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Interracial friendship development and attributional biases

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ABSTRACT

We demonstrated that a self-other attributional bias impedes interracial friendship development. Whites were given the opportunity to become friends with a White or Black participant. Whites indicated how interested they were in becoming friends and how concerned they were about being rejected as a friend. They also indicated how interested they thought the other person was in becoming friends and how concerned they thought the other person was about being rejected as friend. Results revealed that lower-prejudice Whites made divergent explanations for the self and other when the potential friend was Black, whereas higher-prejudice Whites did not. Prejudice level did not influence the type of explanations made when the potential friend was White. Implications for interracial friendship development are considered.

KEY WORDS: attributional biases • friendship development • interracial interactions

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Friendship is a ubiquitous aspect of human experience (Tesch, 1983). People develop and maintain friendships across the lifespan, and these friendships play important roles in identity development and the psychological well-being of people during various stages of life (Berscheid & Reis, 1998; Hartup, 1989). The process by which friendships, and close relationships more generally, are formed has been explored by researchers (Berg, 1984; Hays, 1984; Reis & Shaver, 1988). Few of these studies, however, have focused on the development of intergroup friendships. This omission is unfortunate because the intimate, personal interaction associated with friendships can reduce prejudice and lead to more harmonious intergroup relations (Levin, van Laar, Sidanius, 2003; Pettigrew, 1997). Using data from majority group members in four Western European countries, Pettigrew (1997), for example, found that Europeans who had more friends of another nationality, race, culture, religion, and social class were less prejudiced toward minorities in their country. Moreover, having a racially diverse friendship network influences cultural awareness and commitment to racial understanding (Antonio, 2001). Thus, similar to friendships in general, interracial friendships have important personal as well as societal benefits.

Given the role of intergroup friendship in facilitating positive intergroup relations as well as the benefits associated with friendships in general, it seems critical that we develop a richer understanding of the issues involved in developing intergroup friendships. To date, the focus of research on intergroup friendship has been on the determinants of friendship choices. This research has shown that interpersonal factors such as similarity and structural factors such as propinquity inhibit intergroup friendship development (Gibbons & Olk, 2003; Hallinan & Williams, 1989; McPherson, Smith-Lovin, & Cook, 2001). In the present research, we take into consideration that people's concerns with how they will be viewed and treated as members of their racial group compared with their perceptions of outgroup members' concerns may also interfere with the development of interracial friendships (see also Vorauer, 2005; Vorauer & Sakamoto, 2006).

Research on pluralistic ignorance sheds light on how perceptions of the self and other may inhibit the development of interracial friendships. Pluralistic ignorance occurs when people observe others behaving similarly to themselves but believe that the same behaviors reflect different feelings and beliefs (Miller & McFarland, 1987). People perceive their own behavior as reflecting fears of social exclusion but do not consider such fears as an explanation for the other person's behavior. Instead, they take the other person's behavior at face value, and believe that the behavior reflects the person's true feelings. Consistent with this account, Shelton and Richeson (2005) found that when explaining why interracial contact fails to occur, Whites (and Blacks) attribute their own failure to initiate interracial contact to concerns about being rejected because of their race, whereas they attribute outgroup members' failure to initiate contact to lack of interest. In other words, individuals demonstrated an attributional bias by weighting their own rejection concerns more heavily than those of potential outgroup interaction partners. Furthermore, the more Whites displayed this attributional bias, the less contact they actually had with Blacks over a 3-month time period (Shelton & Richeson, 2005, Study 6). Thus, not only did Whites exhibit an attributional bias regarding why they and Blacks avoid interracial contact, but the bias also interfered with their potential to make outgroup friends over time.

Although failures in interracial friendship development are typically associated with higher levels of racial bias, we argue in the present work that lower-prejudice Whites are likely to be more susceptible to barriers to interracial friendship that stem from attributional biases. Specifically, we present the results of two studies that examine whether the attributional bias observed in our previous research (Shelton & Richeson, 2005) is stronger for Whites lower, rather than higher, in prejudice. To the extent that such a pattern emerges, it suggests that the individuals most open to developing interracial friendships (i.e., lower-prejudice Whites) may, ironically, be the ones for whom it is the most difficult to develop such friendships when the opportunity presents itself.

