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Competence vs. Legacy: The Employer's Decision

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Abstract

This study seeks to investigate biases in hiring practices due to perceived similarity, gender and the quality of the applicant. Current faculty members at several universities were asked to evaluate the curriculum vitae of one of eight fictional candidates for hire for a tenure-track, faculty position. Results demonstrate a shifting of standards in how positively candidates are evaluated; with significant interactions occurring between gender and quality of the candidate, as well as between perceived similarity and quality of the candidate.

Competence vs. Legacy: The Employer's Decision

In a complex and cut-throat job-market it seems like you really need an “in” to get anywhere. It feels like hard work is not always enough to get the position your qualifications merit. The question then, is how much of this idea of an “in” is founded in truth and how much is composed of myth. Are job candidates who have an “in” treated differently? In other words, is there preferential treatment towards candidates based on job-irrelevant criteria? Thus, this study seeks to investigate if there really are biases involved in the hiring process that do not pertain to the actual quality of the candidate. By manipulating the credentials of candidates for a faculty position such that there are clear differences in the quality of the candidates, the researchers seek to determine how “good” candidates are perceived as compared to “very good” candidates; especially, when candidate evaluators can be influenced by sharing an alma mater and the gender of the candidate. Will the interaction between two job-irrelevant criteria, gender of the candidate and perceived similarity, be enough to make a difference in the opinions of the evaluators and give the “good” candidates a boost while providing the “very good” candidates with a career setback?

Gender in the Workplace

“We are less dissatisfied when we lack many things than when we seem to lack but one thing”.

–Eric Hoffer

Rejection is never a pleasant experience, especially as Hoffer states, when it seems like there was only one difference between the accepted and politely rejected. In 2001, Cotter, Hermsen, Ovadia and Vanneman published their analysis on the existence of glass ceilings, which they defined to be a type of discrimination in the work place that is not explained by job-relevant criteria, is greater at higher levels of outcome, and also indicates a decreasing probability of promotion and salary increase as one progresses in their career. Cotter, et al. (2001) found that women were more likely to experience this glass ceiling and encounter greater disadvantages as

their careers progress as well as have greater difficulty attaining promotions that is not explained by insufficiency in any job-relevant criteria such as their past history, education or qualifications. However, one can only hit a glass ceiling if they are “in house,” because the glass ceiling can only be encountered by those individuals who made it past the first challenge of being hired over their peers. It does not take into the account individuals that were not hired due to not meeting job-irrelevant criteria, such as being male or of a specific race.

In fact, research has shown that the qualities that employers look for in potential employees differ based on the gender of the applicant. For instance, Phelan, Moss-Rascusin and Rudman (2008) found that the qualities that help men to gain an edge in an interview for a leadership position, such as being ambitious, competitive and capable (agentic), are the same qualities that have a negative impact on the perception of women applying for the same position. Using videotaped interviews of either agentic or communal, male and female candidates for a computer lab manager position, participants were asked to evaluate a candidate on competence, social skills and hireability. Though the interviews the participants viewed had been scripted such that the male and female candidates described themselves in the same manner for the communal or agentic conditions, the researchers found that when the female behaved in the agentic fashion their ratings on social skills plummeted, but when they behaved in the communal fashion, they were deemed less competent. So regardless of their approach the females were facing a disadvantage. What the researchers found most interesting was that when the participants evaluated the male candidates, social skills and competence were deemed equally important to their hiring decision. However, when evaluating the agentic females, there was a shift in the hiring criteria and suddenly the social skills that agentic females were being rated negatively on were deemed as a more important quality for the job than their competence (Phelan, Moss-Rascusin, & Rudman, 2008; see also Foschi, Lai & Sigerson, 1994). While this study examined shifting standards based on

personality characteristics, we set out to examine how standards may shift based on how similar the candidate is to the perceiver. To do so we will manipulate whether the candidate shares an alma mater with the participant or not and see if this causes a change in the way the candidate is evaluated.

Further research into the impact of shifting criteria showed that stereotypes have an influence on how individuals are perceived (Biernat & Vescio, 2002). It is a common stereotype that women are less athletic than men. Using this context researchers had participants pretend to be the managers of softball team and choose thirteen out of a possible eighteen softball players (9 female, 9 male) to be on their team, from a series of photographs. Participants then had to rank each player on objective measures, like batting average or fielding error rates and determine which ten players would be starting in the field and which three would be benched. Though pretesting determined that the male and female players were equivalent in terms of athleticism, the results showed that males were rated as being better players and were less likely to be benched than females. However, when the participants were asked to imagine how they would react to a specific player batting a single, females were much more likely to get a more enthusiastic response, such as cheering loudly, than a male player. This is likely because a successful play by a female is more unexpected than a successful play by a male and thus the criteria that male and females are held to varies (Biernat & Vescio, 2002).

As varying expectations can impact the way that a player's accomplishments are reacted to, varying expectations can also impact customer satisfaction; even when the customer feels the employee is qualified. The relationship between corporation and consumer generally involves the company providing the customer with what they want, especially in regards to service. However, knowing, for example, that male consumers want to trust the maintenance of their cars to other males can cause bias in which qualified candidate is hired for a specific job. Mohr and Henson

(1996) found that participants in their study felt more satisfied with their service when the employee they imagined interacting with fit the stereotype of the gender most likely to perform that particular job (job-congruent), despite feeling that the employee was qualified. For example, when participants imagined an encounter with a male mechanic (job-congruent) their attitudes were more favorable than when they imagined an encounter with a male nurse (job-incongruent). This finding held for all participants; with the exception that there was a tendency for female participants to favorably view women in job-incongruent roles (e.g., female automobile mechanic; see Mohr & Henson, 1996). While this study investigated people's attitudes towards a service they received, it did not investigate hiring decisions. The present study will expand upon Mohr & Henson (1996) by investigating whether this preference for job-congruency continues in academic situations.

