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Employment Decisions as a Function of an Applicant's Accent

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EMPLOYMENT DECISIONS AS A FUNCTION OF AN APPLICANT'S ACCENT

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ABSTRACT

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by Lam T. Nguyen

Using data collected from 167 college students, the present study examined the effects of an applicant's accent (Standard American English vs. Spanish) on employment-related decisions (i.e., job suitability, likelihood of promotion, and decision to hire) and perceived applicant characteristics (i.e., competence and likability). Results showed that Spanish-accented applicants were rated less suitable for an entry-level software engineering job, were perceived as having a lower chance of being promoted to a managerial position, and were hired less frequently compared to the Standard American English-accented applicant. Additionally, the Spanish-accented applicant was rated less competent but just as likable as the Standard American English-accented applicant. Interestingly, ethnicity of the participants had no effect on the evaluation and perceptions of the Standard American English-accented or Spanish-accented applicants. The results of the study indicate that accent could serve as a basis for stigma, and consequently, foreign-accented applicants might suffer a number of negative consequences. Implications of the results are discussed.

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Introduction

Ethnic minorities represent one-third of the current U.S. population and are expected to become the majority by 2050 (U.S. Census Bureau, 2008). Among them, Hispanics account for 15.4% (47 million) of the U.S. population (U.S. Census Bureau, 2008). They have become the largest and fastest growing minority group in the country and are projected to nearly triple from 47 million to 132 million in number, accounting for 30% of the U.S. population by 2050 (U.S. Census Bureau, 2008). This statistic means that almost one in every three U.S. residents would be Hispanic in mid-century.

Immigration is one of the contributing factors for such growth of the Hispanic population. In fact, at least 47% (22 million) of the foreign-born population are Hispanic (Grieco, 2009). Such influx of foreign-born Hispanics into the U.S. subsequently increases the percentage of non-native English speakers (Parliman & Shoeman, 1994). In 2008, about 45% of Hispanics (14 million) 18 years of age and older reported that they spoke English "less than very well" and this percentage went up to almost 73% if they were foreign-born (Pew Hispanic Center, 2008). This suggests that many foreign-born Hispanics and some native-born Hispanics speak English with an accent or do not speak it at all and that these individuals may have some level of difficulty communicating in English (U.S. Census Bureau, 2008).

Despite the fact that the above statistics clearly demonstrate that Hispanics will be a critical component of the next generation of workers and foreign-born Hispanic workers play an important role in the U.S. economy, the study of Hispanics has been neglected compared to other ethnicities in industrial/organizational psychology (Lin, Dobbins, &

Farh, 1992; Nkomo & Cox, 1996). This scarcity in research persists even though bias against Hispanic workers exists (Kennedy & Wissoker, 1994; Sanchez & Brock, 1996). The relative lack of research on the treatment of Hispanic immigrants in the workplace, in particular, the impact of Spanish accents on employment-related outcomes, is unfortunate given that both statistical and research evidence clearly shows bias against immigrants and/or foreign-accented individuals in the workplace (e.g., Podberesky, Deluty, & Feldstein, 1990; Reitz, 2001).

For example, immigrants have much higher unemployment rates and much lower earning levels than native English speakers in the U.S. (Reitz). Moreover, the U.S. General Accounting Office (GAO; 1990), using data from a nationwide stratified sampling of U.S. employers, estimated that 10% of them (i.e. 461,000 employers) engaged in illegal discriminatory hiring practices based on a person's foreign appearance or accent and found that 41% of the employers, through a telephone hiring audit, treated applicants with accents differently from applicants without accents. Specifically, 16% of the employers told accented callers that the positions were filled but told unaccented callers that the same positions were open; 12% of the employers scheduled employment interviews with only unaccented callers; and 13% of the employers required significantly different documents from accented callers as opposed to unaccented callers.

A more recent report by the Pew Hispanic Center (2006) also shows that not all Americans are ready to embrace an influx or surge of immigrants. More specifically, 52% of those surveyed on the issue of immigration in several metropolitan areas (e.g., Phoenix, Chicago, Las Vegas) reported that immigrants were a burden to the U.S. by

taking away jobs and straining the healthcare system, and that they were worried about the cultural impact of immigrants on traditional American values.

Finally, despite the increasing number of immigrants in the U.S., the majority of research on foreign accents was conducted mainly in the 1960s, 1970s, and early 1980s and no major studies have expanded this area of research (Niestas, 2005). Since then, there have been only a handful of studies that have contributed to the literature. Therefore, given the importance of the topic and the scarcity of research in this area among Hispanics, this study examined the effects of the accent (Standard American English vs. Spanish) of a hypothetical job applicant on employment judgments and a hiring decision. In the following sections, a definition of accent is provided, a model of stigmatization (Stone-Romero & Stone, 2007) that serves to explain the potential negative treatment given to Spanish-accented applicants is presented, followed by a review of past research on the effects of foreign accents on employment-related decisions as well as the perceptions of foreign-accented speakers. Finally, hypotheses are presented.

Definition of Accent

An *accent* can be defined as "a manner of pronunciation different from standard speech with the grammatical, syntactical, and lexical levels consistent with the standard" (Brennan, 1977, p. 11). Accented language is derived from phonological characteristics influenced by a person's native origin, native language, or social status. The speech characteristics of this native language may overlap or carry on into the "standard" English language when spoken as a secondary language, resulting in accented English

(Carlson & McHenry, 2006; Lippi-Green, 1997). For example, Spanish-accented English and Asian-accented English reflect the origin of the speaker (e.g., Mexico, China, India; Owens, 1996, 2001).

A Model of Stigmatization in Organizations

A model of stigmatization in organizations was proposed by Stone-Romero and Stone (2007) where they defined stigma as "a real or perceived deeply discrediting discrepancy between a person's virtual and actual social identities" (p. 129). Stone-Romero and Stone assert that a person's virtual social identity (VSI) consists of the expectations of what a person should be in terms of characteristics such as the desired abilities, personality, physical appearance, attitudes, and behaviors that are consistent with the norms of a social system (e.g., organizational culture). For example, a person's VSI may represent a prototype of an ideal job applicant or incumbent who has all the required skills and qualifications for a particular position. On the other hand, a person's actual social identity (ASI) represents his or her personal characteristics that are actually perceived or are capable of being perceived by an observer. That is, the job applicant may be perceived as not having all the desired traits of an ideal job applicant (e.g., the applicant speaks English with an accent). Therefore, job applicants with distinct discrepancies between their VSI and ASI are believed to be stigmatized. In other words, what an observer sees or hears from the applicant was not what he or she expected.

The culture of an organization has substantial influence on the beliefs about the VSIs of a job applicant or incumbent (Stone-Romero & Stone, 2007). For example, U.S. organizations and its organizational cultures are predominantly managed and influenced

by male, White, Anglo-Saxon Protestants (MWASPs) who do not speak with a foreign accent, rather than persons in a minority group who might speak with an accent. As a result, the expected VSIs of an ideal job applicant would reflect the values, beliefs, and language of MWASPs, which are derived from Western European and Northern European cultures (Stone-Romero & Stone).

