

To Disclose or Not to Disclose Biracial Identity: The Effect of Biracial Disclosure on Perceiver Evaluations and Target Responses

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Are biracial people perceived more negatively than their monoracial counterparts? Across two studies, we compared ratings of warmth, competence, and minority scholarship worthiness for biracial (Study 1: Black/White, Study 2: Asian/White), White, and minority (Study 1: Black, Study 2: Asian) college applicants. Findings suggest that both biracial applicants were perceived as colder and sometimes less competent than both White and corresponding minority applicants. Moreover, biracial people were also perceived as less qualified for minority scholarships than other racial minorities, which is partially explained by penalties to warmth and competence. Study 3 shows that disclosing one's biracial identity makes biracial people vulnerable to negative feedback. Taken together, these studies suggest that biracial people who disclose their biracial identity experience bias from perceivers and may be more vulnerable to that bias because of the personal nature of racial disclosure. Findings are discussed considering the stereotype content model (Cuddy, Fiske, & Glick, 2007), cultural stereotypes about biracial people (Jackman, Wagner, & Johnson, 2001), and the costs of disclosing devalued identities.

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Consider the following scenario: A University committee deliberates about whom to give a prestigious minority fellowship. Two equally qualified candidates are proposed, one of whom is Black and the other is of biracial Black/White descent. Will the biracial candidate be viewed as less scholarship worthy than the Black candidate? Are biracial candidates viewed as having more favorable or less favorable traits than their minority monoracial peers? Biracial people have several identity options and may vary with regard to how they categorize themselves in different contexts (Rockquemore, Brunsma, & Delgado, 2009). When faced with a college application, biracial people may decide between choosing the race that they perceive will give them the most advantage and choosing the race that reflects their personal identification (Rockquemore et al., 2009). Yet it is unclear how evaluators perceive someone who identifies with their biracial identity.

These questions are especially relevant now that the U.S. Census allows biracial people to check more than one box indicating their racial background. This practice has become more popular in recent years, with biracial people disclosing their dual-race background to possible employers, prospective colleges, and government agencies. It is unclear, however, what the consequences of this disclosure may be. Little work has been done that investigates perceptions of biracial identity, as well as what these perceptions mean for the way in which biracial individuals are perceived, valued, and treated.

Instead, most of the work examining biracial identity has understandably focused on the target perspective to identify how people of biracial descent cope with the challenges assumed to accompany their membership in two or more racial groups (e.g., see Shih & Sanchez, 2005). While research with this focus often presents biracial identity as an adversity, researchers also argue that biracial populations challenge how people define race and the meaning of racial categories (e.g., Shih, Bonam, Sanchez, & Peck, 2007). To the extent that this argument is true, the perceiver's perspective on biracial people becomes increasingly important because it may shed light on how biracial identity challenges thinking about race. Perceptions of biracial identity, moreover, will provide valuable context for understanding the stigmatization that some biracial people experience. Thus, this study fills an important gap by examining whether evaluators judge biracial college applicants differently than their White and Minority counterparts on dimensions of warmth, competence, and minority scholarship worthiness (Studies 1 and 2). Moreover, Study 3 examines the consequences of these evaluations by examining whether biracial people who disclose their biracial identity are more vulnerable to negative evaluations compared those who do not disclose their biracial identity.

Perceptions of Biracial People

Only a handful of studies have examined perceptions of biracial people, and most of this work has focused on the perceptions of biracial children with the

exception of Pittinsky and Montoya (2009). For example, Jackman, Wagner, and Johnson (2001) found that unfavorable attitudes toward biracial children consisted of beliefs that biracial children were awkward in social situations and socially ostracized. A follow-up study also demonstrated that perceivers viewed biracial children as having trouble with social acceptance (Chelsey & Wagner, 2003). In addition, they found that White college students harbor these unfavorable attitudes about biracial people more than students of color (Jackman et al., 2001). On the contrary, Pittinsky and Montoya (2009) found no difference between White and Black students' support of policies benefiting multiracial groups. Thus, it is unclear what role the race of the perceiver may play.

Taken together, Jackman and colleagues' findings consistently showed that people view biracial children as socially awkward and isolated. Because this work may have implications for the manner in which biracial people of all ages are perceived, we draw upon it to provide background for our research question within the framework of the stereotype content model. Specifically, we expected biracial people to be viewed as less warm compared to monoracial people because they are typically seen as socially challenged. Moreover, we explored whether biracial people may also be seen as less competent because they are seen as more confused; however, we were less confident about this hypothesis because previous work suggests that biracial people are socially confused, not necessarily implicating intelligence (Jackman et al., 2001).