Attributional biases and friendship development

A burgeoning area of research on metastereotypes shows that Whites believe that racial minorities evaluate them negatively, particularly as being prejudiced, closed minded, arrogant, and selfish (e.g., Vorauer, Main, & O'Connell, 1998). In addition, these undesirable metastereotypes are activated when Whites interact with and/or imagine being evaluated by racial minorities (Vorauer, Hunter, Main, & Roy, 2000). Whites' beliefs regarding how minorities evaluate them have important implications for the explanations Whites give for avoiding interracial contact.

Shelton and Richeson (2005) reasoned that when considering why they avoid interracial contact, Whites may focus on the metastereotypes associated with their racial group (e.g., Blacks think I am racist), and, thus, they may be concerned with being rejected if they initiate interracial contact. Because the concern of being rejected is an internal feeling, it is highly salient to Whites as they consider engaging in contact. In contrast, when thinking about why Blacks do not initiate contact with them, Whites are less likely to have access to or be thinking about the Black person's feelings. Instead, Whites are focused on the behavior of the Black person (in this case, not initiating contact), which on the surface suggests that the person is not interested in having an interaction. Consistent with this reasoning, Shelton and Richeson, as noted previously, demonstrated that Whites explained their own failure to initiate interracial contact as stemming from their concerns with being rejected more than their lack of interest in getting to know the Black person. However, Whites explained the Black person's failure to initiate contact as stemming from the person's lack of interest in getting to know them more than to the person's concerns with being rejected.

In the present research, we consider the extent to which peoples' racial attitudes might influence this self-other attribution bias during interracial

friendship development. Based on research on metastereotype activation and application, we predict that lower-prejudice Whites are more likely to make divergent explanations regarding their own and a Black potential friend's concerns and feelings when given the opportunity to develop a friendship.

Although metastereotypes are activated for both lower- and higherprejudice Whites in anticipated and actual interactial interactions, research has shown that lower-prejudice Whites are less likely than higher-prejudice Whites to believe that the metastereotypes will be applied to them (Vorauer, 2003; Vorauer & Kumhyr, 2001). Lower-prejudice Whites believe that outgroup members will focus on the ways in which they are different from the metastereotypes, whereas higher-prejudice Whites believe that outgroup members will focus on the ways in which they are similar to the metastereotypes. As a result, lower-prejudice Whites are likely to underestimate a Black potential friend's level of concern about being rejected. In other words, because lower-prejudice Whites' egalitarian self-image is likely to be salient to them at most times they will not expect for Blacks to think of them as prejudiced or biased, and, therefore, they will not expect Blacks to be concerned about rejection. Furthermore, when thinking about the self, because lower-prejudice Whites are often genuinely interested in fostering interracial friendships, their lack of interest is likely to be far less influential than concerns with rejection.

The process for higher-prejudice Whites is apt to be different. In general, higher-prejudice Whites tend not to be interested in interracial friendships. Thus, lack of interest is likely to be just as salient as the metastereotypes (if not more so) in anticipation of an opportunity to develop a friendship across racial lines. Similarly, when higher-prejudice Whites consider how Blacks may feel about forming interracial friendships, they may presume that Blacks are comparably disinterested in interracial friendships. In addition, higher-prejudice Whites' expectation that metastereotypes will be applied to them is likely to amplify their perception of the Black person's concerns about being rejected (i.e., Blacks may perceive me as a stereotypical White person who will reject them). Hence, higher-prejudice Whites are likely to think that a Black potential friend is equally disinterested in becoming friends and concerned about being rejected and, furthermore, that their own level of preinteraction concerns and interest do not differ much from those of a Black potential friend.

The above processes for lower- and higher-prejudice Whites are most likely to occur during actual interracial interactions when Whites have the opportunity to individuate themselves. For lower-prejudice Whites individuation means revealing how they contrast with the metastereotype; for higher-prejudice Whites it means revealing how they assimilate to the metastereotype. In the present research, we explore the initial stages of friendship development; the point where there is the potential for a friendship to develop but substantive interactions have not yet occurred – the point before individuals can individuate themselves. We predict that the same self–other divergent pattern will also occur prior to individuation, but perhaps for reasons that differ slightly from those described earlier. In this scenario,

lower-prejudice Whites' concerns about rejection will outweigh their interest in forming the friendship because, although they feel they are different from the metastereotype, their Black potential friend may assimilate them to that stereotype without knowing that they are different. Moreover, lower-prejudice Whites will think that if their Black potential friend considers them prejudiced, that person will not be interested in forming a relationship. Therefore, the Black potential friends' lack of interest will outweigh their concerns with rejection. However, as stated previously, higher-prejudice Whites will lack interest in forming an interracial friendship and believe the stereotype will be applied to them.