Apart from the characteristics mentioned above, Stone-Romero and Stone (2007) argue that the VSIs of an ideal job applicant or incumbent may include personal attributes such as race, gender, and ethnicity. Furthermore, Hosoda and Stone-Romero (2010) argue that an additional attribute of the ideal job applicant may also include that they should not speak with a foreign accent because it may negatively alter their performance (e.g., Purkiss, Perrewé, Gillespie, Mayes, & Ferris, 2006). Thus, it can be argued that a foreign accent could serve as a basis for stigma. As a result, foreign-accented applicants might suffer a number of negative consequences, such as the likelihood of being rejected for various jobs.

Stone-Romero and Stone (2007) contend that the VSIs of an ideal job applicant or incumbent differs as a function of job status, but in U.S. companies, those holding high status positions tend to be members of the dominant group in society. These high status individuals tend to be White men who speak English without a foreign accent. Thus, the ideal job applicant or incumbent would reflect personal attributes that are similar to White men who speak unaccented English. As a result of the perceived negative discrepancy between the VSIs and the ASIs of minorities, these members are often perceived as unsuitable for high status jobs. On the other hand, they may be perceived as

more suitable for low status jobs as previous research has shown (Giles, Wilson, & Conway, 1981; Kalin, 1982; Ryan, Hewstone, & Giles, 1984). Thus, the next section discusses previous research on the effects of foreign accent on employment-related decisions.

The Effects of Foreign Accents on Employment-Related Decisions

Consistent with the above argument by Stone-Romero and Stone (2007), research shows that overall, applicants with the accent of a dominant group in society are judged to be suited for high status jobs, whereas applicants with foreign accents are viewed as appropriate for low status jobs (Giles, et al., 1981; Kalin, 1982; Ryan, et al., 1984). For example, Standard American English-accented applicants were more likely to be hired for a supervisor position, whereas Spanish-accented Mexican American applicants were more likely to be hired for a semi-skilled position (De la Zerda & Hopper, 1979). Likewise, Standard English Canadian-accented applicants were rated as more suitable for high status jobs, but foreign-accented applicants (e.g., Italian, Greek, Portuguese, West African, and Slovac) were rated as more suitable for low status jobs in Canada (Kalin & Rayko, 1978).

Exceptions to the above consistent findings are a few varieties of foreign-accented English in the U.S. Applicants with accents of a British, French, or some Asian varieties are not negatively evaluated for high status jobs, mainly because they are perceived to be of equal status or competitive with the dominant group (Cargile, 1997, 2000; Cargile & Bradac, 2001; Hosoda & Stone-Romero, 2010). For example, Cargile (1997) reported that Mandarin Chinese-accented applicants were not judged to be less suitable for high

status jobs nor more suitable for low-status jobs compared to Standard American English-accented applicants.

However, a more recent study by Purkiss et al. (2006) suggests that applicant accent and ethnic name function together to influence judgments about the applicant. Manipulating both accent and name independently, Purkiss et al. found that a Hispanic-named applicant with a Spanish accent received the most unfavorable interview judgment, but a Hispanic-named applicant with a Standard American English accent received the most favorable judgment. However, the judgment of an Anglo-named applicant was the same regardless of whether he had a Spanish accent or a Standard American English accent. As a result, their findings suggest that Hispanic-named applicants with an accent might face discrimination.

Moreover, Hosoda and Stone-Romoro (2010) demonstrated that in addition to the status of a job, one needs to consider the communication demands, such as oral communication of a job to better understand potential discrimination against foreign-accented applicants. Specifically, they found that Japanese-accented applicants and French-accented applicants were not rated more negatively than Standard American English-accented applicants for high status jobs that differed on communication demands (i.e., oral communication). Yet, Japanese-accented applicants were rated less suitable for a low status job that required a great amount of communication, such as a customer service representative, compared to both French-accented and Standard American English-accented applicants. Similarly, Cargile (2000) noted that when a job description of a human resource associate included the statement that the associate must "possess

good communication skills," Mandarin Chinese-accented applicants were judged to be less efficient and less suited for the job compared to Standard American English-accented applicants. These findings are consistent with Adler's (1987) assertion that job applicants with foreign accents or dialects are not likely to be selected for jobs that require strong communication skills.

Based on the findings reviewed above, this study builds on the current research by examining the effect of a Spanish accent on job suitability ratings. Second, previous studies have not examined how people rate a prospective Spanish-accented employee on the likelihood of obtaining a promotion to a higher level position. Thus, the relationship between the Spanish accent and the likelihood of promotion will be examined. Third, in much of the research mentioned above, the effects of a foreign accent on suitability ratings were studied but have not directly examined how a Spanish accent might influence a person's hiring decision. Thus, the present study will also examine the effect of a Spanish accent on a hiring decision. Based on the reasons just mentioned, the following hypothesis was tested.

> Hypothesis 1: The Spanish-accented applicant will be rated as less suitable for a job (*H1a*), viewed as having a lower chance of being promoted to a managerial position (*H1b*), and less likely to be hired (*H1c*) than Standard American English-accented applicants.

In addition to Hypothesis 1, research has revealed that an applicant's personal characteristics are related to employment evaluations. For example, applicants perceived as suitable for low status jobs are also perceived as having low competence. The next

section will discuss the Stereotype Content Model developed by Lee and Fiske (2006), which serves to explain how people are evaluated as it relates to the perception of foreign-accented people or job applicants.

Perceptions of Applicants' Personal Characteristics

Stereotype Content Model (Lee & Fiske, 2006) indicates that perception centers on two universal dimensions: competence and warmth (i.e., likability). Competence judgments correspond positively to the perceived societal status and power of an out-group, and warmth judgments negatively reflect perceived competition with the in-group (Lee & Fiske). Thus, people attribute competence to those members of groups perceived as holding prestigious jobs and being economically successful, and warmth to those members of groups perceived to be harmless. In a study of various immigrant groups on these two dimensions, Lee and Fiske found that Hispanic immigrants were perceived to be less competent than, but as warm as Americans, meaning that they have low status and are not any more threatening than the average American.

Consistent with these findings, research on language attitudes demonstrates that a foreign accent or dialect serves as an important cue in the social evaluations of speakers (e.g., Cargile & Bradac, 2001). Individuals with the accent of the dominant group are often associated with status and power, whereas the accents of less dominant groups are associated with a lower level of socioeconomic success (Cargile, 2000). Indeed, research shows that the accent or dialect of a dominant group in a society is evaluated more positively on traits related to competence, intelligence, and social status than the accent or dialect of less dominant groups. In contrast, the accent or dialect of less dominant

groups is evaluated as favorably as and sometimes more favorably on traits related to kindness, solidarity, and overall attractiveness than the accent or dialect of a dominant group (e.g., Cargile & Bradac, 2001). For example, Giles, Williams, Mackie, and Rosselli (1995) showed that Standard American English-accented speakers were rated more positively on a "superiority" dimension than Spanish-accented applicants. Likewise, Sebastian, Ryan, Keogh, and Schmidt (1980) found that Spanish-accented speakers were downgraded on status and social status dimensions, but not on the solidarity dimension compared to Standard American English-accented speakers.

