FISEVIER

Contents lists available at ScienceDirect

Journal of Experimental Social Psychology

journal homepage: www.elsevier.com/locate/jesp



Reports

The company you keep: Fear of rejection in intergroup interaction

Jenessa R. Shapiro a,*, Matthew Baldwin b, Amy M. Williams c, Sophie Trawalter d

- ^a University of California, Los Angeles, USA
- ^b University of Kansas, USA
- ^c University of California, Los Angeles, USA
- d University of Virginia, USA

ARTICLE INFO

Article history:
Received 10 April 2010
Revised 29 September 2010
Available online 29 October 2010

Keywords: Intergroup interaction Intergroup relations Stigma Rejection concerns

ABSTRACT

People use many cues to infer the likelihood of acceptance or rejection in intergroup interactions. Nearly all prior research has focused on personal cues directly given off by the potential interaction partner (e.g., eye contact and smiling). However, we argue that in the context of intergroup interactions, individuals may be especially sensitive to broader social cues, such as an interaction partner's social network. Across three experiments we explored differences in White participants' evaluations of a smiling Black man presented with a Black or White friend. When this Black man was featured with a Black friend, White participants reported greater rejection concerns and a greater inclination to reject this Black man compared to when he was featured with a White friend (Experiments 1–3) or featured alone (Experiment 2). Furthermore, when participants received a simple intervention designed to buffer against social rejection, the race of the Black man's friend no longer influenced participants' interests in befriending the Black man (Experiment 3). This research demonstrates the power of friendships in interracial interactions and provides evidence for a simple intervention to reduce the weight of rejection concerns in interracial interactions.

© 2010 Elsevier Inc. All rights reserved.

"When the character of a man is not clear to you, look at his friends." Japanese proverb.

Whether it is the first day of work, a party at a colleague's house, or deciding where to sit in a cafeteria, we face the challenge of identifying who will socially reject or accept us. This is important, as social rejection is painful (DeWall et al., 2010; Eisenberger, Lieberman, & Williams, 2003; Williams, 2007), whether it comes from a meaningful interaction partner such as a loved one or friend, or a stranger in a computer balltossing game (e.g., Baumeister & Leary, 1995; Downey & Feldman, 1996; Zadro, Williams, & Richardson, 2004).

Considering the aversive nature of social rejection, individuals move quickly to detect the possibility of rejection (Downey, Mougios, Ayduk, London, & Shoda, 2004; Gardner, Pickett, & Brewer, 2000; Kerr & Levine, 2008; Spoor & Williams, 2007). One type of interaction in which fear of rejection is particularly salient is intergroup interaction (Shelton & Richeson, 2005; Shelton, Richeson, & Bergsieker, 2009). Intergroup (compared to intragroup) interactions tend to be stressful, difficult, awkward, and frequently rife with miscommunication (Shapiro & Neuberg, 2008; Trawalter, Richeson, & Shelton, 2009; Trawalter, & Richeson, 2008; Richeson, & Trawalter, 2005; Vorauer, &

E-mail address: jshapiro@psych.ucla.edu (J.R. Shapiro).

Sakamoto, 2006), often due to concerns about rejection. For example, research finds that both Whites and Blacks desire greater levels of contact between groups (Shelton & Richeson, 2005). However, both parties tend to enter into intergroup interactions with negative expectations (Mallett, Wilson, & Gilbert, 2008) and believe members of the other group have little to no interest in intergroup contact (Shelton & Richeson, 2005). Not surprisingly, both White and minority individuals concerned about rejection avoid interracial contact and form fewer cross-race friendships (Mallett & Wilson, 2010; Plant, 2004; Plant, Butz, & Tartakovsky, 2008; Shelton & Richeson, 2005).

People use many cues in interactions to infer the likelihood of acceptance or rejection. Nearly all previous research focuses on personal cues given off directly by the potential interaction partner toward the social perceiver, such as emotional expression, speech patterns, eye contact, and the like (e.g., Burklund, Eisenberger, & Lieberman, 2007; Pearson, West, Dovidio, Powers, Buck, & Henning, 2008; Pickett & Gardner, 2005; King, Shapiro, Hebl, Singletary, & Turner, 2006). However, we argue that in the context of intergroup interactions, individuals may be especially sensitive to broader social cues, such as an interaction partner's social network. That is, when arriving at a party or entering a workplace, individuals may scan the different groupings of people and attempt to deduce the probability of being socially rejected or accepted by looking at a person's friendship networks. An individual may infer those associating with similar others are uninterested in friendship with different others. The present research seeks to test this hypothesis.

 $^{\ ^*}$ Corresponding author. Department of Psychology, University of California, Los Angeles, USA.