Study 1

Based on previous research, we make the following predictions: When lower-prejudice Whites are thinking about themselves as the target of evaluation for an interracial friendship, they will express that concerns with being rejected explain their feelings *more* than lack of interest in developing the friendship. When lower-prejudice Whites are focused on evaluating how the other person feels about the friendship, they will express that concern with being rejected is a *less* likely explanation than is lack of interest. By contrast, higher-prejudice Whites should be less likely to exhibit this self-other attribution bias. In addition, Whites' prejudice level should not influence the explanations made when the potential friend is White. We tested these predictions in the laboratory where Whites had the opportunity to choose to become friends with either a Black or White person, as arranged by the experimenter.

Method

Participants. Forty-eight White (19 male and 29 female) undergraduate students participated in the study for payment. One student was eliminated from the analyses because she knew her interaction partner. Thus, the analyses reported below are based on 47 participants.

Procedure. Participants attended a pretesting session (1–3 people per group) at which they completed an explicit measure of racial prejudice along with several other measures unrelated to the present study (e.g., self-esteem). Participants' explicit racial prejudice was assessed with the 5-item social distance subscale of Brigham's (1993) Attitudes Toward Blacks (ATB) scale. The subscale focuses specifically on Whites' discomfort in interacting with Blacks. An example of an item on this subscale is: 'I would rather not have Blacks live in the same apartment building I live in.' Participants made their responses on a 7-point scale (1 = strongly disagree to 7 = strongly agree; $\alpha = .85$).

At the end of the pretesting session, the experimenter (a White woman) gave participants their course credit, and asked participants if they would

be interested in participating in another study at a later time for pay. The experimenter wrote down the names of the participants who agreed to participate in the ostensibly unrelated study.

Approximately 2 to 4 weeks later, a second experimenter (a White woman) contacted the participants from the first session who agreed to participate in the study. Once the participant arrived to the laboratory (a different location from the pretesting session) the experimenter told participants that the focus of the study was on social perception and friendship development. In addition, the experimenter indicated that

we are also interested in the extent to which communication channels influence the way people get to know one another. As a result, we are varying whether the two participants in a given session talk together face-to-face or have restrictions on their communication, such as talking via a telephone or video conferencing.

The experimenter stressed to participants that regardless of their communication channel they would have an interaction with another participant. The experimenter explained that if the participants decided they liked one another and could be friends, then they would work on some additional tasks together.

Next, the experimenter explained that in order to facilitate the interaction, participants would exchange some background information and a picture with their partner. The participants completed the background information sheet, which required them to indicate their hometown, number of siblings, and what they like to do in their spare time. In addition, the experimenter took a Polaroid photograph of the participant and attached it to the participant's background information sheet. Then the experimenter left the room ostensibly to collect the same information from the other participant. Participants received a same-sex Polaroid photograph of a confederate and a fictitious background information sheet. Approximately half (n = 25) of the participants received a photograph of a White confederate and the other half (n = 22) received a photograph of a Black confederate. We used two photos of each race and gender. The background information remained the same across the confederates; the confederate was from Pennsylvania, had two siblings and enjoyed hanging out with his/her friends and watching television during his/her spare time.