Based on the findings above, my second hypothesis examines how an applicant with a Spanish-accent is perceived on personal characteristics such as competence and likability compared to a Standard American English-accented applicant. Thus, the following hypothesis was tested.

> Hypothesis 2: Spanish-accented applicants will be perceived as less competent than (*H2a*), but as likable as Standard American English-accented applicants (*H2b*).

Method

Participants

A total of 167 (98 female and 69 male) undergraduate students in Northern California were recruited from an introductory psychology class as part of required research participation. Their ages ranged from 18 years to 40 years old (M = 19.62, SD = 1.86). The sample was diverse in terms of its ethnic composition: 35% Asian (n = 58), 26% White non-Hispanic (n = 44), 20% Hispanic (n = 34), 8% Middle Eastern (n = 14), 6% African American (n = 10), 1% Native American (n = 1), and 2% (n = 4) mixed race. Fifty-four percent of participants were working at the time of the data collection and 92% of these participants were employed part-time. Participants had an average of three years of work experience (SD = 3.28) with a range of 1 to 25 years. Demographic information is presented in Table 1.

Procedure

Each experimental session was run with one participant at a time. At the beginning of each, an experimenter informed the participant that the study was about employment-related decisions. The experimenter asked the participant to (a) assume the responsibility of hiring someone for an entry-level job, (b) listen to an applicant describe himself and his desire for the job, and (c) evaluate him on employment-related decisions. After this brief explanation, the participant was asked to complete an informed consent agreement. The participant was then provided with an instruction sheet and a questionnaire. The experimenter told the participant that he would wait outside the room and allow the participant to read the instruction sheet carefully and privately without any

distractions. The experimenter then asked the participant to notify him once he or she had finished reading the instruction sheet. The instructions reiterated what the experimenter had previously told the participant, but it also included a brief job description of and qualifications required for an entry-level software engineering job. The brief job description and qualifications were obtained from an interview with an actual software engineer. After the participant notified the experimenter that he or she had finished reading the instruction sheet, the experimenter entered the room and told the participant that he or she would listen to a recording of an applicant for about one minute only once and that he or she would evaluate the applicant using the questionnaire after the recording has stopped playback. The experimenter asked if the participant had any further questions. The experimenter then started the playback on a laptop computer and exited the room. After the participant completed the questionnaire, he or she was provided with a written debriefing. All participants were randomly assigned to one of the two experimental conditions described below.

Accent Manipulation

The present study adopted a matched-guise technique (Lambert, 1967) in which a single, genuinely bilingual Mexican American speaker read a prepared script that described himself and his desire for a job in two different accents (Standard American English and Spanish). This technique is widely used because the speaker is held constant by design, therefore, paralinguistic characteristics (e.g., voice quality, pitch, tone) are assumed to remain constant across different accent conditions, thereby ruling out various confounds (Bresnahan, Ohashi, Nebashi, Liu, & Shearman, 2002). I carefully rehearsed

the stimulus speaker's reading of the script so that he did not sound like he was virtually reading from the script and made multiple recordings before selecting the final recordings to be used in the research inductions. The stimulus person was fluent in English and used correct grammar. The script appears in Appendix A.

Table 1

Demographic Characteristics of Participants (n = 167)

Variable	*n*	%	*M*	*SD*
Age	–	–	19.62	1.86
Gender				
Male	69	41.3 %		
Female	98	58.6 %		
Ethnicity				
Asian/Pacific Islander	58	35%		
White non-Hispanic	44	26%		
Hispanic	34	20%		
Middle Eastern	14	8%		
African American	10	6%		
Native American	1	1%		
Mixed race	4	2%		
Employment Status				
Employed	90	54%		
Unemployed	77	46%		
Part-time	83	92%		
Full-time	7	8%		

The matched-guise technique used in this study is not without limitations. First, it might be susceptible to threats to validity that are present when conclusions are drawn about the impact of a variable (i.e., an accent) based on a single empirical realization (operational definition) of it (Cargile & Giles, 1997). Second, the Spanish accent provided by the speaker may not be a true Spanish accent. For example, a U.S. born Spanish-accent may not be equivalent to a foreign-born Spanish-accent from Mexico.

Measures

Job suitability. Job suitability was measured with a 4-item summated scale (α = .88; Hosoda & Stone-Romero, 2010). Sample items are: "I feel that he is suited for the job" and "I feel that he has the necessary skills and abilities to perform the job." Participants responded to these items along a 7-point Likert-type scale (1 = *strongly disagree,* 7 = *strongly agree*). The higher the score on the measure, the more suitable the applicant was for the job.

Likelihood of a promotion. The likelihood of a promotion was measured with a 2-item summated scale that was developed for the present study. A sample item is "The likelihood of him to move up to the upper level managerial position is…" Participants responded to these items along a 7-point Likert-type scale (1 = *very low,* 7 = *very high*). The two items in the scale were highly related to each other (r = .86, $p = 2.1 \times 10^{-53}$) indicating reliability of the measure.

Decision to hire. Hiring decision was measured with one item: "Would you hire him for the job?" The item was also developed for this study. Hiring decision was

scored 1 for *no* or 2 for *yes*. In the interest of linguistic simplicity, a score of 2 indicate a recommendation to hire the applicant.

Perceptions of an applicant's personal characteristics. Adapted from Hosoda and Stone-Romero (2010), perceptions of the applicant's personal characteristics were measured using 22 semantic differential items that had seven equally spaced segments. These items were subjected to a factor analysis in order to identify the underlying relationships among the related variables. The suitability of the data for factor analysis was assessed. An inspection of the correlation matrix revealed the presence of many correlation coefficients of .30 and above. The Kaiser-Meyer-Oklin value was .86, exceeding the recommended value of .60 (Kaiser, 1970, 1974) and Bartlett's Test of Sphericity (Bartlett, 1954) reached statistical significance, supporting the factorability of the correlations.

Results showed four factors with eigenvalues exceeding 1, each factor explaining 32.8%, 18.2%, 6.6%, and 6% of the total variance, respectively. An inspection of the screeplot revealed a good break after the second factor. Therefore, it was decided to retain only two factors for further investigation.

Thus, a second factor analysis with a two factors extraction was conducted. The two-factor solution explained 50% of the total variance, with Factor 1 contributing 31.78% and Factor 2 contributing 18.24%. Both Factors 1 and 2 showed a number of strong loadings and all variables loading on one of the two factors. An inspection of items in each factor shows that the items in Factor 1 measures likability and the items in Factor 2 measures competence. Items in each factor were averaged. The higher the score

on the measure, the more positively the applicant was perceived. Reliability analysis showed Cronbach's $\alpha = .90$ for the likability dimension and $\alpha = .88$ for the competence dimension. The result of the factor analysis is presented in Table 2.

Demographic information. Six items were used to measure demographic information of participants. The gender, age, and ethnicity of participants were asked. Employment status was also gathered asking if participants were working, if so either part-time or full-time. Total number of years worked was also asked. The response options included both dichotomous answers (e.g., yes or no, male or female, part-time or full-time) as well as response choices for ethnicity (e.g., White non-Hispanic, Asian, Hispanic).

