Ethnicity, qualifications, and peer influence: Relative effects in a simulated hiring decision

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ETHNICITY, QUALIFICATIONS, AND PEER INFLUENCE: RELATIVE EFFECTS IN A SIMULATED HIRING DECISION

by

Victoria Lynn Kerns

Psychology - B.A., Ohio University, 2013

A Thesis Submitted in Partial Fulfillment of the Requirements for the Master of Science in Experimental Psychology

In

The Department of Psychology
Seton Hall University

May, 2015
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Dedication

For my husband, who sacrificed so much to support my dreams.

I am more grateful for you every day.
Acknowledgements

I am very grateful for my parents, Jeff and Barb James, who encouraged me to do what I love and supported me in many ways while I found it. I wouldn’t be where I am now if my panicked decision to switch majors as an undergraduate student hadn’t fallen on such understanding ears.

My husband, Evan Kerns, has also been a source of endless patience and encouragement. He has suffered through the countless moments of doubt and exhaustion that accompany graduate school, and always offered the perfect advice and reassurance. I can’t imagine doing this with anyone else by my side.

To all my fellow graduate students, you have inspired me in more ways than you know. The class of 2014 showed me that one can not only survive, but thrive in this program, and never tired of my endless questions about their every experience. The class of 2015 supported me from beginning to end, as we hyperventilated over deadlines and commiserated about difficult classes. The class of 2016 never let me forget to have fun every now and then.

My committee was exceedingly patient as I turned in drafts dangerously close to deadlines, asked for letters of recommendation, and sucked up precious time at the busiest portions of the semester. Your tailored feedback is immensely appreciated.

Finally, my advisor, Dr. Susan Teague, is the person I would be lost without. She carefully and humorously edited draft after draft, reworking anything I was concerned about from sentences to entire sections. She offered everything from experiment design suggestions to advice on how to approach Ph.D. applications. I’ve never met anyone more appropriately optimistic. Thank you for your guidance, opinions, and support.
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Abstract

Past research has examined the effects observed when résumés varying only in a name or a particular characteristic that is often stereotyped against receive differential feedback (see, for example, Derous et al., 2009). The current study sought to build on that design, adding the influence of peers as a possible way to reduce this discrimination in hiring.

Participants viewed two résumés varying in qualifications, one belonging to a seemingly Anglo candidate and one belonging to a seemingly Arab candidate. They chose a candidate for the position in the presence of peer influence which favored one candidate over another, or peer influence was absent. Finally, they rated each candidate on their qualifications and completed two assessments designed to measure prejudice. It was predicted that the Arab candidate would receive lower average ratings and be chosen less frequently for the position.

There was a robust, significant effect of qualifications on both candidate selection and rating, as well as a significant effect of peer influence on candidate selection when the Arab candidate was favored. These data indicate a possible way to reduce discrimination in hiring, particularly through encouraging employers to carefully consider the qualifications of applicants. Several suggestions for improvement upon the current design, directions for future research, and explanations of the observed results are included.

*Keywords:* hiring discrimination, ethnicity, Arab, qualifications
Introduction

Social psychologists have been examining prejudice in its many forms for as long as it has existed as a scientific discipline, but one of the types of prejudice studied first was that against racial and ethnic outgroups. At the turn of the 20th century, Thomas (1904) was attempting to explain the psychology behind why people hold prejudiced beliefs against other groups. Although his assessment that “race-prejudice is, after all, very impermanent, of no more stability, perhaps, than fashions” was far from the mark, the fact that racial prejudice was being examined in a rudimentary scientific fashion at this time shows its importance as a question of the human condition. Literature from the fields of racial and ethnic discrimination, hiring discrimination, and conformity has been analyzed to present a comprehensive review of where the scientific body of knowledge currently stands on each topic as well as to provide the context into which the current study fits.

Racial and Ethnic Discrimination

In 1976, one psychologist was looking at how readily people associate certain positive or negative characteristics with black and white individuals. Duncan (1976) showed that people not only found it typically easier to connect positive characteristics with white individuals, but they also tended to connect negative characteristics more readily with black individuals. Participants rated the behaviors of two confederates whom they viewed on a closed-circuit television. The people being watched and rated were either both black, both white, or one black and one white confederate. The confederates then got into an argument. Afterward, participants were asked to describe what they had seen. When the black individual was the perpetrator and the white individual was the victim, participants rated the behavior as violent 75% of the time, as opposed
to 17% when the roles were reversed. When the perpetrator was white and the victim was black, participants classified the behavior as horseplay 42% of the time, as opposed to 6% in the reversed roles.

Later, a study asking the same question in a less obvious way found similar but slightly less overtly discriminatory results. Gaertner and McLaughlin (1983) showed that white participants were less likely to associate positive characteristics with black individuals than with white individuals. However, they did not tend to associate negative characteristics more readily with black individuals.

When the task involved more implicit than explicit associations, however, white participants indicated an impulse to relate negative characteristics, particularly violence, with black individuals. Participants were primed with the faces of either black or white individuals and then asked to identify a target as either a handgun or a hand tool, and race had a clear effect. Participants who were primed with black faces were faster, on average, than participants primed with white faces to identify guns. It also seemed that participants primed in this way were more likely to mistakenly classify a hand tool as a handgun (Payne, 2001).