Candidate Quality

"[Everyone is prone to] look for the facts that fit the conclusion they have already reached".

-Peter F. Drucker

Generally, when given the choice of five candidates and little knowledge of the field for which the candidate is to be hired, most students will select the candidate with the most education (Norton, Vandello & Darley, 2004). However, when the selection comes down to two candidates in which a female candidate has more education but less experience than a male candidate, students selected the male candidate and justified their answers by claiming that experience was more important. However, when the female candidate had more experience than the more educated male candidate, education was claimed to be of more importance. Thus, these results again, suggest a shifting of standards based on the gender and quality of the applicant.

To further emphasize these effects of bias in the hiring process, Härtel, Douthitt, Härtel, Douthitt, (1999) separated a class of students into two groups and provided them with the

curricula vitae and recorded lectures of two prospective candidates for a faculty position. Although the recorded lectures were identical and the lecturer had a gender-neutral voice, aspects of the curricula vitae were manipulated so that one group was lead to believe the candidate they were evaluating was a Caucasian male and in the other group, a Native American female. Afterwards, the students were given a questionnaire asking them to judge the quality of their candidate. Researchers confirmed the existence of an explicit bias by comparing the scores students had given to the candidates. In terms of knowledge and competence, the candidates were judged roughly the same; however on more subjective questions like “how would you rate the clarity of the speaker” the Native American female was rated lower than the Caucasian male. Also, those students scoring high on the ideal employee inventory (IEI), an assessment of how open or closed individuals are to people dissimilar to themselves, displayed a much more pronounced level of bias. This suggested that individuals with a lower tolerance for outgroup members, or individuals that are distinct from themselves, were much more likely to show ingroup bias, or preferential treatment towards individuals that they considered similar to themselves. Thus, the Caucasian male candidate was rated as being better suited to the position than the Native American female. One limitation to this study is that it manipulated ethnicity and gender simultaneously, so it is unclear whether the biases were due to the ethnic background or the gender (or both) of the candidates. The current study will manipulate the gender of the candidate while using a race neutral CV to further investigate the extent of this shifting standard.

Perceived Similarity/In-Group Bias

Studies have shown that a name, even one unfamiliar to the individual is more than enough to induce ingroup bias (Ashburn-Nardo, Voils & Monteith, 2001). In a series of three experiments researchers investigated how much information was needed to induce ingroup bias. In the first experiment each participant was administered two implicit association tests (IAT). The IAT

measured the reaction time of a participant to categorizing a stimulus word, which in this case was a name that was either traditionally American, or a name that was from the fictional country Surinam. Participants in this study showed an implicit bias in favor of the American names in that their reaction times for pairing American names with pleasant words were faster than for pairing Surinamese names with pleasant words.

The third experiment was designed to further show how quickly an implicit bias can occur. The researchers randomly assigned participants to conditions by telling them that their selections on a computer program displaying paintings indicated that they had a preference for either the fictional artist Quan or Xanthie. Participants were then told that fans of Quan were bottom-up art processors, while Xanthie fans were top-down art processors. The participants were then administered an IAT in which the stimulus word was a name that either contained a “q” or an “x”. Participants were led to believe that stimulus names with a “q” represented people who preferred Quan, and that stimulus names with an “x” represented people that preferred Xanthie. Even based on these meaningless group assignments, the reaction times of the participants on the IAT still suggested ingroup favoritism toward the fans of whichever artist the participant had been assigned (Ashburn-Nardo, Voils, Monteith, 2001). If one can exhibit an implicit bias against a group that they have previously never encountered, what happens when a job application comes across the desk of someone that is aware of the stereotypes and biases against a particular group?

Studies have shown that even knowing the stereotypes of your own group can impact one’s performance. Shih, Pittinsky and Ambady (1999) conducted a study to investigate the impact of stereotype threat on quantitative performance. Participants were first asked to complete a questionnaire on dorm-life in the treatment condition that would either make their Asian identity salient or their gender identity salient. The control group did not answer a questionnaire that evoked either identity. The researchers found that when their Asian identity

was made salient the participants were statistically significantly more accurate in answering the questions on the assessment. The participants whose gender identity was made salient performed worse than any other condition. This suggests that knowing the stereotype against your group even at a subconscious level can lead to its confirmation (Shih, Pittinsky & Ambady, 1999). If knowing stereotypes about our own group can impact our answering decisions on an assessment, what happens when an employer knows the stereotypes about a group to which an applicant belongs? This study seeks to further this research by determining if knowing the stereotypes against a stigmatized group, such as females, will impact the way they are evaluated for a position as a university professor.

Further, Pulakos and Wexley (1983) found in their field study of manager-subordinate dyads that perceptual similarity had a significant effect on the ratings given both by managers to their subordinates and subordinates to their managers. In this study managers were asked to complete an assessment of their subordinates in which questions investigating their perceived similarity were embedded. The subordinates of these managers were then asked to complete a similar assessment of their managers and the researchers found that there was a significant main effect of perceived similarity on the ratings given by the manager and the subordinate. Meaning, that when the manager viewed the subordinate as being similar to them they rated the subordinate much more favorably than when the manager viewed the subordinate as being dissimilar. Also, the subordinate rated the manager more favorably when they viewed the manager as being similar to them and less favorably when they viewed the manager as being dissimilar. The researchers also found a significant interaction effect in that when both members of the dyad viewed each other as being dissimilar their evaluations of each other were significantly lower than when at least one person in the dyad viewed the other as being perceptually similar. The dyads in which both members viewed each other as being perceptually similar had the highest ratings in all cases. This

suggests that even without actually being similar, the perception of similarity can cause one to favorably evaluate others (Pulakos & Wexley, 1983). The current research intends to examine if this effect can be replicated using a subtle manipulation of alma mater (either from the same alma mater or different).