Accent Manipulation Check

One item was used to assess the effectiveness of the applicant accent manipulation. Participants were asked to indicate the strength of the applicant's accent on a 7-point Likert type scale (1 = *no accent at all*, 7 = *very strong accent*). As an open-ended item, we also asked participants what they thought the ethnicity of the applicant was.

Table 2

Factor Analysis of Personal Characteristics

Item No.	Items	Factor 1: Likability	Factor 2: Competence
14r	Pleasant vs. Unpleasant	**.89**	.07
12r	Friendly vs. Unfriendly	**.85**	-.04
13r	Likable vs. Unlikable	**.84**	-.01
7r	Good-natured vs. Bad-natured	**.79**	.12
11r	Warm vs. Cold	**.79**	-.01
15r	Considerate vs. Inconsiderate	**.78**	.12
4	Untrustworthy vs. Trustworthy	**.57**	.23
8	Insincere vs. Sincere	**.56**	.17
16r	Honest vs. Dishonest	**.50**	.25
9r	Conscientious vs. Not Conscientious	**.46**	.30
3r	Upper class vs. Lower class	.06	**.75**
5r	Intelligent vs. Unintelligent	.25	**.73**
1r	Literate vs. Illiterate	.01	**.73**
2r	Educated vs. Uneducated	.07	**.72**
10r	Advantaged vs. Disadvantaged	.31	**.71**
20r	Confident vs. Not Confident	.12	**.68**
22	Incompetent vs. Competent	.22	**.65**
6r	White-collar vs. Blue-collar	.07	**.64**
19	Low- vs. High Work Ethic	.24	**.58**
21r	Energetic vs. Lazy	.19	**.55**
18r	Talkative vs. Shy	-.10	**.49**
17	Submissive vs. Dominant	-.39	**.48**

Notes. Factor loadings > .40 are shown in boldface. Items are ordered according to their factor loadings (from highest to lowest). Reverse items are indicated with "r" after each item number.

Results

Accent Manipulation Check

The results of an analysis of variance (ANOVA) supported the effectiveness of the applicant accent manipulation: the Spanish-accented applicant (M = 5.20, SD = 1.11) was perceived as having a stronger accent than the Standard American English-accented applicant (M = 2.90, SD = 1.50), $F(1, 165) = 124.39$, $p = 7.0 \times 10^{-22}$. Furthermore, 60% of respondents in the Standard American English-accent condition judged him to be White non-Hispanic and 82% of the respondents in the Spanish-accented condition categorized him as Hispanic.

Descriptive Statistics

Table 3 presents the means, standard deviations, and correlations among the measured variables. Results show that, overall, participants felt that the applicants were somewhat suitable for the job (M = 4.50), competent (M = 4.58), and likable (M = 4.31). Participants did not perceive the applicants as having a high likelihood of being promoted to a managerial position (M = 3.79).

Correlations Among the Measures

The correlation coefficients among the measured variables show that applicant accent was significantly correlated with job suitability (r = -.20, p = .009), likelihood of promotion (r = -.29, $p = 1.8 \times 10^{-4}$), decision to hire (r = -.16, p = .041), and perceived competence (r = -.42, p = .001), but was not correlated with perceived likability (r = -.05, p = .568). These results indicate that when the applicant had a Spanish accent, participants gave him lower job suitability ratings, perceived him as having a lower

chance of being promoted to a managerial position, were less inclined to hire him, and lacking competence, but did not perceived him as less likable compared to the applicant with a Standard American English-accented accent.

All of the measured outcome variables (i.e., job suitability, likelihood of promotion, decision to hire, perceived competence, and perceived likability) had moderate to strong positive correlations with one another, ranging from $r = .20$ to $r = .56$. Specifically, correlations between job suitability, likelihood of promotion, decision to hire, perceived competence, and perceived likability indicate that when job suitability is high, the applicant is more likely to be promoted and hired, and is judged to be more competent and likable.

Analysis of Accent Type and Demographic Variables on the Measured Variables

Prior to testing the hypotheses, several multivariate analysis of variance (MANOVAs) were conducted in order to examine whether some demographic variables interacted with applicant accent to influence the measured variables (i.e., job suitability, likelihood of promotion, decision to hire, perceived competence, and perceived likability).

Table 3

Means, Standard Deviations, and Correlations Among the Measured Variables

Variables	*M*	*SD*	1	2	3	4	5
1. Applicant accent	–	–	–				
2. Job suitability	4.50	1.29	- .20**	–			
3. Likelihood of promotion	3.79	1.53	- .29**	.50**	–		
4. Decision to hire	–	–	- .16*	.56**	.47**	–	
5. Perceived competence	4.58	.90	- .42**	.42**	.54**	.38**	–
6. Perceived likability	4.31	.96	- .05**	.46**	.20**	.43**	.28**

Notes. *$p < .05$. ** $p < .01$. Applicant accent (1 = *Standard American English accent*, 2 = *Spanish accent*). Decision to hire (1 = *No*, 2 = *Yes*).

Given that 40% of the participants in the Standard American English-accented condition identified the applicant as non-White, we examined whether there was any difference on the measured variables between participants who identified the applicant as White non-Hispanic and participants who identified him as non-White. Results of a MANOVA showed that there was no significant difference between these two groups, $F(5, 76) = .59$, $p = .71$, Wilks' $\Lambda = .96$. Thus, the data of all the participants in the Standard American English-accent condition were used for hypothesis testing.

Furthermore, given the ethnic diversity of the sample, we examined if the ethnicity of the participants had any effect, in particular any interaction effect with accent type, on the measured variables. Thus, a series of MANOVAs were conducted. First, participants were separated into four groups: Whites non-Hispanic ($n = 44$), Asians ($n = 58$), Hispanics ($n = 34$), and Others ($n = 29$). Because the Middle Eastern ($n = 14$), African American ($n = 10$), Native American ($n = 1$), and mixed race ($n = 4$) ethnic groups had a relatively small number of participants, they were combined to form one group classified as Others. Thus, the result of a 2 (accent type) × 4 (ethnicity of participants) MANOVA showed that ethnicity of participants did not have any effect on the measured variables, $F(15, 420) = .97$, $p = .49$, Wilks' $\Lambda = .91$, nor did it interact with accent type, $F(15, 420) = .73$, $p = .75$, Wilks' $\Lambda = .93$. Second, participants were categorized into three groups that represented the majority of the sample: Whites non-Hispanic, Asians, and Hispanics. Thus, a 2 (accent type) × 3 (ethnicity of participants) MANOVA was conducted. The results showed no effects of ethnicity of participants on the measured variables, $F(10, 250) = 1.11$, $p = .35$, Wilks' $\Lambda = .92$, nor an interaction

between accent type and ethnicity of participants, $F(10, 250) = .59$, $p = .82$, Wilks' $\Lambda = .95$.