However, race is not always the most important factor in biased social perception. A study examining the effects of race, status, beliefs about civil rights, and command of spoken English found that even in 1966, race was surprisingly not the dominant influence on white participants. In fact, the quality with which one spoke English was found to be the most influential factor of all on participants’ opinions of black confederates (Triandis, Loh, & Levin, 1966). Although this study only looked at the impact of certain factors on white participants’ judgments of black confederates rather than including other races, there is an important issue at hand here. If someone, for example, views an application of a prospective employee and sees a
foreign name, he or she may assume that the person does not speak fluent English. Even if they believe they harbor no ill will toward other races, they may still act in a prejudiced manner based on a strong desire to have a new employee who will be certain to have an excellent command of the language.

The study of racial prejudice commonly examines prejudices held by white individuals against black individuals, but the target of this paper concerns the prejudices people hold against individuals of Arabic descent. It may not be a surprise that anti-Arab prejudice in the United States increased after the September 11 attacks; many people had trouble separating a small group of radical terrorists from other people of Arabic descent, and the nation as a whole was looking for someone on whom to blame the atrocities. However, prejudice toward this ethnic group was held even before that. In 1992, researchers applied a measure of prejudice aimed to detect differences in attitudes toward black and Arab individuals. In 70% of responses, participants indicated attitudes that were even more negative toward people of Arab descent than black individuals (Sergent, Woods, & Sedlacek, 1992).

The attack on New York City changed attitudes toward people of Arabic descent to become even more negative. A decade later, participants given several assessments of prejudice, including the Universal Orientation Scale (Phillips & Ziller, 1997) showed that they still tended to harbor negative feelings toward Arabs similar to those they did immediately following the attacks (Khan & Ecklund, 2012). People reported significantly higher feelings of anxiety, on average, when presented with hypothetical situations such as boarding a plane with someone of Arabic descent or buying a used car from a person of Arabic descent than when asked to rate their anxiety for identical situations involving a person of unspecified race.
Such feelings of anxiety have been explained through several mechanisms. Lyons, Kenworthy, and Popan (2010) looked at ingroup identification and narcissism as predictors of prejudice toward people of Arabic descent. Ingroup identification has been described as the individual meaning that belonging to a group has for the person (Tajfel, 1981). In other words, people like belonging to a group because it brings meaning to their lives (e.g., belonging to a book club may bring meaning both through the act of self-edification and the rewarding social interaction). Narcissism has been defined as “an extremely positive self-view and hypersensitivity concerning feedback from others” (Barry, Loflin, & Doucette, 2015). Working from the assumption that narcissistic people may find themselves and people like them to be more desirable than “outsiders,” researchers tested their hypothesis. Lyons and colleagues (2010) found a moderate correlation between narcissism and nationalism, and also found that ingroup identification predicted prejudice at moderate and high levels of narcissism. They also found that regardless of the ethnic, national, or regional outgroup, people tended to associate Arabs with a desire to wish harm upon the United States. Interestingly, when given the task of allocating university funds to various on-campus groups, participants consistently gave less money to the Arab group than they did to any other ethnic outgroup. The link between nationalism and prejudice supports an interesting connection to narcissism. People who believe that their way of life is superior to an outgroup member’s way of life may be more likely to also believe that those outsiders are inferior rather than just disagreeing with them.

Persson & Musher-Eizenman (2005) looked at people’s exposure to media programming covering the September 11th attacks as a predictor for negative attitudes toward Arab Americans. It was found that people who were exposed to an above average amount of news coverage were significantly more biased in their attitudes toward Arab Americans than those who received
minimal news input. This may be due to the fact that news stations tended to portray Arab Americans as outgroup rather than ingroup members (i.e., that they were a part of the Middle East, not the United States) and also tended to associate the attacks with all people of Arabic descent rather than the small group of individuals actually responsible. The effect was temporary, though, as news exposure was not an accurate predictor one year after the 9/11 attacks. Still, these researchers found that participants were significantly more prejudiced, on average, against Arab Americans than African Americans, and also felt that their belief was justified.

**Hiring Discrimination**

Discrimination related to hiring is a pervasive problem that may occur along many dimensions. A classic study done by Mischel (1974) found that participants tended to like identical articles better when they had a man’s name as the author unless the article concerned a stereotypical female domain, such as child rearing. More recently, Phelan (2010) conducted a review of hiring research and discussed the “Catch-22” situation women seemed to be in—that is, they could be liked in the workplace or respected in the workplace, but not both. With regard to other demographic factors, a recent study found age discrimination in hiring occurring as early as 38 years of age as well as a significant finding of married applicants receiving fewer callbacks, on average, from potential employers (Albert, Escot, & Fernandez-Cornejo, 2011). Finally, hiring discrimination is also beginning to be researched in the LGBT community. One study found that participants rated homosexual applicants less positively, on average, than heterosexual applicants with identical qualifications (Horvath & Ryan, 2003).

Regarding racial discrimination, Dovidio and Gaertner (1996) showed that prejudice against black individuals was, near the end of the 20th century, still a problem in the hiring
process. Students were given prospective Resident Assistant applications to look over and asked to indicate which candidate seemed better suited for the position. Interestingly, when applications for both the white and black candidate were uniformly positive, participants showed no evidence of discrimination in the candidates they chose, on average. However, when the applications were manipulated such that each candidate possessed a roughly equivalent amount of positive and negative attributes, they found that participants tended to choose the white candidate much more frequently than the black candidate. A possible reason for this is that if people are aware that both candidates are well qualified for the job, they fear they will be perceived as prejudiced if they choose the white candidate. When there are negative items on the applications, participants can point to a factual basis for their rejection of the black candidate without being accused of racial bias.