Stereotype Content Model

The stereotype content model (SCM; Fiske, Cuddy, Glick, & Xu, 2002) suggests that the content of stereotypes can be best understood along two dimensions: warmth and competence. Understanding the content of stereotypes along warmth and competence dimensions is important for predicting the emotional and, thus, behavioral responses to members of stereotyped groups (Cuddy, Fiske, & Glick, 2007; Fiske et al., 2002). For example, people experience the emotion of pity in response to groups they perceive as high in warmth and low in competence (Cuddy & Fiske, 2002; Cuddy, Norton, & Fiske, 2002; Fiske et al., 2002) and envy toward those they perceive high in competence and low in warmth (Fiske et al., 2002). If stereotypes are entirely negative, that is, stereotypes are low in warmth and competence, people often experience contempt for members of those groups. Moreover, these emotional responses elicit specific behaviors. For example, envy predicts harassing behavior from others while pity predicts greater tendencies to help from others (Cuddy et al., 2007). The group members who are least likely to receive help are those for whom the stereotype is entirely negative. Understanding where stereotypes groups fall within dimensions of competence and warmth may predict their willingness to help such groups. We believe it important then to identify how biracial populations fit into the SCM as they may be stereotypes

as lower in warmth and competence than their minority peers. In addition, their lower perceived warmth and competence may predict evaluations of their minority scholarship worthiness.

Studies 1 and 2 will focus on perceptions of Black/White and Asian/White biracial people. Because biracial children are believed to be confused and isolated (Chelsey & Wagner, 2003; Jackman et al., 2001), biracial people might generally be lower in warmth (because of their perceived lack of social acceptance and isolation) than both their White and Minority peers. We also explored whether biracial people were seen as less competent compared to monoracial candidates. Thus, Studies 1 and 2 compare ratings of warmth and competence among Black/White, Black, and White candidates (Study 1) and Asian/White, Asian, and White candidates (Study 2).

Minority Scholarship Worthiness

In addition to examining trait perceptions, we also examine whether candidates are perceived as deserving of minority scholarships (Studies 1 and 2). Worthiness of these awards is an important domain to study because it is one of the many emerging arenas in which biracial people have the opportunity to disclose their full racial background. Moreover, financial assistance can determine access to educational opportunities that would otherwise be unavailable to minorities. Thus, understanding access and assistance for people of mixed-racial backgrounds will provide useful information on whether biracial people are viewed as “minority enough” for social policies intended to support racial minorities. Moreover, feeling positively toward biracial people appears to predict support of social policies and financial assistance for biracial people (Pittinsky & Montoya, 2009); thus, we expected that the trait evaluations of the biracial candidate would relate to their scholarship worthiness. We hypothesize that biracial candidates will be rated as less deserving than their minority monoracial peers for two reasons. First, biracial candidates may be perceived as lower in warmth and competence because of the stereotypes associated with them. We expect warmth and competence ratings to influence minority scholarship worthiness. Because these rewards are for academic competence, we expect higher competence ratings to predict greater scholarship worthiness. We also expect higher warmth perceptions to predict greater scholarship worthiness because giving scholarships is a form of helping. People who are perceived as warm are also those who receive the most help by others because warmth elicits particular intergroup emotions associated with proactive and cooperative behavior (BIAS map; Cuddy et al., 2007).

An additional explanation for why we believe biracial candidates will be seen as less minority scholarship worthy is that biracial candidates who have White and Minority racial backgrounds (e.g., Asian/White, Black/White biracial people) may be perceived as less deserving because of their “Whiteness.” Minority fellowships are earmarked for racial minorities who may have overcome hardships

and difficulties associated with their minority status. Biracial people have dual minority status (Johnson, 1992; Shih & Sanchez, 2005), which means that they may not be perceived as White enough to gain all the privileges associated with being White (e.g., immunity from racial discrimination) but not quite “minority enough” to be viewed as a full member of a racial minority group and thus, deserving of minority fellowships. Thus, biracial people may be viewed as less in need, and therefore, less minority scholarship worthy than “real” racial minorities as part of their dual minority status bind.

Overview of Hypotheses

The purpose of the first studies is to show that applications from biracial candidates will be penalized on the warmth and competence dimension relative to applications from monoracial candidates. We also expected that biracial candidates will be seen as less minority scholarship worthy compared to monoracial minority candidates. In addition, we expected that the penalties biracial applicants receive to warmth and competence will account for some (if not all) of the advantage that the minority monoracial minority candidate has for the minority scholarship. In addition, we tested whether biracial candidates were seen as having overcome less obstacles than minority monoracial candidates as well as whether overcoming obstacles might also explain why minority candidates were seen as more scholarship worthy.

Study 1

Study 1 compares evaluations of a college applicant described either as Black, White, or Black/White biracial by college students. We compare applicants on ratings of warmth, competence, and perceived obstacles encountered, as well as minority scholarship worthiness in a between-subjects experimental design.

Method

Participants

Participants consisted of 181 undergraduates (102 women and 79 men) from Rutgers University from the psychology subject pool who participated in exchange for course credit. The racial breakdown of participants was as follows: 111 White/European Americans, 63 Asian Americans, and 7 Latinos. The mean age was 18.76 ($SD = 1.06$).

Procedure and Measures

Participants were told the study was about the types of criteria college students think are important in deciding admissions and scholarships for predicting later

college success. Each participant was given three candidates (two fillers and one target) to evaluate for undergraduate admission at a top-ranked university. All filler candidates were males; the first was described as White and the third, Latino. The second candidate in each packet was always the target candidate, who was described as an 18-year-old male with various good academic qualities (e.g., 1410 SAT, 4.0 GPA, and various extracurricular activities). The only difference among the three conditions was that the second candidate was listed as White, Black, or Black/White biracial. In other words, the ethnicity of Candidate 2 was rotated, but all other information was held constant across conditions. The participants were randomly assigned to condition.