Present Study

The current study seeks to understand the extent to which perceived similarity due to a shared alma mater, candidate quality, and gender can impact the hiring process. First we predict a main effect for the quality of the candidate such that the “very good” candidate will be evaluated more favorably than the “good” candidate. Due to previous research regarding the effects of in and outgroup biases, such as that done by Ashburn-Nardo, Voils and Monteith (2001), we predict a main effect for perceived similarity such that the candidate that shares an same alma mater with the participant will be rated more favorably than candidates that do not share an alma mater. In addition, previous research suggests that one’s gender influences perceptions of hireability and quality (see Cotter, et al., 2001; Mohr, et al. 1996; Norton, et al. 2004). More specifically, this research found that women are typically viewed less favorably than their equally qualified male counterparts in all conditions due to gender bias (Cotter, Hermsen, Ovadia, Vanneman, 2001). Given these findings, we also predict a main effect for gender, such that the female candidate will be viewed more negatively than the male candidate.

In addition, based on the past research we predict a 3-way interaction effect between the perceived similarity, candidate quality, and the gender of the applicant. That being said, we predict that of the very good candidates, males that are perceptually similar to the participant will be evaluated more favorably than females that are perceptually similar, and both will be rated more favorably than males and females that are perceptually dissimilar; though the male, dissimilar candidate will be rated more favorably than the female. As for the good candidates, we predict

that male candidates that are perceptually similar to the participant will be evaluated more favorably than perceptually similar females, however we anticipate that perceptually dissimilar males will be rated more favorably than both perceptually similar and perceptually dissimilar females.

Method

Participants

A total of 84 participants (57 male, 27 female) completed the evaluation forms. Data from five participants was omitted as two were missing significant amounts of data and three had responses that were more than 2 standard deviations away from the mean and were considered outliers. Analyses were conducted using the data from a total of 79 participants (56 male, 23 female). Participants are current university faculty members and all participated voluntarily. All participants provided informed consent.

Design

The current experiment is of 2x2x2 between subjects design. The independent variables in this experiment are perceived similarity of the alma mater (same or different), quality of the candidate (good or very good) and the gender of the candidate (male or female). The dependent variable was how positively the participant evaluated the candidate using a twelve question candidate evaluation form provided to them by the researchers.

Materials

Each participant received a transcript of a fictional telephone interview conducted by a search committee member, a curriculum vitae of the candidate, and an evaluation form.

Perceived Similarity Manipulation. Each participant received a CV that had been personalized in order to manipulate their perceived similarity to the candidate. The candidate's doctoral alma mater was changed to be either the same or different to that of the participant. In

cases where the participant had not attained their doctorate degree, the school from which they attained their highest degree was used. To standardize the different school condition, the different school was always Ohio State University, unless that was the participant's alma mater, in which case Michigan State University was used as the different school. Alma maters for the faculty participants were gathered using a faculty directory. In cases where the participant had completed their doctoral work outside of the United States, or had attended a school that did not offer a psychology program the participant was randomly assigned to one of the four different school conditions to ensure the strength of the perceived similarity manipulation in the same school conditions.

Quality of the Candidate Manipulation. The quality of the candidate was manipulated using both summarized notes of a telephone interview (Appendix A) and ostensible curriculum vitae (CV) (Appendix B). In the telephone interview, the candidate was described as either good or very good. In the CVs, the very good candidates had more publications, grants and reviewed more journals than their good counterparts.

Gender Manipulation. Gender was manipulated via the first name of the candidate, either Brandon or Brenda. The last name was consistently "Schroder" for all conditions.

Candidate Evaluation Form. The dependent variable was operationalized using an evaluation form that employed a 7-point Likert-Type scale (1 = Not At All; 7 = Very Much) and asked questions like, "How likely would you be to recommend hiring this professor?" and "What is your overall evaluation of this individual as a hire at your school?" (1=Poor; 7=Excellent). (Appendix C).

Overall Rating Score. In order to determine if an overall impression rating of the candidate could be created, a principle components factor analysis was conducted. One factor, Overall Rating, emerged from the factor analysis (Eigen value = 6.69), and a reliability analysis

showed that this Overall Rating factor was reliable ($\alpha = .91$). The Overall Rating score, was created from the average of the responses to the following questions on the Candidate Evaluation Form: “How would you rate the quality of the CV?”, “How likely would you be to recommend hiring this professor?”, “How successful do you think the professor is?”, “How much potential do you think this professor has?”, “What is your overall evaluation of this individual as a hire at your school?” and the responses to each of the “Judge the quality” questions (Appendix C).

Procedure

Each participant was randomly assigned to one of the eight possible conditions. Each condition had a different variation of the candidate as follows: 1) same school, good quality, male; 2) same school, very good quality, male; 3) same school, good quality, female; 4) same school, good quality, female; 5) different school, good quality, male; 6) different school, good quality, female; 7) different school, very good quality, male; 8) different school, very good quality, female.

Participants received a packet of materials for the experiment through inter-campus mail. Upon opening the packet the faculty members read a letter briefly explaining what the study would entail and the informed consent form, which all participants signed. Next, participants encountered the summary of a telephone interview previously conducted by a committee member. This enabled the researchers to manipulate the quality of the candidate, as the summary described the candidate as being either “good” or “very good”. After reading the telephone summary the participant was given the curriculum vitae of the ostensible candidate in which the name of the candidate was either “Brenda” or “Brandon” to manipulate the candidate’s gender. The curriculum vitae was also used to manipulate the candidate’s quality, with “good” candidates having fewer publications, grants and awards than the “very good” candidates. After reading the curriculum vitae participants were asked to complete the evaluation form which enabled the researchers to operationalize the dependent variable, which was how positively the participant

evaluated the candidate. Upon completion, participants were to return the informed consent and evaluation forms via a pre-addressed envelope enclosed in the packet.