After allowing the participants a few minutes to examine the photograph and the background information sheet of their anticipated interaction partner, the experimenter informed participants that it was important for them to complete a preinteraction questionnaire. Of primary importance to this study, participants answered two questions regarding how interested they were in having the interaction (i.e., How interested are you in getting to know the other participant? How much would you prefer not to have the interaction with the other participant?) and rated the extent to which they agreed with the following statement, 'I am not interested in becoming friends with the other participant.' These 3 items were combined (reversed coded where necessary) to form a lack of interest in becoming friends

composite score (α = .69). In addition, participants completed 3 items that tapped how concerned they were that the other participant would accept them as a friend (i.e., To what extent are you concerned about being accepted by the other participant? To what extent are you nervous that the other participant will not like you? And, how concerned are you about what the other person will think of you?; α = .91). Additionally, participants answered these same questions with respect to the extent they thought the other participant was interested in becoming friends (α = .68) and how concerned they thought the other participant was about being accepted as a friend (α = .83). Participants made all of their responses on 7-point Likert-type scales (1 = not at all and 7 = a lot). The questions for the self and other were counterbalanced. The order did not influence the results; therefore, we will not discuss it further. At the end of the study, the experimenter debriefed the participants, and compensated them for their participation.

Results

Manipulation checks. We asked participants to indicate the gender and race of their interaction partner during the study. All participants correctly identified this information.

Primary analyses. We analyzed the data using a 2 (prejudice level: Lower vs. higher) \times 2 (race of potential friend: White vs. Black) \times 2 (explanation: Concern with not being accepted vs. lack of interest) \times 2 (person: Self vs. other) ANOVA with repeated measures on the last two factors. Results revealed a main effect for race of potential friend, F(1, 43) = 9.79, p = .003, a main effect for explanation, F(1, 43) = 5.07, p = .03, and a person by explanation two-way interaction, F(1, 43) = 17.15, p < .0001. Moreover, consistent with predictions, the 4-way interaction was significant, F(1, 43) = 8.87, p = .005. In order to understand the 4-way interaction, we divided the sample into two parts based on the race of the potential friend.

Consistent with Shelton and Richeson (2005), results revealed that when participants thought they were interacting with a potential Black friend, the person (i.e., self vs. partner) by explanation (i.e., interest vs. acceptance) two-way interaction was significant, F(1, 20) = 10.76, p = .004. As predicted, however, this two-way person by explanation interaction for the interracial condition was moderated by participants' prejudice level, F(1, 20) = 8.31, p = .009. In order to understand this interaction, we divided the sample into two parts based on prejudice level. Consistent with our primary predictions, the person by explanation interaction described earlier was significant for lower-prejudice participants but not for higher-prejudice participants, F(1,10) = 12.18, p = .006 and F(1, 10) = .18, p = .681, respectively (see Table 1 for cell means). Simple effect analyses revealed that lower-prejudice participants reported greater concern with being accepted by the outgroup individual than disinterest in becoming friends, F(1, 10) = 8.61, p = .015. Furthermore, they believed that the outgroup individual was more disinterested in becoming friends than concerned about being accepted, F(1,10)

TABLE 1
Study 1: Mean likelihood ratings assigned to lack of interest and concern with
not being accepted perceptions for self and other when potential partner is
Black

	Lack of interest	Rejection concerns
Lower prejudice		
Self	3.15 (0.92)	4.69 (1.50)
Other	4.06 (0.87)	3.26 (1.13)
Higher prejudice		
Self	4.03 (0.90)	3.54 (1.17)
Other	4.39 (0.71)	3.76 (1.04)

Note. Standard deviations are in parentheses.

= 4.61, p = .057. In addition, lower-prejudice Whites thought the outgroup individual was less interested in becoming friends and less concerned about being accepted than they were, F(1, 10) = 11.34, p = .007 and F(1, 10) = 7.27, p = .022, respectively.

We also examined the self-other attributions when the potential friend was White. The data revealed that when participants thought they were interacting with a potential White friend, the person by explanation twoway interaction was reliable, F(1, 23) = 6.28, p = .02 (see Table 2 for cell means). Simple effect analyses revealed no differences between how interested participants were in becoming friends and how concerned they were with being accepted as a friend when the anticipated friend was also White, F(1, 23) = .84, p = .37. However, participants thought their White potential friend was considerably less interested in becoming friends than concerned about being accepted, F(1, 23) = 20.16, p < .0001. Furthermore, participants reported that their partner was less interested in becoming friends than they were, F(1, 23) = 9.62, p = .005, but they did not anticipate any differences for self and partner in concerns about being accepted, F(1, 23) = .23. p = .357. As predicted, prejudice level did not moderate this two-way interaction, F(1, 23) = 1.45, p = .241 (for the prejudice \times person \times explanation interaction in the White partner condition).