Although hiring discrimination against black individuals has been documented, they do not, as a racial group, tend to experience the most discrimination. In the United States, people of Arabic descent tend to be employed in low income, low status jobs in higher proportions than any other ethnic minority and have a higher unemployment rate overall (Klaver et al., 2005).

Derous, Nguyen, & Ryan (2009) investigated reasons why employers might not find people of Arabic descent to be suitable employees. They found that applicants with Arab-sounding names and affiliations were rated as less suitable for a job, on average, than applicants without, even when both candidates had equivalent qualification for the job in question. Additionally, people of Arabic descent were rated less suitable, on average, for jobs regardless of cognitive demand. Researchers predicted they would find a disproportionate lack of Arabic employees in jobs with high cognitive demand, but they did not expect to find discrimination in jobs with low cognitive demand. The authors argued that an employer seeing someone of Arabic
descent applying for a job with low cognitive demand would use this information to reinforce existing stereotypes about what kinds of things Arabic people are qualified to do. Then, they would actually discriminate more against someone applying for an undemanding job because this potential employee confirms the employer’s prejudices.

A recent Swedish study showed that it is possible for Arab applicants to overcome discrimination, but it is not easy. Researchers sent out over 5,000 applications varying Swedish affiliations with Arab affiliations, low warmth with high warmth, and low competence with high competence. Affiliations were varied through the name of the applicant, whereas warmth and competence were varied through phrasing of the cover letter. They discovered that an applicant with an Arab-sounding name needed to be high in both warmth and competence to receive as many callbacks, on average, as an applicant with a Swedish-sounding name who needed only to be high in either warmth or competence (Agerstrom, Bjorklund, Carlsson, & Rooth, 2012).

These results could be predicted by the Ethnic Prominence Model (Levin, Sinclair, Veniegas, & Taylor, 2002). This model states that one’s ethnicity is the most dominant characteristic another person notices. In other words, although factors such as sex and marital status are also points of discrimination in hiring, ethnicity tends to provide the strongest basis for discrimination (Levin et al., 2002). Therefore, manipulation of the ethnic origin of an applicant’s name may be an effective way to study ethnic discrimination in hiring. It must be noted, however, that familiar names tend to evoke more positive reactions in others, and that a part of discrimination based on a foreign name may be partly due to the fact that it is unusual. It is possible that this liking of common names could be due to the Mere Exposure Effect, which states that the more a person is exposed to a stimulus, the more they tend to like it, even if they are not aware that exposure is the reason (Zajonc, 1968). Perhaps being exposed to countless
“Michaels” and very few “Hassans” in this country is part of the reason people seem to be more hesitant to hire these applicants. Even if an experimenter controls for the commonality of a name, it is unlikely that a typical employer will receive applications from names similar in commonality; more likely, Anglo names will be most common.

For example, in one study, participants tended to believe that people who had more common names would be more likeable than people who had ethnic outgroup names, or people who had very unusual names. Participants in a study of simulated hiring decisions also said that they felt they would be more likely, on average, to hire applicants with common names than they would be to hire participants with uncommon names (Cotton, O’Neill, & Griffin, 2008).

**Conformity**

From Solomon Asch’s famous line comparison research (1956) to more recent analyses of why teens yield to peer pressure (Kosten, Scheier, & Grenard, 2013), psychologists have been interested in what circumstances cause people to alter their behavior to conform with the rest of the group. Asch’s (1956) research showed that typically if three or more confederates claimed a line was a different length than it clearly was, participants would agree with the group regardless of their true beliefs. Building on Asch’s work, Kundu and Cummins (2013) used moral dilemmas to examine the effect of unanimity on conformity. The one true participant in a group of four always answered first, and although the group of confederates always agreed on the first dilemma, they subsequently either continued to agree or began disagreeing, according to condition. The pattern of results showed conformity effects similar to those found in Asch’s line-judgment study. When confederates disagreed with the participant, the participant changed his or her mind about decisions made on the moral dilemmas. While Asch’s findings were unexpected, they concerned a fairly trivial matter. In the grand scheme of things, who cares if
people pick a different line to appease a crowd of strangers? Kundu and Cummins showed that exposure to a unanimous group opinion can influence something most people believe is a part of their very being: their morality.

Even if a decision does not affect participants directly, they still tend to conform to the group. Kaplan and Miller (1987) found that the presence of peers influenced decisions concerning fictitious legal settlements. When asked individually and then later as a group to award a dollar amount to a plaintiff in a simulated legal matter, the average amount awarded changed significantly after a group discussion. This was especially true if the group was instructed that their decision had to be unanimous rather than just a majority vote. Additionally, the way in which participants reached their decision revealed interesting results. When the issue was intellectual, or appeared to have a definite correct answer, participants tended to be more concerned about being accurate than about how the rest of the group perceived them. However, when the issue involved participant judgment, participants tended to worry most about what other group members thought of them. In other words, when the matter at hand is subjective rather than objective, people appear to rely less on facts and more on how they are being perceived. Perhaps because subjective matters allow for more abstract justifications, people worry about expressing opinions that will not be acceptable to the group as they may not have many facts on which to base their judgments.

Although the presence of others often increases conformity, people can still feel pressure to conform even when a group is not physically present. Researchers surveyed participants on their beliefs about two current social issues. The participants were told, based on the condition they were assigned to, that they were in the minority or the majority. In this two-part experiment, they examined the participants’ intentions to speak out about the issue and the
participants’ actual action taken. Although many participants showed strong intentions for the issue they believed, few followed through with any action. In fact, when in the minority, those with stronger moral convictions tended to speak out less than those with weaker moral convictions. Despite the fact that no one was physically present to pressure them into conforming, participants were still hesitant to speak out and contradict the majority (Hornsey, Smith, & Begg, 2007).

