Summer 2013

On a First Name Basis: Effects of African American Sounding First Names on the Hiring Decision

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ON A FIRST NAME BASIS: EFFECTS OF AFRICAN AMERICAN SOUNDING FIRST NAMES ON THE HIRING DECISION

by

SHAYNA BROWN

(Under the Direction of Amy A. Hackney)

ABSTRACT

A controlled experiment contributes to our understanding of the hiring disparity by examining the effect of applicant race and type of applicant first name on hiring decisions. Two-hundred and five participants acted as mock hiring managers and reviewed an application and resume, completed an evaluation of the applicant’s job related characteristics, and made hiring and starting salary recommendations. Measures for stereotype and race activation were also included. Neither applicant race nor applicant name type affected participants’ ratings of job related characteristics such as perceived motivation, intellectual ability, ability to work well with others, and potential in the field. Results showed that participant gender affects hiring and salary decisions. Male participants recommended applicants for hire less often than did female participants, regardless of applicant race or name type. Participant gender and applicant race also interacted to affect awarded salary. Male participants tended to award lower salaries to African American applicants than to White applicants. For those participants who reviewed African American applicants, males tended to award lower salaries than did females. Male and female participants did not differ in the salaries awarded to White
applicants. The findings demonstrate the importance of participant demographic characteristics and salience of the ingroup when making evaluative decisions.

INDEX WORDS: Hiring Decisions, Salary, Name Type, Race, Stereotype
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SHAYNA BROWN

B.S., Georgia Southern University, 2011

A Thesis Submitted to the Graduate Faculty of Georgia Southern University in Partial Fulfillment of the Requirements for the Degree

MASTER OF SCIENCE

STATESBORO, GEORGIA

2013
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Electronic Version Approved:
July 2013
ACKNOWLEDGMENTS

Firstly, I would like to thank my committee chair, Dr. Amy Hackney. Your guidance, suggestions, and expertise improved this project immensely. Your encouragement allowed a research idea to flourish and grow into a final product that I am very proud of. Thank you for your patience and time, especially with the many drafts that this project required. Thank you for your kind and motivating words throughout the entire process.

I would also like to thank my other committee members, Dr. Karen Naufel and Dr. Thresa Yancey. Thank you both for your interest, ideas, and inspiration. I greatly appreciate your help in improving and editing this project. I am very thankful to have had such a supportive thesis committee.

Thank you to the Psychology Department for making my experience as a Masters student a pleasurable one.

Finally, my greatest thanks are to my family. Thank you for your encouragement and reassurance throughout my academic career. Thank you for teaching me that all goals are attainable. Thank you to my sister, Fallon. I appreciate your help with data entry and your interest in my many research ideas.
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CHAPTER 1
INTRODUCTION

America is known as the land of opportunity. Ideally, these opportunities should be equally available to all citizens. However, this is not the case. Racial inequalities are evident in the labor market. Historically, the general level of unemployment has been higher for African Americans than it has been for Whites (Rose, 1964). For the past several decades, unemployment rates for African Americans have been double that of Whites (Queneau & Sen, 2009). During the period from 1972 to 2004, the average rate of unemployment for African American males was 12.4% versus 5.4% for White males (Couch & Fairlie, 2010). By January 2009, the unemployment rate for African Americans was 12.7% while the unemployment rate for Whites was 7.1% (U.S. Department of Labor, 2012). As of January 2013, the rate of unemployment reached 14.3% for African Americans and 7.6% for Whites with the highest rate of unemployment being 39.6% for African American teens versus 21.5% for White teens (U.S. Bureau of Labor Statistics, 2013). Consistently over time, African Americans have had higher rates of unemployment than Whites.

Historically, racial prejudice and discrimination in the economic sphere began when Whites did not want African American competition in the workforce, White patrons objected to being served by African American workers, and employers viewed African Americans as inferior workers (Rose, 1964). African American workers were usually employed with low paying, low status jobs (Jones, 1972). These historical ideals continue to affect the workforce. There are large income disparities between African
Americans and Whites (Fryer & Levitt, 2004). The median income for an African American family is only 60% the income for a White family (Jones, 1972). During the period from 1966 to 2011, the median income for African American families consistently remained at around 60% of the median income for White families. In 2011, the median family income for African Americans reached $40,750 versus the median family income for Whites at $64,192 (U.S. Census Bureau, 2013).

There has been a clear hiring disparity in the workforce, in which White applicants have been hired more often than African American applicants for both high and low status job positions (Orpen, 1982). Compared to 10% of Whites, 40% of African Americans report that they had been denied a job because of their race (Coleman, 2004). To create a workforce free of discrimination, we must first better understand what factors contribute to this disparity in hiring practices. It is essential to determine why African Americans are hired less often than Whites so that interventions may be created to prevent hiring based on race rather than individual merit.

**The Hiring Disparity**

Extensive research indicates that African Americans are hired less often than Whites. Equally qualified African American applicants are given more negative hiring recommendations than White applicants with identical resumes (Ford et al., 2004). When age, gender, and education are held constant, African Americans continue to be hired less often than Whites (Weller & Fields, 2011). For job positions that are typically held by African Americans, White applicants are still more likely to be hired than African American applicants (Orpen, 1982).
Evidence for the hiring disparity was found through a field study in which researchers responded with fictitious resumes to 1300 help-wanted ads in Boston and Chicago newspapers. The resumes presented the fictitious applicants as equally qualified, with the only differences being applicant race. Perception of applicant race was manipulated by assigning each resume either an African American sounding name or a White sounding name. Resumes with African American sounding names received half as many callbacks for interviews as resumes with White sounding names. This trend was constant across occupations and industries (Bertrand & Mullainathan, 2004). Similar results were discovered through a field study in New York City. Confederates posing as job applicants were assigned equivalent, fictitious resumes and applied for entry level jobs that required little previous experience. All job applicants were well-spoken, clean cut young men and were matched on levels of verbal skills, interactional styles, and physical attractiveness. The job applicants differed in race. The equally qualified African American applicants were half as likely to receive a callback or job offer as the White applicants. In fact, African American applicants with a clean criminal record were even called back less often than White applicants who had been convicted of a felony (Pager, Western, & Bonikowski, 2009).

If African American applicants are hired, discrimination continues to affect their workforce experience. When participants do indicate that they would hire African Americans, it is for low status jobs (Stewart & Perlow, 2001). African American workers are more likely to be laid off than White workers, controlling for individual characteristics and occupation (Elvira & Zatzick, 2002). Regardless of the workers’ characteristics or job type, African American workers are more likely to be laid off when
compared to White workers. Nearly one-quarter of African American workers reported being racially discriminated against in raises and promotions (Coleman, 2004). Discrimination affects the experiences of African Americans in the workforce while applying for jobs, seeking promotions and raises, and keeping jobs.