Additionally, given that White non-Hispanic participants might respond differently compared to non-White participants, participants were separated into two groups: Whites non-Hispanic vs. non-Whites. The result of a 2 (accent type) × 2 (ethnicity of participants) MANOVA showed no effect of participant ethnicity, $F(5, 156) = 1.33$, $p = .25$, Wilks' $\Lambda = .96$, or an interaction effect between accent type and ethnicity of participants, $F(5, 156) = .47$, $p = .80$, Wilks' $\Lambda = .99$. Furthermore, given a relatively larger number of Asian participants, we then categorized the participants into Asians and non-Asians and conducted a 2 (accent type) × 2 (ethnicity of participants) MANOVA that also showed no effect of participant ethnicity, $F(5, 156) = 1.30$, $p = .27$, Wilks' $\Lambda = .96$, nor an interaction between accent type and participant ethnicity, $F(5, 156) = .96$, $p = .44$, Wilks' $\Lambda = .97$. Finally, given that the present study used a Spanish accent, we thought that Hispanic participants might respond differently compared to non-Hispanic participants. A 2 (accent type) × 2 (ethnicity of participants) MANOVA was conducted which also yielded no significant effect of participant ethnicity, $F(5, 156) = .60$, $p = .70$, Wilks' $\Lambda = .98$, nor an interaction between accent type and participant ethnicity, $F(5, 156) = .44$, $p = .82$, Wilks' $\Lambda = .99$.

A 2 (accent type) × 2 (participant gender) MANOVA was also conducted to examine whether participant gender interacted with accent type. Results showed no significant interaction between accent type and participant gender, $F(4, 160) = .86$, $p = .49$, Wilks' $\Lambda = .98$.

In summary, the analyses above showed that there was no difference on the measured variables between participants who identified the applicant as White non-Hispanic and those who identified him as non-White in the Standard American English-accented condition. An examination of participant ethnicity on the measured variables showed no significant effects or interactions between accent type and participant ethnicity. Lastly, an examination of participant gender on the measured variables also showed no significant interaction.

Tests of Hypotheses

Employment-related decisions. In order to test hypothesis *H1a*, which stated that the Spanish-accented applicant would be rated as less suitable for a job than the Standard American English-accented applicant, and *H1b*, which stated that the Spanish-accented applicant would be rated as having a lower chance of being promoted to a managerial position than the Standard American English-accented applicant, a one-way between-subjects MANOVA was conducted to examine the effects of accent type on the employment-related decisions of job suitability and likelihood of promotion.

Results of the MANOVA showed a significant effect of applicant accent, $F(2, 164) = 7.78$, $p = .001$, Wilks' $\Lambda = .91$.

Results of an ANOVA showed a significant effect of accent type on job suitability ratings, $F(1, 165) = 7.00$, $p = .009$. Specifically, the Spanish-accented applicant ($M = 4.24$, $SD = 1.30$) was rated as less suitable for the software engineering job than the Standard American English-accented applicant ($M = 4.76$, $SD = 1.25$; see Table 4). This

result supports hypothesis *H1a*, which stated that the Spanish-accented applicant would be rated as less suitable for a job than the Standard American English-accented applicant.

Results of an ANOVA also showed a significant effect of accent type on likelihood of promotion, $F(1, 165) = 14.73$, $p = 1.8 \times 10^{-4}$. Specifically, the Spanish-accented applicant ($M = 3.35$, $SD = 1.38$) was perceived as having a lower chance of being promoted to a managerial position than the Standard American English-accented applicant ($M = 4.23$, $SD = 1.56$; see Table 4). This result supports H1b, which stated that the Spanish-accented applicant would be rated as having a lower chance of being promoted to a managerial position than the Standard American English-accented applicant.

Table 4

Means and Standard Deviations of the Measured Variables

	Accent Type			
	Spanish-accented English		Standard American English-accent	
Variables	*M*	*SD*	*M*	*SD*
Job suitability	4.24	1.30	4.76	1.25
Likelihood of promotion	3.35	1.38	4.23	1.56
Perceived competence	4.21	.84	4.96	.81
Perceived likability	4.35	.93	4.27	.99

Hiring decision. In order to test hypothesis *H1c*, which stated that the Spanish-accented applicant would be less likely to be hired than the Standard American English-

accented applicant, a chi-square analysis was conducted to examine the effect of accent type on a hiring decision. The result showed no significant effects of accent type on a hiring decision, χ^2 (1, N = 166) = 3.57, p = .06, phi = -.16. Thus, hypothesis *H1c* was not supported. However, it is important to note that the direction of the percentages was consistent with the hypothesis. A closer look revealed that the participants in the Standard American English-accented condition were evenly divided on their decision to hire the applicant with 51% deciding *not* to hire and 49% deciding to hire. Conversely, 66% of participants in the Spanish-accented condition decided *not* to hire him versus 34% who were in favor of hiring (see Table 5).

Table 5

Effect of Applicant Accent on a Hiring Decision

	Would you hire for the job?			
	No		Yes	
Accent Type	*n*	%	*n*	%
Spanish-accented English	55	66	28	34
Standard American-accented English	42	51	41	49

Note. χ^2 (1, *n* = 166) = 3.57, *p* = .06, phi = - .16.

Perceptions of an applicant's personal characteristics. In order to test hypothesis *H2a*, which stated that the Spanish-accented applicant would be perceived as less competent than the Standard American English-accented applicant, and hypothesis *H2b*, which stated that the Spanish-accented applicant would be perceived as likable as the Standard American English-accented applicant, a one-way between-subjects

MANOVA was conducted to examine the effect of accent type on the perceived competence and perceived likability of the applicants.

Results of the MANOVA showed a significant effect of accent type, $F(2,164) = 20.79$, $p = 9.0 \times 10^{-9}$, Wilks' $\Lambda = .80$.

Results of an ANOVA showed a significant effect of accent type on perceived competence, $F(1, 165) = 34.62$, $p = 2.2 \times 10^{-8}$. Specifically, the Spanish-accented applicant ($M = 4.21$, $SD = .84$) was perceived as less competent than the Standard American English-accented applicant ($M = 4.96$, $SD = .81$; see Table 4). This result supports hypothesis *H2a*, which stated that the Spanish-accented applicant would be perceived as less competent than the Standard American English-accented applicant.

Results of an ANOVA also showed no significant effect of accent type on perceived likability, $F(1, 165) = .33$, $p = .57$. Specifically, the Spanish-accented applicant ($M = 4.35$, $SD = .93$) was perceived as likable as the Standard American English-accented applicant ($M = 4.27$, $SD = .99$; see Table 4). This result supports hypothesis *H2b*, which stated that the Spanish-accented applicant would be perceived as likable as the Standard American English-accented applicant.

Summary of the Findings

The results of the present study showed that applicant accent had an effect on job suitability ratings and the perceived likelihood of promotion such that the Spanish-accented applicant was rated as less suitable for the software engineering job and was seen as having a lower chance of being promoted to a managerial position than the Standard American English-accented applicant. However, there was no difference

between the Spanish-accented applicant and the Standard American English-accented applicant on hiring decision. However, more participants in the Spanish-accented condition preferred not to hire him than to hire him compared to those in the Standard American English-accented condition.

With regard to the perception of the applicant's personal characteristics, the Spanish-accented applicant was perceived as less competent than the Standard American English-accented applicant, but was equally perceived as likable as the Standard American English-accented applicant.