It is no surprise that people want to conform, as it not only eases social pressure, but it has been found to also increase liking. Prislin, Wilson, & Brewer (2002) formed discussion groups of four, three confederates and a participant. They were asked current social issue questions, with the participant always responding first. Confederates agreed with the participant throughout, disagreed throughout, or varied responses after agreeing on the first question. When confederates agreed with the participant, the participant reported, on average, liking them more and feeling more comfortable working with them in the future. When confederates disagreed, participants liked them less, on average.

The Current Study

What influences social judgment more: ethnicity, qualifications, or peer influence? This study sought to investigate that question. The existing literature does not appear to include any conclusive information on how all three of these factors interact with each other. Based on a design that varied qualifications (low, moderate, or high) and peer favor (favored, not favored, no information given) for prospective job candidates of two different ethnicities (who, based on their names, appeared to be of either of Anglo or Arabic descent), the relative influence of each of these factors was explored.
Hypotheses

A three-way interaction among the variables ethnicity, qualifications, and peer influence was predicted. It was also believed that two two-way interactions, between ethnicity and peer influence, as well as between ethnicity and qualifications would occur. At a minimum, a main effect of ethnicity was expected. It was also predicted that discrimination of any type would be more likely to be observed in candidate selection than for candidate qualification ratings.

H1: Ethnicity, qualifications, and peer influence were predicted to influence candidate choice differentially based on which combination of these variables participants experienced. If participants encountered a condition in which only peer influence or qualifications favored the Arab candidate, it was predicted that the Anglo candidate would be chosen. If they encountered a condition in which both peer influence and qualifications favor the Arab candidate, it was predicted that the Arab candidate would be chosen.

The Ethnic Prominence Model (Levin et al., 2002) states that a person’s ethnicity is the most influential factor in decision making, and Triandis et al. (1966) found that command of the English language carried more persuasive power than the speaker’s prestige, message, or race. Although it may sound like the two contradict each other, a person’s foreign ethnicity and their command of English can be closely tied. Even though many people with a foreign name speak English well, an employer could easily jump to a false conclusion by assuming that a foreign name constitutes a poor grasp on the English language, and therefore denote a person with other negative qualities (Cotton et al., 2008).

Agerstrom and colleagues (2012) found that Arab job applicants could get as many callbacks, on average, from prospective employers as their white counterparts if they were high in both warmth and competence. In this study, the high qualifications of the Arab candidate
indicated high competence, and the peer favor might be construed as an indicator of warmth. As a result, I hypothesized that in this condition alone, the Arab applicant will receive more votes than the Anglo candidate.

H2: It was predicted that ethnicity and qualifications would interact in such a way that the Anglo candidate would be chosen regardless of qualifications.

Dovidio and Gaertner (1996) showed that as long as positive and negative characteristics were evenly distributed across both résumés, participants tended to choose a white candidate over a black candidate. Therefore, it seemed reasonable to hypothesize that when ethnicity and qualifications were the only two factors (peer influence not present), participants will select the Anglo applicant more frequently than the Arab candidate.

H3: It was predicted that ethnicity and peer influence would interact in such a way that the Anglo candidate would be chosen regardless of whether peer influence was in his favor or against him.

The power of ethnicity has been demonstrated in many past studies. With qualifications held constant, peer influence is the other contributing factor. Past research has shown participants’ willingness to conform despite their own morality (Kundu & Cummins, 2013), despite the lack of impact upon themselves (Kaplan & Miller, 1987), and despite the absence of the disagreeing group (Hornsey et al., 2007). However, it was predicted that ethnicity would overpower peer favor of the Arab candidate, causing the Anglo candidate to win in these conditions.

H4: It was predicted that there would be a main effect of ethnicity favoring the Anglo candidate.
Many studies cited within this paper have supported the effect of the influence of ethnicity on an opinion about someone or a decision to hire, and so for those reasons it was predicted that when both candidate were equally and moderately qualified and peer influence was not present, participants would favor the Anglo candidate over the Arab candidate.

H5: People would tend to exhibit more discrimination in candidate selection than in candidate ratings. The former draws on more implicit ethnic biases while the latter forces the participant to consider what makes each candidate more or less fit for the job.

Because the selection of a candidate was intended to assess a first impression, whereas the ratings of candidates were intended to assess a more in-depth analysis of each candidate, it was predicted that prejudices would become more apparent in candidate selection. Branscombe and Smith (1990) found that when participants were asked to make a hiring decision based upon photographs depicting stereotype-consistent or inconsistent applicants, participants tended to be more influenced by prejudices when photos were stereotype-consistent. This suggests that discrimination could be less present in hiring when the applicant does not fulfill typical stereotype expectations. Based on this, it was expected that participants would make an initial candidate selection with their stereotypes of that candidate fueling their decision. However, after being asked to carefully consider the qualifications of each candidate, especially given that stereotypes would only be fulfilled when the Arab candidate was poorly qualified, they would be less prejudiced in their ratings.
Method

Participants

According to a G*Power analysis conducted for a medium effect size for a 3x3 MANCOVA with two covariates, I needed to collect 196 participants to achieve 80% power with an alpha level of .05. 231 people participated in total, but eight were removed for not completing enough questions, 21 were removed for completing the assessment in less than four minutes or more than 30 minutes, and two were removed for identifying as Middle Eastern. 135 of participants were women and 66 participants were men, resulting in 200 total participants. Participants were all Seton Hall University undergraduate students between the ages of 18 and 34, and they received partial course credit for their participation.

