Each participant rater presented with a minimum education level of a high school diploma, therefore it was assumed that participants understood the definitions of these traits and foils.

Part I also consisted of four open-ended questions where participants were asked to write 1-3 comments regarding the speaker in Tape 1 and Tape 2, as well as commenting on their communication. Part II consisted 2-6 questions to gather additional knowledge about the participant’s personal experience with nonnative English and accented speech. The number of questions in Part II varied, depending on whether the participant answered “yes” to knowing someone with accented speech, as the survey then assessed their personal experiences with accented speech. Last, a section at the end of the survey where participants were permitted to write any additional comments was provided.

Procedures

Participant raters met with the researcher at the University of Texas Speech and Hearing Clinic within the Department of Communication Sciences and Disorders at UT-Austin. They were taken to one of available private clinic rooms, and were provided with a consent form containing a brief description of the study. Participants participated in the

experiment individually with one researcher supervising each session. The participants were informed that they would be viewing two short videos and then asked to fill out a short survey regarding the videos. Each subject viewed two of the four possible videos while sitting at Dell computers and listened to the videos' sound through circumaural headphones adjusted to their hearing comfort level. Headphones helped to ensure participants were able to hear the videos clearly while also reducing the interference of any general background noise from the clinical environment. The order in which the videos were assigned to participants was systematically randomized by creating a list of every possible order of video pairings. As participants arrived for their appointments, they were assigned the next video pairing in the list and that pairing would be crossed off. This list was repeated until the desired number of participants had been run. An example of this method, along with a complete list of video pair permutations is available in Appendix C.

While the participant-rater was viewing the videos, the researcher sat quietly in the corner reading so as not to distract the participant or make him or her feel uncomfortable. When the participant was finished viewing both videos, the researcher told the subject to read the instructions of the survey carefully and answer the questions as best as possible. The researcher sat outside of the clinic room, while allowing the participant to complete the survey in the privacy of the room. Following survey completion, the participant was debriefed to provide explicit details regarding the specific purpose of the study. Any questions the participants had about the study were answered during this time.

Storing Data

Data were stored electronically on a password-protected computer. Consent forms were stored in a locked filing cabinet inside the Speech Production Laboratory in the University of Texas Speech and Hearing Center. Only IRB-approved personnel had access to the surveys and consent forms.

Data from the surveys were collected and coded in Excel spreadsheets. Only responses from participant raters who had viewed both a video with self-disclosure and a video with no self-disclosure were used to examine the effect of self-disclosure on listener perceptions. A chi-square analysis was completed using Vassar Stats to determine how observed frequencies difference from expected proportions. Results were considered significant at <0.05 .

Results

Table 2 shows the expected and observed results for the listeners' choices for five personality traits and five foils between self-disclosure (SD) and no self-disclosure (NSD) videos across the two speakers.

The two traits that showed a statistically significant difference between the two videos were *more outgoing*, or social (Chi-Square=4.5; df=1; p=0.0339) and *viewer felt more distracted*, or unable to focus on the video (Chi-Square=24.5; df=1; p=<0.0001). When listeners viewed both videos, 33 of the 50 participants indicated that the speakers on the NSD videos appeared more outgoing than the speakers on the videos that included self-disclosure and 43 of the 50 participants indicated that the speakers on the self-disclosure videos appeared more distracting than the speakers on the videos with no self-disclosure.

As indicated by Table 2, no other findings suggested that self-disclosure had a significant effect on listener perceptions.

Table 2 – Effect of Self-Disclosure on Listeners’ Perceptions of Personality Traits

Trait	Chose SD Video	Chose NSD Video	Chi-Square	df	p-value
More friendly	22	28	.5	1	.4795
More unfriendly	31	19	2.42	1	.1198
More outgoing	17	33	4.5	1	.0339*
More shy	27	23	.18	1	.6714
More intelligent	25	25	0	1	1
More unintelligent	23	26	.08	1	.7773
More confident	23	27	.18	1	.32
More insecure	28	22	.5	1	.4795
Viewer felt more distracted	43	7	24.5	1	<.0001*
Viewer felt less distracted	29	21	.98	1	.3222

**Indicates statistical significance*

Additionally, a qualitative analysis was completed to gain further insight on listener perception. Table 3 conveys examples of text responses from the participant raters on their perception of the speaker and their overall communication.

Although no formal conclusions can be drawn from the qualitative analysis, it appears as though many of the perceptions of the speakers were based on overall body language and exposure to the English language. For example, it appeared as though listeners observed that Speaker B had significantly more exposure to English and rated him more positively than Speaker A. This outcome is consistent with the available

research on perceptions of accented speakers. Use of self-disclosure was occasionally mentioned in the qualitative analysis, but overall had no significant effect on increasing positive listener perception in the quantitative analysis.