Interestingly, the ethnicity of the participants had no interaction effect with applicant accent on any of the measured variables. These findings are discussed further in the following section.

Discussion

Hispanics are the largest and fastest growing ethnic minority group in the U.S. (U.S. Census Bureau, 2008). Yet, little research has been conducted to understand their experiences in the workplace. This is true even when statistical and research evidence indicates bias against Hispanic workers. Furthermore, statistics show that 45% of Hispanics 18 years of age and older speak English "less than very well" (Pew Hispanic Center, 2008). It is likely then that many Americans will interact with Hispanics who may either lack English proficiency or speak English with an accent on a regular basis across different settings (e.g., workplace, school, community). Research on language attitudes has consistently shown that Standard American English-accented speakers are rated more positively on job suitability ratings and personality characteristics such as status (i.e., competence), compared to foreign-accented speakers who typically receive less favorable ratings. Therefore, foreign-accented speakers are likely to be disadvantaged, especially when they apply for a job. Research examining the impact of Spanish-accented English on employment-related decisions has been relatively few in number. Thus, the present study examined the effects of a hypothetical applicant's accent (Standard American English vs. Spanish) on employment-related decisions (e.g., suitability ratings, likelihood of promotion, hiring decision) and perception of applicant characteristics (e.g. competence, likability).

As predicted, participants rated the Spanish-accented applicant as less suitable for the software engineering job than the Standard American English-accented applicant. This finding is consistent with previous studies that have shown that foreign-accented

speakers receive lower job suitability ratings than those without an accent (e.g., Carlson & McHenry, 2006; De la Zerda & Hopper, 1979; Hosoda & Stone-Romero, 2010; Kalin & Rayko, 1978; Rey, 1977; Purkiss et al., 2006).

Results also showed that the Spanish-accented applicant was seen as having a lower chance of being promoted to a managerial position in comparison to the Standard American English-accented applicant. This would make sense given that suitability ratings and likelihood of promotion was positively correlated (r = .49) such that the more suitable the applicant was perceived for the job, the higher the likelihood of being promoted to a managerial position. Therefore, the Spanish-accented applicant who was perceived as less suitable for the job was also perceived as having a lower chance of obtaining a promotion.

Although not statistically significant, there was a notable discrepancy when the applicants were subjected to a hiring decision. The Spanish-accented applicant had more of a tendency not to be hired than to be hired compared to the Standard American English-accented applicant who had no discernable trend on the decision to hire. This shows that even though both applicants had the same qualifications for the job, the Spanish-accented applicant were less likely to be hired than the Standard American English-accented applicant. Overall, these results suggests that Spanish-accented applicants experience both access-related discrimination (i.e., less likely to secure an entry into a high status job) and treatment-related discrimination (i.e., lower chance of being promoted to a managerial position) even after they secure employment.

Consistent with Lee and Fiske's (2006) research, which showed that Hispanic immigrants (e.g., Mexican) were judged to be less competent but as likable as Americans, this study also showed that the Spanish-accented applicant was perceived as less competent but rated just as likable as the Standard American English-accented applicant.

Overall, the results of this study can be explained by the assertion that Stone-Romero and Stone (2007) made in their model of stigmatization in organizations that a foreign accent could serve as a source for a stigma, creating a negative discrepancy between the perceived attributes of a job applicant (ASI) and the prototype of an ideal job applicant (VSI). Consequently, foreign-accented applicants are likely to suffer a number of negative consequences (e.g., reduced chances of being hired for various jobs).

An alternative explanation for the lower ratings of the Spanish-accented applicant on employment-related decisions is that there is a social stereotype that Hispanics are dirty, unintelligent, irresponsible, and lazy (Cross & Maldonado, 1971) and that they are better suited to low status jobs in the agricultural and service industries (e.g., farming, landscaping). These jobs rely more heavily on physical labor than cognitive abilities. Given that the Spanish-accented applicant was perceived as having low competence, which is consistent with the social stereotype, the Spanish-accented applicant was perceived as not suitable for and unfit for a promotion for the high status job such as software engineering.

Interestingly, the present study shows that the participants' ethnicity and gender did not have any effect on their reactions to either the Standard American English-accented or the Spanish-accented applicant. The lack of significant interaction effect

between participants' ethnicity and applicant accent on the measured variables is consistent with the findings of several other studies (e.g., Hosoda & Stone-Romero, 2010; Singer & Eder, 1988). These findings assume that one characteristic of an ideal job applicant (VSI) is that he or she does not speak with an accent and this characteristic is shared among the participants, regardless of their race or ethnicity.

Practical Implications

This study revealed that prejudicial reactions to foreign-accented speakers or applicants continue to exist decades after this issue gained prominence in the 1960s (e.g., Anisfeld, Bogo, & Lambert, 1962). Although laws are in place to protect workers (e.g., Title VII of the Civil Rights Act of 1964), organizations should maintain good hiring strategies to prevent or reduce the risk of accent discrimination before they occur. Organizations seeking to prevent accent discrimination may employ several strategies. First, previous studies have suggested that accent modification or reduction for heavier accented speakers provide some benefits (Carlson & McHenry, 2006; Cargile, 2000). However, these services may come at a psychological cost (Cargile, 2000) and are met with some level of controversy as this method can be construed as insensitive and cause one to believe that he or she has deserted his or her personal or cultural identity (i.e., "This is who I am" and "This is my heritage").

Second, it might be more effective for organizations to employ comprehensive hiring strategies that includes a series or combination of standardized testing and structured interviews to increase job-related validity and reduce adverse impact (Hosoda & Stone-Romero, 2010; Huffcutt, Conway, Roth, & Stone, 2001).

Third, organizations may also consider placing highly qualified individuals who are well trained in making non-biased hiring decisions. Furthermore, Purkiss et al. (2006) suggested that employers should consider interviewers who are high on "openness to experience" on the Five-Factor Model of personality because they may be less inclined to apply prejudicial attitudes toward ethnic minorities or particular job applicants.

Strengths, Limitations, and Future Research

Much of the research on the effects of foreign accents on employment-related decisions has focused on employment suitability, particularly with regard to jobs that varied in status (e.g., Kalin, 1982; Kalin et al., 1980; Giles et al., 1981). However, as mentioned above, these studies have not directly examined the effect of foreign accents on the decision to hire. Therefore, a major strength of this study is the contribution of the findings to the *hiring* criterion. An additional strength of this study is that the nature of research design in the present study permits casual inferences of the findings.

There are several limitations to this study. First, as mentioned previously, the Spanish accent provided by a genuinely bilingual Mexican American speaker may not be a true Spanish accent, meaning the U.S. born Spanish-accent used in this study may not be equivalent to a Spanish-accent of a foreign-born Mexican from Mexico.

Second, the description of the applicants included a modest college GPA of 2.8 for the high-status job of software engineering. This could explain the marginal ratings of the applicants on job suitability and likelihood of promotion to a managerial position dimensions. It is not known whether the same results would be obtained had this study used more highly educated applicants (e.g., 3.8 GPA).