**Stereotypes and the In-Group**

The hiring disparity may exist because there is a negative African American stereotype. Stereotypes can be defined as the ideas formed by a group about others unlike themselves (Sigelman & Tuch, 1997). Activation of a negative stereotype can affect evaluations made about members of the stereotyped group. Stereotyping occurs when we generalize characteristics, motives, or behavior to an entire group of people without taking into account possible individual differences. Stereotyping is a way for people to organize and simplify the complex social world around them (Aronson, 2012). The ability to quickly categorize others into groups is evolutionarily adaptive. Being able to immediately identify others as either friend or foe aided human survival.

Others can easily be categorized into two groups: those in my group and those in the outgroup. Members of the outgroup are seen as more similar to one another and different from the ingroup (Aronson, 2012). The ingroup/outgroup division can be based on virtually any criteria. For example, ingroups are constructed based upon group members’ gender (Rudman & Goodwin, 2004), race (Linville & Jones, 1980), age, political affiliation, and sexual orientation. People naturally favor their own group over other groups. In group favoritism is the tendency to see one’s own group as better than the outgroup (Aronson, 2012). Clark (2001) observed that both White students and African American students held more favorable ideas about their own race in comparison
to all other races. Participants were given a list of 84 adjectives and asked to check 5 that applied to their own group and 5 that applied to other racial groups. White participants attributed less favorable adjectives to African Americans than to other Whites. The tendency to favor one’s own group may result in negative qualities being attributed to the outgroup.

Although stereotyping does serve an adaptive function, it also has negative consequences for members of the stereotyped group. Negative stereotypes affect the likelihood of hire for members of the stereotyped group. Endorsement of a negative ethnic stereotype predicts job applicant ratings, with higher stereotype endorsement predicting lower suitability ratings for the job applicant (Baltes & Rudolph, 2010). Research suggests that mere contact between different groups can decrease negative stereotyping (Sigelman & Tuch, 1997). Personal contact allows members of another group to be seen as individuals with unique characteristics. Intergroup contact can lessen the effects of negative stereotyping. Stereotypes also affect the performance of stereotyped group members. Stereotype threat suggests that the awareness of a negative stereotype creates anxiety in target group members. This anxiety and fear of confirming a negative stereotype actually causes group members to perform worse (Aronson, 2012).

Stereotypes not only cause members of the target group to be treated differently by others, but they also hamper the ability of group members to perform well.

Stereotypes are automatically activated in the presence of a member of the stereotyped group and in the presence of a symbol of the stereotyped group. This occurs for high-prejudice people as well as low-prejudice people (Devine, 1989). Low-prejudice people experience equally strong stereotype activation; however, they consciously inhibit
any stereotypical thoughts. Automatic stereotype activation can have dire consequences in real-world situations. Correll et al. (2007) examined the decision to shoot using a video game simulation. Participants were instructed to quickly shoot armed suspects and to not shoot unarmed suspects. After reading about African American criminals, participants were more likely to shoot unarmed African Americans and fail to shoot armed Whites. When comparing a sample of police officers with a sample of community members, the officers gave more accurate shoot/don’t shoot responses. This was thought to be because the officers were better able to inhibit the automatic activation of negative African American stereotypes due to their training and experiences (Correll et al., 2007).

Automatic stereotype activation may also affect evaluative judgments in the context of hiring decisions.

**Effects of First Name**

Through previous research, it is known that African American applicants are less likely to be hired than White applicants (Ford et al., 2004; Orpen, 1982). However, it is unknown what specific factors may contribute to the hiring disparity. The first step in improving equal hiring among minority applicants must be to determine which factors most affect the hiring decision. There is a gap in the literature exploring what specific factors contribute to African Americans being hired less often than Whites. One possible factor may be applicant’s first name.

First names have an effect on how positively an individual is rated. For example, Herbert and McDavid (1973) instructed participants to evaluate essays, and each essay was authored by either a highly desirable first name or non-desirable first name. Names were chosen based on frequency in the population and by desirability ratings made by
both children and teachers. David and Karen were examples of highly desirable names used; Elmer and Bertha were examples of non-desirable names. The results showed that essays were evaluated more positively when authored by a person with a highly desirable first name compared to the essays authored by a person with a non-desirable first name (Herbert & McDavid, 1973). Common first names and unusual first names elicit very different responses. How often a name occurs in the population is strongly related to the name’s social desirability rating (Crisp, Apostal, & Luessenheide, 1984). Names that occur in the population more often are evaluated more positively and rated as more desirable than names occurring less often. Furthermore, common names are rated better liked, and people with common names are more likely to be hired than people with unusual names (Cotton, O’Neill, & Griffin, 2008).

The Mere Exposure Effect. Words or syllables are more likely to be rated as good if they occur in the English language frequently (Johnson, Thomson, & Frincke, 1960). Word frequency is positively correlated with how positively words are rated. High frequency words as well as common names could be rated more positively because there is increased exposure to them. The mere exposure effect explains that repeated exposure to a novel stimulus causes an increase in positive feelings toward that stimulus (Zajonc, 1968). By mere exposure, it is meant that the individual must merely be exposed to the stimulus; interaction with the stimulus is not necessary for the elicitation of positive feelings. For example, mere exposure to a novel brand name has been shown to be an effective form of advertising when the competitors were also unknown and of equivalent performance (Baker, 1999). Research indicates that mere exposure to political candidates’ names leads to those names being rated more positively. Level of exposure to
a candidate’s name predicted the amount of votes received. When other forms of campaigning were held constant, mere exposure to a candidate’s name resulted in more votes for that candidate (Schaffner, Wandersman, & Stang, 1981). Research shows that the mere exposure effect can occur even without conscious awareness of the stimulus (Moreland & Zajonc, 1977).

An explanation for the mere exposure effect is grounded in perceptual fluency. Repeated exposure to a stimulus increases perceptual fluency, or the ease of processing, when the stimulus is encountered again. Ease of processing increases the experience of positive affect (Reber, Winkielman, & Schwarz, 1998). Stimuli with previous exposure are processed more easily which increases positive ratings of those stimuli. Because common names have more exposure, they are processed more easily, and elicit more positive affect.

Substantial evidence supports that common names are rated more positively than unusual names, and African Americans tend to have more unusual names than Whites. The analysis of data covering the first names of every child born in California over a period of forty years discovered that African American females in segregated areas went from receiving names that were twice as likely to be given to African Americans as to Whites to receiving names more than twenty times as likely to be given to African Americans. African American male names followed this same trend. This pattern began to appear in the 1970s, a period in history during which African Americans began to perceive their identities differently because of the rise of the Black Power movement (Fryer & Levitt, 2004). With a stronger African American identity, came more distinct African American names. There are certain affixes that African Americans use to create
new names, including: da, de, la, sha, and ja. These affixes account for 75 percent of all new African American names (Dinwiddie-Boyd, 1990).