Results

Manipulation Check. To ensure that the varying candidate qualities were observed by the participants the researchers conducted a one-way analysis of variance to determine the effect of the candidate quality on the overall rating score of the candidate. The analysis showed that there was a statistically significant difference between the overall ratings of the good and very good candidates, $F(1, 77) = 10.37, p < .005$. This indicates that the manipulation was successful and the very good candidates ($M = 5.13, SD = 1.10$) were being evaluated more positively than the good candidates ($M = 4.47, SD = 0.74$), as predicted.

Effect of Participant Gender. An exploratory analysis investigating quality of the candidate, perceived similarity, candidate gender and participant gender on the overall rating score, showed a main effect for participant gender $F(1,70) = 9.87, p < .005$. Since there were not enough female participants to include participant gender as an independent variable, participant gender was used as a covariate in the main analysis investigating quality of the candidate, perceived similarity, and candidate gender on the overall rating score.

Overall Ratings of the Candidates. To examine the effects of the quality of the candidate, perceived similarity and candidate gender on the overall rating score, a $2 \times 2 \times 2$ analysis of covariance was used with participant gender as the covariate. There was no main effect for gender of the candidate $F(1,70) = 1.09, p = .30$ or alma mater $F(1,70) = .04, p = .84$ on the overall rating score of the candidate, indicating that neither the candidate's gender nor alma mater predicted how positively the participants viewed the candidates (see Table 1 for additional means and standard deviations).

However, as seen in Figure 1, there was a significant two-way interaction between the quality of the candidate and the gender of the candidate $F(1, 70) = 7.08, p = .01$. Further analysis of the simple effects of this interaction determined that there was a statistically significant difference between the way in which very good male candidates and very good female candidates were evaluated. Very good male candidates ($M = 4.80, SD = .19$) were evaluated significantly less favorably than very good female candidates ($M = 5.50, SD = .20$), $F(1, 70) = 6.37, p = .01$. However, good male candidates ($M = 4.61, SD = .19$) were evaluated more favorably than good female candidates ($M = 4.31, SD = .18$), $F(1, 70) = 1.42, p = .24$. For Male candidates, there was no significant difference in how they were evaluated $F(1, 70) = .50, p = .49$. But, for Female candidates, the very good applicant was evaluated much more favorably than the good candidate $F(1, 70) = 20.22, p < .005$.

In addition, as seen in Figure 2, there was also a significant interaction effect between alma mater and quality of the CV, $F(1, 70) = 6.65, p = .01$. Analysis of the simple effects of this interaction determined that good candidates that shared an alma mater with the participant ($M = 4.20, SD = .18$) were being evaluated significantly less favorably than good candidates that did not share an alma mater with the participant ($M = 4.72, SD = .18$), $F(1, 70) = 4.23, p = .04$. However, very good candidates that shared an alma mater with the participant ($M = 5.38, SD = .19$) were evaluated more favorably than very good candidates that did not share an alma mater with the participant ($M = 4.93, SD = .20$). While there was no significant difference in the way that candidates that did not share an alma mater with the participant were evaluated $F(1, 70) = .59, p = .45$, there was a significant difference in the way the candidates that shared an alma mater with the participant were evaluated $F(1, 70) = 19.98, p < .005$. The good candidates that shared an alma mater with the participant were evaluated significantly less favorably ($M = 4.20, SD = .18$) than the very good candidates that shared an alma mater with the participant ($M = 5.38, SD = .19$).

As seen in Figures 3 and 4, there was also a marginally significant three-way interaction between the gender of the candidate, perceived similarity and quality of the CV, $F(1,70)=3.28$, $p=.07$. An exploratory analysis of the simple effects determined that female candidates were being evaluated significantly differently depending on their alma mater and quality. Female, good candidates that attended the same school as the participant ($M = 3.88$, $SD=.27$) were evaluated much less favorably than female, good candidates that attended a different school than the participant ($M = 4.73$, $SD=.23$), $F(1, 70) = 5.82$, $p=.02$, see (Figure 4). Female, very good candidates were rated much more favorably when they attended the same school as the participant ($M = 5.91$, $SD=.29$) than when they attended a different school than the participant ($M = 5.10$, $SD=.28$), $F(1, 70) = 4.01$, $p=.05$. However, there was no significant difference in how male, good candidates were evaluated, $F(1, 70) = .29$, $p=.59$. Male good candidates were rated more favorably when they attended a different school than the participant ($M=4.71$, $SD=.29$) than when they attended the same school as the participant ($M=4.51$, $SD=.25$). There was also no significant difference in the way the male, very good candidates were evaluated, $F(1, 70) = .05$, $p=.82$. Although, the very good male candidates that attended the same school as the participant were evaluated more favorably ($M=4.85$, $SD=.25$) than those that attended a different school than the participant ($M=4.76$, $SD=.29$), see (Figure 3).

Discussion

The present study sought to investigate the different ways in which perceived similarity, quality of the candidate, and gender of the candidate can impact the hiring decisions made by employers. The analyses confirmed the hypothesis that there would be a main effect for quality of the candidate, such that very good candidates were rated more favorably than good candidates.

There were no main effects for gender of the candidate or the perceived similarity as predicted. However, there were several significant interactions that emerged.

First, there was an interaction between the gender of the candidate and the quality of the candidate, such that when the candidate was good, male candidates were rated significantly more favorably than female candidates. However, in the very good condition, females were rated more favorably than male candidates. The findings that good female candidates were perceived less favorably than good male candidates is consistent with past research demonstrating that female candidates are typically viewed less favorably than male candidates (Härtel, et al. , 1999; Cotter, et al., 2001). However, it was unexpected that very good female candidates would be rated more favorably than very good male candidates. One possible explanation for this finding is overcompensation. Gilbert & Eaton (1970) found that participants that were consciously aware of the existence of a racial bias, tended to overcompensate their responses in order to appear unbiased; this has been called a “discrimination in reverse” effect. Thus, it is possible that participants who saw the very good female candidate were not only impressed but also overcompensated in their rating of this candidate.