This hypothesis, if true, could have important implications for organizations, college campuses, and other public places that implement strategies such as same-gender work groups or same-race dorms in order to protect against some of the negative implications of solo status or under-representation (e.g., Inzlicht & Ben-Zeev, 2000; Lord & Saenz, 1985; Sekaquaptewa & Thompson, 2002; Trail, Shelton, & West, 2009; Walton & Cohen, 2007). That is, same-gender groups or same-race dorms may have the unanticipated consequence of alienating these groups from the dominant culture—majority group members may mistakenly assume these individuals are uninterested in working or socializing with them. The present research thus seeks to test a simple intervention strategy that can be implemented in these contexts that is anticipated to reduce the negative influence of rejection concerns on interest in intergroup interaction.

In the present research we explored differences in White participants' evaluations of a smiling Black male target as a function of whether this Black man was featured with a Black or White friend. We focused specifically on smiling Black men, as previous research demonstrates that neutrally expressive Black men are often seen by Whites as physically threatening (Maner et al., 2005; Richeson & Trawalter, 2008; Shapiro et al., 2009) and a smile serves to diffuse this threat (Richeson & Trawalter, 2008). In the present research we anticipated that a Black man featured with a Black friend would elicit rejection concerns—even when he is smiling—within White participants. We also anticipated these rejection concerns would propel Whites to express less interest in befriending the Black male target.

To test these hypotheses we assessed participants' rejection concerns (i.e., participants' perceptions of the Black man's interest in becoming friends with them) and their inclination to socially reject the Black man as a function of the race of the Black man's friend (White/Black). In Experiment 1, we expected rejection concerns would mediate the relationship between the race of the Black man's friend and participants' inclination to reject the Black man. These hypotheses are rooted in the prediction that it is the Black man's association with a Black friend that cues rejection concerns within White participants. Thus, in Experiment 2, we hypothesized that when the Black man was presented alongside a Black friend (the social rejection cue), participants would report greater rejection

concerns and a greater inclination to reject the Black man compared to when he was featured alone or with a White friend. Finally, Experiment 3 provided a further test of rejection concerns as the mechanism driving participants' rejection inclinations. Here, we anticipated that when White participants were randomly assigned to receive an intervention increasing feelings of social acceptance, thereby inoculating them against the threat of rejection, they would not differentially evaluate the Black man as a function of the race of his friend.

1. Experiment 1

In Experiment 1, White students viewed a photo of a smiling Black man featured with an ostensible Black or White smiling male friend. We anticipated participants would report greater rejection concerns and a greater inclination to reject the Black male target when he was featured alongside the Black, compared to the White, friend. Furthermore, we expected rejection concerns would mediate the relationship between the race of the Black man's friend (Black/White) and participants' inclination to reject the Black male target.

1.1. Method

1.1.1. Participants

90 White students (41 female, 1 unknown) participated online in exchange for class credit.

1.1.2. Procedure and design

Participants learned the researchers were (purportedly) interested in how well people guess the friendliness of others. Participants viewed two photographs side-by-side ostensibly taken of two friends. Participants responded to questions about the person featured on the left: a smiling Black man. The photograph on the right was randomly assigned and depicted either a smiling White or Black man (see Fig. 1).

1.1.3. Materials

Color photographs of two Black men and one White man were taken from the Productive Aging Lab database (Minear & Park, 2004).

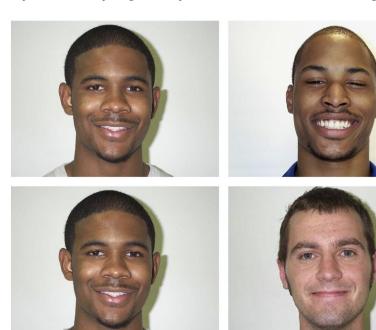


Fig. 1. Example of the presentation of stimuli. Participants were informed the photographs were of two friends. Participants were asked to consider the person on the left when responding to dependent measures.

1.1.4. Measures

Participants responded to three items measuring rejection concerns (e.g., "To what extent do you think this person would want to become friends with you?", "How likely is it that this person would find you interesting?", "To what extent do you think that this person would enjoy talking to you?", reverse coded, $\infty = .82$) and three items regarding participants' inclination to reject the target (e.g., "To what extent do you think you would want to become friends with this person?", "How likely is it that you would find this person interesting?", "To what extent would you enjoy talking to this person?", reverse coded, $\infty = .86$). All evaluations used a Likert-type scale anchored at 1 (Not at all) and 7 (A great deal).

1.2. Results

Participants reported greater rejection concerns when the Black male target was featured with a Black friend (M = 3.33,SD = .91) compared to a White friend (M = 2.91, SD = .96), t(88) = 2.16, p = .03.\(^1\) Similarly, participants reported a greater inclination to reject the Black man when he was featured with a Black friend (M = 4.07, SD = 1.14) compared to a White friend (M = 3.37, SD = 1.08), t(88) = 2.99, p = .004.

