ABSTRACT—Most of the research on intergroup anxiety has examined the impact of people's own anxiety on their own outcomes. In contrast, we show that in intergroup interactions, one's partner's anxiety is just as important as one's own anxiety (if not more important). Using a diary study among college roommates, we show that partners' anxiety predicts respondents' anxiety across time on a daily basis, as well as respondents' interest in living together again the next year. We discuss the importance of taking a relational approach to understanding intergroup interactions.

Interracial interactions provoke high levels of anxiety, which, in turn, increases people's desire to disengage from out-group members, preventing the numerous benefits of intergroup contact, such as prejudice reduction (Pettigrew & Tropp, 2006). Unfortunately, however, the research on anxiety and intergroup contact has primarily been cross-sectional survey research or brief interactions between Whites and ethnic minorities in the laboratory in which one person in the interaction is studied. Although informative, this research has left us with little knowledge about the relationship between people's anxiety and the consequences of interacting with an anxious partner during interracial interactions. Here, we examined both Whites' and ethnic minorities' anxiety during daily interactions across time. We suggest that one person's anxiety can spill over and influence the other person's anxiety over time during daily interracial interactions. Moreover, we suggest that one's partner's anxiety, above and beyond one's own anxiety, is related to one's desire to engage in additional intergroup contact. This relational approach to studying anxiety highlights the interdependence of Whites and ethnic minorities in interracial interactions.

Whites' and ethnic minorities' anxiety often leaks out during interracial interactions (Dovidio, Hebl, Richeson, & Shelton, 2006). When people notice that their partner is anxious, they are likely to search for an explanation for the anxiety (Vorauer, 2006). People tend to attribute an out-group partner's anxiety to a readily salient factor: race—specifically, prejudice and discomfort with intergroup interactions. Indeed, research has shown that people make negative attributions for out-group partners' ambiguous behaviors. For example, they interpret out-group members' failure to initiate contact as lack of interest, despite not doing so for the self (Shelton & Richeson, 2005), and they interpret out-group members' anxious behaviors as unfriendly but interpret in-group members' anxious behaviors as simply anxiety (Dovidio, Pearson, Smith-McLallen, & Kawakami, 2005). In same-race interactions, race is a less relevant factor that could explain anxiety; thus, people attribute their partner's anxiety to some other factor that is more fleeting than race. During same-race interactions, if people attribute their partner's anxiety to situational factors (e.g., anxiety about an exam) rather than something essential about the partner, then interpersonal consequences that follow would be different from those in interracial interactions. Here, we explore two consequences of interacting with an anxious out-group partner.

First, we examine the impact of a partner's anxiety on one's own anxiety over time. Given that anxiety is labeled with surplus meaning in interracial interactions, a partner's anxiety may “bleed over” into one's own anxiety as one wrestles with interacting with someone who might have negative beliefs about one's group. Being uncertain about why one's partner is anxious, or (perhaps worse) being certain that it is because of prejudice, is likely to make one anxious. In contrast, in intragroup interactions, this attributional uncertainty is reduced, and people are more likely to give their partner the benefit of the doubt that their anxiety does not reflect anything negative about the relationship. As a result, if people are more certain that their partner's anxiety is not about interacting with them, then it is less likely to have negative consequences on their own anxiety. In other words, believing my partner is anxious because of racial prejudice is likely to make me feel anxious, but believing my partner is anxious because of an exam, for example, is less likely to have as strong an effect.
Second, whereas previous work has focused on one’s own anxiety and interest in future intergroup contact (Plant, 2004; Plant & Devine, 2003), we explore the consequence of partner anxiety on people’s interest in engaging in future intergroup contact. Given that people expect interracial interactions to be stressful (Mallet, Wilson, & Gilbert, 2008), actually interacting with an anxious out-group member is likely to increase people’s desire to distance themselves from future encounters. Moreover, it is unlikely that people would want to maintain contact with someone they believe has negative perceptions of their group.

OVERVIEW OF THE STUDY

For 15 days at the beginning of the academic year, we had mixed-race and same-race college roommate dyads, who had been randomly assigned to live together, complete measures of their anxiety and their interest in living with their roommate again. The design of the study allowed us to examine the day-to-day carryover effects of actor and partner anxiety. We hypothesized that anxiety is more likely to carry over in mixed-race than in same-race dyads, such that partner anxiety yesterday will positively predict actor anxiety today. In addition, we examined how actor and partner anxiety is related to interest in future intergroup contact. We hypothesized that partner anxiety, over and above actor anxiety, will be negatively related to how interested people are in living with their roommate again among mixed-race dyads. By examining these issues in a natural context where the ideal intergroup conditions are met, we begin to shed light on the processes that interfere with establishing long-standing intergroup relationships.

METHOD

Participants
Seventy-nine same-sex freshmen roommate dyads (45 female dyads, 34 male dyads) participated in the study for $50. The sample consisted of 28 cross-race dyads (White-minority) and 51 same-race dyads (40 White-White and 11 minority-minority). The students had been randomly assigned to be roommates.