Participants were asked the same questions about both the target and the two filler candidates; however, reliability is reported only for the target candidate because we were not interested in the filler candidates. Participants were asked to rate the candidate on the extent to which he had warmth (warm, good-natured, sincere, and trustworthy; $\alpha = .93$) and competence traits (capable, efficient, organized, and skillful; $\alpha = .93$) on a scale from 1 (*not at all*) to 7 (*extremely*). These traits have been used and found reliable in previous SCM research (e.g., Cuddy, Fiske, & Glick, 2004). In addition, participants rated eight other filler items about the candidate (e.g., practical, tolerant, determined; Cuddy et al., 2004).

Finally, participants were told that exceptional racial minorities would qualify for a minority scholarship to subsidize the cost of tuition, books, and living expenses. They were asked to rate their level of agreement with the following statements on a scale from 1 (*strongly disagree*) to 7 (*strongly agree*) to determine minority scholarship worthiness: "I believe this candidate should be awarded a selective scholarship for minority students," "I am extremely confident that this candidate deserves a minority scholarship," and "If I only had one minority scholarship to give, this candidate would be my first choice for the minority scholarship." These items were averaged, and the scale was reliable ($\alpha = .98$). As a proxy measure of the privilege of Whiteness, we asked evaluators the following question, "This candidate likely overcame obstacles in his life" on a scale from 1 (*strongly disagree*) to 7 (*strongly agree*). Following the candidate evaluation, participants were asked a series of filler questions about the importance of various criteria in admissions decisions (SATs, GPA, Letters of Recommendation, etc.).

Results and Discussion

Was the Biracial Candidate Seen as Less Warm Than the Monoracial Candidates?

We compared evaluations between the target candidates using ANOVAs followed by Tukey post hoc comparisons. For warmth ratings, we found a significant effect of condition, $F(2, 178) = 4.44, p = .01$. The post hoc Tukey tests revealed

that the Black/White candidate ($M = 4.72$, $SD = .75$) was viewed as significantly lower in warmth than both the Black candidate ($M = 5.13$, $SD = 1.03$, $p < .05$) and the White candidate ($M = 5.11$, $SD = 1.08$, $p = .03$). No significant difference was found between the White and Black candidate. For competence ratings, we did not find any effect of condition, $F(2, 178) = .58$, $p = .56$, *ns*.

Was the Biracial Candidate Viewed as Less Scholarship Worthy Than the Monoracial Minority?

For minority scholarship worthiness, we found a significant effect of condition, $F(2, 177) = 180.71$, $p < .001$. As a manipulation check on whether participants paid attention to the race of candidates, we found that the White candidate ($M = 1.60$, $SD = 1.02$) was viewed significantly less appropriate for the minority scholarship than both the Black candidate ($M = 5.89$, $SD = 1.21$, $p < .001$) and the Black/White candidate ($M = 5.25$, $SD = 1.36$, $p < .001$). More pertinent to our hypotheses, the Black/White candidate was viewed as less scholarship worthy than the Black candidate ($p = .01$). Finally, there was no difference between any of the candidates on the extent to which the perceivers' believed they had overcome obstacles, $F(2, 178) = .96$, $p = .38$, *ns*.

Do Penalties to Warmth Explain Why the Biracial Candidate Was Less Scholarship Worthy?

The Black/White candidate received penalties on the warmth dimension and was seen as less minority scholarship worthy than the Black candidate. To test whether the penalty to warmth explained the lower scholarship worthiness of the Black/White candidate, we tested for mediation in accordance with Baron and Kenny (1986). As already demonstrated by the previous analyses, the Black/White candidate was believed to be lower in warmth and scholarship worthiness. We then needed to test whether warmth ratings predicted the scholarship worthiness of the target candidate when he or she was described as a minority (Black/White or Black). Indeed, warmth ratings were associated with scholarship worthiness ($r = .23$, $p = .008$). The next step was to test whether the Black candidate's advantage in getting the minority scholarship over the Black/White candidate was explained, at least partially, by the difference in warmth ratings. We regressed scholarship worthiness on the condition effect (1 = candidate was described as Black/White, 2 = the candidate was described as Black) in Step 1 and warmth was added at Step 2. In Step 2, we found that the original advantage the Black candidate had over the Black/White candidate was reduced from $\beta = .24$ to $.20$, but the condition effect was still significant at $p = .02$. According to the Sobel's *t*-test, this was, at best, a marginally significant mediation effect ($t = 1.69$, $p = .08$).

Summary

These findings are consistent with several predictions. First, biracial candidates were perceived as lower in warmth paralleling previous work that finds biracial people are perceived as socially awkward and isolated (Jackman et al., 2001). In addition, the biracial candidate was viewed as less scholarship worthy, which could not be explained by the warmth penalty. Warmth did, however, predict scholarship worthiness as the SCM and BIAS map would suggest (Cuddy et al., 2007).

Study 2

In Study 2, we examine whether the findings regarding warmth and scholarship worthiness apply to a different biracial group: Asian/White biracial people. We also expand on the methodology of Study 1 by examining whether evaluators who share the biracial candidate's minority identity (i.e., Asian monoracial people) rate this candidate more favorably than monoracial White people do. Jackman and colleagues' (2001) findings suggested that minorities should show bias toward biracial applicants; however, other studies suggest that we should not find differences between these two groups (Pittinsky & Montoya, 2009). Thus, the purpose of Study 2 was also to explore these contradictory findings.