TABLE 2
Study 1: Mean likelihood ratings assigned to lack of interest and concern with not being accepted perceptions for self and other when potential partner is White

	Lack of interest	Rejection concerns	
Self	3.29 (0.86)	2.92 (1.47)	
Other	3.87 (0.86)	2.75 (1.04)	

Note. Standard deviations are in parentheses.

Discussion

The results of this study demonstrate that racial attitudes predict the extent to which individuals reveal attributional biases regarding interracial friendship development. Our results suggest that lower-prejudice Whites are more likely than higher-prejudice Whites to make divergent explanations regarding the self and other when given the opportunity to form an interracial friendship. Specifically, when asked to consider their feelings about forming a friendship with a Black person, lower-prejudice Whites emphasized their rejection concerns rather than their possible level of disinterest. By contrast, lower-prejudice Whites emphasized their Black potential partner's disinterest rather than their concerns with being rejected. Higher-prejudice Whites, however, did not demonstrate this self-other attributional bias.

Study 2

Study 1 provides support for our prediction that lower-prejudice Whites are susceptible to a pattern of attributional bias regarding interracial contact that hinders friendship development. Although these results are compelling, the prejudice measure employed may limit their generalizability. Recall that we used only the social distance subscale of the ATB, which focused exclusively on Whites' discomfort with interracial contact. Although we expected social distance attitudes to be the most relevant for our hypothesis, it is important to consider whether more global assessments of racial attitudes predict the same attributional bias. In other words, is the attributional bias influenced primarily by fluctuations in social distance attitudes or, rather, do racial attitudes more generally predict differences in susceptibility to attributional biases regarding interracial friendship development? In Study 2, therefore, the entire ATB was used to assess racial attitudes.

Method

Participants. Seventy White undergraduate students (29 male and 41 female) participated in the study for partial credit in a course. Two students were eliminated from the analyses because they knew their interaction partner or did not believe the cover story, leaving 68 White participants.

Procedure. The procedures and materials are identical to Study 1 except for the following. First, all participants received a photograph of a Black same-sex partner. Thus, all of the anticipated interactions were interracial. Second, we used the full ATB to assess prejudice (α = .87). The alphas for participants' attributions were similarly high (α = .81 for own interest in the interaction; α = .81 for perceived other's interest in the interaction; α = .78 for own concerns with rejection; and α = .67 for perceived other's concerns with rejection).

Results

Manipulation checks. We asked participants to indicate the gender and race of their interaction partner during the study. All participants correctly identified this information.

Primary analyses. We analyzed the data using a 2 (prejudice level: Lower vs. higher) \times 2 (explanation: Concern with not being accepted vs. lack of interest) \times 2 (person: Self vs. other) ANOVA with repeated measures on the last two factors. Results revealed a main effect for person F(1, 66) = 23.48, p < .0001, and a person by explanation two-way interaction, F(1, 66) = 51.79, p < .0001. Moreover, consistent with predictions, the three-way interaction was significant, F(1, 66) = 11.63, p < .01. In order to understand the three-way interaction, we divided the sample into two parts based on Whites' prejudice level (see Table 3).

Consistent with Study 1, results revealed that for lower-prejudice Whites, the person by explanation two-way interaction was significant, F(1, 35) = 51.13, p < .0001. Simple effect analyses revealed that lower-prejudice Whites reported that they were more concerned with being accepted by the outgroup individual than disinterested in becoming friends, F(1, 35) = 6.97, p = .01. By contrast, however, lower-prejudice Whites believed that the outgroup individual was more disinterested in becoming friends than concerned about being accepted, F(1, 35) = 12.78, p < .01. Approaching the two-way interaction from another perspective revealed that lower-prejudice Whites thought the outgroup individual was less interested in becoming friends than they were, F(1, 35) = 51.04, p < .0001. In addition, lower-prejudice Whites believed that they were more concerned with being accepted as a friend than the outgroup individual, F(1, 35) = 8.79, p = .005.