Distinctively African American names are viewed more negatively by others. When rated by schoolchildren of varying ethnicities, first names of African American boys are liked significantly less than names of boys from seven other ethnic groups (Busse & Seraydarian, 1977). According to Milkman et al. (2012), college professors are less likely to meet with prospective doctoral students with African American sounding names. Professors were e-mailed by fictional prospective students requesting a meeting for the next week. Male prospective students with White sounding names received more and faster responses than did prospective students with African American, Hispanic, Indian, or Chinese sounding names. Ethnic names have been found to elicit more negative evaluations. Participants rated a series of nameless, ethnically nonspecific photos. Two months later, the same photos were assigned ethnic names and rated again. When Jewish and Italian ethnic names were assigned to photos, those photos were rated more negatively than they had been in the first, nameless trial (Razran, 1950).

The spelling of first names is also important. Mehrabian (2001) examined the relationship between conventional spelling of name and participant ratings of an imagined person with that name. Participants rated a number of different names including conventionally spelled names together with the unconventionally spelled variant. People with unconventionally spelled names were rated less ethical, less popular, and less successful than people with conventionally spelled names. The author suggested that these findings occurred because unconventional name spelling causes the name to be
more unusual, and a known preference exists for common, familiar names (Mehrabian, 2001).

**Summary, Hypotheses, and Experimental Overview**

There is a clear disparity in the hiring of African American applicants and White applicants (McConahay, 1983). Many different factors may contribute to this relationship. The current research aims to discover if type of applicant first name contributes to African Americans being hired less often than White applicants. It is known that unconventionally spelled names are rated less desirably than conventionally spelled names (Mehrabian, 2001) and that unusual names are less likely to be hired than common names (Cotton et al., 2008).

However, it is unknown how names that are typically African American may affect hiring decisions. African American sounding names are both more unusual and spelled more unconventionally. Often times, the race of an applicant can be guessed solely by reading the name.

Evidence that distinctively African American names are evaluated more negatively (Busse & Seraydarian, 1977) provides a rationale for the current research. Unusual names combined with the distinctive African American affixes (Dinwiddie-Boyd, 1990) will be operationally defined as African American sounding names. It is important to compare unusual names that are distinctively African American and unusual names that are not distinctively African American to avoid measuring the known preference for common names over unusual names (Cotton et al., 2008). The current research will also explore the potential effects of participant race and participant gender on ratings of job related characteristics and hiring recommendations.
Hypothesis 1: There will be a main effect of name type in which applicants with unusual, African American sounding first names will be rated lower on job related characteristics, recommended for hire less often, and awarded a lower starting salary than applicants with unusual, White sounding names and applicants with common names.

Hypothesis 2: There will be a main effect of applicant race in which African American applicants will be rated lower on job related characteristics, recommended for hire less often, and awarded lower starting salary than White applicants.

Hypothesis 3: There will be an interaction between name type and applicant race in which African American applicants with unusual, African American sounding first names will be rated lower on job related characteristics, recommended for hire less often, and awarded lower starting salary than White applicants and African American applicants with other name types.

Measures were also included to identify potential mediating variables in an attempt to determine the mechanism underlying the effect of first names. A word-fragment completion task that can be completed with race-relevant words was used to assess the activation of racial concepts. If participants complete the task with words related to race, then racial concepts were activated by applicant name, and race could be the underlying mechanism for the ratings attributed to the job applicant.

A second measure also used a word-fragment completion task to determine if stereotype activation is the underlying mechanism. The current research utilized the word-fragment completion task used by Steele and Aronson (1995). The task consists of
eleven word fragments which can be completed with stereotypical words that reflect African Americans or non-stereotypical words.

CHAPTER 2

METHOD

Participants

Georgia Southern University students from Introduction to Psychology courses, other courses at the university, and community members participated in the study ($N = 205$). Introduction to Psychology students participated in partial fulfillment of a course requirement or for extra course credit. Recruiting was done using the online SONA system. In order to recruit a community sample, the link for the study was advertised on Facebook pages. Of the 205 participants, 13 were non-student professionals. Participant gender was 39% male and 61% female. Participants ranged from eighteen to sixty-nine in age ($M = 21.00; SD = 5.69$). Participants varied in racial and ethnic background, with 68% identified as White, 24% identified as Black, 2% identified as Hispanic, and 4% indicated other.

Design

This experiment involved a 2 (Applicant Race: Black vs. White) X 3 (Type of Name: Common, White-sounding Unusual, African American-sounding Unusual) between-subjects design. Participants were randomly assigned to evaluate one of the six race/name type combinations.

Materials and Measures

The applicants were portrayed as equally qualified, with only applicant race and type of applicant first name manipulated. All possible resumes belonged to female job
applicants who had graduated from Georgia Southern University with a psychology major and equivalent work experiences. The applicant name type was a common first name, unusual White sounding first name, or unusual African American sounding first name. To ensure that the hiring disparity is not affected by one particular first name, several names were utilized in each of the first name conditions. The common first names include: Jennifer, Ashley, and Mary. Names used in the common first name condition are among some of the most common in the United States (U.S. Census Bureau, 2005; Social Security, 2012). The unusual, White sounding names include: Avery, Shawna, and Melody. Names in the unusual, White sounding first name condition are ranked in popularity from 52nd most popular to 942nd most popular for females in the United States (Social Security, 2006). The unusual, African American sounding first names include: Ja’Avery, DeShawna, and LaMelody. The prefixes ja, de, and la were used to make the names sound distinctly African American (Dinwiddie-Boyd, 1990). The resumes depicted both African American and White applicants with each of the names listed to allow us to distinguish between applicant race effects and applicant name effects.

Participants completed two word-fragment completion tasks in order to measure if African American stereotypes or the construct of race had been activated through reviewing the resume materials. Participants completed a questionnaire for hiring decisions which included ratings of job related characteristics, recommendations for hire, and amount awarded for starting salary. Participants rated the job applicant on ten job related characteristics including reliability, work ethic, and motivation (See Table 2 for full list of job related characteristics) on a 5-point Likert scale (1 = Very Low, 5 = Very High).
Participants indicated whether they would recommend the job applicant for hire on a 4-point ordinal scale (Do not recommend, Recommend with reservations, Recommend, Strongly recommend), and recommended an hourly starting salary for the applicant ranging from $10.50 to $25.00 per hour. The purpose of the large range in possible salary was to make awarded salary a more ambiguous measure. Both half and whole dollar amounts were included in the salary range in order to make salient that both half and whole dollar amounts could be considered. Participants also completed manipulation checks and provided demographic information including race, gender, age, major, and profession.