Methods

Participants

Participants consisted of 163 undergraduates (60 women, 102 men, and 1 unidentified gender) from Rutgers University's Introductory Psychology class to participate in exchange for extra credit at the beginning of a class period. The group consisted of 78 Asian participants with the non-Asian participants consisting of 63 White/European Americans, 11 Black/African Americans, 1 American Indian/Alaskan Native, and 4 Others. The mean age was 19.09 ($SD = 1.06$).

Measures and Procedure

The procedure and materials were identical to Study 1 except that participants were given two candidates to evaluate, one of which was the target who was either described as Asian, White, or Asian/White biracial. We used two instead of three candidates in the packet to shorten the procedure for distribution as extra credit at the beginning of an Introductory Psychology class. The target candidate always appeared second. The first candidate was described as Latino. Warmth ($\alpha = .87$),

competence ($\alpha = .81$), and scholarship worthiness measures ($\alpha = .95$) were reliable.

Results and Discussion

We compared evaluations between the target candidates using a 2 (Asian vs. non-Asian evaluator) \times 3 (Candidate: Asian, White, or Asian/White) ANOVA followed by Tukey post hoc comparisons. Across every analysis, Asian participants were not less likely to show bias toward biracial candidates. We found no interactions between condition and whether participants were Asians or non-Asians; thus, we do not discuss participants' race any further and evaluator race variable was excluded from subsequent analyses.

Did Biracial Applicants Receive Penalties to Warmth?

As expected, there was a significant main effect for warmth ratings, $F(2, 160) = 3.19, p = .04$ replicating Study 1. The post hoc Tukey test revealed that the Asian/White candidate ($M = 4.39, SD = .89$) was viewed as significantly lower in warmth than the Asian candidate ($M = 4.80, SD = .89, p = .04$). No significant differences were found between the White applicant ($M = 4.67, SD = .83$) and any of the other candidates.

Unexpectedly, there was a significant condition effect for competence ratings, $F(2, 160) = 5.13, p = .007$. The post hoc Tukey test revealed that the Asian/White candidate ($M = 5.51, SD = .93$) was viewed as significantly less competent than both the Asian candidate ($M = 5.98, SD = .77, p = .007$) and the White candidate ($M = 5.86, SD = .64, p = .05$). No significant differences were found between the White and Asian candidates.

Were Biracial Candidates Viewed as Less Scholarship Worthy Than Monoracial Minorities?

For scholarship worthiness, we found a marginal main effect for being Asian, $F(2, 160) = 3.00, p = .08$, that did not significantly interact with condition. As expected and consistent with Study 1, we found a significant effect of condition for scholarship worthiness, $F(2, 160) = 36.41, p < .001$. Again, we found that the White candidate ($M = 2.33, SD = 1.45$) was viewed as significantly less minority scholarship worthy than both the Asian candidate ($M = 4.86, SD = 1.41, p < .001$) and the Asian/White candidate ($M = 4.02, SD = 1.59, p < .001$). More important, the Asian/White candidate was viewed as less scholarship worthy than the Asian candidate ($p = .01$).

For perceived obstacles, we found a main effect for being an Asian evaluator, $F(2, 160) = 6.16, p = .01$, that did not interact significantly with condition. As in

Study 1, there were no other significant main effects of condition or interactions for perceived obstacles.

Do Penalties to Warmth and Competence Explain Why the Biracial Candidate Was Less Scholarship Worthy?

As expected based on the findings of Study 1, the Asian/White candidate received penalties on the warmth dimension and was seen as less minority scholarship worthy than the Asian candidate. Unique to Study 2, the Asian/White candidate was also rated as less competent than the White and Asian candidates. To test whether the penalties resulting from less warmth or competence explained the lower scholarship worthiness of the Asian/White candidate, we tested for mediation using the same analyses in Study 1.

As already demonstrated by the previous analyses, the Asian/White candidate was believed to be lowest in warmth, competence, and scholarship worthiness. We then needed to test whether warmth or competence ratings predicted the scholarship worthiness of the target candidate when he was described as a minority (Asian/White or Asian). Moreover, both warmth ratings ($r = .23, p = .004$) and competence ratings ($r = .23, p = .003$) were associated with greater scholarship worthiness. The next step was to test whether the Asian candidate's advantage in getting the minority scholarship over the Asian/White candidate was explained, at least partially, by the difference in warmth ratings and/or the competence ratings. We tested mediation by warmth and competence separately. We regressed scholarship worthiness on the condition effect (1 = candidate was described as Asian/White, 2 = the candidate was described as Asian) in Step 1 and warmth was added at Step 2. We found that the original advantage the Asian candidate had over the Asian/White candidate in Step 1 was reduced from (β) .27 to .19 when warmth was added at Step 2, but this condition effect was still significant at $p = .03$. The Sobel's t -test was significant ($t = 2.05, p = .04$), suggesting that warmth explained some, but not all, of the advantage that the Asian candidate had over Asian/White candidates on scholarship worthiness.