There was also an interaction between the perceived similarity and the quality of the candidate. Participants tended to rate good candidates lower when they were perceptually similar, as compared to when they were perceptually dissimilar. However, perceptually similar candidates received consistently higher ratings. This effect may be related to research that shows that an outgroup favoritism effect will emerge when a candidate is assumed to be unlikely to succeed (Lewis & Sherman, 2003). In this study, participants chose the perceptually similar candidate, a member of their ingroup, whenever the member was likely to succeed in the faculty position and improve the group’s image. However, when the candidate was unlikely to succeed in the position, participants favored the outgroup member. This outgroup favoritism was attributed to a desire to

maintain one's self confidence and not mar the appearance of the ingroup; which would be damaged were a member of the ingroup to fail (Lewis & Sherman, 2003).

Somewhat in line with predictions, there was a marginal three-way interaction between the gender of the candidate, perceived similarity, and CV quality. Participants tended to rate good female candidates that were perceptually similar significantly lower than those that were perceptually dissimilar. However, very good female candidates that were perceptually similar received a significant increase in their evaluation. In addition, participant gender had a significant main effect, suggesting that regardless of the independent variable manipulations, male participants consistently rated all candidates less favorably than female participants. This leniency supports a study conducted by Winkvist, Mohr, and Kenny (1998) which showed that females consistently perceived others more positively than males did.

The results of this study emphasize that candidates are being evaluated not only on their credentials but also on job-irrelevant criteria. Biases can occur not only based upon common factors such as race and gender, but also upon whether one is perceived as similar or not. In addition, the results of this study show the extent to which a combination of job-irrelevant criteria can influence how a candidate is evaluated. Male employers evaluating a candidate that is female, "sort of" qualified, and shares their alma mater may show preferential treatment to a male candidate with similar qualifications. Past research, such as that done by Härtel, Douthitt, Härtel and Douthitt (1999), has also identified race as being a strong component in the forming of biases. Thus, future research should examine the effect of the race of the candidate as well as the participant and how these factors may influence hiring decisions.

In conclusion, current research demonstrates the fact that individuals can generate biases not only on the basis of common factors such as gender, but also through ingroup and outgroup affiliations. Candidates applying for employment within business or academia may be subject to

unwarranted scrutiny elicited by factors which are irrelevant to the position for which they are applying. Even though it is assumed that people with an “in” possess a better chance of landing a job, this research suggests the existence of a much more complicated situation.

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Table 1.
 Analysis of Variance for Mean Overall Rating Scores

Source	Mean	Std. Dev.	n	F	p
Quality of CV			79	13.510	.000**
Good	4.4654	.74295	43		
Very Good	5.1345	1.09508	36		
Perceived Similarity			79	.043	.837
Same	4.7633	.98301	40		
Different	4.7775	.97652	39		
Gender of Candidate			79	1.093	.299
Male	4.6795	.82309	39		
Female	4.8583	1.10416	40		
Quality of CV x Perceived Similarity				6.654	.012*
Good and Same	4.196	.181			
Good and Different	4.722	.180			
Very Good and Same	5.376	.193			
Very Good and Different	4.929	.201			
Quality of CV x Gender of Candidate				7.076	.010**
Good x Male	4.612	.187			
Good x Female	4.306	.175			
Very Good x Male	4.801	.192			
Very Good x Female	5.503	.201			
Perceived Similarity x Gender of Candidate				.009	.926
Same x Male	4.678	.176			
Same x Female	4.894	.199			
Different x Male	4.735	.201			
Different x Female	4.915	.180			
Quality of Candidate x Perceived Similarity x Gender of Candidate				3.284	.074
Good, Same, Female	4.512	.250			
Good x Same x Female	3.881	.265			
Good x Different x Male	4.712	.276			
Good x Different x Female	4.731	.230			
Very Good x Same x Male	4.845	.250			
Very Good x Same x Female	5.906	.293			
Very Good x Different x Male	4.758	.293			
Very Good x Different x Female	5.099	.276			