Analyses of the higher-prejudice participants also revealed a reliable person by explanation interaction, F(1, 31) = 8.37, p < .01; however, the simple effects did not reveal the now familiar attributional bias as found for the lower-prejudice Whites. Indeed, simple effect analyses revealed

TABLE 3
Study 2: Mean likelihood ratings assigned to lack of interest and concern with not being accepted perceptions for self and other when potential partner is Black

	Lack of interest	Rejection concerns
ower prejudice		
Self	2.93 (1.00)	3.58 (1.27)
Other	4.02 (0.98)	3.12 (1.04)
igher prejudice		
Self	3.35 (0.75)	3.45 (1.29)
Other	3.99 (0.92)	3.53 (0.92)

Note. Standard deviations are in parentheses.

only one significant difference between the means; higher-prejudice Whites thought the outgroup individual was less interested in becoming friends than they were, F(1,31) = 30.36, p < .0001. Considered in tandem with the results from Study 1, the results of Study 2, employing a broad measure of racial attitudes, provide compelling evidence to suggest that lower-prejudice White individuals may be particularly susceptible to attributional biases regarding interracial contact that serve to undermine interracial friendship development.

General discussion

Across two studies we found support for our prediction that lower-prejudice Whites are more apt to reveal a self-other bias regarding why they and outgroup members fail to establish interracial friendships. Our findings are particularly interesting when considered against previous research on how people's racial attitudes influence social relationships. Accumulating evidence suggests that Whites' and ethnic minorities' racial attitudes negatively predict how frequently individuals interact with, become friends with, and date outgroup members (e.g., Levin et al., 2003; Levin, Taylor, & Caudle, 2007). Although lower-prejudice Whites may have more interracial friendships than higher-prejudice Whites, our findings suggest that the process of developing interracial friendships (and initiating interracial contact) may still be difficult for them. Lower-prejudice Whites are quite concerned with how they are being viewed by Blacks. It appears, however, that it is difficult for them to realize that Blacks are likewise concerned with how they are being viewed by Whites. This attributional bias has the potential to create misunderstanding and hostility, which could have serious repercussions for the success of interracial friendships, as well as for individuals' racial attitudes. For instance, perhaps if this attributional bias did not exist, lower-prejudice Whites would have even more Black friends than they do because their bias would not interfere with the friendship development process and, as a result, we might have an even less prejudiced society.

Our findings also add to research revealing ironic effects of racial attitudes on intergroup interactions and how misunderstandings can occur between lower-prejudice Whites and ethnic minorities. Vorauer and Turpie (2004), for example, found that evaluative concerns cause lower-prejudice Whites to engage in fewer intimacy-building behaviors during interracial interactions, whereas they cause higher-prejudiced Whites to engage in more intimacy-building behaviors during interracial interactions. Moreover, Shelton, Richeson, Salvatore, and Trawalter (2005) found that Blacks had a more favorable impression of higher-prejudice Whites than lower-prejudice Whites during an interracial interaction because higher-prejudice Whites were more engaged in the interaction. Finally, lower-prejudice Whites overestimate the clarity of social overtures they make toward a minority, compared to White, potential friend, believing that they signal more interest in forming an interracial friendship than is actually perceived by the potential

friend and objective observers (Vorauer, 2005). The findings reported in this article suggest the ironic effect that lower-prejudice Whites may have trouble considering the concerns of outgroup members as they anticipate forming a friendship. That is, they fail to recognize that their concerns and fears are actually quite similar to the concerns and fears of outgroup members. These findings suggest more research is needed to understand the interracial contact experiences of lower-prejudice Whites.

The self-other bias we have shown here suggests that Whites, especially lower-prejudice Whites, may experience difficulty taking the perspective of outgroup members; they fail to see that outgroup members have similar concerns as their own. Therefore, the attributional self-other bias regarding why people fail to establish interracial friendships may be stronger for people who have trouble taking the perspective of others in general. This poses an interesting question – are young children more likely than adults to show the self-other attributional bias we have demonstrated in our work? On the one hand, given that children have trouble seeing situations from multiple perspectives, they may be more inclined than adults to show the self-other bias. That is, because children have trouble standing in the proverbial shoes of others, they may not realize that outgroup members are concerned with being rejected just as they are. On the other hand, given that children are more prone to think that others have similar feelings and thoughts as their own, they may be less inclined than adults to show the self-other bias. This is an interesting topic to explore in future research because it could shed light on changes in interracial friendship patterns across the developmental lifecycle.