We also performed the same mediation analyses for competence ratings. We found that the original advantage the Asian candidate had over the Asian/White candidate was reduced from (β) .27 to .16 and the condition effect became only marginally significant ($p = .08$) when competence ratings were added to the regression. The Sobel's t -test was significant ($t = 2.50, p = .01$) suggesting that competence ratings explained part of the advantage that the Asian candidate had over Asian/White candidates on scholarship worthiness.

As expected, Study 2 replicates the findings of Study 1 in several ways. Biracial candidates across both studies were penalized on the dimension of warmth. In addition, biracial candidates were seen as less minority scholarship worthy compared to their minority monoracial peers. In addition, dimensions of warmth

predicted scholarship worthiness. Study 2 shows that penalties for Asian/White biracial candidates extend to the competence domain as well with Asian/White biracial candidates viewed as less competent than their peers. In addition, lowered warmth and competence ratings explained part of the advantage Asian candidates had on the minority fellowships. Moreover, Study 2 provided initial evidence that Asian evaluators were not less likely to make these unfavorable ratings of biracial candidates.

The findings of Studies 1 and 2 suggest that a biracial college applicant who chooses to indicate his or her biracial background may be vulnerable to more negative evaluations compared to when the candidate chooses to disclose his or her White or Minority monoracial background. Findings from Studies 1 and 2 suggest that biracial people face potential bias from evaluators. Does disclosing biracial identity make biracial people more vulnerable to these potentially biased evaluators? Study 3 examines whether disclosing one's biracial background to an evaluator makes biracial people vulnerable to negative feedback from that evaluator. For Study 3, we move from the perceiver perspective (how others evaluate biracial people) to the target perspective (how biracial people respond to evaluations). Study 3 will examine whether disclosing one's biracial identity followed by negative feedback has negative consequences for self-evaluations compared to nondisclosure. This knowledge will shed light on the consequences of evaluator bias demonstrated in Studies 1 and 2.

Study 3

Should biracial people disclose their biracial identity? The findings of Studies 1 and 2 demonstrate that biracial people should not disclose their identity because they may be perceived as less warm and less scholarship worthy. However, Studies 1 and 2 have focused primarily on the perceiver perspective, neglecting how disclosure of one's biracial identity may affect biracial people's self-evaluations. However, disclosures vary to the degree that the personal information revealed is intimate and private (Derlega, Metts, Petronio, & Margulis, 1993; Kelly & McKillop, 1996; Laurenceau, Barrett, & Pietromonaco, 1998; Moon, 2000). For example, disclosure of stigmatized identities represents an intimate form of self-disclosure (e.g., Kawamura & Frost, 2004; Quinn, Kahng, & Crocker, 2004). Research on identity disclosure typically finds that disclosure predicts positive outcomes such as feeling more connected and accepted by others (Altman & Taylor, 1973), the reduction in the stress related to concealing information (Pennebaker, 1997), and better physical (Pennebaker, Kiecolt-Glaser, & Glaser, 1988) and psychological well-being (Pantchenko, Lawson, & Joyce, 2003). Many of the proposed benefits of disclosure assume a positive response from discloses. Nearly all of the negative consequences associated with disclosure stem from situations in which disclosing a devalued identity is met with disapproval or

negative evaluations. This is precisely the situation we intended to create in our laboratory for Study 3. Given that Studies 1 and 2 show that biracial disclosure may be met with negative evaluations, we were particularly interested in whether biracial people internalize negative feedback when they have disclosed their biracial identity compared to nondisclosure conditions. Study 3 adds the important perspective of the target perspective by showing the effect of biracial disclosure on target responses to negative feedback.

Disclosing one's biracial identity is an intimate form of disclosure that should make the biracial person more vulnerable to those they have disclosed to. Previous work suggests that disclosing any stigmatized social identity represents an intimate exchange that make the disclosers more vulnerable to the response of those to whom they have disclosed (Altman & Taylor, 1973; Collins & Miller, 1994; Cozby, 1973; Derlega et al., 1993; Jourard, 1979; Kelly & McKillop, 1996; Laurencieu et al., 1998; Moon, 2000; Wheelless, 1976). For example, McKenna and Bargh (1998) found that those who had concealable identities were vulnerable to negative feedback, as evident by their reluctance to post messages in Internet chat rooms after a previous message was responded to negatively. Thus, biracial people who receive negative feedback after disclosing their biracial identity may be more vulnerable to that feedback than those who have not disclosed their biracial identity.

Given the biased evaluations found for biracial candidates in Studies 1 and 2, we believed it was important to examine whether disclosure made biracial people vulnerable to negative feedback from those they had disclosed to. Study 3 examines whether biracial people who disclose their biracial background show lower self-esteem after negative feedback from those they disclosed to compared to nondisclosure. Study 3 examines whether biracial people show lower state self-esteem after receiving negative feedback compared to biracial people who are not made to disclose their biracial identity. We also examined whether this effect was unique to biracial people, that is, we examined whether White/European participants with valued racial identities would show similar responses to racial disclosure followed by negative feedback. We hypothesized that increased vulnerability to negative feedback would be unique to biracial people because they were revealing relatively devalued (thus, more personal) racial identities.