Note. * $p < .05$, ** $p < .01$

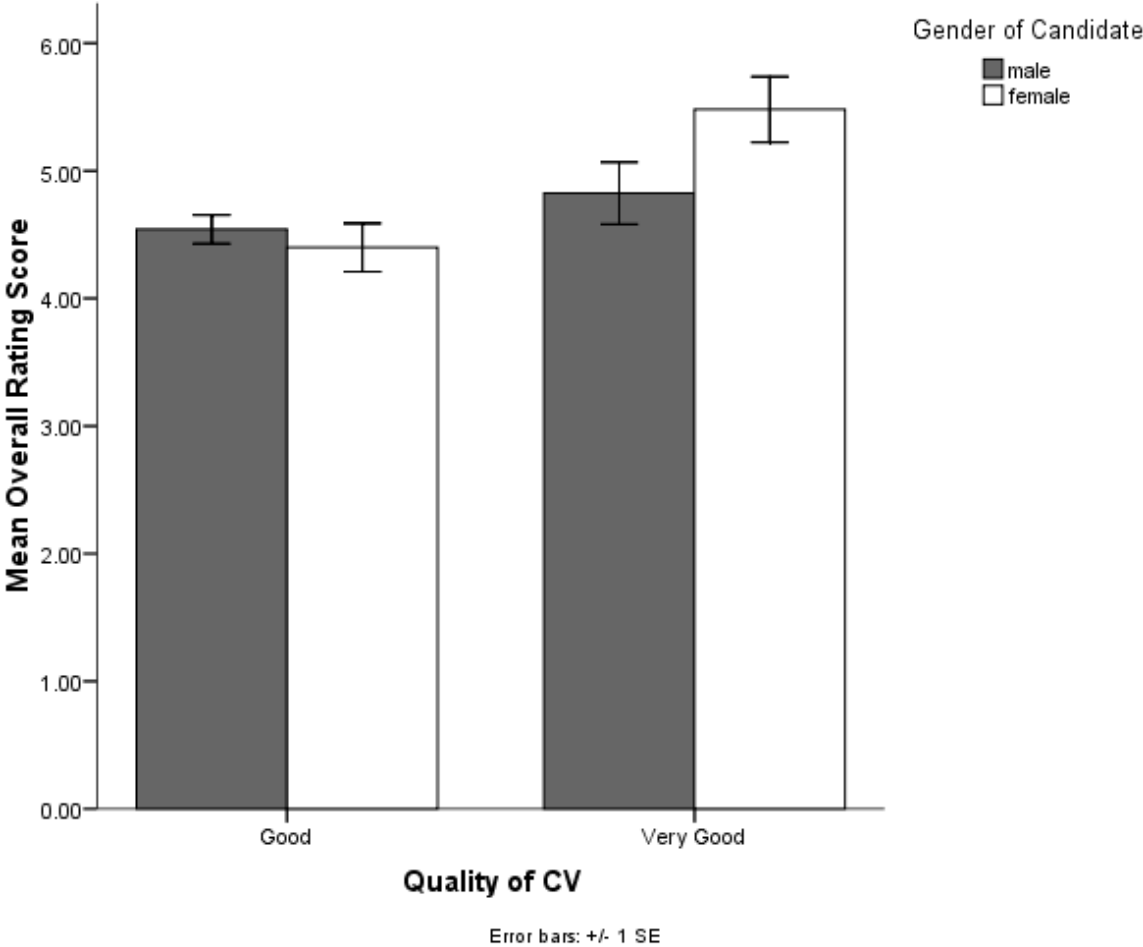
Figure Captions

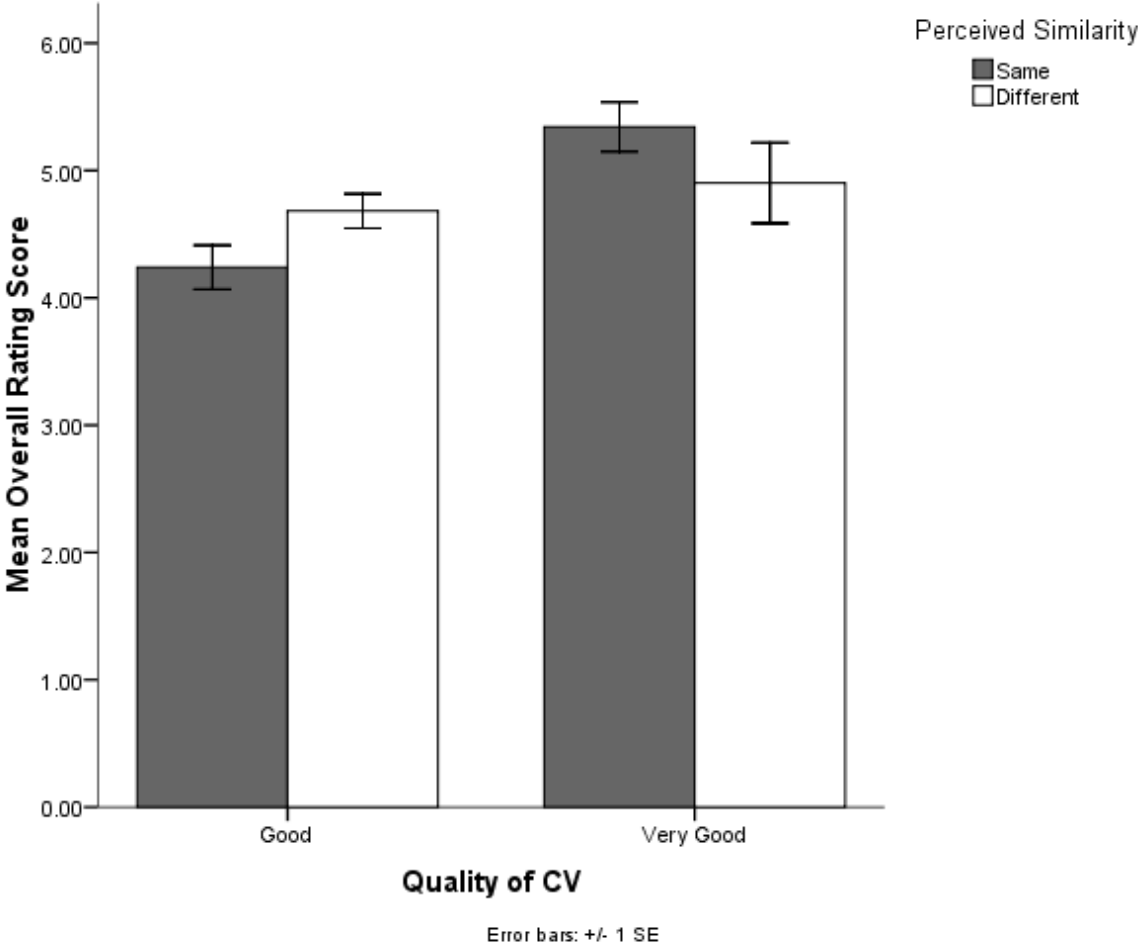
Figure 1. Mean overall rating score as a function of gender of candidate and quality of CV.