1.2.1. Mediation analysis

If White participants' inclination to reject the Black man featured with a Black friend was due to rejection concerns, then participants' rejection concerns should mediate the relationship between the race of the friend and participants' inclination to reject the Black man. We followed the mediation procedure outlined by Baron and Kenny (1986). As reported above, the race of the Black man's friend (independent variable, dummy coded as 0 = Black friend, 1 = Whitefriend) significantly predicted rejection concerns (the anticipated mediator) and participants' inclination to reject the Black male target (the focal dependent variable). When the race of the Black man's friend (independent variable) was included in a regression model, participants' rejection concerns (mediator) predicted their inclination to reject the Black male target (dependent variable), B = -.72, p < .001. Finally, as anticipated, the relationship between the race of the Black man's friend (independent variable) and participants' inclination to reject the Black man (dependent variable) was mediated by participants' rejection concerns (Sobel statistic z = 2.07, p = .04).

1.3. Discussion

Experiment 1 revealed White participants were more inclined to reject a smiling Black man if he was featured with a Black, compared to a White, friend. Furthermore, we anticipated, and found, rejection concerns mediated this relationship. These findings provide initial evidence that White participants' lack of interest in befriending a Black man featured with a Black friend (compared to a White friend) was driven by the anticipation of rejection—information inferred from the Black man's friendship network.

2. Experiment 2

In Experiment 1, White participants reported a greater inclination to reject a Black man featured with a Black (compared to a White) friend, a relationship driven by participants' rejection concerns. What is unclear, however, is whether rejection concerns were increased by the presence of a Black friend (as we have argued) or diminished by the presence of a White friend. Thus, in the present experiment we sought to explore these competing hypotheses by introducing a control condition in which the smiling Black male target was featured alone.

2.1. Method

2.1.1. Participants

379 (237 female, 2 unknown) White individuals (age: M = 34.34, SD = 12.39) participated in exchange for payment on MTurk, an online forum through which people can choose to participate in studies for payment (see Buhrmester, Kwang, & Gosling, in press).

2.1.2. Procedure and design

Participants were randomly assigned to one of three possible conditions. Two conditions mirrored those in Experiment 1—participants saw a smiling Black man featured with a smiling White or Black male friend. In the third condition, new to this study, participants only saw the smiling Black man. Thus, all participants evaluated the same Black male target. Participants completed the same questions used in Experiment 1 measuring rejection concerns (∞ =.91) and inclinations to reject the target (∞ =.91). In addition, participants reported their best guess regarding what percentage of the Black male target's friends were White.

2.2. Results

2.2.1. Rejection concerns

Replicating Experiment 1, participants reported greater rejection concerns when the Black male target was featured with a Black (M=3.99, SD=1.27), compared to a White (M=3.53, SD=1.11), friend, $t(243)=2.99, \ p=.003$. The control condition, new to this study, revealed the Black male target's association with another Black man drove White participants' rejection concerns. That is, participants reported similar levels of rejection concerns when observing the Black man featured with a White friend or featured alone $(M=3.67, SD=1.27), \ t<1$. However, when the smiling Black man was featured with a Black friend, participants reported greater rejection concerns compared to when he was featured alone, $t(253)=2.00, \ p=.05$.

2.2.2. Participants' inclination to reject the target

Replicating Experiment 1, participants reported a greater inclination to reject the smiling Black man when he was featured with a Black friend $(M=3.52,\ SD=1.15)$ compared to a White friend $(M=3.15,\ SD=1.01),\ t(243)=-2.68,\ p=.01.$ The control condition revealed the association with another Black man drove White participants' friendship interests. That is, participants had a similar (low) inclination to reject the Black male target when he was featured with a White friend compared to when he was alone $(M=3.23,\ SD=1.10),\ t<1.$ However, participants reported a greater inclination to reject the smiling Black man when he was featured with a Black friend compared to when he was featured alone, $t(253)=2.34,\ p=.04.$

Also consistent with Study 1, the relationship between the race of the Black male target's friend (Black/White) and White participants' inclination to reject the Black male target was mediated by rejection concerns. As reported above, the race of the Black man's friend (independent variable) significantly predicted rejection concerns (the anticipated mediator) and participants' inclination to reject the Black male target (the focal dependent variable). When the race of the Black man's friend was included in the regression model, participants' rejection concerns predicted inclinations to reject the Black man, B = -.58, p < .001. Finally, the relationship between the race of the Black man's friend and the participants' inclination to reject the Black male target was mediated by participants' rejection concerns, Sobel statistic z = -2.91, p = .01.

2.2.3. Perceptions of the Black male target's friendship network

An Analysis of Variance (ANOVA) with participants' percentage estimates of the Black man's White friends as the dependent variable and the race of the ostensible friend (Black, White, no friend) as the

¹ There were no effects of participant gender (all ps>.2) and therefore gender is not discussed further

independent variable yielded a significant effect of the friend's race, F(2, 353) = 4.23, p = .02, $\eta_p^2 = .02$. Specifically, participants estimated the Black man had fewer White friends when he was featured with a Black (M = 25%, SD = 18%), compared to a White (M = 32%, SD = 21%), friend, t(228) = 2.77, p = .006. Furthermore, when he was featured alone, participants' estimates of his White friends (M = 31%, SD = 20%) (a) did not differ from estimates when he was with a White friend (t < 1) but (b) were higher than the estimates when he was with a Black friend [t(230) = 2.40, p = .02].