Third, the difficult nature of gathering data from actual decision makers has led me to rely on collecting data from college students, and caution must be stressed when generalizing the results to the workplace. For example, experienced hiring personnel may be well trained to avoid discriminatory hiring practices, responding in a nonbiased manner. However, Barr and Hitt (1986) suggest the variation in responses between students and employees or supervisors is minimal. Furthermore, bias against foreign-accented individuals by actual decision makers has been reported in actual work settings (e.g., De la Zerda & Hopper, 1979). Thus, I doubt that my findings are an artifact of experimental research.

A fourth limitation is that the results are confined to a young age group with an average age of 19, thus the perceptions of this sample might not accurately represent the perceptions of a mature working population.

Given the limitations above, a future study should replicate this research by sampling professionals working in human resources, or supervisors in charge of hiring and promoting employees. Data should be diverse, gathered from a variety of organizations, consisting of a matured workforce (i.e. workers aged 25 and above), and collected across different metropolitan regions in the U.S. This would provide a more accurate representation of potential discrimination against foreign-accented individuals and behavioral reactions to them in the workplace. Moreover, it would be interesting to see what effect a higher college GPA, such as a 3.6 GPA for example, might have on the evaluation (e.g., job suitability) of applicants who differ on accent. In other words, if the Spanish-accented applicant demonstrated stronger academic credentials, would

participants still rate him lower on job suitability and likelihood of promotion than the Standard American English-accented applicant?

Additionally, research on foreign accents has used primarily male speakers for accent manipulations. It would be interesting to see if and how the results might be influenced when gender of the applicant is changed. In other words, how might a female foreign-accented applicant be evaluated differently compared to the male counterpart used in this study?

Furthermore, although foreign accent discrimination exists, it does not appear that the Equal Employment Opportunity Commission (EEOC) has published statistical reports on this specific type of discrimination (i.e., foreign accent discrimination is classified under National Origin Discrimination). Perhaps an independent study should be performed to gather these much needed data to shed light on key information such as the frequency of these cases per year, annual trends, which ethnicity or race is most frequently affected (e.g., Hispanic, Middle Eastern), and what regions in the U.S. are heavily affected. Such data might provide an indication of what areas future studies should investigate.

Conclusion

This study showed that even though both applicants demonstrated identical job qualifications for the software engineering position, the Spanish-accented applicant was rated lower on employment-related decisions and perceived competence than the Standard American English-accented applicant. These findings are consistent with Lippi-Green's (1997) assertion that negative reactions are evoked by accents associated with

countries of lower-socioeconomic status and darker skin colors. With a growing Hispanic population, more Hispanic job seekers with an accent might face employment discrimination, inequalities, or other unforeseen setbacks as they enter the workplace. These problems may also affect organizations that lack good hiring strategies. Thus, consistent with past recommendations (Hosoda & Stone-Romero, 2010; Huffcutt et al., 2001), hiring personnel should rely more on objective measures such as standardized testing and structured interviews, which provide more job-related validity and reduces adverse impact. Organizations may also consider employing interviewers with a lot of experience in issues of diversity and impartiality in order to reduce potential discrimination against foreign-accented applicants.

References

Adler, S. (1987). Bidalectalism? Mandatory or elective? *Asha, 29,* 41-42.

Anisfeld, M., Bogo, N., & Lambert, W. E. (1962). Evaluational reactions to accented English speech. *Journal of Abnormal and Social Psychology, 65,* 223-231.

Barr, S.D., Hitt, M. A. (1986). A comparison of selection decision models in manager versus student samples. *Personnel Psychology, 39,* 599-617.

Bartlett, M. S. (1954). A note on the multiplying factors for various chi square approximations. *Journal of the Royal Statistical Society, 16(B),* 296-298.

Bradac, J. J., & Wisegarver, R. (1984). Ascribed status, lexical diversity, and accent: Determinants of perceived status, solidarity, and control of speech style. *Journal of Language and Social Psychology, 3,* 239-255.

Brennan, E.M. (1977). Mexican-American accented English: Phonological analysis, accent scaling, and evaluative reactions (Doctorial Dissertation, University of Notre Dame, 1977). *Dissertation Abstracts International, 38,* 1434.

Bresnahan, M. J., Ohashi, R., Nebashi, R., Liu, W. Y., & Shearman, S. M. (2002). Attitudinal and affective response toward accented English. *Language & Communication. 22,* 171-185.

Campbell, D. T. (1967). Stereotypes and the perception of group differences. *American Psychologist, 22,* 817-829.

Cargile, A. C. (1997). Attitudes toward Chinese-accented speech: An investigation in two contexts. *Journal of Language and Social Psychology, 16(4),* 434-443.

Cargile, A. C. (2000). Evaluation of employment suitability: Does accent always matter? *Journal of Employment Counseling, 37(3),* 165-177.

Cargile, A. C., & Bradac, J. J. (2001). Attitudes toward language: A review of applicant-evaluation research and a general process model. In W. B. Gudykunst (Ed.), *Communication yearbook 25* (pp. 347-382). Mahwah, NJ: Dawrence Erlbaum.

Cargile, A. C. & Giles, H. (1997). Language attitudes towards varieties of English: an American-Japanese context. *Journal of Applied Communication Research, 26,* 338-356.

Carlson, H.K., & McHenry, M. A. (2006). Effect of accent and dialect employability. *Journal of employment counseling, 43,* 70-83.

Cross,W. C. & Maldonado, B. (1971). The counselor, the Mexican-American, and the stereotype. *Elementary School Guidance and Counseling, 6(1),* 27-31.

De la Zerda, N., Hopper, F. (1979). Employment interviewers' reactions to Mexican American speech, *Communication Monographs, 46(2),* 126-134.

Fiske, S. T., Xu, J., & Cuddy, A. C. (1999). (Dis)respecting versus (dis)liking: Status and interdependence predict ambivalent stereotypes of competence and warmth. *Journal of Social Issues, 55(3),* 473-489.

Giles, H., Wilson, P., & Conway, A. (1981). Accent and lexical diversity as determinants of impression formation and perceived employment suitability. *Language Sciences, 3(1),* 91-103.

Giles, H., Williams, A., Mackie, D. M., & Rosselli, F. (1995). Reactions to Anglo- and Hispanic-American-accented speakers: Affect, identity, persuasion, and the English-only controversy. *Language & Communication, 15(2),* 107-120.

Greico, E. M. (2009). *Race and Hispanic origin of the foreign-born population in the United States: 2007.* American Community Survey Reports (ACS-11). Retrieved on March 15, 2010 from U.S. Census Bureau: http://www.census.gov/prod/2010pubs/acs-11.pdf

Hosoda, M. & Stone-Romero, E. (2009). The effects of foreign accents on employment related decisions. *Journal of Managerial Psychology, 25(2),* 113-132.

Huffcutt, A. I., Conway, J. M., Roth, P.L., & Stone, N. J. (2001). Identification and meta-analytic assessment of psychological constructs measured in employment interviews. *Journal of Applied Psychology, 86(5),* 148-63.

Kaiser, H. (1970). A second generation Little Jiffy. *Psychometrika, 35,* 401-415.

Kaiser, H. (1974). An index of factorial simplicity. *Psychometrika, 39,* 31-36.