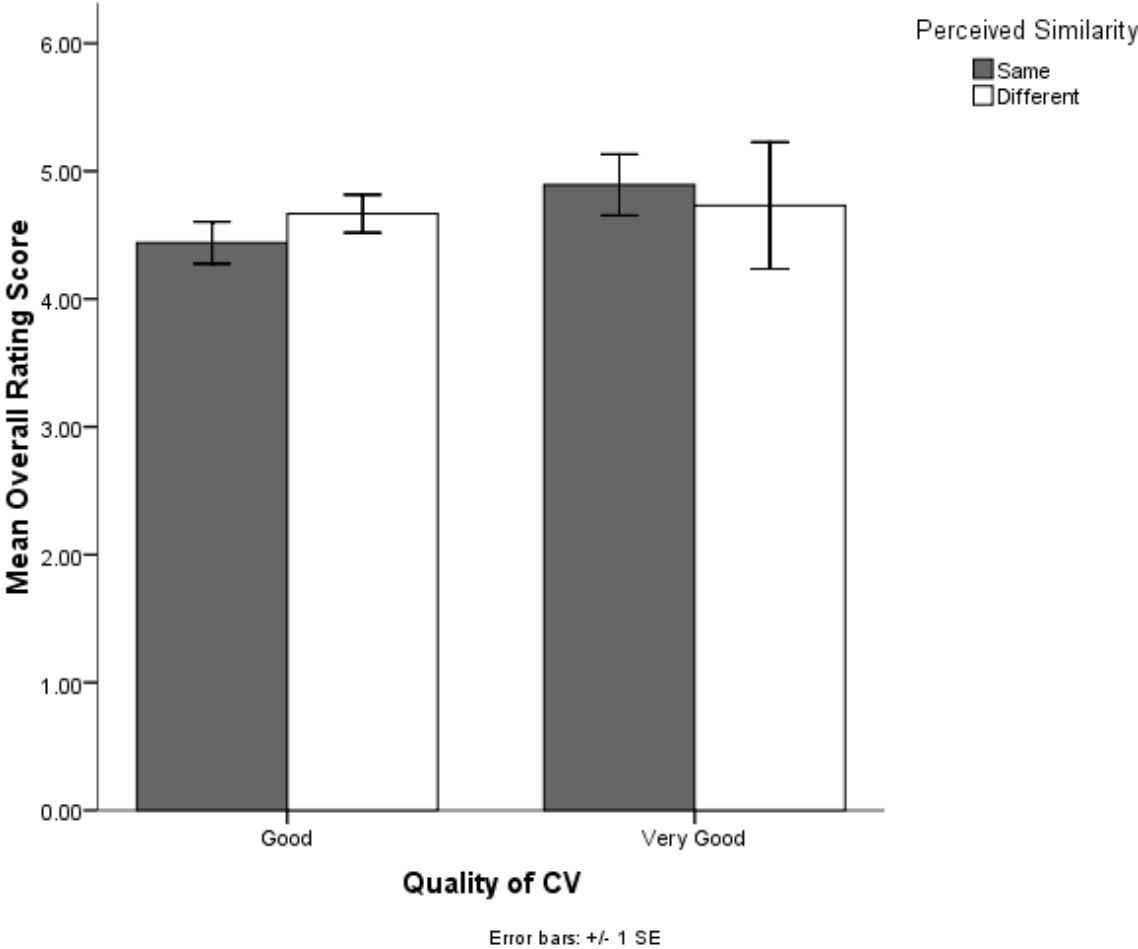
Figure 2. Mean overall rating score as a function of alma mater and quality of CV.

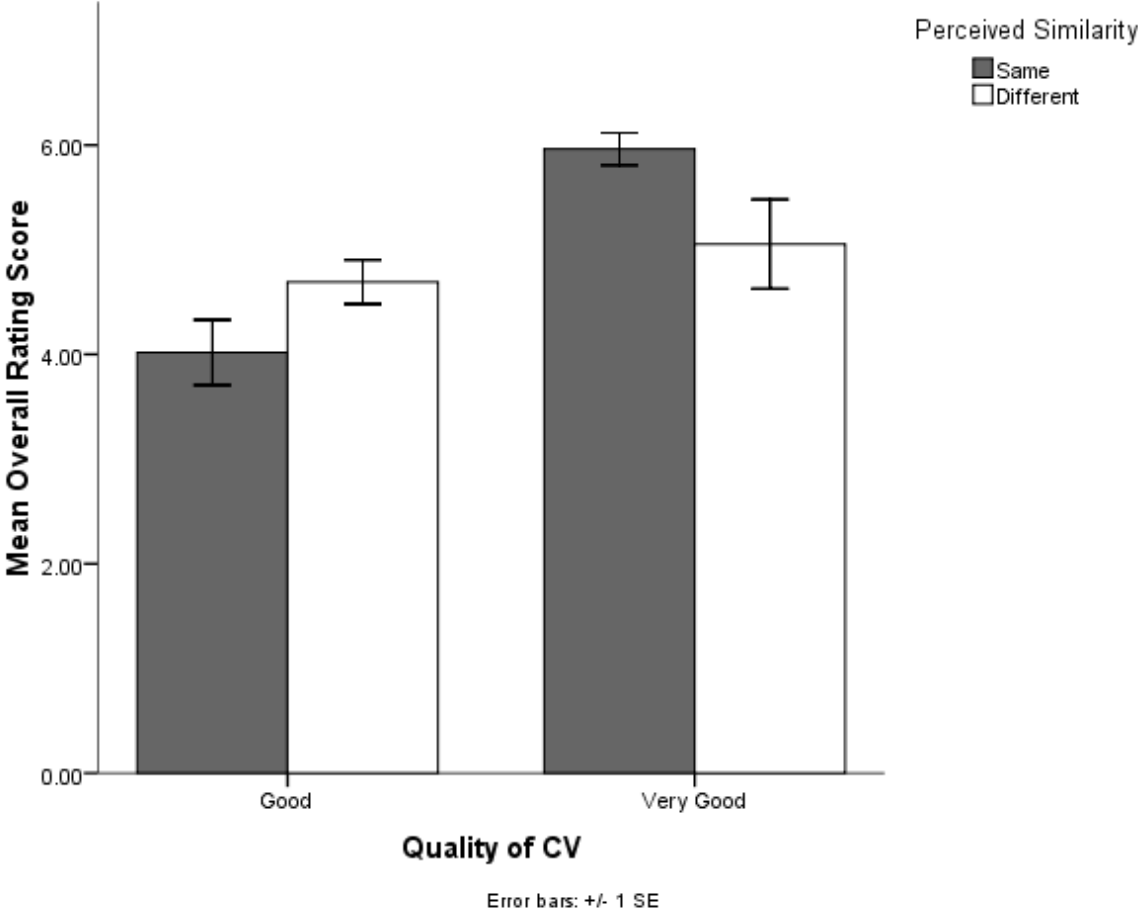
Figure 3. Mean overall rating score as a function of alma mater and quality of CV for male candidates.