Setting and Apparatus

This research was completed on participants’ own laptops at their convenience. That is, they were free to participate anywhere they had internet access rather than coming into the lab. A web page accessible through the SONA system (an online system used by Seton Hall University to connect students with available psychology experiments and give them credit for participation) displayed all the necessary information for participants to complete the task. Although this method of data collection provided less control over extraneous variables, minimum and maximum completion times were used to identify any participant who seemed not to be taking the task seriously. Participants who completed the task in fewer than four minutes or greater than 30 minutes were eliminated from analysis.
Materials

Participants viewed two résumés designed to illustrate differences in qualifications. Because no participant viewed two poorly qualified candidates or two highly qualified candidates, these résumés were identical across both ethnicities (aside from name). Only the moderately qualified résumés differed because participants viewed a moderately qualified résumé for each candidate ethnicity, and these two moderate résumés were counterbalanced between ethnicities. A pilot study showed that the poorly qualified résumé was rated significantly lower than the highly qualified résumé. Additionally, the two moderately qualified résumés were rated statistically the same, but were still counterbalanced across ethnicities (see Table 1 for a summary of statistics).

Table 1
Summary of statistics from content of résumés

<table>
<thead>
<tr>
<th></th>
<th>Moderately qualified 1</th>
<th>Moderately qualified 2</th>
<th>Poorly qualified</th>
<th>Highly qualified</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>3.93</td>
<td>4.10</td>
<td>3.42</td>
<td>4.47</td>
</tr>
<tr>
<td>SD</td>
<td>.67</td>
<td>.67</td>
<td>.09</td>
<td>.06</td>
</tr>
<tr>
<td>t-test</td>
<td>$t(42) = -1.41, p = .17, d = .22$</td>
<td>$t(67) = -10.37, p &lt; .001, d = 1.67$</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The résumés had either an Anglo name at the top (Heath Woodward) or an Arabic name at the top (Hassan Habib). These names were pre-tested to ensure that they would elicit the ethnicity and gender intended, as well as to ensure that the names were similar in how common and familiar they were. A total of 14 Arab and 14 Anglo first and last names were analyzed (28 names total), and names were selected based on participant responses. The Anglo and Arab first
and last names used for this study tested equivalently for familiarity and commonality, and also
fit the target gender and ethnicity appropriately (see Table 2 for a summary of statistics).

Table 2

*Summary of statistics for pretesting of names*

<table>
<thead>
<tr>
<th></th>
<th>Hassan</th>
<th>Heath</th>
<th>Habib</th>
<th>Woodward</th>
</tr>
</thead>
<tbody>
<tr>
<td>% male</td>
<td>97</td>
<td>87.9</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>% target ethnicity</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Commonality</td>
<td>$M = 3.28$</td>
<td>$M = 2.78$</td>
<td>$M = 2.53$</td>
<td>$M = 2.38$</td>
</tr>
<tr>
<td><em>t</em>-test</td>
<td>$t(31) = 1.660, p = .107, d = .29$</td>
<td>$t(31) = .787, p = .437, d = .11$</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Familiarity</td>
<td>$M = 3.50$</td>
<td>$M = 3.44$</td>
<td>$M = 2.50$</td>
<td>$M = 2.25$</td>
</tr>
<tr>
<td><em>t</em>-test</td>
<td>$t(31) = .21, p = .84, d = .04$</td>
<td>$t(31) = .61, p = .54, d = .14$</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The qualifications of the applicants were varied (the Anglo candidate was highly qualified while the Arab candidate was poorly qualified, the Arab candidate was highly qualified while the Anglo candidate was poorly qualified, or both candidates were moderately and equally qualified). The order in which the participants viewed the résumés was counterbalanced to account for primacy and recency effects.

Participants completed the Universal Orientation Scale (Phillips & Ziller, 1997) and the Islamophobia Scale (Lee, Gibbons, Thompson, & Timani, 2009). The Universal Orientation Scale has a reliability of .75 and an alpha coefficient of .76, and consists of 20 questions rated on a five-point Likert scales designed to examine how people believe they fit into a world of diverse people and some of the attitudes they hold about outgroups (e.g., “I can understand almost anyone because I’m a little like everyone,” Phillips & Ziller, 1997). As this scale was created to
examine prejudice as a whole, it seemed necessary to also administer the Islamophobia Scale alongside it because it assesses prejudice against Muslims and the religion of Islam specifically. The Islamophobia Scale had an alpha coefficient of .92 for avoidance attitudes (measured by the first eight questions) and .94 for attitudes toward Islam (measured by the last eight questions) when it was formed in 2009 (Lee et al., 2009). It was re-evaluated later and found to have an alpha coefficient of .92 for avoidance attitudes and .93 for attitudes toward Islam (Lee et al., 2013). This scale consists of 16 questions in which prejudice against individual Muslims and Islam as a whole can be assessed (e.g., “If I could, I would avoid contact with Muslims” is an example of avoidance behavior and “I believe that Muslims support the killing of all non-Muslims” is an example of prejudice toward the entire religion of Islam).