2.3. Discussion

Experiment 2 replicated and extended the findings of the first experiment. As in Experiment 1, when a Black male target was featured with a Black (compared to a White) friend, White participants reported greater rejection concerns and, in turn, a greater inclination to reject this Black man. In addition, the present findings clarify how intragroup and intergroup friendship networks may communicate very different information. Specifically, it was unclear from Experiment 1 whether the Black man's White friend reduced rejection concerns or if his Black friend increased rejection concerns. The present findings suggest that it was the latter: Compared to when he was featured alone or with a White friend, a Black man's association with a Black friend led White participants to report greater rejection concerns, estimate the Black man had fewer White friends, and express less interest in befriending the Black man.

These findings highlight the significance White participants placed on the Black man's association with another Black individual, making an inference about the Black man's larger friendship network and the likelihood of being socially accepted by him based on his friendship with another Black man. What may seem surprising, at first blush, is the similarity in participants' reactions to the solitary Black man and the Black man featured with a White friend. However, it is important to note that in both instances there are signals of safety and social acceptance—when the Black man is alone he is smiling and when he is with a White friend there is information that he is willing to befriend a White person. This study also provides evidence supporting our assertion that the association with similar others may be construed as a lack of interest in an association with different others, thereby leading the all-Black dyad to communicate a very different message than the Black—White dyad and the solitary Black man.

These findings are particularly distressing as they have a number of negative implications for individuals who are under-represented in certain contexts, such as racial minority students on many college campuses, women in engineering firms, and men in nursing. Previous research emphasizes that friendships with similar others can be extremely helpful for reducing the negatively implications of solo status (e.g., Inzlicht & Ben-Zeev, 2000; Sekaquaptewa & Thompson, 2002; Trail, Shelton, & West, 2009). However, the present research suggests these intragroup friendships may hinder intergroup friendship development-friendships that can also be helpful as they provide more access to people with useful information, people who may serve as employers or decision makers, and the like. Thus, these findings highlight that interventions targeting solo status may be most beneficial when they also consider the factors that can increase the likelihood of social isolation. Hence, Experiment 3 not only continues to test the proposed mechanism in the present researchrejection concerns-but also explores a simple, theoretically rooted intervention strategy targeting rejection concerns as a way in which to increase White participants' interest in intergroup friendship formation.

3. Experiment 3

In Experiment 3, we sought to further investigate whether White participants' inclination to reject a Black man associating with a Black

friend was due to rejection concerns by manipulating these concerns. Thus, we attempted to inoculate participants against the threat of rejection by having participants consider a time when they felt socially included.

3.1. Method

3.1.1. Participants

296 White students (169 female, 4 unknown) participated online in exchange for class credit.

3.1.2. Procedure and design

Participants were led to believe they would take part in two unrelated experiments. The first experiment was described as assessing memory for everyday events. Participants were randomly assigned to write about something they did last Tuesday (control) or a time when they felt socially included (Zhong & Leonardelli, 2008). Next, participants were directed to the allegedly unrelated second experiment. As in Experiment 1, participants were asked to evaluate a smiling Black male target featured either with a White or Black friend. Three new photographs were taken from the Productive Aging Lab database and used as stimuli. The measures were identical to the previous experiments, assessing rejection concerns (∞ = .78) and participants' inclination to reject the Black man (∞ = .80). Thus, the overall experimental design was a 2 (Friend Race: White/Black)×2 (Inclusion Prime: Social Inclusion/Control), between-participants design.

3.1.3. Inclusion prime manipulation pilot study

To verify the inclusion prime does indeed buffer against social rejection concerns (as opposed to merely creating positive mood), 51 students (42 female) were randomly assigned to the social inclusion prime or control task. Participants then completed the 20-item Positive and Negative Affect Scale (PANAS; Watson, Clark, & Tellegen, 1988) anchored at 1 (very slightly or not at all) and 5 (extremely). Next, participants completed a modified version of the Rejection Sensitivity Questionnaire (Downey & Feldman, 1996), which asked participants to imagine themselves in two social interaction scenarios typical of undergraduate student experiences (arriving to the dorms and seeing your neighbor for the first time; starting a new on-campus job and meeting your co-worker for the first time). Participants used a 6-point Likert-type scale anchored at 1 (very unconcerned) and 6 (very concerned) to respond to two questions per scenario regarding their sensitivity to rejection ("How concerned or anxious are you over whether or not this person will accept you?" and "I would expect this person will reject me"). Rejection sensitivity was calculated using Downey and Feldman's formula, which consists of multiplying the response to the first question with the reverse score of the second question and then generating a mean across the scenarios.