Method

Participants

One hundred participants (56 biracial Americans and 44 White/European Americans) were included in this study. The average age of the entire sample was 18.91, of which 60% were women. Participants were recruited through the undergraduate psychology subject pool at a state university and received course credit for participation.

Participants were preselected to participate in the study on the basis of their parents' ethnicity. A prescreening questionnaire was distributed on the first day of introductory psychology classes on which all subject pool participants indicated their biological parent's ethnicity. Participants who indicated that their parents came from different racial backgrounds were recruited for the biracial sample and participants who indicated that both of their parents came from White European-American backgrounds comprised our White sample. We added in one further selection criteria for the biracial participants—they had to indicate one biological White parent and one biological parent of another race because we wanted to sample White biracial populations.¹

Participants were unaware of the selection criterion for recruitment. The final sample of biracial people determined from self-reported biological parents' background obtained at the end of the study included 21 Asian/White, 12 Latino/White, 11 Black/White, 10 White/Other, and 3 Multiracial/White.

Materials

Self-esteem. To measure the participants' self-esteem after receiving their negative evaluation, we administered a state version of the Rosenberg Self-Esteem Inventory (RSE; Rosenberg, 1965). The responses were measured on a scale of 1 (*strongly disagree*) to 7 (*strongly agree*), and the statements were tailored to reflect participants' self-esteem in the immediate context (e.g., "Right now, I feel that I am a person of worth, at least on an equal basis with others"). The measure was reliable ($\alpha = .84$).

Mood. To ensure that our findings regarding state self-esteem were not due to differences in mood from the act of disclosure itself rather than the combination of disclosure and negative feedback, we measured mood (sadness, hostility, and anxiety) after disclosure but before negative feedback with the Multiple Affect Adjective Checklist-Revised (MAACL-R; Zuckerman & Lubin, 1985). The MAACL-R includes a list of 18 adjectives associated with hostility (angry, agreeable, cooperative, friendly, irritated, mad; $\alpha = .82$), sadness (blue, energetic, happy, hopeless, sad, strong; $\alpha = .86$), and anxiety (secure, steady, tense, worrying, calm, fearful; $\alpha = .82$). For each trait, participants were asked the extent to which they were experiencing that feeling right now on a 1 (*not at all*) to 7 (*very much*) scale. Traits (e.g., agreeable) were reverse scored such that higher scores indicated higher levels of anxiety, sadness, and hostility.

¹Categorizing biracial identity based on biological parents' background has been used in previous research (e.g., Herman, 2004). It is a useful method for examining first-generation biracial people because we will not necessarily overrepresent those who highly identify with their biracial background.

Experimental manipulation. At the start of the experiment, participants were asked to fill out an information sheet to be provided to another participant as a way to introduce themselves. Participants in both conditions were asked to share their age, academic major, hometown, number of siblings, favorite movies, favorite bands, and hobbies. In the experimental condition, participants were also asked to disclose the racial identities of both of their biological parents.² All other information on the sheet was held constant across conditions. This manipulation allowed us to compare the effect of negative feedback between individuals whose race was disclosed to the bogus participant and individuals whose race was not disclosed.

Standardized feedback. All participants received a feedback form that had a handwritten evaluation. The evaluation stated that the participant's paragraph was overall weak, had many ignored arguments, and was not very persuasive. The feedback form also had a numeric evaluation at the bottom, in which the bogus participant could circle a number from 1 (*below average quality*) to 7 (*above average quality*). The number 2 was circled on the standardized feedback form, indicating that the paragraph was considered below average quality.

Procedure

Participants arrived at the designated experiment site with two adjoining rooms separated by a door. They were greeted by a White female experimenter. The experimenter told the participant that they were still awaiting a second participant, but that the participant could begin to read over the informed consent form while waiting. The experimenter exited the room, attended to a bogus second participant in the room next door, and returned to the subject, claiming that the second participant had arrived and was ready to begin as well. Experimenters were instructed to maintain the credibility of the bogus participant by opening and closing doors, reading instructions to the bogus participant such that the real participant next door could overhear the instructions given to the bogus participant. After procuring the signed informed consent form, the experimenter administered the manipulation (Introduction Sheet). Participants were randomly assigned to either the experimental (racial disclosure) or control condition (nondisclosure of

²We chose parents' identity because racial categorization is known to fluctuate for biracial people depending on the situation (Harris & Sim, 2002; Hitlin, Brown, & Elder, 2006; Rockquemore et al., 2009) whereas we expected parental racial identity not to be as vulnerable to the social context. In this case, all of the participants who were asked to disclose, indeed disclosed a biracial background. If we had simply asked "what is your race," it is likely that many of the participants who we knew from pretest were biracial may not have indicated so during the experiment because of the tendency for racial labels to change (Harris & Sim, 2002; Hitlin et al., 2006). However, whether biracial participants would change their racial identification in the context of threat is an interesting topic for future studies.

race). The Information Sheet in the experimental condition prompted participants to disclose the racial identity of each of their biological parents. The Information Sheet in the control condition asked participants to reveal identical information with the exception of their racial heritage. The experimenter told participants that the bogus second participant would read over the completed Information Sheet.