Listeners attributed more negative qualities to Speaker A (the female speaker) in comparison to Speaker B (the male speaker). However, they acknowledged her self-disclosure and that English was her second language. Speaker B received more statistically positive ratings because his speech was more intelligible, but in text responses, his body language and intonation were often items of interest to the listeners.

Table 3 – Text Responses of Listener Perceptions

Perceptions of Speaker A	Perceptions of Speaker B
“The speaker sounded insecure and nervous. Could seem unintelligent if the listener was unaware she was speaking English as a second language.”	“The speaker has been learning English for a long time or has learned to speak English in a more formal setting.”
“Provided more of an introduction, so seemed more outgoing.”	“The speaker’s communication was better and easier to follow, however his monotone voice made it harder to stay focused.”
“The fact that she introduced herself and let us know English was not her first language was very helpful. She seemed shy and because the reading took longer, I felt myself getting distracted at some points that were hard for me to decipher.”	“Much easier to understand compared to other speaker, but his speech was very unenthusiastic.”
“Her communication skills were very appropriate as she had informed the listeners that she may sound different than we are used to hearing.”	“The speaker’s communication is clear and he enunciates well, but lacks intonation.”
“I think because the speaker has learned English as a second language, it has affected her confidence in speaking the language.”	“He spoke very fluidly and very matter of fact. He was easy to understand, but less enjoyable to watch and listen to.”
“I felt the speaker was a tad insecure because English is her second language but she did not give up through the entire passage.”	“The speaker appears to have experience both in learning English and reading out loud. His introduction made him more personable.”
“I don’t believe the speaker is unfriendly or unintelligent, but I do see how she could come across that way. The language barrier definitely does make her appear more timid.”	“Issuing disclosure statement about reading skills beforehand [...] seemed confident; unaffected by the fact that his verbal reading skills may not be as fluent as a native speaker.”

Discussion

The goal of this study was to evaluate a potential intervention technique for speakers who have foreign accents. Available research has indicated that foreign dialect may interfere with speaker intelligibility (Derwing & Munro, 1997). This effect on listeners has been shown to have emotional and vocational repercussions (Carlson & McHenry, 2006). The study questions and design were originally conceptualized and implemented in a study focused on treatment of persons who stutter (Cappellini, 2012). This pilot study was designed as an adaptation to consider the effects of self-disclosure on listeners when speakers exhibit foreign accents. Based on the results of the original study, it was hypothesized that self-disclosure would have a positive effect on listeners' perception of accented speech.

In a quantitative analysis of the data from the survey that required listeners to rate their perceptions of the speakers, results indicated that self-disclosure does not increase positive listener perception. In an additional qualitative analysis presented to the listeners following the survey, listeners wrote additional comments on their perceptions of the speakers. While self-disclosure was acknowledged as occurring, positive perception of self-disclosing speakers was secondary to speakers presenting with a less severe foreign accent in these two speakers. It should be noted that although listeners described concerns about body language in Speaker B, this speaker was rated overall more positively than Speaker A. According to the qualitative analysis, this outcome could possibly be due to the fact that regardless of body language and intonation, Speaker B was a more intelligible speaker than Speaker A.

Results of statistical analysis indicate that there was no significant difference in responses of listeners to speakers who did and did not self-disclose at the onset of the videos viewed. The significant results for *viewer felt more distracted* and *more outgoing* possibly suggest that the manner in which the speakers presented themselves had a larger effect on listener perception than whether the speakers self-disclosed. In a separate section where listeners were asked to give qualitative comments on their overall perceptions of the speakers, Speaker B (tape 2) was perceived as “curt or “unenthusiastic,” which may affect why the viewer was more distracted while watching the video.

Results from this study did not indicate that self-disclosure significantly influenced viewer’s perceptions of persons with accented speech on the specific traits in this study. However, some trends emerged in the data obtained. Comments by these listeners regarding the videos indicate overall that Speaker B had more exposure to the English language, which contributed to their perceptions. Although formal conclusions cannot be drawn from these qualitative comments on two participants, it is possible that with a greater number of participant speakers with less variation in degree of severity of accented speech, the traits evaluated could achieve positive results in favor of the utilization of self-disclosure. Many participants also verbally commented to the examiner following debriefing about the purpose of the study. They reported that they recognized that self-disclosure had occurred, but were unable to describe whether or not it affected their perceptions.

Limitations

A critical weakness of this pilot investigation was the significant variation in degree of severity of the accented speakers. Speaker A had limited exposure to English compared with Speaker B, which possibly contributed to negative perceptions that were not in favor of using self-disclosure. Listener comments lend support for this conclusion as many of them stated Speaker B is “more confident and practiced in [their] speech,” “more experienced in communicating,” and “seemed more comfortable.” Future research with a larger study cohort should compare the same speaker self-disclosing and omitting self-disclosure in two different videos to better understand whether a significant difference between personality traits can be observed.