Related to the notion of perspective taking, it is possible that Whites who have been successful at developing multiple interracial friendships may be less inclined to show a self-other bias regarding why they and outgroup members fail to establish interracial friendships. It is possible that Whites who have developed interracial friendships have spent more time understanding the world through the eyes of outgroup members. Additional work is needed to examine the extent to which the quantity of intergroup friendships attenuates the findings presented here.

Caveats

There are a few limitations of the present research that warrant attention in future work. First, our finding that lower-prejudice Whites are more likely than higher-prejudice Whites to show the divergent self—other attributional bias stems, in part, from previous research on the activation and application of metastereotypes. We did not assess metastereotype activation in the present research, however and, therefore, the veracity of this potential mechanism remains unknown. Future research needs to explore this issue in further detail.

Second, the present work focused on the extent to which racial attitudes influence the divergent explanations Whites make regarding the self and outgroup members' concerns about the development of interracial friendships. Previous work shows that similar to Whites, Blacks are also susceptible

to the self-other attributional bias (Shelton & Richeson, 2005). It is not clear, however, if Blacks' racial attitudes moderate the effect in a similar fashion to those of Whites. Future work is needed to investigate this issue. If lower-prejudice Blacks show a similar pattern to the one we have demonstrated with lower-prejudice Whites, this would provide evidence that the attributional biases exist on both sides of the racial divide, possibly making it even more difficult for interracial friendships to develop among the people who are most open to friendship across this divide.

Finally, the present research is susceptible to the criticisms associated with examining relationship development in an experiment in a laboratory setting. Although we created the situation such that participants thought about the ostensible partner in terms of a potential friend, the interdependent processes associated with friendship development in the real world were clearly absent. Future research should explore self-other attributional biases in a real-world context, for example among interracial roommate pairs or new members in a social organization, to gain an understanding if our findings replicate outside of the laboratory. In addition, by moving outside of the lab, researchers could explore the extent to which racial attitudes influence the attributional biases presented here in such a way that the biases actually lengthen the time it takes for lower-prejudice Whites to develop interracial friendships in the real world. Shelton and Richeson (2005) showed that the more Whites demonstrate an attribution bias the less contact they have with Blacks across 3 months. Addressing the extent to which this effect is even stronger for lower-prejudice Whites will contribute to our understanding of why interracial friendships are not as prevalent as one would expect (or hope) among lower-prejudice Whites.

Conclusion

Developing interracial friendships can be difficult and awkward. As with developing any type of relationship, there are apt to be barriers that hinder this process. One reason why interracial friendships fail to develop is because members of different racial groups tend to live and socialize in racially segregated areas in the US, although this pattern is slowly changing (Massey & Denton, 1993). Even when proximity is not an issue, however, friendships between Whites and Blacks are still more difficult to develop than friendships within racial groups (Aboud, Morton, & Purdy, 2003; Hallinan & Williams 1989). The findings from the present research suggest that a self–other attributional bias may be a significant impediment in the development of interracial friendships, especially for lower-prejudice Whites even when the opportunity for contact is available. Reducing lower-prejudice Whites' concerns with being rejected and helping them recognize that Blacks are interested in developing interracial friendships may play a pivotal role in increasing the number of friendships between Whites and Blacks.

Interracial friendships play a crucial role in promoting racial harmony. Previous research suggests that lower-prejudice Whites are more likely than

higher-prejudice Whites to move towards developing such friendships. Our results suggest, however, that the process of developing interracial friendships may be quite complex for lower-prejudice Whites. Perhaps because of their concerns with how they are being evaluated, lower-prejudice Whites seem to be less in tune with the concerns of outgroup members. This disconnect may ironically hinder them from benefiting from the social and emotional resources associated with interracial friendships.