While the Information Sheet was being “delivered” to the bogus participant, subjects filled out a mood measure. The experimenter returned and instructed the participant at this time to construct an essay on the war between the United States and Iraq.³ After the essay was completed, experimenter returned to their room, explaining that the second participant would now evaluate their paragraph. While the second participant was supposedly evaluating their paragraph, participants completed a filler task, which required them to share what they believed to be strong evaluator qualities. After appropriate amount of time had elapsed, the experimenter returned to the room and gave the participant a standardized feedback form. The participant then received the feedback from the bogus evaluator suggesting that the paragraph was poorly written, weak, and not persuasive. The experimenter instructed participants to read over their feedback and complete a packet of questionnaires. The questionnaire contained the state RSE scale embedded in various other filler tasks. In addition, participants were asked their racial background as a prescreen check. The experimenter asked participants whether anything about the study seemed suspicious and recorded any responses.⁴ At this point, participants were debriefed and thanked for participation.

Results and Discussion

Does Racial Disclosure Followed by Negative Feedback Impact State Self-Esteem?

Our hypothesis was that biracial participants, not White participants, would show lower self-esteem after negative feedback when they had previously disclosed their racial background compared to those who did not disclose their racial background. We ran a 2 (Condition: disclose vs. no disclose) \times 2 (Race: White or biracial participant) ANOVA on state self-esteem. The main effect for condition was not significant, $F(1, 99) = 2.72, p = .10$. The main effect for race was not significant, $F(1, 99) = .17, p = .68$. However, the predicted race by condition effect was significant, $F(1, 99) = 4.36, p = .04$. Consistent with our hypotheses, the biracial participants showed lower self-esteem in the disclosure condition

³No difference emerged in the tone or political orientation of the participants by condition. Participants were just as likely to support/not support the war in Iraq in both conditions.

⁴Two participants did not believe there was another participant. Results excluding these participants did not alter the results.

Table 1. Means and Standard Deviations for Race by Condition

	Disclosure		No Disclosure		Cohen's <i>d</i>	<i>t</i>
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>		
Biracial Participants (<i>n</i> = 56)						
State Self-Esteem	5.04	0.88	5.60	0.57	.75	-2.93**
Hostility	2.21	0.77	2.01	0.74	.26	1.00
Sadness	3.04	1.11	2.79	0.91	.25	0.90
Anxiety	2.84	1.06	2.96	1.01	.12	-0.41
White Participants (<i>n</i> = 44)						
State Self-Esteem	5.29	0.62	5.23	0.85	.08	0.30
Hostility	2.08	1.00	2.34	0.80	.29	-0.93
Sadness	2.55	1.10	2.63	0.94	.08	-0.24
Anxiety	2.41	1.14	2.27	0.91	.14	0.44

($M = 5.04$, $SD = .88$) than the nondisclosure conditions ($M = 5.60$, $SD = .57$) following the negative feedback, $F(1, 55) = 7.62$, $p = .008$. Also consistent with our hypotheses, no difference was found between White participants in the disclosure ($M = 5.29$, $SD = .62$) and nondisclosure conditions ($M = 5.23$, $SD = .85$), $F(1, 43) = .91$, $p = .76$ (see Table 1).

Does Racial Disclosure before Negative Feedback Impact Mood?

We also tested whether disclosure alone affected the mood of our participants, before they received the negative feedback. We ran a 2 (Condition: disclose vs. no disclose) \times 2 (Race: White or biracial participant) ANOVA on each mood subscale: hostility, anxiety, and sadness. In these analyses only one effect emerged as significant; biracial participants, regardless of condition, experienced greater anxiety ($M = 2.89$, $SD = 1.03$) than White participants ($M = 2.35$, $SD = 1.06$) during the experiment, $F(1, 97) = 6.94$, $p = .01$. Because of this unexpected mood difference, we conducted an additional 2 (Condition) \times 2 (Race of participant) ANOVA on state self-esteem covarying out preexisting differences in anxiety and still found a significant two-way interaction between race \times condition. Thus, controlling for preexisting differences in anxiety between White and biracial participants did not alter the results.

The results were consistent with our predictions that disclosing a biracial identity would make biracial people vulnerable to feedback from the discloser. Biracial people reported lower self-esteem following negative feedback when they had previously disclosed their biracial background compared to nondisclosure. As predicted, no such effect was found for White participants. Although biracial participants indicated greater anxiety in our study than White participants, the

main findings persisted controlling for anxiety. Moreover, racial disclosure itself (prior to negative feedback) had no effect on anxiety, hostility, or sadness. Thus, the state self-esteem differences for biracial participants after negative feedback were specific to disclosure paired with negative feedback rather than the result of disclosure alone. Taken together, the finds of these studies suggest that biracial people may be more likely to receive negative evaluations than their monoracial peers and the act of disclosing biracial identities appears to make them vulnerable to negative feedback.

General Discussion

When an identical application is submitted by a college student who discloses his or her biracial background, we find that he or she is perceived as less warm than if the college student was described as monoracial. We replicated the warmth penalty to biracial applicants across two studies assessing evaluations of Black/White and Asian/White applicants. In addition, applicants described as biracial were perceived as less minority scholarship worthy than minority monoracial applicants. Moreover, disclosure of one's biracial identity makes biracial people vulnerable to feedback from others.