Procedure

Participants opened a screen on the SONA system to access the survey and receive their participation credit. The next screen gave a brief overview of the experiment. Participants were told that they would be viewing two résumés and that they should pay careful attention to each one, as they would be asked questions regarding what they had read. After viewing both résumés, participants accessed another screen on which they could choose a candidate for the position (to gauge their initial reactions to the candidates). Then, they completed ratings related to the qualifications of the candidate (to assess the candidates with more depth). While choosing a candidate, they were exposed to one of three types of information as a manipulation of peer influence. One condition involved the Arab candidate obtaining the majority of the votes (72% versus 28%), one involved the Anglo candidate obtaining the majority of the votes (identical percentages), and the final had no information on the voting progress. After they made their decision, they moved onto the final stage of the task.
Here, participants completed the Universal Orientation Scale followed by the Islamophobia Scale, as detailed above. It should be noted that although Muslims and people of Arabic descent are not identical groups, I believed this scale would still be an accurate measure of prejudice because many Americans either believe all Arabs are Muslim, or hold similar views toward both groups. A recent survey found that 39% of Americans though Arabs were an unfavorable group, as compared to 41% who thought Muslims were an unfavorable group (The American Divide, 2012). I believed that by combining questions from each of these assessments, I would be able to look at participants’ underlying prejudices without them becoming aware of the purpose of the study.
Results

To test my first four hypotheses regarding the effects of the independent variables, a 3 (qualifications: Arab high, Anglo high, both moderate) x 3 (peer influence: Arab favored, Anglo favored, no information) MANOVA was conducted, initially with scores on two prejudice scales (the Universal Orientation Scale and the Islamophobia Scale) as covariates. The scores given to each candidate were the dependent variables. As neither of the covariates were found to be significant contributors to the ratings, both measures were removed from further analyses, $F(2, 173) = .57, p = .57, \eta = .01$ and $F(2, 173) = 2.054, p = .13, \eta = .02$, respectively. Dependent variables for this analysis were participants’ ratings of both the Arab and Anglo candidates.

Level of candidate qualification was a significant contributor to participant ratings of each candidate. The omnibus test was significant, $F(4, 384) = 11.27, p < .001, \eta^2 = .11$, leading to post-hoc tests using a Tukey LSD correction (see Figure 1). The Anglo candidate scored significantly higher when he was well qualified ($M = 25.97, SD = 3.43$) than when he was moderately qualified ($M = 24.27, SD = 2.99$) or poorly qualified ($M = 22.06, SD = 4.73$), $F(1, 135) = 9.54, p = .002, d = .53$ and $F(1, 126) = 28.62, p < .001, d = .96$, respectively. He also scored higher when he was moderately qualified than when he was poorly qualified, $F(1, 135) = 10.95, p = .001, d = .57$.

Similarly, the Arab candidate was ranked more highly when he was highly qualified ($M = 25.56, SD = 3.83$) than when he was poorly qualified ($M = 22.22, SD = 6.56$) or moderately qualified ($M = 23.42, SD = 6.03$), $F(1, 126) = 12.39, p = .002, d = .64$ and $F(1, 135) = 5.941, p = .02, d = .43$, respectively (see Figure 1). There was no difference between his rating scores when he was poorly or moderately qualified, $F(1, 135) = 1.26, p = .26, d = .19$. 
Figure 1. Mean scores of candidates across qualifications conditions. The Anglo candidate scored significantly higher when he was highly qualified than moderately qualified, and significantly higher when he was moderately qualified than poorly qualified. The Arab candidate scored higher when he was highly qualified than when he was moderately or poorly qualified. Asterisks indicate significant differences between candidate scores.

Peer influence was not found to be a significant contributor to candidate rankings, $F(4, 384) = 1.09, p = .36, \eta = .01$. As a result, no further tests were warranted. Additionally, there were no mean differences in scores based on gender of participants for the Anglo or Arab candidate, $F(1, 199) = 1.71, p = .19, d = .20$ and $F(1, 199) = 3.15, p = .08, d = .22$ respectively. There were also no mean differences in scores based on participant ethnicity of the Anglo or Arab candidate, $F(1, 196) = .19, p = .66, d = .06$, and $F(1, 196) = 1.48, p = .23, d = .17$, respectively.
Unfortunately, these results were not consistent with my first four hypotheses. Peer influence and ethnicity seemed to have very little effect on the scores participants gave candidates. The qualification of the candidates was the main factor in candidate rating, and therefore I was unable to support my predictions.

A logistic regression was also conducted to test if my hypotheses might be supported through the dependent variable of candidate selection as the data from candidate ratings did not support my predictions. I used the manipulated variables as predictors (qualifications: Anglo high, Arab high, or both moderate; peer information: Anglo candidate favored, Arab candidate favored, no information) and candidate selection as the criterion. The omnibus test was significant, $\chi^2 (4) = 59.796, p < .001, V = .27$, and the model improved from 57% accuracy to 74% accuracy with the addition of both predictor variables. The -2 Log likelihood was 216.211 and Nagelkerke R square was .345. Résumé condition was a significant predictor across all three conditions (Arab high: $p < .001$; Anglo high: $p = .001$; both moderate: $p < .001$, see Figure 2) but peer condition was only significant when the Arab candidate was favored, $p = .048$ (see Figure 3). While these results still did not support my first four hypotheses, there was some support for my final hypothesis. Peer influence was a more important factor in candidate selection than candidate rating, indicating that participants were casting their vote, then rating candidates in a slightly different way. The discrimination I expected to observe was not present, but there is support for a differential decision-making process between candidate voting and candidate rating.
Figure 2. Number of votes received by each candidate across qualifications conditions. The apparent effect seen when one candidate is more qualified in contrast with the lack of effect seen when both candidates are moderately qualified highlights the importance of qualifications in the participants’ hiring decisions. Asterisks indicate significant differences in votes received.
Figure 3. Number of votes received by each candidate across peer influence conditions. The influence of peers only seems to affect candidate selection when the Arab candidate is winning. In the other two conditions, it appears to not have an effect. The asterisk indicates a significant difference in votes received.
Discussion

General Discussion

Instead of the three-way and two-way interactions predicted, the largest contributor to both candidate selection and candidate rating was résumé condition. This seems to indicate that participants were making candidate selections based upon facts rather than prejudices in most cases, which is contrary to much of the past research in hiring discrimination. However, there may have been other factors contributing to the findings observed including an atypical sample for the effect being researched, possible reverse discrimination, and a few limitations to the design.