**Race Activation.** The current research utilized the word-fragment completion task used by Plant, Peruche, and Butz (2005). Plant and colleagues found that participants who received more trials of shooting training came to inhibit the target’s race because of its lack of predictive value and completed fewer word fragments with letters that made race related words ($M = 1.30, SD = .95$) than either participants who received fewer trials of shooting training ($M = 2.00, SD = 1.15$) or participants in the control condition ($M = 1.97, SD = 1.32$). Ten word fragments related to racial categories were provided (R__E, DA__, WH__) which can be completed with words related to race (RACE, DARK, WHITE) or words unrelated to race (RULE, DAMP, WHOLE). The complete list of words includes black, minority, white, African, race, Harlem, ethnic, dark, racial, and colored. Ten filler word fragments were also included. Participants were instructed to complete the word fragments as quickly as possible with the first word that comes to mind.
**Stereotype Activation.** The current research utilized the word-fragment completion task used by Steele and Aronson (1995). Steele and Aronson found that when performance on a task was described as diagnostic of abilities, African American participants ($M = 3.70$, $SD = 1.10$) completed more word fragments with letters that made stereotype related words than did White participants ($M = 1.40$, $SD = 1.20$). The word fragments can be completed with either stereotypical words or non-stereotypical words. The complete list of words includes race, lazy, black, poor, class, brother, white, minority, welfare, color, and token. If participants complete the word fragments with words stereotypical of African Americans, then stereotype activation may be the underlying effect of applicant race or first name on hirability. Three words (minority, black, white) were featured in both the race activation measure and the stereotype activation measure. These words were separated from the measures and completed at the end as to not prime participants by exposure to the same word more than once.

**Job Related Characteristics.** Job related characteristics were rated on a 5-point Likert scale (1 = Very Low, 5 = Very High). The characteristics include: reliability, intellectual ability, ability to work with others, work ethic, maturity, responsibility, punctuality, motivation, potential in field, and ability to follow directions. Cronbach’s alpha was computed for ratings of the 10 job related characteristics. It was found that the ratings of job related characteristics formed a consistent scale, Alpha = .94. The one factor solution was verified via an exploratory factor analysis. Because ratings of job related characteristics form a consistent scale, the mean was computed for the 10 ratings to create one average rating for job related characteristics to be used in analyses.

**Procedure**
This research was conducted online using the Qualtrics survey system. Participation in the research could have been conducted anywhere with internet access. Participants were randomly assigned to review one candidate’s application materials which included an application for employment and resume. Participants first read the informed consent form and provided their consent to participate in the research. Participants were instructed to carefully review an application for employment and a resume, and then make recommendations as a hiring manager would. Participants then reviewed the application for employment and resume to which they were randomly assigned. Upon reviewing the resume materials, participants completed word-fragment completion measures for race and stereotype activation. The word-fragment completion measures were followed by a questionnaire for hiring decisions which included ratings of job related characteristics, recommendations for hire, and amount awarded for starting salary. Participants then completed manipulation checks and provided demographic information. Throughout the online survey, participants were unable to go back to previous questions or change responses. Upon finishing the study, participants were thanked for their participation and provided with information on how to obtain credit for participation, if applicable.

CHAPTER 3

RESULTS

It was hypothesized that there would be a main effect of name type in which applicants with unusual, African American sounding first names would be rated lower on job related characteristics, recommended for hire less often, and awarded a lower starting salary than applicants with unusual, white sounding names and applicants with common
names. It was also hypothesized that there would be a main effect of applicant race in which African American applicants would be rated lower on job related characteristics, recommended for hire less often, and awarded lower starting salary than white applicants. It was also hypothesized that there would be an interaction between name type and applicant race in which African American applicants with unusual, African American sounding first names would be rated lower on job related characteristics, recommended for hire less often, and awarded lower starting salary than white applicants and African American applicants with other name types. Finally, we had exploratory hypotheses that the combinations of applicant race and applicant name might differentially activate the concepts of race or stereotypes.

**Preliminary Analyses**

Of the 205 participants, 13 were non-student professionals. Independent samples t-tests were conducted to explore any potential differences between professionals and students. There were no significant differences, all \( p > .05 \). See Table 1 for means of job related characteristics, hiring recommendations, and awarded salary for professionals and students.

Because the job applicants were represented as psychology majors, participants were separated into either psychology majors or non-psychology majors using demographic information. Independent samples t-tests were conducted to explore any potential effects of participant major on the DVs. There were no significant differences between psychology majors and non-psychology majors in ratings of job related characteristics or recommendations for hire, \( p > .05 \). There was a marginally significant difference in awarded salary, \( t(184) = 1.93, p = .06 \). Psychology majors (\( M = \)
16.41, SD = 3.14) tended to award higher salaries to the job applicants than did non-psychology majors (M = 15.22, SD = 3.65).

Differences within each name type group (Common, White-sounding Unusual, African American-sounding Unusual) were analyzed by the specific applicant name (e.g., Avery, Shawna, and Melody within the White-sounding Unusual category). There were no significant differences between specific names within each name group, all p’s > .05. Therefore, the specific applicant names within each name group were collapsed for hypothesis testing.

Eighty-three percent of participants correctly identified applicant race, and 37% of participants correctly identified applicant name. Those participants who misidentified applicant race were removed from the analyses. The analyses were conducted using only those participants who correctly indicated the applicant’s race in the manipulation check (N = 171). Not enough participants correctly identified applicant name to remove those who misidentified name type from the analyses. Therefore all participants in the analyses correctly identified the applicant’s race, but the majority of participants in the analyses did not correctly identify the applicant’s specific name. To test the primary hypothesized relationships between applicant race and applicant name type on ratings of job related characteristics, recommendations for hire, and recommended starting salary, a series of ANOVA models was conducted. The results are organized by dependent variable.

Secondary analyses included the effects of participant race and participant gender on employment decisions, and analyses of race and stereotype activation. To gain a full understanding of the current research, it was necessary to include participant characteristics in the ANOVA models for the analyses of the dependent variables. Based
upon the strength of ingroup/outgroup effects, participant gender and participant race were examined. Because all job applicants were female, participant gender was included in the model to examine potential ingroup/outgroup effects. Participant race was also included because the current study manipulated applicant race, and it is known that there is a strong preference for racial ingroup members (Clark, 2001).

**Job Related Characteristics**

To test whether applicant characteristics affected ratings of job related characteristics, a 2 (Applicant Race: Black vs. White) X 3 (Type of Name: Common, White sounding Unusual, African American sounding Unusual) factorial ANOVA was conducted. The analysis yielded a nonsignificant main effect of applicant race, $F(1, 164) = .03, p > .05$, a nonsignificant main effect of name type, $F(2, 164) = .17, p > .05$, and a nonsignificant interaction between applicant race and name type, $F(2, 164) = 1.18, p > .05$. All means and standard deviations for job related characteristics are reported in Table 2.