REFERENCES

- Aboud, F. E., Mendelson, M. J., & Purdy, K. T. (2003). Cross-race peer relations and friendship quality. *International Journal of Behavioral Development*, 27, 165–173.
- Antonio, A. L. (2001). The role of interracial interaction in the development of leadership skills and cultural knowledge and understanding. *Research in Higher Education*, 42, 593–617.
- Berg, J. (1984). Development of friendship between roommates. *Journal of Personality and Social Psychology*, 46, 346–356.
- Berscheid, E., & Reis, H. T. (1998). Attraction and close relationships. In D. T. Gilbert, S. T. Fiske, & G. Lindzey (Eds.), *The handbook of social psychology* (pp. 193–281). Boston, MA: McGraw-Hill.
- Brigham, J. C. (1993). College students' racial attitudes. *Journal of Applied Social Psychology*, 23, 1933–1967.
- Gibbons, D., & Olk, P. (2003). Individual and structural origins of friendship and social position among professionals. *Journal of Personality and Social Psychology*, 84, 340–351.
- Hallinan, M. T., & Williams, R. A. (1989). Interracial friendship choices in secondary schools. American Sociological Review, 54, 67–78.
- Hartup, W. W. (1989). Social relationships and their developmental significance. *American Psychologist*, 44, 120–126.
- Hays, R. (1984). The development and maintenance of friendship. *Journal of Social and Personal Relationships*, 75–98.
- Levin, S., Taylor, P. L., Caudle, E. (2007). Interethnic and interracial dating in college: A longitudinal study. *Journal of Social and Personal Relationships*, 24, 323–341.
- Levin, S., van Laar, C., & Sidanius, J. (2003). The effects of ingroup and outgroup friendships on ethnic attitudes in college: A longitudinal study. *Group Processes and Intergroup Relations*, 6, 76–92.
- McPherson, M., Smith-Lovin, L., & Cook, J. (2001). Birds of a feather: Homophily in social networks. *Annual Review of Sociology*, 27, 415–444.
- Massey, D. S., & Denton, N. A. (1993). Trends in the residential segregation of Blacks, Hispanics, and Asians: 1970–1980. *American Sociological Review*, 52, 802–825.
- Miller, D., & McFarland, C. (1987). Pluralistic ignorance: When similarity is interpreted as dissimilarity. *Journal of Personality and Social Psychology*, 53, 298–305.
- Pettigrew, T. (1997). Generalized intergroup contact effects on prejudice. *Personality and Social Psychology Bulletin*, 23, 173–185.
- Reis, H., & Shaver, P. (1988). Intimacy as an interpersonal process. In S. W. Duck (Ed.), *Handbook of personal relationships* (pp. 367–389). New York: Wiley.
- Shelton, J. N., & Richeson, J. A. (2005). Intergroup contact and pluralistic ignorance. *Journal of Personality and Social Psychology*, 88, 91–107.
- Shelton, J. N., Richeson, J. A., Salvatore, J., & Trawalter, S. (2005). Ironic effects of racial bias during interracial interactions. *Psychological Science*, 16, 397–402.
- Tesch, S. (1983). Review of friendship development across the life span. *Human Development*, 26, 266–276.
- Vorauer, J. D. (2003). Dominant group members in intergroup interactions: Safety or vulnerability in numbers? *Personality and Social Psychology Bulletin*, 29, 498–511.

- Vorauer, J. D. (2005). Miscommunications surrounding efforts to reach out across group boundaries. *Personality and Social Psychology Bulletin*, *31*, 1653–1664.
- Vorauer, J. D., Hunter, A., Main, K., & Roy, S. (2000). Concerns with evaluation and metastereotype activation. *Journal of Personality and Social Psychology*, 78, 690–707.
- Vorauer, J., & Kumhyr, S. (2001). Is this about you or me? Self- versus other- directed judgments and feelings in response to intergroup interaction. *Personality and Social Psychology Bulletin*, 27, 706–719.
- Vorauer, J. D., Main, K., & O' Connell, G. (1998). How do individuals expect to be viewed by members of lower status groups?: Content and implications of metastereotypes. *Journal of Personality and Social Psychology*, 75, 917–937.
- Vorauer, J. D., & Sakamoto, Y. (2006). I thought we could be friends, but ...: Systematic miscommunication and defensive distancing as obstacles to cross-group friendship formation. *Psychological Science*, 17, 326–331.
- Vorauer, J. D., & Turpie, C.A. (2004). Disruptive effects of vigilance on dominant group members' treatment of outgroup members: Choking versus shining under pressure. *Journal* of Personality and Social Psychology, 87, 384–399.