The population sampled may have contributed to the lack of prejudice observed in these data, as the Seton Hall University student population is quite diverse. Harper and Yeung (2013) found that students who believed their university was committed to diversity tended to be more open-minded themselves, and Seton Hall proudly reports an above-average 42% diversity rate, meaning that nearly half the student population claim an ethnicity that is not Caucasian. (Seton Hall University, 2014). Therefore, students may have either held minimal prejudices toward people of Arabic descent, or they may have been accustomed to hiding these prejudices to appear more socially acceptable.

In fact, in addition to a lack of discrimination, there seemed to be a slight overall preference for the Arab candidate. If participants were simply making decisions based on facts rather than attitudes, we would expect statistically similar scores for each candidate. Instead, the Arab candidate had 57% of the selection votes as well as a trend toward significantly higher ranking scores on the six rating dimensions. With these data in mind, it is possible that reverse
discrimination was playing a role in candidate perception. That is, participants could have chosen to hide their prejudice and discrimination by favoring the Arab candidate.

With regard to the effects of peer influence, the statistical analyses showed that it appeared to have greater influence on candidate selection than on candidate ratings. This suggests that participants’ original judgments may have been influenced by peer information; that is, the influence of peers seemed to have an effect on participants’ initial decisions. However, when participants were asked to consider ability more carefully and evaluate each candidate on several specific dimensions, they seemed to use qualifications to make their decisions instead. Perhaps, then, using peer influence in hiring is not the best way to achieve fairness since it seems to influence a decision to vote with the rest of the group, in line with conformity processes. Rather, requiring employers to rate applicants on several dynamics of ability may be a better way to reduce bias.

It is important to note that peer influence seemed to have the largest impact on candidate selection when the Arab candidate was favored. With a typical conformity effect, we would expect participants to select the candidate favored by their peers regardless of ethnicity, but as Figure 4 shows, there is only an effect in the condition where the Arab candidate is favored. Perhaps conformity, then, is not the best explanation for this trend. Participants in this condition could have seen that the Arab candidate was favored by their peers, and subsequently been reminded of their own prejudices. They may have been concerned about being perceived as someone who discriminates, unlike their peers, so they may have felt increased pressure to select the minority candidate. This lends more support to the idea that peer influence may not be the most appropriate way to correct for discrimination. If peers favor the minority applicant, an effect of reverse discrimination could be observed as it was here.
Limitations

There are some important limitations to note in this study. The population sampled was not necessarily the best model for simulating a genuine hiring process. It would be ideal to bring real employers into the lab to see how these résumés would fare in the job market and how peer influence might affect decisions in a professional setting. Testing these questions with a real-world sample would likely provide more accurate information about employers’ perceptions of ethnic minority job applicants.

Another limitation was the lack of authenticity in the participants’ experience. They knew the study was just “playing pretend” and as a result, they may have not put as much thought into their decisions as they would if they were making a real hiring decision. The fabricated experience might also have led participants to believe that the peer information manipulation was not genuine, which would be accurate, but regrettable, for the validity of the study. Unfortunately, no manipulation check was performed, so it is unknown if participants were aware of the true purpose of the study.

The measures utilized in this study to examine prejudice may have been unable to observe true attitudes of participants. Responses to the Universal Orientation Scale showed a fairly typical, fairly normal bell curve ($M = 69.20$, $SD = 6.42$), but the Islamophobia Scale was not as neat. The questions in this assessment are quite blunt (e.g., “I believe that Muslims support the killing of all non-Muslims.”), and I believe this could have resulted in inaccurate measurements of prejudice (Lee et al., 2009). If someone did hold prejudices against Muslims or the religion of Islam, these pointed questions could cause the person to hesitate to be honest, and it may not be able to register feelings of prejudice that are less severe. In fact, nearly 30% of this
sample scored a 16, the lowest possible score on this assessment, and the overall distribution of scores was extremely positively skewed \((M = 24.37, SD = 10.52)\). Therefore, alternative measures of prejudice should be utilized in the future.

A final limitation was the way in which the study was conducted. Because it was presented online rather than in a laboratory, I was unable to control for environmental factors when the participants completed the assessment. As a result, several participants’ responses had to be removed from analysis due to incomplete surveys or completion times for the assessment that suggested they were not taking the task seriously. That is, completion times under four minutes were considered too short to even have read the questions, and completion times over 30 minutes were considered too long for the participant to have focused on the task. Although bringing participants into the lab would have meant slower data collection, it might have also meant higher data retention or quality. However, this method may have provided a strength as well. Participants completing an assessment in a less formal setting could have meant that their responses were more genuine. That is, they may not have felt a need to behave differently than they normally would upon entering a formal lab setting. The trade-off between internal and external validity will, of course, always be present in research.