In order to further explore participants’ ratings of job related characteristics, participant gender was added to the model. A 2 (Applicant Race: Black vs. White) X 3 (Type of Name: Common, White sounding Unusual, African American sounding Unusual) X 2 (Participant Gender: Male vs. Female) factorial ANOVA was conducted. The main effect for participant gender was nonsignificant, $F(1, 161) = .84, p > .05$. There were no significant interactions, $p$’s $> .05$. Next, participant race was added to the model. A 2 (Applicant Race: Black vs. White) X 3 (Type of Name: Common, White sounding Unusual, African American sounding Unusual) X 2 (Participant Race: Black vs. White)
factorial ANOVA was conducted. The main effect for participant race was nonsignificant, $F(1, 162) = .03, p > .05$. There were no significant interactions, $p$’s > .05.

**Recommendation for Hire**

To test whether applicant characteristics affected the hiring recommendation a 2 (Applicant Race: Black vs. White) X 3 (Type of Name: Common, White sounding Unusual, African American sounding Unusual) factorial ANOVA was conducted1. Neither the main effect for applicant race, $F(1, 169) = .90, p > .05$ nor the main effect for name type, $F(2, 169) = 1.62, p > .05$ were statistically significant. The interaction between applicant race and name type was also nonsignificant, $F(2, 169) = 1.60, p > .05$. See Table 3 for frequencies of hiring recommendations for African American and White applicants across name type.

In order to further explore participants’ recommendations for hire, participant gender was added to the model. A 2 (Applicant Race: Black vs. White) X 3 (Type of Name: Common, White sounding Unusual, African American sounding Unusual) X 2 (Participant Gender: Male vs. Female) factorial ANOVA was conducted. There was a significant main effect of participant gender, $F(1,166) = 3.96, p = .049$. Male participants ($M = 2.98, SD = .55$) indicated lower recommendations for hire for the job applicants

1 The data for recommendations for hire is ordinal, that is, the responses have a meaningful order. Although the data is ordinal rather than interval, ANOVAs were chosen to analyze the data. The use of an ANOVA is generally acceptable; however, it is important to understand that a recommendation may be higher or lower on the spectrum, but differences cannot be interpreted as a quantity.
than did female participants ($M = 3.18, SD = .59$). There were neither statistically significant 2-way interactions between participant gender and applicant race or applicant name, nor a statistically significant 3-way interaction between participant gender, applicant race, and applicant name. See Table 4 for frequencies of hiring recommendations for African American and White applicants across participant gender.

Participant race was added to the model. A 2 (Applicant Race: Black vs. White) X 3 (Type of Name: Common, White sounding Unusual, African American sounding Unusual) X 2 (Participant Race: Black vs. White) factorial ANOVA was conducted. The main effect for participant race was nonsignificant, $F(1, 167) = .07, p > .05$. All interactions were also nonsignificant, $p$’s $> .05$.

**Awarded Salary**

The starting salaries awarded to the applicants ranged from $10.50-$25.00 per hour ($M = $15.49, $SD = 3.68$). To test whether applicant characteristics affected amount awarded for starting salary, a 2 (Applicant Race: Black vs. White) X 3 (Type of Name: Common, White sounding Unusual, African American sounding Unusual) factorial ANOVA was conducted. The analysis yielded a nonsignificant main effect of applicant race, $F(1, 171) = .13, p > .05$, a nonsignificant main effect of name type, $F(2, 171) = .43, p > .05$, and a nonsignificant interaction between applicant race and name type, $F(2, 171) = .54, p > .05$.

In order to further explore amount awarded for starting salary, participant gender was added to the model. A 2 (Applicant Race: Black vs. White) X 3 (Type of Name: Common, White sounding Unusual, African American sounding Unusual) X 2 (Participant Gender: Male vs. Female) factorial ANOVA was used to analyze the data.
The main effect for participant gender, $F(1, 168) = .09, p > .05$ was nonsignificant. There was a significant interaction between applicant race and participant gender, $F(1, 168) = 4.03, p = .046$. Follow up simple effects testing showed marginally significant trends for male participants to award a lower salary to Black applicants ($M = 14.50, SD = 3.68$) than to White applicants ($M = 16.19, SD = 3.65$), $t(62) = -1.84, p = .07$. Female participants did not differ in the salaries they awarded to Black applicants ($M = 15.87, SD = 3.40$) and White applicants ($M = 15.20, SD = 3.88$), $t(102) = .94, p = .35$. Follow up simple effects testing also showed marginally significant trends for participants who viewed the resume of a Black job applicant. For Black applicants, the salary awarded by male participants ($M = 14.50, SD = 3.68$) was lower than the salary awarded by female participants ($M = 15.87, SD = 3.40$), $t(83) = -1.75, p = .08$. Male ($M = 16.19, SD = 3.65$) and female ($M = 15.20, SD = 3.88$) participants did not differ in the salaries awarded to White applicants, $t(81) = 1.15, p = .25$.

Participant race was added to the model. A 2 ( Applicant Race: Black vs. White) X 3 (Type of Name: Common, White sounding Unusual, African American sounding Unusual) X 2 (Participant Race: Black vs. White) factorial ANOVA was conducted. The main effect for participant race was nonsignificant, $F(1, 169) = .70, p > .05$. All interactions were also nonsignificant, $p$’s $> .05$.

**Stereotype and Race Activation**

The correlations between stereotype activation and race activation were weak ($r = .12$); therefore, separate ANOVAs were run rather than one MANOVA. To test whether applicant characteristics affected stereotype activation a 2 ( Applicant Race: Black vs. White) X 3 (Type of Name: Common, White sounding Unusual, African American
sounding Unusual) factorial ANOVA was conducted. There was not a significant main
effect of applicant race, $F(1, 171) = .07, p > .05$. There also was not a significant main
effect of name type, $F(2, 171) = .62, p > .05$. There was a marginally significant
interaction between applicant race and name type, $F(2, 171) = 2.94, p = .056$. Follow up
simple effects testing showed that participants who viewed the resume of the Black job
applicant completed more word stems with stereotypical words if the applicant name type
was common ($M = 2.10, SD = 1.21$) than if the applicant name type was unusual, African
American sounding ($M = 1.55, SD = .89$), $p = .049$. Participants also completed more
word stems with stereotypical words if the applicant name type was unusual, White
sounding ($M = 2.25, SD = 1.11$) than if the applicant name type was unusual, African
American sounding ($M = 1.55, SD = .89$), $p = .02$. There were not significant differences
of stereotype activation for participants who viewed the resume of the White job
applicant, $p$’s > .05.

To test whether applicant characteristics affected race activation a 2 (Applicant
Race: Black vs. White) X 3 (Type of Name: Common, White sounding Unusual, African
American sounding Unusual) factorial ANOVA was conducted. Neither the main effect
for applicant race, $F(1, 171) = .31, p > .05$ nor the main effect for name type, $F(2, 171) =
.35, p > .05$ were statistically significant. The interaction between applicant race and
name type was also nonsignificant, $F(2, 171) = .95, p > .05$.