As expected, there were no significant differences in mood across conditions: positive affect did not differ between the social inclusion (M=2.68, SD=.82) and control (M=2.81, SD=.85) conditions (t<1) and neither did negative affect (social inclusion: M=1.68, SD=.47; control: M=1.81, SD=.59; t<1). Also consistent with predictions, participants reported fewer rejection concerns when they were in the social inclusion (M=11.98, SD=4.69) compared to the control (M=15.75, SD=5.54) condition, t(48)=2.59, p=.01. Thus, the results from the pilot study suggest that the social inclusion prime does not change mood but does buffer against rejection concerns.

3.2. Results

3.2.1. Rejection concerns

We conducted a Friend Race \times Inclusion Prime ANOVA with rejection concerns as the dependent variable. This yielded no main effects (Fs<1) and, as predicted, a significant interaction between

Friend Race and the Inclusion Prime, F(1,292) = 3.70, p = .05, $\eta_p^2 = .01$. Replicating Experiments 1 and 2, in the control condition, participants reported greater rejection concerns when the Black male target was featured with a Black (M = 3.38, SD = 1.08), compared to a White (M=3.07, SD=.92), friend $[F(1,292)=3.27, p=.07, \eta_p^2=.01]$. However, when participants were asked to write about a time when they felt socially included, they did not report any differences in rejection concerns as a function of whether the Black man was featured with a Black (M = 3.10, SD = .96) or White (M = 3.25, SD = 1.05) friend, F < 1. Consistent with expectations, this pattern of data was driven by the influence of the Inclusion Prime on evaluations of the Black male target featured with a Black friend. That is, when participants received the social inclusion manipulation (compared to control), they were less concerned about being rejected by the Black man featured with a Black friend [F(1,292) = 2.67, p = .10, $\eta_p^2 = .01$], although this difference was only marginally significant. However, when the Black male target was featured with a White friend, rejection concerns did not differ as a function of the Inclusion Prime (p>.3).

3.2.2. Participants' inclination to reject the target

We conducted the same analyses on participants' inclination to reject the Black male target. There was a main effect of Friend Race, F(1,292) = 3.64, p = .06, $\eta_p^2 = .01$, qualified by the predicted interaction between Friend Race and the Inclusion Prime, F(1,292) = 5.90, p=.02, $\eta_p^2=.02$. Replicating Experiments 1 and 2, in the control condition, participants reported a greater inclination to reject the Black male target when he was featured with a Black (M = 4.13, SD = 1.19), compared to a White (M=3.53, SD=1.23), friend, F(1,292)=8.96, p = .003, $\eta_p^2 = .03$. However, participants asked to write about a time when they felt socially included did not report any difference in their inclination to reject the Black man as a function of whether he was featured with a Black (M=3.74, SD=1.17) or White (M=3.81, SD=1.17)SD = 1.14) friend, F < 1. Again, this pattern of data was driven by the influence of the Inclusion Prime on evaluations of the Black target featured with a Black friend: Participants were less inclined to reject the Black male target featured with a Black friend when they received the social inclusion prime (compared to the control condition) $[F(1,292) = 4.05, p = .05, \eta_p^2 = .01]$. However, participants' inclination to reject the Black male target when he was featured with a White friend did not differ as a function of Inclusion Prime (p>.2). See Fig. 2.

3.3. Discussion

Experiment 3 replicated the pattern of data found in Experiments 1 and 2: White participants reported greater rejection concerns and a greater inclination to reject a Black man when this Black man was featured

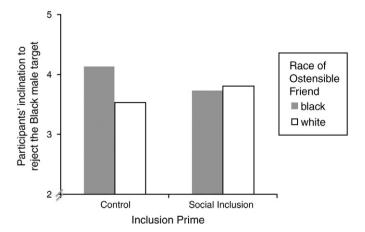


Fig. 2. Participants' inclination to reject a Black male target as a function of the race of the Black male target's friend (White/Black) and the Inclusion prime (social acceptance/control).

with a Black, compared to a White, friend. Furthermore, these effects were diminished with a manipulation of rejection concerns. That is, participants who considered a time when they were socially accepted—by anyone, ingroup or outgroup members²—were buffered against rejection and subsequently did not report differences in rejection concerns or rejection inclinations as a function of the race of the Black man's friend. Thus, the present experiment provided additional support for rejection concerns as a mechanism facilitating White participants' intergroup rejection inclinations in addition to offering an example of a simple intervention to facilitate intergroup contact.