**Future Directions**

Future research could go in several directions. Sending résumés to real employers would help gauge real reactions to applicants of ethnic minorities. Although employers would not be subjected to the variable of peer influence, very little research has been conducted on hiring discrimination against Arabs, and more information would be valuable.
The overall structure of the assessment could also be varied in ways that I did not have the resources to accommodate. For example, the use of a larger subject pool would allow for participants to view and rate only one résumé instead of both. This would help reduce concern that participants were becoming sensitized to the purpose of the study through the comparison of names that were perhaps too obviously Anglo and Arab.

Additionally, using an actual group of confederates interacting with the participant as a way to operationalize the variable of peer influence might be helpful, in that it would improve the face validity of the procedure, which might affect conformity pressure. Although it is certainly plausible that a visual representation of peer influence (e.g., a simple graph showing which candidate had more votes) could be persuasive enough to sway candidate selection, if a group hiring decision were utilized in the workplace, it would likely involve people meeting in person to discuss candidates. Living, present participants would, no doubt, create more powerful peer influence in a more authentic simulation of the hiring process.

Finally, future research could investigate any potential changes that may be observed if the characteristics ascribed to the fictitious candidates were altered. In this study, both candidates were portrayed as male. It is possible, though, that we would see increased discrimination against Arab women or Arab candidates who were presented as devout Muslims. The résumés used in this study contained little information on the personal characteristics of candidates, but rather looked only at their credentials. It would be interesting to see if, for example, a candidate’s involvement in their local mosque would decrease their chances of being hired, as such information may come to light in the context of the hiring process.
Conclusion

Although much past research has demonstrated a negative effect of candidate ethnicity on employers’ hiring decisions, this study did not demonstrate such an effect. Several reasons for this discrepancy have been explored, including the possibility of increased open-mindedness of the sample, possible pressure to hide one’s prejudiced beliefs, or the fact that participants were focused on consideration of candidate qualifications, potentially resulting in a fairer, fact-based judgment.

The addition of peer influence was novel in this experiment, and although here it did not appear to be a significant contributor to the hiring decision, it should not be dismissed yet. The literature demonstrates how powerful the desire to conform tends to be; the lack of a finding here does not disconfirm that. The suggestions made for future research here could provide useful information on the impact of peer influence that would be essential to the body of research on hiring discrimination.

Several suggestions have been made here to improve the current study and to outline paths for future research. This topic concerns an important and relevant issue, so a lack of significant findings in this study should not discourage future attempts to uncover what valuable information may still be unknown.
References


Appendix

Low qualifications résumé

Name: Heath Woodward/Hassan Habib

Job applying for: Budget Coordinator

Education:

- Associate’s degree in business administration from Wayne County Community College (2.7 GPA)
- Bachelor’s degree in business from Northern Michigan University (2.5 GPA)

Work experience:

- Internship at Staples (corporate). Responsibilities: completing and filing paperwork, organizing notes for future meetings, and keeping schedules of multiple people straight. Position held December 2013-March 2014

Skills:

- Able to operate Microsoft Word and Office
- Successful as an officer of Habitat for Humanity for one year
- Capable of meeting deadlines and working under pressure
- Learns quickly and works well with others
High qualifications résumé

Name: Heath Woodward/Hassan Habib

Job applying for: Budget Coordinator

Education:

• MBA from Rutgers University (3.8 GPA)

Work experience:

• Salesperson at Third Degree Advertising. Responsibilities: supervised a small group of employees, met or exceeded sales goals each quarter, ensured customer satisfaction, and assembled/presented a bi-monthly progress report. Position held October 2011-present.

• Internship at Third Degree Advertising. Responsibilities: ensured customer satisfaction, trained on sales techniques, and relayed information between sales and accounting. Was hired on at completion of 4-month internship.

Skills:

• Skilled with Linux
• Able to operate all programs in Microsoft Office Suite
• Fluent in Spanish and Russian
• Can work flexibly and reliably
Moderate qualifications résumé

Name: Heath Woodward/Hassan Habib

Job applying for: Budget Coordinator

Education:

- Bachelor’s degree in business from Oklahoma State University (3.0 GPA)

Work experience:

- Shift manager at Kraftmaid factory. Responsibilities: managed staff during shifts and gave feedback, organized marketing activities, managed inventory and ordered supplies, and maintained high standards of customer service. Position held August 2010-February 2014.
- Internship at Midwest Publishing and Marketing. Responsibilities: handling customer concerns and complaints, organized and prepared bi-monthly meetings, and ensured there were no discrepancies between sales and accounting departments. Position held April 2012-September 2012.

Skills:

- Able to operate Microsoft Office Suite
- Fluent in Italian
- Successfully ran Business Club at Oklahoma State University for two years
- Capable of meeting deadlines and working under pressure
Moderate qualifications résumé

Name: Heath Woodward/Hassan Habib

Job applying for: Budget Coordinator

Education:

• Bachelor’s degree in business from University of Arkansas (3.1 GPA)

Work Experience:

• Head of quality control at T.G.I. Friday’s. Responsibilities: trained new employees, upheld company standards of excellence, assigned work schedules, and inspected restaurant regularly to ensure quality. Position held December 2010-March 2014.
• Internship at Third Degree Advertising. Responsibilities: assisted with handling complete accounting cycle, prepared sales invoices, and proofread financial statements.

Skills:

• Fluent in German
• Quick learner and good with people
• Sufficient STATA and Microsoft Word skills