Previous work suggests that others view biracial people as confused, socially isolated, and awkward (Jackman et al., 2001). Lower ratings of warmth may be related to these notions. Future research should examine how endorsement of biracial stereotypes may predict evaluations of biracial applicants. Moreover, we found that warmth ratings are associated with greater rewards, such as receiving a minority fellowship. Thus, the penalization to warmth has important consequences for behavior toward biracial people. Moreover, we found evidence that some biracial groups (Asian/White biracial people) may also be perceived as less competent than their peers. Why did Asian/White biracial people receive penalties on both warmth and competence dimensions? Several possible explanations call for the need for future research. First, novelty or lack of exposure may be related to the unfavorable trait evaluations of biracial people. For example, research suggests mere exposure increases likeability (Zajonc, 1968) and thus, out-group contact reduces prejudice toward out-group members (Pettigrew, 1997; Pettigrew & Tropp, 2006). Perhaps, evaluators in this study merely had less exposure to Asian/White biracial people and thus, their prejudice or unfavorable evaluations of the biracial candidate were driven by this lack of exposure. In addition, lower competence ratings for Asian/White candidates might be due to the fact that Asian/White biracial people are not seen as fully Asian or fully White and thus are not afforded the generally high competence ratings given to Asian Americans and Whites (Fiske et al., 2002).

Our findings also suggested that ratings of warmth and competence may have explained some of the advantage that minority monoracial group members had over

biracial candidates. To our surprise, perceivers' perceptions of whether minority group members overcame obstacles were unrelated to scholarship worthiness. In retrospect, this may have been a result of having mostly White perceivers who generally are unaware of the privilege afforded to their racial identity and the systemic disadvantages of coming from a minority background (McIntosh, 1990). Thus, knowledge of White privilege may be an important moderator to consider in future research as work has found that attitudes toward affirmative action may be influenced by knowledge of, and guilt about White privilege (Swim & Miller, 1999). In addition, we believe future research should also explore the possibility that biracial group members who are part-White are just not seen as "minority enough" or prototypical minorities in the eyes of others. Perhaps, biracial people who are both Asian and Black may be perceived as scholarship worthy unlike White biracial applicant. Our study was limited to perceptions of White/Black and White/Asian biracial people but what about those who are members of two minority groups? Perhaps, people perceive those who have White and minority background as less warm because of the threat to the distinctiveness that they pose to White and minority groups. Studies have shown that threatening group distinctiveness promotes in-group bias (Jetten, Spears, & Manstead, 1997). Moreover, people tend to show greater dislike of those out-groups that are similar to the in-group who pose a threat to distinctiveness, a phenomenon referred to as *horizontal hostility* (White & Langer, 1999). Evaluations of biracial people as well as toward assistance aimed at biracial populations may be moderated by equality beliefs (Pittinsky & Montoya, 2009); thus, future studies should examine the extent to which equality moderates the effect of trait ratings on biracial applicants' scholarship worthiness.

Finally, Study 3 suggests that when biracial people disclose their biracial heritage to evaluators, they may become more vulnerable to negative feedback compared to not disclosing their racial heritage. However, it is not clear whether disclosure of their monoracial identities alone would have yielded similar findings. Previous work examining Black college students in a similar experiment suggests that Black students whose racial identities are known to evaluators do not show lower self-esteem in the face of negative feedback (Crocker, Voelkl, Testa, & Major, 1991). Instead, Black college students attribute negative feedback to prejudice when their racial identities are known to evaluators. Following these results, biracial people may be unaffected by negative evaluations from a prejudice evaluator. Although the findings of Study 3 did not compare disclosing biracial identity to disclosing monoracial identities, the findings do show that disclosing biracial heritage induces vulnerability.

Notably, this study is not without limitations. For example, the mediation models proposed in Studies 1 and 2 cannot rule out reverse causal models. In addition, many of the measures utilized for the study (e.g., scholarship worthiness, perceived obstacles) were designed by the authors. While the measures have good

reliability and face validity, they should be properly validated in future research. In addition, the study relied on self-report measures, which may be compromised by social desirability.

Conclusion

Biracial people have long been kept invisible from the dialogue about affirmative action including discussions around education and educational policies (Renn, 2009). At the same time, biracial people may experience prejudice that may have serious consequences for educational access and assistance. Building awareness around the nature and parameters of prejudice toward biracial groups will aid educators and policymakers in justifying (a) the inclusion and proper use of biracial data (Renn, 2009), and (b) the need for biracial people to be included in policies aimed at improving minority access to education.

These studies make an important contribution to the limited work on perceptions of biracial people, providing researchers with a much needed context to understand the stigmatization of biracial people. Evidence from these studies suggests that biracial people may be viewed as having less favorable traits than people who are monoracial and viewed as less qualified for minority scholarships. This is paradoxical in that, even though biracial people are still bearing negative effects of racism, they are less likely than the monoracial minorities to be given access to an opportunity that is intended to provide some compensation for racist perceptions and institutional discrimination. Should biracial people disclose or not disclose? The findings of three studies suggest that biracial people who disclose may be perceived as less warm and less minority scholarship worthy compared to their peers. In addition, biracial disclosure may be an intimate act that makes biracial people internalize perceivers' negative feedback.

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