4. General discussion

As suggested by the Japanese proverb presented at the outset of this manuscript, we often look to a person's friends for information about a person's character. The present research suggests we may draw even more from someone's friendship networks—we may assume someone's friendship with others who are similar on one dimension (such as race) suggests a lack of interest in friends who are different on that dimension. The present research found White participants were more inclined to reject a Black man and were more likely to anticipate rejection from this Black man when he was featured with a Black, compared to a White, friend (Experiments 1–3). Furthermore, these studies suggest participants' inclination to reject the Black man was driven by their rejection concerns-that is, the assumption that the Black man featured with a Black friend would have little interest in a friendship or interaction with the White participant. In Experiments 1 and 2, the relationship between the race of the Black man's friend and participants' inclination to reject the Black man was mediated by participants' rejection concerns. Experiment 2 also revealed the Black man's association with the Black, and not the White, friend drove participants' rejection concerns. That is, participants found the smiling Black man featured alone or with a White friend as similarly approachable, and significantly more so, compared to when he was featured with a Black friend. In addition, Experiment 2 revealed White participants assumed the Black man featured with a Black friend had fewer White friends compared to when he was featured alone or with a White friend. And, finally, in Experiment 3, a manipulation of rejection concerns moderated participants' rejection inclinations. When White participants' rejection concerns were diminished via a social inclusion prime, participants no longer reported differences in their interest in friendship with a Black male target as a function of the race of his friend (White/Black).

These findings complement recent research examining Blacks' perceptions of Whites' friendship intentions as a function of Whites' social networks (Wout, Murphy, & Steele, 2010). Wout and colleagues found that when White targets were featured with only White friends (compared to a more diverse friendship network), Black participants anticipated more challenges during an interaction and expected the White target would perceive them negatively. Together with the present research, these studies demonstrate that both Whites and Blacks are more optimistic about interracial interactions and are more likely to approach interracial interactions when they believe their interaction partner has a diverse friendship network. The present research also adds to these data by demonstrating these effects are at least partially attributable to concerns about being socially rejected and offers a theoretically driven avenue for intervention.

The findings from the present research thus have important theoretical and pragmatic implications. Previous research suggests rejection concerns make intergroup contact particularly stressful (Shelton & Richeson, 2005) and that personal or even vicarious contact with outgroup members can help to reduce these intergroup anxieties (Page-Gould, Mendoza-Denton, & Tropp, 2008; Page-Gould, Mendoza-Denton, Alegre, & Siy, 2010; Wright, Aron, McLaughlin-Volpe, & Ropp,

² Not a single participant wrote about an experience in an interracial interaction.

1997). For example, knowledge that an outgroup member is friends with one's own close friends is shown to reduce rejection concerns (Shelton & Richeson, 2005) and reminders that interracial interactions, like many of one's previous interpersonal interactions, often go better than expected leads to more positive interracial interactions and a higher likelihood of initiating interracial interactions (Mallett & Wilson, 2010). However, individuals who are concerned about rejection from outgroup members may not have friendship networks or friends with friendship networks that include outgroup members. Thus, understanding factors that reduce intergroup anxieties that are outside one's personal (or one's friends') intergroup interaction experiences is important for interventions. The present research suggests strategies promoting general feelings of inclusion-participants were asked to think about any instance of inclusion, rather than instances specific to positive outgroup experiences—may serve to reduce barriers between groups.

These findings also have implications for interventions focused on increasing positive intergroup contact or those targeting solo status. For example, people who are similar often sit together in cafeterias, join particular fraternities, select specific dormitories, or choose particular companies or work groups. The present research suggests these groupings may unintentionally communicate lack of interest in others who may be different. A remedy might be to break up these groupings. This solution, however, is undesirable because solo status can have many negative ramifications. The present research provides an alternative: Inoculating individuals against rejection concerns (concerns that drove reluctance to approach intergroup interaction). That is, when participants were merely asked to recall a time when they felt socially accepted, they were more open to intergroup contact. Future research will benefit from continuing to explore the different strategies that can foster positive intergroup perceptions and smoother intergroup interactions.

Although the present research offers evidence that fear of rejection facilitates reduced interest in intergroup interaction, future research will also benefit from a greater exploration of why minority and majority group members chronically assume outgroup members have little interest in intergroup interaction. The present research suggests this may emerge as a function of perceptions of outgroup members' racial attitudes—for example, that Whites attune themselves to cues such as a Black man's friendship network, and then infer from this information whether or not this person likes White people (see also Vorauer, Hunter, Main, & Roy, 2000).

An aspect of the present research that is worth noting is White participants were confronted with outgroup members who were smiling—an expression that typically communicates friendliness and warmth (DeWall, Maner, & Rouby, 2009; Kraut & Johnston, 1979) and tends to reduce threat-responses Whites have to Black targets (Richeson & Trawalter, 2008). However, when smiling Black males were featured with another smiling Black male, White participants' rejection concerns resurfaced. This suggests that cues of acceptance or rejection may be differentially weighted or interpreted in intergroup, compared to intragroup, interactions and that some cues, such as the social cues explored in the present research, can undermine efforts to communicate friendliness (i.e., smiling). For example, two sorority girls sitting together on a bench, two mothers with their small children, two New Yorkers sharing a meal-all smiling-may communicate via their affiliation with similar others that they are likely to socially reject a different other, such as a coed who is not in a sorority, a woman without a child, a person from South Carolina. Thus, research on acceptance cues in intragroup interactions may not always generalize to intergroup interactions. Future research will benefit from a greater exploration of the contexts in which cues differentially communicate acceptance and rejection in intragroup and intergroup contexts.