CHAPTER 4

DISCUSSION

The findings from the current study provide partial support for the hypotheses as
well as unexpected results. Based upon the negative stereotype of African Americans, it
was predicted that African American job applicants and applicants with unusual, African American sounding names would receive lower ratings for job related characteristics than White job applicants and applicants with the other name types. However, the results did not provide support for this hypothesis. There were no statistical differences for ratings of job related characteristics by applicant race or applicant name type. The findings may not have supported the hypothesis because stereotypical effects are more likely to occur in ambiguous situations than in nonambiguous situations (e.g., Darley & Gross, 1983; Dovidio & Gaertner, 2000). All of the job applicants were represented as high achieving college graduates. Thus, the descriptive resume may have provided a nonambiguous situation for the participants. In this context, the decision to rate the job applicants high in job related characteristics likely reflects conscious processing of the applicants’ positive attributes as stated in the resume. High ratings of applicant job related characteristics result from conscious processing of the applicants’ achievements rather than stereotypical biases. If the job applicants’ resumes had provided more ambiguous information, participants’ ratings of job related characteristics may have reflected implicit, stereotypical biases.

African American applicants are given more negative hiring recommendations (Ford et al., 2004), and in field studies African American applicants have been chosen for hire less often than White applicants (Pager et al., 2009). Because of these findings, it was hypothesized that the African American applicant would receive more negative hiring recommendations than the White applicant. The current findings did not support this hypothesis. Again, the current findings could be a reflection of the nonambiguous situation. As with the ratings of job related characteristics, participants’ decision to
recommend all job applicants for the position may have been reached through conscious processing. Because the job applicants were described as highly qualified, participants recommended the applicants for the job. If the hiring decision had been based on a more ambiguous situation, stereotypical biases may have emerged. In real world situations, evaluators have a choice between applicants while making hiring decisions, rather than rating one applicant. Implicit biases may be more likely to affect hiring decisions when a choice between two or more applicants must be made. Although real world applicants may all be highly qualified, only one applicant may be chosen for hire. Implicit biases may emerge more easily in real world situations than in the simulation of the current research due to the forced choice.

Because it has been shown that uniqueness of first name and unconventional spelling of first name affect the hiring decision (Cotton et al, 2008; Mehrabian, 2001), it was also hypothesized that applicants with unusual African American sounding names would be recommended for hire less often than applicants with common or unusual White sounding names. The current findings did not support this hypothesis. Although entirely speculative, the current findings may have been influenced by the geographic region of the study. According to the 2010 U.S. Census, African Americans consist of 13.6% of the total population of the United States. Of the African American population, 55% reside in the southern states, especially the southeastern region (See Figure 1). The current study was conducted in the southeastern United States, and the higher population of African Americans in this region may have affected results. Because of the higher proportion of African Americans, participants in this region may have more contact with African Americans and be more accustomed to unusual, African American sounding
names than would people from other regions of the country. This may have resulted in participants from the southeast perceiving the African American names as less unusual than participants from other areas of the country would.

While it was not hypothesized, there was a main effect of participant gender. Male participants recommended job applicants for hire less often than female participants. Based upon the current study’s use of all female job applicants, these findings are likely due to ingroup/outgroup effects. There is a tendency for members of the ingroup to be seen as better than the outgroup (Aronson, 2012). People naturally favor the group to which they belong. The female job applicants are members of the male participants’ outgroup; therefore, they were evaluated less positively than ingroup members would have been. The female job applicants are perceived as members of the female participants’ ingroup. As a reflection of this, the female participants recommended the job applicants for hire more often than did the male participants. Previous research supports these findings; both male and female participants recommend applicants of their own gender for hiring (Levin, Rouwenhorst, & Trisko, 2005). Female decision makers recommend female job applicants for hire more often than do male decision makers (Gorman, 2005).

Based upon the observed disparity in income between African American families and White families (U.S. Census Bureau, 2013), it was predicted that African American applicants would be awarded a lower salary than White applicants. It was also predicted that applicants with unusual, African American sounding names would receive a lower salary than applicants with common names or unusual, White sounding names. While the findings did not support the hypothesis of name type, they did provide further evidence
for the effect of applicant race on awarded salary. There was an interaction between applicant race and participant gender. Trends showed that male participants awarded a lower salary to African American applicants than to White applicants. Trends also showed that when participants viewed the resume of an African American applicant, male participants awarded a lower salary to the African American applicant than did female participants. These findings have real life pertinence as males are represented in managerial positions more often than females (Government Accountability Office, 2010).

The selection of a starting salary for the job applicant is highly subjective. Participants could award the applicant with any salary within the given range. Because there is less perceived social pressure to award a certain salary to the applicant, it seems as though the awarded salary would best reflect the participants’ evaluations of the job applicant. Research shows that when undecided, people are more influenced by implicit processing of information than explicit processing of information (Galdi, Gawronski, Arcuri, & Friese, 2012). Therefore, when undecided, people are more influenced by automatic processing than by conscious thought. It has been shown that automatic negative biases can affect hiring discrimination even when stereotypes are not endorsed explicitly (Agerström & Rooth, 2011). Applicant race may have affected awarded salary but not recommendation for hire because participants may hold implicit negative biases towards African Americans without endorsing these biases explicitly. Because the selection of awarded salary is more subjective and provides the participants with more choice, implicit negative biases can easily emerge. However, the selection of recommendation for hire provides the participants with set choices in a nonambiguous
Participants may have perceived a social pressure to recommend the applicants for hire because of their strong qualifications, thus inhibiting any explicit negative biases.

Measures of stereotype activation and race activation were also included to identify potential mediating variables of any observed effects of applicant race and name. Applicant characteristics had no effect on race activation; however, there was a marginally significant interaction between applicant race and applicant name type on stereotype activation. Participants who viewed the resume of the African American applicant completed more word stems with stereotypical words if the applicant had a common name or an unusual, White sounding name than if the applicant had an unusual, African American name. The discrepancy between expected first name and observed first name of the African American applicants may have made the African American stereotype more salient.

Limitations

Most participants had something in common with the applicants, being from Georgia Southern University. Some participants also had an interest in psychology in common with the applicants. This is a limitation and could be partly responsible for the null findings. These likenesses likely caused participants to view the applicants as ingroup members. Because ingroup members are evaluated more positively than outgroup members, participants may have given more positive evaluations to the applicants than they would have given to applicants from an outgroup. Effects should be greater for general outgroup members, which would allow race to become more salient.