Kalin, R. (1982). The social significance of speech in medical, legal and occupational settings. In E. B. Ryan, & H. Giles (Eds.), *Attitudes towards language variation in social and applied contexts* (pp. 148-163). London: Edward Arnold.

Kalin, R., & Rayko, D. S. (1978). Discrimination in evaluative judgments against foreign accented job candidates. *Psychological Reports, 43,* 1203-1209.

Kennedy, G.M., & Wissoker, D. A. (1994). An analysis of the correlates of discrimination facing young Hispanic job-seekers. *American Economic Review, 84*, 674-683.

Lambert, W. (1967). A social psychology of bilingualism. *Journal of Social Issues, 23*, 91-109.

Lee, T. L., & Fiske, S. T. (2006). Not an outgroup, not yet an ingroup: Immigrants in the stereotype content model. *International Journal of Intercultural Relations, 30*, 751-768.

Levine, R. A., & Campbell, D. T. (1972). *Ethnocentrism: Theories of conflict, ethnic attitudes, and group behavior.* New York: Wiley.

Lin, T. R., Dobins, G H., & Farh, J. L. (1992). A field study of race and age similarity effects on interview ratings in conventional and situational interviews. *Journal of Applied Psychology, 77*, 363-371.

Lippi-Green, R. (1997). *English with an accent: Language, ideology, and discrimination in the United States*. London: Routledge.

Niestas, A. S. (2005). *European Americans' attitudes toward Mexicans and Mexican Americans: The role of accent and country of birth* (Doctoral dissertation). Retrieved from PsycINFO. (UMI No. 3168788)

Nkomo, S. M. & Cox, T., Jr. (1996). Diverse identities in organizations. In S. R. Clegg & C. Hardy & W. Nord (Eds.), *Handbook of Organization Studies* (pp. 338-356). London: SAGE Publications

Owens, R.E. (1996). *Language development: An introduction* (4th ed.). Boston: Allyn & Bacon.

Owens, R. E. (2001). *Language development: An introduction* (5th ed.). Boston: Allyn & Bacon.

Parliman, G. C. & Shoeman, R. J. (1994). National origin discrimination or employer prerogative? An analysis of language rights in the workplace. *Employee Relations Law Journal, 19(4),* 551-565.

Pew Hispanic Center (2006). *America's immigration quandary: No consensus on immigration problem or proposed fixes*. Retrieved on June 10, 2009 from http://pewhispanic.org/files/reports/63.pdf.

Pew Hispanic Center (2008). *Statistical portrait of Hispanics in the United States*. Retreived on February 8, 2010 from, http://pewhispanic.org/files/factsheets/hispanics2008/Table%2020.pdf.

Podberesky, R., Deluty, R., & Feldstein, S. (1990). Evaluations of Spanish- and Oriental-accented English applicants. *Social Behavior & Personality, 18(1),* 53-63.

Purkiss, S, K, S., Perrewé, P. K., Gillespie, T. L., Mayes, B. T., & Ferris, G. R. (2006). Implicit sources of bias in employment interview judgments and decisions. *Organizational Behavior and Human Decisions Processes, 101*, 152-167.

Reitz, J. G. (2001). Immigrant success in the knowledge economy: Institutional change and the immigrant experience in Canada, 1970-1995. *Journal of Social Issues, 57(3),* 579-613.

Rey, A. (1977). Accent and employability: Language attitudes. *Language Sciences, 47*, 7-12.

Ryan, E. B., Hewstone, M., & Giles, H. (1984). Language and intergroup attitudes. In J. Eiser (Ed.), *Attitudinal judgment* (pp. 135-150). New York: Springer.

Sebastian, R. J., Ryan, E. B., Keogh, T. F., & Schmidt, A. C. (1980). The effects of negative affect arousal on reactions to speakers. In H. Giles, W. Robinson, & P. M. Smith (Eds.), *Language: social psychological perspectives* (pp. 203-208). Oxford: Pergamon.

Sanchez, J. I., & Brock, P. (1996). Outcomes of perceived discrimination among Hispanic employees: Is diversity management a luxury or a necessity? *Academy of Management Journal, 39*, 704-719.

Singer, M., & Eder, G. S. (1988). Effects of ethnicity, accent, and job status on selection decisions. *International Journal of Psychology, 24*, 13-34.

Stone, E. F., Stone, D. L., & Dipboye, R. L. (1992). Stigmas in organizations: Race, handicaps, and physical unattractiveness. In K. Kelly (Ed.), *Issues, Theory, and Research in Industrial/Organizational Psychology* (pp. 385-444). Amsterdam, Netherland: North-Holland.

Stone-Romero, E. F., & Stone, D. L. (2007). Cognitive, affective, and cultural influences on stigmatization: Impact on human resource management processes and practices. *Research in Personnel and Human Resources Management, 26*, 117-167.

U.S. Census Bureau (2008, August 14). *An older and more diverse nation by midcentury*. Retrieved on December 15, 2009 from, http://www.census.gov/newsroom/releases/archives/population/cb08-123.html

United States General Accounting Office. (1990). *Immigration Reform: Employer sanctions and the question of discrimination.* (No. 140974). Retrieved on November 15, 2009 from, http://archive.gao.gov/d24t8/140974.pdf

Appendix A

Description of an Applicant

I have a Bachelor's degree in Computer Engineering with a GPA of 2.8. I consider myself to be an ambitious and motivated person. I like taking risks and will never back away from challenges. I will do anything in my power to get what I want. Although I work well with a team, I prefer to work independently. I can also manage multiple tasks at the same time. I am competitive and strongly believe that competition is essential to one's success. I admit that sometimes I leave things to the last minute, but I do better under pressure. I desire to be self-efficient rather than having others tell me what to do. I am searching for a job that will be challenging and offer better growth opportunities. I strongly feel that I will be a great asset to your company.

Appendix B

Survey Items

Job Suitability (Hosoda & Stone-Romero, 2010)

1. I feel that he is suited for the job.
2. I feel that he has the necessary skills and abilities to perform the job.
3. I believe that he is qualified for the job.
4. I believe that he would be successful on the job.

Likelihood of Promotion

1. The potential for him to be promoted to a supervisor within five years is…
2. The likelihood of him to move up to the upper level managerial position is…

Decision to Hire

1. Would you hire for the job?

Personal Characteristics (Hosoda & Stone-Romero, 2010)

1. Literate/Illiterate
2. Educated/Uneducated
3. Upper class/Lower class
4. Untrustworthy/Trustworthy
5. Intelligent/Unintelligent
6. White-collar/Blue-collar
7. Good-natured/Not Good-natured
8. Insincere/Sincere
9. Conscientious/Not Conscientious
10. Advantaged/Disadvantaged
11. Warm/Cold
12. Friendly/Unfriendly
13. Likable/Unlikable
14. Pleasant/Unpleasant
15. Considerate//Inconsiderate
16. Honest/Dishonest
17. Submissive/Dominant
18. Talkative/Shy
19. Low Work Ethic/High Work Ethic
20. Confident/Not Confident
21. Energetic/Lazy
22. Incompetent/Competent