The present research suggests friends may communicate more about one's character than is typically acknowledged. That is,

observing a Black man's Black (compared to White) friend may heighten rejection concerns for a White interaction partner, increasing the White person's inclination to reject the Black man. However, the present research also suggests that in intergroup interactions, considering the company *you* keep—reminding yourself about personal experiences of social inclusion—may reduce the weight you place on the company kept by others.

Acknowledgments

We thank Christine Chu, Becca Neel, and Chad Mortensen for their assistance with this research.

References

- Baron, R. M., & Kenny, D. A. (1986). The moderator–mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *Journal of Personality and Social Psychology*, 51, 1173–1182.
- Baumeister, R. F., & Leary, M. R. (1995). The need to belong: Desire for interpersonal attachments as a fundamental human motivation. *Psychological Bulletin*, 117, 497–529
- Buhrmester, M. D., Kwang, T., & Gosling, S. D. (in press). Amazon's Mechanical Turk: A new source of inexpensive, yet high-quality, data? *Perspectives on Psychological Science*.
- Burklund, L. J., Eisenberger, N. I., & Lieberman, M. D. (2007). The face of rejection: Rejection sensitivity moderates dorsal anterior cingulated activity to disapproving facial expressions. Social Neuroscience, 2, 238–253.
- DeWall, C. N., MacDonald, G., Webster, G. D., Masten, C., Baumeister, R. F., Powell, C., Combs, D., Schurtz, D. R., Stillman, T. F., Tice, D. M., & Eisenberger, N. I. (2010). Acetaminophen reduces social pain: Behavioral and neural evidence. *Psychological Science*, *21*, 931–937.
- DeWall, C. N., Maner, J. K., & Rouby, D. A. (2009). Social exclusion and early-stage interpersonal perception: Selective attention to signs of acceptance. *Journal of Personality and Social Psychology*, 96, 729—741.
- Downey, G., & Feldman, S. I. (1996). Implications of rejection sensitivity for intimate relationships. *Journal of Personality and Social Psychology*, 70, 1327–1343.
- Downey, G., Mougios, V., Ayduk, O., London, B. E., & Shoda, Y. (2004). Rejection sensitivity and the defensive motivational system: Insights from the startle response to rejection cues. *Psychological Science*, *15*, 668–673.
- Eisenberger, N. I., Lieberman, M. D., & Williams, K. D. (2003). Does rejection hurt? An fMRI study of social exclusion. *Science*, 302, 290—292.
- Gardner, W. L., Pickett, C. L., & Brewer, M. B. (2000). Social exclusion and selective memory: How the need to belong influences memory for social events. *Personality and Social Psychology Bulletin*, 26, 486–496.
- Inzlicht, M., & Ben-Zeev, T. (2000). A threatening intellectual environment: Why females are susceptible to experiencing problem-solving deficits in the presence of males. *Psychological Science*, 11, 365–371.
- Kerr, N. L., & Levine, J. M. (2008). The detection of social exclusion: Evolution and beyond. *Group Dynamics: Theory Research and Practice*, 12, 39–52.
- King, E. B., Shapiro, J. R., Hebl, M. R., Singletary, S. L., & Turner, S. (2006). The stigma of obesity in customer service: A mechanism for remediation and bottom-line consequences of interpersonal discrimination. *Journal of Applied Psychology*, 91, 579-593.
- Kraut, R. E., & Johnston, R. E. (1979). Social and emotional messages of smiling: An ethological approach. Journal of Personality and Social Psychology, 37, 1539-1553.
- Lord, C. G., & Saenz, D. S. (1985). Memory deficits and memory surfeits: Differential cognitive consequences of tokenism for tokens and observers. *Journal of Personality* and Social Psychology, 49, 918–926.
- Mallett, R. K., & Wilson, T. D. (2010). Increasing positive intergroup contact. *Journal of Experimental Social Psychology*, 46, 382–387.
- Mallett, R. K., Wilson, T. D., & Gilbert, D. T. (2008). Expect the unexpected: Failure to anticipate similarities leads to an intergroup forecasting error. *Journal of Personality* and Social Psychology, 94, 265–277.
- Maner, J. K., Kenrick, D. T., Becker, D. V., Robertson, T. E., Hofer, B., Neuberg, S. L., Delton, A. W., Butner, J., & Schaller, M. (2005). Functional projection: How fundamental social motives can bias interpersonal perception. *Journal of Personality and Social Psychology*, 88, 63–78.
- Minear, M., & Park, D. C. (2004). A lifespan database of adult facial stimuli. *Behavior Research Methods, Instruments, and Computers*, 36, 630–633.
- Page-Gould, E., Mendoza-Denton, R., Alegre, J. M., & Siy, J. O. (2010). Understanding the impact of cross-group friendship on interactions with novel outgroup members. *Journal of Personality and Social Psychology*, 5, 775—793.
- Page-Gould, E., Mendoza-Denton, R., & Tropp, L. R. (2008). With a little help from my cross-group friend: Reducing anxiety in intergroup contexts through cross-group friendship. *Journal of Personality and Social Psychology*, 95, 1080–1094.
- Pearson, A. R., West, T. V., Dovidio, J. F., Powers, S. R., Buck, R., & Henning, R. (2008). The fragility of intergroup relations: Divergent effects of delayed audiovisual feedback in intergroup and intragroup interaction. *Psychological Science*, 19, 1272—1279.
- Pickett, C. L., & Gardner, W. L. (2005). The social monitoring system: Enhanced sensitivity to social cues as an adaptive response to social exclusion. In K. D. Williams, J. P. Forgas, & W. von Hippel (Eds.), The social outcast: Ostracism, social exclusion, rejection, and bullying. New York, NY, US: Psychology Press.