As described in the primary analyses section, the marginally significant differences between salary awarded by psychology majors and salary awarded by non-psychology...
majors provides evidence that participants may have evaluated applicants more positively when viewing them as ingroup members. Based upon the more positive evaluations from psychology majors to applicants viewed as ingroup members and the probability that students are more likely to identify with institution than major, it can be assumed that identification as a Georgia Southern student is more salient and produces stronger ingroup associations. These affiliations with the applicant likely caused the applicant to be perceived as an ingroup member, making applicant race less salient and resulting in higher evaluations and more positive affect.

One limitation of the current study may have been that the study was conducted online. Although the instructions motivated participants to pay attention and for many participants the completion of this research partially fulfilled course credit, participants may not have given full attention to the participant race or name on the resume. Only 33% of participants indicated both applicant race and applicant name correctly on the manipulation checks. To account for this, the analyses only utilized those participants who correctly identified the applicant race. Because a large majority of participants could not remember the applicant’s specific name, the name was not salient enough to have an effect on evaluations. Future research should make applicant name more salient, perhaps by making the font of the name on the resume larger or by increasing the African American stereotypicality or unusualness of the names.

The use of mostly college students as participants may also be a limitation. While there were community members in the sample, the majority of participants were college students (94%). If a higher proportion of community members had participated, the study would better reflect real-world situations. The current research could be replicated in the
future using actual hiring managers to provide greater ecological validity. Another limitation for the current study may be the geographic location of the study. Using a subject pool from a region with a higher percentage of African Americans in the population can skew results when measuring attitudes towards African Americans. Participants may have more exposure to unusual, African American sounding names than people residing in other areas of the country, thus reducing how unusual these names seem.

**Implications and Future Directions**

While participant gender effects were not hypothesized, the findings of the current research implicate the importance of evaluator gender in hiring decisions. Results showed that males recommended female job applicants for hire less often than did females regardless of applicant race or name type. These findings are consistent with ingroup/outgroup theory, in which members of one’s own ingroup are evaluated more positively than members of the outgroup (Aronson, 2012). These findings have real world implications for the labor market. Men still occupy many managerial positions, and their reluctance to hire female applicants has a large impact on gender inequality in the workforce. Gender also affected awarded salary. Male participants awarded a lower salary to African American applicants than to White applicants. When male and female participants evaluated the African American applicant, males awarded lower salaries than did females. Because men are represented more often in managerial positions, these findings have real world pertinence. Equally qualified African American applicants are awarded lower salaries than White applicants perpetuating the income disparity among African Americans and Whites.
Future directions should include increasing the African American stereotypicality or unusualness of the names in order to make applicant name more salient. Pilot testing should be utilized to collect ratings for unusualness of names. This would ensure that the applicant names are perceived as unusual to the participant population. A manipulation check should be added for commonness of name to ensure that participants perceive the name type manipulation as intended. Future directions should also include affective measures of participants’ evaluations of applicant name (e.g., good vs. bad). Through measuring participants’ evaluations of different names, affective responses to name type can be analyzed. Future research could increase the subjectivity of the awarded salary measure by providing no range for the participants. Without a salary range, the measure would be highly subjective and implicit biases may emerge to a greater extent. Future research should examine male job applicants. A possible explanation for null results may have been the current study’s use of female job applicants. In general, African American females are viewed less stereotypically than are African American males (e.g., Plant, Goplen, & Kunstman, 2011; Navarrete, McDonald, Molina, & Sidanius, 2010). Through the use of male applicants, there may be increased stereotype activation and differences in hiring evaluations.

Future directions for this line of research should include expanding the design to a within subjects design. Participants could be instructed to evaluate resumes for multiple applicants and choose only one applicant for hire. This would more closely reflect actual hiring practices in which many qualified applicants may apply for a position, but only one can be chosen for hire. By requiring participants to make a forced choice, implicit biases may emerge. The experimental design could also be expanded to include field
studies using actual hiring managers as participants. Findings of field studies are more applicable to the current day real world labor market. Field studies could include applying to open positions with fictional resumes that are varied only in applicant race and applicant name type. Past field studies have manipulated applicant race and found significant results (e.g., Bertrand & Mullainathan, 2004).

Although many of the proposed hypotheses were not supported, the current study yielded interesting findings in respect to the relationship between participant gender and hiring decisions as well as the factors which affect stereotype activation. Results showed that male participants recommended applicants for hire less often than female participants. These results reflect the salience of the ingroup and are highly applicable to real world hiring decisions. Results showed that participant gender interacted with applicant race when awarding salary. Male participants awarded lower salaries to African American applicants than did female participants, and male participants awarded lower salaries to African American applicants than White applicants. Because awarded salary is the most subjective measure, implicit negative biases emerged more easily. These findings are important to real life hiring practices because of the income disparity between African Americans and Whites. Results also showed that there were higher levels of stereotype activation when African American applicants had common or unusual White sounding names than when they had African American sounding names. The contrast between what name type was expected of the applicant and the actual name of the applicant likely increased the salience of applicant race. Future research should continue to investigate the effects of applicant race, applicant name type, and participant
gender on hiring decisions. In order to reduce the hiring disparity between African Americans and Whites, we must first identify and understand the contributing factors.
REFERENCES


Social Security (2012). Top names over the last 100 years. Social Security Administration.


U.S. Census Bureau (2013). Mean income received by each fifth and top 5 percent of families. *Income.*


Table 1

*Mean ratings of job related characteristics, hiring recommendations, and awarded salary for professionals and students*

<table>
<thead>
<tr>
<th></th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Job Related Characteristics</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Professional</td>
<td>3.90</td>
<td>0.63</td>
</tr>
<tr>
<td>Student</td>
<td>3.90</td>
<td>0.56</td>
</tr>
<tr>
<td><strong>Hiring Recommendations</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Professional</td>
<td>3.31</td>
<td>0.63</td>
</tr>
<tr>
<td>Student</td>
<td>3.05</td>
<td>0.61</td>
</tr>
<tr>
<td><strong>Salary</strong></td>
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<td></td>
</tr>
<tr>
<td>Professional</td>
<td>15.31</td>
<td>4.32</td>
</tr>
<tr>
<td>Student</td>
<td>15.50</td>
<td>3.64</td>
</tr>
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</table>
### Table 2

Mean ratings of job related characteristics for African American and White applicants across name type