Figure 4. Mean overall rating score as a function of alma mater and quality of CV for female candidates.









Appendix A

Sample Telephone Manipulation

Telephone Interview Evaluation

Candidate's Name: Brandon G. Schrader

Date of Interview: 1/4/10 CV Attached: YES NO

Interviewer: Jessie Moore

Overall Evaluation:

How would you rate the quality of this candidate?

1 2 3 4 5 6 7
poor good excellent

Comments: *Candidate was knowledgeable and poised. It appears he has a good track record - decent educational background and publication record (CV should be checked for confirmation). Good interpersonal skills.*

Evaluator:

Jessie Moore
Signature of Committee Member

Date: 1/4/10

Appendix B

Sample Curriculum Vitae

CURRICULUM VITAE (shortened version)

Brandon G. Schroder
 154 W 12th Avenue
 Columbus, Ohio 43210
 (614) 243-3348
 bschroder@gmail.com

Education

Ph.D. Quantitative Psychology. Ohio State University, expected May 2010.

M.S. Social Psychology of Sports and Physical Activity. University of Washington, 2007.

Arizona State University, Psychology, 2005.

Grants

The Fetzer Institute, Longitudinal Study of the Cognitive, Emotional, and Neural Effects of Sustained, Intensive Meditation Training. 07/01/08 – 06/30/2010, Total: \$80,000. Role: Co-PI

University of Washington Travel Grants, Summer 2008, 2009

Honors and Awards

2007 The Society of Multivariate Experimental Psychology Paper Award

Publications

Charles, D., Cheng, P. F., Schroder, B.G., & Harley, B. (in press). Exploring intra-individual, interindividual and inter-variable dynamics in dyadic interactions. In D Charles, B Schroder, & B. Harley (Eds.), *Statistical methods for modeling human dynamics: An interdisciplinary dialogue*. Notre Dame Series on Quantitative Methodology (Vol. 4). New York, NY: Taylor and Francis.

Schroder, B.G., Harley, B., Charles, D., & Cheng, P.F. (2009). Exploring nonstationary dynamics in dyadic interactions via hierarchical segmentation. *Psychometrika*.

Lazarro, J. L., Schroder, B.G., & Kent, T.P. (2009). Validity of causal inferences from passive longitudinal analyses of correction interventions: Accounting for selection and regression artifacts. *International Journal of Behavioral Development*.

Wheatley, U.J., Schroder, B.G., & Carter, O.D. (2009). Factorial invariance within longitudinal structural equation models: Measuring the same construct across time. *Child Development Perspectives*.

Bailey, L., Schroder, B.G., & Wheatley, U.J. (2008). Factorial Invariance and the specification of second-order latent growth models. *Methodology*, 4, 22-36.

Cheng, P.F, Schroder, B.G., & Nassir, G.P. (2007). A Kalman filter approach to the estimation of nonlinear dynamical systems models. *Multivariate Behavioral Research*, 42, 283-321.

Douglas, C.B., Martin, G.R., Cooper, N.J., Schroder, B.G., & Williams, H.F. (2005). Multivariate modeling of age and practice in longitudinal studies of cognitive abilities. *Psychology and Aging*, 20, 412-422.

Ad hoc reviewer

Cognitive Therapy and Research, Developmental Psychology, Experimental Aging Research, Intelligence, Journal of Applied Developmental Psychology

Professional Memberships

American Psychological Association

Society of Multivariate Experimental Psychology

Society for Research in Child Development

Teaching Experience

Primarily responsible for teaching two semesters of Psychology 342: Research Methods (Summer, 2008; Fall, 2009).

Teaching Assistant for Psychometrics, Multivariate Statistics, and Intro Psychology

Appendix C

Candidate Evaluation Form Questions

Evaluation of CV

Please complete the following questions to the best of your ability.

1. What was the name of the candidate you evaluated?	_____						
2. *How would you rate the quality of the CV?	1 Poor	2	3	4 Good	5	6	7 Excellent
3. *How likely would you be to recommend hiring this professor?	1 Not at All	2	3	4 Moderately	5	6	7 Very Much
4. *How successful do you think this professor is?	1 Not at All	2	3	4 Moderately	5	6	7 Very Much
5. *How much potential do you think this professor has?	1 Poor	2	3	4 Good	5	6	7 Excellent
6. *What is your overall evaluation of this individual as a hire at your school?	1 Poor	2	3	4 Good	5	6	7 Excellent

How central was it to making your recommendation?

Now consider...

*Judge the quality:

7. The research topic...	1 Poor	2	3	4 Good	5	6	7 Excellent	1 Not at All	2	3	4 Moderately	5	6	7 Very Much
8. The quality/number of this professor's publications...	1 Poor	2	3	4 Good	5	6	7 Excellent	1 Not at All	2	3	4 Moderately	5	6	7 Very Much
9. Professor's extramural funding...	1 Poor	2	3	4 Good	5	6	7 Excellent	1 Not at All	2	3	4 Moderately	5	6	7 Very Much
10. Professor's educational background...	1 Poor	2	3	4 Good	5	6	7 Excellent	1 Not at All	2	3	4 Moderately	5	6	7 Very Much
11. Professor's teaching experience...	1 Poor	2	3	4 Good	5	6	7 Excellent	1 Not at All	2	3	4 Moderately	5	6	7 Very Much
12. Professor's service contributions...	1 Poor	2	3	4 Good	5	6	7 Excellent	1 Not at All	2	3	4 Moderately	5	6	7 Very Much

* These questions were used to compute the "overall rating" score