- Plant, E. A. (2004). Responses to interracial interactions over time. *Personality and Social Psychology Bulletin*, 30, 1458–1471.
- Plant, E. A., Butz, D. A., & Tartakovsky, M. (2008). Interethnic interactions: Expectancies, emotions, and behavioral intentions. Group Processes & Intergroup Relations, 11, 555-574
- Richeson, J. A., & Trawalter, S. (2005). Why do interracial interactions impair executive function? A resource depletion account. *Journal of Personality and Social Psychology*, 88, 934–947.
- Richeson, J. A., & Trawalter, S. (2008). The threat of appearing prejudiced and race-based attentional biases. Psychological Science, 19, 98–102.
- Sekaquaptewa, D., & Thompson, M. (2002). The differential effects of solo status on members of high- and low-status groups. *Personality and Social Psychology Bulletin*, 28, 693-707.
- Shapiro, J. R., Ackerman, J. M., Neuberg, S. L., Maner, J. K., Becker, D. V., & Kenrick, D. T. (2009). Following in the wake of anger: When not discriminating is discriminating. *Personality and Social Psychology Bulletin*, 35, 1356—1367.
- Shapiro, J. R., & Neuberg, S. L. (2008). When do the stigmatized stigmatize? The ironic effects of being accountable to (perceived) majority group prejudice-expression norms. *Journal of Personality and Social Psychology*, 95, 877—898.
- 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., & Bergsieker, H. B. (2009). Interracial friendship development and attributional biases. *Journal of Social and Personal Relationships*, 26, 179–193.
- Spoor, J., & Williams, K. D. (2007). The evolution of an ostracism detection system. In J. P. Forgas, M. Haselton, & W. von Hippel (Eds.), The evolution of the social mind: Evolutionary psychology and social cognition. New York: Psychology Press.
- Trail, T. E., Shelton, J. N., & West, T. V. (2009). Interracial roommate relationships: Negotiating daily interactions. *Personality and Social Psychology Bulletin*, 35, 671–684.

- Trawalter, S., & Richeson, J. A. (2008). Let's talk about race, baby! When Whites' and Blacks' interracial contact experiences diverge. *Journal of Experimental Social Psychology*, 44, 1214—1217.
- Trawalter, S., Richeson, J. A., & Shelton, J. N. (2009). Predicting behavior during interracial interactions: A stress and coping approach. *Personality and Social Psychology Review*, 13, 243—268.
- Vorauer, J. D., Hunter, A. J., Main, K. J., & Roy, S. A. (2000). Meta-stereotype activation: Evidence from indirect measures for specific evaluative concerns experienced by members of dominant groups in intergroup interaction. *Journal of Personality and Social Psychology*, 78, 690—707.
- 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.
- Walton, G. M., & Cohen, G. L. (2007). A question of belonging: Race, social fit, and achievement. Journal of Personality and Social Psychology, 92, 82–96.
- Watson, D., Clark, L. A., & Tellegen, A. (1988). Development and validation of brief measures of positive and negative affect: The PANAS scales. *Journal of Personality and Social Psychology*, 54, 1063—1070.
- Williams, K. D. (2007). Ostracism. Annual Review of Psychology, 58, 425-452.
- Wout, D. A., Murphy, M. C., & Steele, C. M. (2010). When your friends matter: The effect of White students' racial friendship networks on meta-perceptions and perceived identity congruencies. *Journal of Experimental Social Psychology*, 46, 1035–1041.
- Wright, S. C., Aron, A., McLaughlin-Volpe, T., & Ropp, S. A. (1997). The extended contact effect: Knowledge of cross-group friendships and prejudice. *Journal of Personality and Social Psychology*, 73, 73–90.
- Zadro, L., Williams, K. D., & Richardson, R. (2004). How low can you go? Ostracism by a computer is sufficient to lower self-reported levels of belonging, control, self-esteem, and meaningful existence. *Journal of Experimental Social Psychology*, 40, 560–567.
- Zhong, C. B., & Leonardelli, G. J. (2008). Cold and lonely: Does social exclusion literally feel cold? *Psychological Science*, 19, 838–842.