<table>
<thead>
<tr>
<th>Job Related Characteristics</th>
<th>Common Name</th>
<th>Unusual, White Name</th>
<th>Unusual, African American Name</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$M$</td>
<td>$SD$</td>
<td>$M$</td>
</tr>
<tr>
<td><strong>Reliability</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Black</td>
<td>3.91</td>
<td>0.70</td>
<td>3.76</td>
</tr>
<tr>
<td>White</td>
<td>3.76</td>
<td>0.55</td>
<td>3.64</td>
</tr>
<tr>
<td><strong>Intellectual Ability</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Black</td>
<td>4.17</td>
<td>0.66</td>
<td>3.97</td>
</tr>
<tr>
<td>White</td>
<td>4.03</td>
<td>0.52</td>
<td>3.92</td>
</tr>
<tr>
<td><strong>Ability to Work with Others</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Black</td>
<td>3.94</td>
<td>0.64</td>
<td>3.78</td>
</tr>
<tr>
<td>White</td>
<td>3.71</td>
<td>0.58</td>
<td>3.72</td>
</tr>
<tr>
<td><strong>Work Ethic</strong></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Black</td>
<td>4.11</td>
<td>0.68</td>
<td>3.72</td>
</tr>
<tr>
<td>White</td>
<td>3.88</td>
<td>0.69</td>
<td>3.94</td>
</tr>
<tr>
<td><strong>Maturity</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Black</td>
<td>3.97</td>
<td>0.71</td>
<td>3.73</td>
</tr>
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<td>White</td>
<td>3.91</td>
<td>0.71</td>
<td>3.86</td>
</tr>
<tr>
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<td></td>
<td></td>
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<tr>
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<td>4.11</td>
<td>0.68</td>
<td>3.94</td>
</tr>
<tr>
<td>White</td>
<td>3.88</td>
<td>0.70</td>
<td>3.89</td>
</tr>
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<td><strong>Punctuality</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
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<td>3.89</td>
<td>0.68</td>
<td>3.72</td>
</tr>
<tr>
<td>White</td>
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<td>0.71</td>
<td>3.67</td>
</tr>
<tr>
<td><strong>Motivation</strong></td>
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<td></td>
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<tr>
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<td>3.97</td>
<td>0.71</td>
<td>3.91</td>
</tr>
<tr>
<td>White</td>
<td>3.85</td>
<td>0.61</td>
<td>4.03</td>
</tr>
<tr>
<td><strong>Potential</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Black</td>
<td>4.17</td>
<td>0.66</td>
<td>3.88</td>
</tr>
<tr>
<td>White</td>
<td>4.00</td>
<td>0.61</td>
<td>3.97</td>
</tr>
<tr>
<td><strong>Ability to Follow Directions</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Black</td>
<td>4.06</td>
<td>0.64</td>
<td>3.82</td>
</tr>
<tr>
<td>White</td>
<td>4.06</td>
<td>0.66</td>
<td>3.94</td>
</tr>
<tr>
<td><strong>Average Across all Traits</strong></td>
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<td></td>
</tr>
<tr>
<td>Black</td>
<td>4.03</td>
<td>0.68</td>
<td>3.82</td>
</tr>
<tr>
<td>White</td>
<td>3.86</td>
<td>0.63</td>
<td>3.86</td>
</tr>
</tbody>
</table>
Table 3

*Hiring recommendations for African American applicants and White applicants across applicant name type*

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>African American</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Common</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Strongly Recommend</td>
<td>10</td>
<td>29%</td>
</tr>
<tr>
<td>Recommend</td>
<td>19</td>
<td>54%</td>
</tr>
<tr>
<td>Recommend with</td>
<td>5</td>
<td>14%</td>
</tr>
<tr>
<td>Reservations</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Do not Recommend</td>
<td>1</td>
<td>3%</td>
</tr>
<tr>
<td>Unusual, White</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Strongly Recommend</td>
<td>10</td>
<td>30%</td>
</tr>
<tr>
<td>Recommend</td>
<td>21</td>
<td>64%</td>
</tr>
<tr>
<td>Recommend with</td>
<td>2</td>
<td>6%</td>
</tr>
<tr>
<td>Reservations</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Do not Recommend</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>Unusual, African American</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Strongly Recommend</td>
<td>4</td>
<td>17%</td>
</tr>
<tr>
<td>Recommend</td>
<td>24</td>
<td>71%</td>
</tr>
<tr>
<td>Recommend with</td>
<td>6</td>
<td>12%</td>
</tr>
<tr>
<td>Reservations</td>
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<tr>
<td>Do not Recommend</td>
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<td>0%</td>
</tr>
<tr>
<td><strong>White</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Common</td>
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<tr>
<td>Strongly Recommend</td>
<td>8</td>
<td>23%</td>
</tr>
<tr>
<td>Recommend</td>
<td>22</td>
<td>65%</td>
</tr>
<tr>
<td>Recommend with</td>
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<td>12%</td>
</tr>
<tr>
<td>Reservations</td>
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<td></td>
</tr>
<tr>
<td>Do not Recommend</td>
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<td>0%</td>
</tr>
<tr>
<td>Unusual, White</td>
<td></td>
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</tr>
<tr>
<td>Strongly Recommend</td>
<td>6</td>
<td>17%</td>
</tr>
<tr>
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<td>25</td>
<td>69%</td>
</tr>
<tr>
<td>Recommend with</td>
<td>4</td>
<td>11%</td>
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<tr>
<td>Reservations</td>
<td></td>
<td></td>
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<tr>
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<td>3%</td>
</tr>
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<td>Unusual, African American</td>
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<tr>
<td>Strongly Recommend</td>
<td>5</td>
<td>15%</td>
</tr>
<tr>
<td>Recommend</td>
<td>22</td>
<td>67%</td>
</tr>
<tr>
<td>Recommend with</td>
<td>4</td>
<td>12%</td>
</tr>
<tr>
<td>Reservations</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Do not Recommend</td>
<td>0</td>
<td>0%</td>
</tr>
</tbody>
</table>
Table 4

*Hiring recommendations for African American applicants and White applicants across participant gender*

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percent</th>
</tr>
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<tbody>
<tr>
<td><strong>African American</strong></td>
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</tr>
<tr>
<td><strong>Male</strong></td>
<td></td>
<td></td>
</tr>
<tr>
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<td>10%</td>
</tr>
<tr>
<td>Recommend</td>
<td>31</td>
<td>75%</td>
</tr>
<tr>
<td>Recommend with Reservations</td>
<td>6</td>
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</tr>
<tr>
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<td>0</td>
<td>0%</td>
</tr>
<tr>
<td><strong>Female</strong></td>
<td></td>
<td></td>
</tr>
<tr>
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<td>20</td>
<td>33%</td>
</tr>
<tr>
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<td>32</td>
<td>53%</td>
</tr>
<tr>
<td>Recommend with Reservations</td>
<td>7</td>
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</tr>
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<td>1</td>
<td>2%</td>
</tr>
<tr>
<td><strong>White</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Male</strong></td>
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<td></td>
</tr>
<tr>
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<td>18%</td>
</tr>
<tr>
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<td>66%</td>
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<td>0%</td>
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<tr>
<td><strong>Female</strong></td>
<td></td>
<td></td>
</tr>
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<td>19%</td>
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<tr>
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<td>8%</td>
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<tr>
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<td>1</td>
<td>2%</td>
</tr>
</tbody>
</table>
Figure 1. African American population as a percent of country population: 2010 (U.S. Census Bureau, 2011)