Another dimension of the listener participants’ response was that 46 out of the 50 participants personally knew someone with accented speech. The length of time they had known an accented speaker ranged from 1 to 27 years. Ratings of how well they knew the speaker ranged from 2-7 (on a scale from 1-7, with 1 being *not well at all* and 7 being *very well*). The main purpose of this study was to provide evidence that the act of self-disclosing can offset negative perceptions by listeners about accented speech to alleviate emotional and vocational issues. However, it is possible that people who have greater personal experience with accented speech might have fewer negative perceptions about accents. Future research should include participants who have less personal experience with accented speech to understand more precisely the effects of accented speech on a variety of listener types.

Additionally, the listeners were required to at least have a high school diploma and some college education. Listeners also ranged from 18 to 27 years old and were predominantly female. It is possible that a different demographic with varying education, ages, and gender might perceive accented speech differently. Additionally, 60% of the raters were considered to have accented speech. Especially important for this issue might be to investigate outcomes with persons who might be in a position to employ individuals with accented speech.

Speaker characteristics may also have contributed to perceptual responses of these listeners. This pilot study included two different speakers with different personality types. In the survey, quantitative analysis of questions, indicated statistically significant differences between speakers whom viewers found *more outgoing* and that *viewers felt more distracted* while viewing the video. In their qualitative commentaries, listener-participants indicated that Speaker B seemed more serious and less engaging. This outcome lends support to the possibility that self-disclosure was not taken into consideration as listeners expressed their perceptions of the two speakers, they may have focused more on severity of accent or body language. If the listener-participants were randomly sorted into the group where Speaker B self-disclosed, they potentially could have been distracted by Speaker B's body language, thus viewing this speaker as more distracting or less outgoing than Speaker A. Conversely, if listener-participants were sorted into the group where Speaker A self-disclosed, they might have perceived this speaker's more severe accent negatively. Future research should include presenting two

speakers with similar body language and attitude, in addition to less variation in degree of severity of accent.

Another consideration is that the use of self-disclosure was negatively perceived and may have caused the listener to view the speaker more negatively. It is possible that viewers felt more distracted after learning the speaker spoke English as a second language. Viewers may also have perceived the speaker as less outgoing upon self-disclosure.

Finally, it was assumed that college aged raters understood the meaning of the terms and foils used in this study. Future research should include defining all terms using a screener prior to beginning the study in order to assure fidelity.

Conclusions

Results did not indicate significant effects on listener participant perceptions supporting the use of self-disclosure by accented speakers as a way to create more positive listener perceptions in this pilot study. However, future research should include similar degrees of accent severity in the speakers as well as with similar body language and intonation. Relative to listener-participants, a more homogenous population of listener-participants who have had less exposure to accented speech might provide needed dimensionality to these results. Listeners who are able to employ adults in a professional setting rather than college student listeners might match the currently available research more closely. Because there are growing numbers of speakers of second language in the US today who have accented speech patterns interfering with their employability, educational advancement, self-esteem, or everyday life activities, finding techniques to support an increase in functional intelligibility is important.

Appendix A - Script Read by Speakers

The Rainbow Passage

When the sunlight strikes raindrops in the air, they act like a prism and form a rainbow. The rainbow is a division of white light into many beautiful colors. These take the shape of a long, round arch, with its path high above and its two ends apparently beyond the horizon. There is, according to legend, a boiling pot of gold at one end. People look, but no one ever finds it. When a man looks for something beyond his reach, his friends say he is looking for the pot of gold at the end of the rainbow. Throughout the centuries men have explained the rainbow in various ways. Some have accepted it as a miracle without physical explanation. The Greeks used to imagine that it was a sign from the gods to foretell war or heavy rain. The Norsemen considered the rainbow as a bridge over which the gods passed from earth to their home in the sky. Other men have tried to explain the phenomenon physically. Aristotle thought that the rainbow was caused by reflection of the sun's rays by the rain. Since then, physicists have found that it is not reflection, but refraction by the raindrops, which causes the rainbow. Many complicated ideas about the rainbow have been formed. The difference in the rainbow depends considerably upon the size of the water drops, where the width of the colored band increases as the size of the drops increase. The actual primary rainbow observed is said to be the effect of superposition of a number of bows. If the red of the second bow falls upon the green of the first, the result is to give a bow with abnormally wide yellow band, since red and green lights when mixed form yellow. This is a very common type of bow, one showing mainly red and yellow, with little or no green or blue.

Appendix B – Survey

--- Please watch Tape 1 before Tape 2 and watch both to completion. Each video is about two minutes long.

Q1 Please select your gender below.

- ☐ Male
- ☐ Female

Q2 What is your age?

--- PART I

For each of the following questions please circle the choice (Tape 1, Tape 2) you feel is the best answer.

Q3 In which tape do you think the speaker appears friendlier?

- ☐ Tape 1
- ☐ Tape 2

Q4 In which tape do you think the speaker appears more outgoing?

- ☐ Tape 1
- ☐ Tape 2

Q5 In which tape do you think the speaker appears more intelligent?

- ☐ Tape 1
- ☐ Tape 2

Q6 In which tape do you think the speaker appears more confident?

- ☐ Tape 1
- ☐ Tape 2

Q8 In which tape did you feel more distracted while trying to listen to the reading?

- ☐ Tape 1
- ☐ Tape 2

Q9 In which tape do you think the speaker appears more unfriendly?

- ☐ Tape 1
- ☐ Tape 2

Q10 In which tape do you think the speaker appears more shy?

- ☐ Tape 1
- ☐ Tape 2

Q11 In which tape do you think the speaker appears more unintelligent?

- ☐ Tape 1
- ☐ Tape 2

Q12 In which tape do you think the speaker appears more insecure?

- ☐ Tape 1
- ☐ Tape 2

Q13 In which tape did you feel less distracted while trying to listen to the reading?

- ☐ Tape 1
- ☐ Tape 2

Q14 Please provide 1-3 comments about your perceptions of the speaker in Tape 1:

Q15 Please provide 1-3 comments about your perceptions of the speaker in Tape 2:

Q16 Please provide 1-3 comments about your perceptions of the speaker's communication in Tape 1:

Q17 Please provide 1-3 comments about your perceptions of the speaker's communication in Tape 2:

--- PART II

For each of the following questions, please select the best answer or provide a written answer (if possible) to the best of your ability.

Q18 Have you ever met someone with accented speech?

- ☐ Yes
- ☐ No

Q19 Have you ever personally known someone with accented speech?

- ☐ Yes
- ☐ No

Q20 How long have you known this person (years)?

Q21 How well do you know this person?

_____ 1= Not well at all and 7= Very well

Q22 Have you ever been told you speak with an accent?

- ☐ Yes
- ☐ No

Q23 Do you ever self-disclose about your accent? (Example of self-disclosure: Just so you know, English was not my first language, let me know if you need me to repeat myself)

- ☐ Yes
- ☐ No

Q24 If you have any additional comments, please feel free to write them in the space below.

Appendix C – Permutations for Video Viewing Order

Male SD-Female NSD	<i>Participant 1</i>	Male SD-Female NSD	<i>Participant 9</i>
Female SD-Male NSD	<i>Participant 2</i>	Female SD-Male NSD	<i>Participant 10</i>
Male SD-Female NSD	<i>Participant 3</i>	Male SD-Female NSD	<i>Participant 11</i>
Female SD-Male NSD	<i>Participant 4</i>	Female SD-Male NSD	<i>Participant 12</i>
Male SD-Female NSD	<i>Participant 5</i>	Male SD-Female NSD	<i>Participant 13</i>
Female SD-Male NSD	<i>Participant 6</i>	Female SD-Male NSD	<i>Participant 14</i>
Male SD-Female NSD	<i>Participant 7</i>	Male SD-Female NSD	<i>Participant 15</i>
Female SD-Male NSD	<i>Participant 8</i>	Female SD-Male NSD	<i>Etc.</i>

References

- Abercrombie, D. (1955). English accents. *Communication Education*, 4(1), 10-18.
- American Speech-Language-Hearing Association. (2016). Accent modification.
- Cappellini, C. H. (2012). The effects of self-disclosure on listener perceptions of male and female individuals who stutter.
- Carlson, H. K., & McHenry, M. A. (2006). Effect of accent and dialect on employability. *Journal of Employment Counseling*, 43(2), 70-83.
- De La Zerda, N., & Hopper, R. (1979). Employment interviewers' reactions to Mexican American speech. *Communications Monographs*, 46(2), 126-134.
- Derwing, T. M., & Munro, M. J. (1997). Accent, intelligibility, and comprehensibility. *Studies in second language acquisition*, 19(01), 1-16.
- Giles, H. (1970). Evaluative reactions to accents. *Educational review*, 22(3), 211-227.
- Hopper, R. (1977). Language attitudes in the employment interview.
- Kalin, R., & Rayko, D. S. (1978). Discrimination in evaluative judgments against foreign-accented job candidates. *Psychological Reports*, 43(3f), 1203-1209.
- Mackun, P. J., Wilson, S., Fischetti, T. R., & Goworowska, J. (2011). *Population distribution and change: 2000 to 2010*. US Department of Commerce, Economics and Statistics Administration, US Census Bureau.