Procedure
During the first week of the school year, we recruited students to participate in a study about freshmen’s college experiences. Participants attended an orientation session where they were told they would complete a questionnaire during the session and a daily diary questionnaire during the next 15 days. The pre-diary questionnaire included demographic questions and individual difference measures, which are irrelevant to this study and are not discussed further. Participants completed the diary questionnaire Sunday through Thursday for 3 weeks, for a total of 15 days. At the end of the diary period, participants attended a postdiary session during which they completed a final ques-

Background Measures

Race of Roommate
Participants indicated the race and sex of their roommate. In all of our analyses, we compared effects for Whites with effects for ethnic minorities (i.e., Blacks and Latinos). Analyses indicated no differences between Blacks and Latinos.

Daily-Level Measures
Participants completed eight items (e.g., anxious, uncomfortable, uncertain) to assess the extent to which they felt anxious during interactions with their roommate each day. Responses were made on a 7-point scale (1 = strongly disagree, 7 = strongly agree). The items were combined to form an anxiety composite (α = .85 across time points) in which higher values indicate more anxiety.

Participants also indicated the extent to which they agreed with the following statement: “If I had to decide today, I would live with my roommate again next year.” Participants rated this item on a 7-point scale (1 = strongly disagree, 7 = strongly agree).

RESULTS

Given that our data involved examining interchangeable dyads over time, we used an analysis strategy described by Kenny, Kashy, and Cook (2006). To examine the time-delayed effects of self and partner anxiety, we used a cross-lagged approach that is conceptually based on the actor-partner interdependence model (Kenny & Acitelli, 2001), in which the predictor variables (self-anxiety and partner anxiety) were lagged 1 day, and the outcome variable was the respondent’s own anxiety experienced the following day (see Kenny et al., 2006). The actor effect refers to the effect of the respondent’s own anxiety at one time point on his or her own anxiety at the following time point. The partner effect refers to the effect of the respondent’s roommate’s anxiety at one time point on the respondent’s anxiety at the following time point. Thus, the respondent’s and roommate’s anxiety experienced on a given day were used to predict the respondent’s anxiety experienced on the following day. We did not find any effects for day of the week.

Race differences were examined using an approach outlined by West, Popp, and Kenny (2008) in which race of the respondent and race of the partner are factors. Thus, the study had a 2 × 2 full design. Note that in this design, the interaction of the two factors shows the differential effect of same-race and mixed-race dyads. To examine the degree to which race effects moderated the actor and partner lagged effects, each of the lagged variables interacted with each of the three race variables. Thus, we were able to examine the degree to which the actor and
partner lagged effects were moderated by respondent’s race, partner’s race, and their interaction.

**Lagged Effects of Self-Anxiety and Partner Anxiety**

A main effect of respondent’s own anxiety was found, \( t(102) = 7.62, p_{rep} = .99, d = 1.83 \), indicating that respondents’ anxiety on a given day was positively predicted by their anxiety the previous day. In addition, a parallel effect was found for partner anxiety, \( t(1387) = 4.88, p_{rep} = .99, d = .77 \), indicating that a respondent’s anxiety on a given day was positively predicted by his or her partner’s anxiety the previous day across all dyads. In addition, a Partner Anxiety × Respondent Race × Partner Race interaction was found, \( t(1396) = -2.73, p_{rep} = .96, d = -0.43 \). Follow-up tests revealed that, although the lagged effect of partner anxiety on respondent’s own anxiety was not significant for respondents in same-race dyads, \( p_{rep} = .80 \), the effect was significant and positive for respondents in mixed-race dyads, \( t(1296) = 5.18, p_{rep} = .99, d = 1.20 \). Together, these results indicate that, although all respondents’ anxiety was predicted by their own anxiety the previous day, respondents in mixed-race dyads were especially impacted by their roommate’s felt anxiety the previous day.

**Interest in Future Contact**

We examined the degree to which participants were interested in living together with their roommate again next year. The Respondent Race × Partner Race interaction was significant, \( t(92.65) = 2.48, p_{rep} = .94, d = 1.08 \). Respondents in mixed-race dyads were less interested in living with their roommates again than were respondents in same-race dyads (see Table 1). No other effects were found.

**The Effect of Anxiety on Interest in Future Contact**

We examined respondent and partner anxiety (and their interactions with the race parameters) as predictors of respondents’ interest in contact. We did not include effects of time in this model; thus, effects refer to a consistent pattern across all time points. A main effect of respondent anxiety was found, \( t(1983.47) = -5.73, p_{rep} = .99, d = -1.09 \), indicating that the more anxious respondents felt, the less interested they were in living with their roommate again next year. In addition, the Respondent Race × Partner Race × Partner Anxiety interaction was significant, \( t(1982.76) = 3.48, p_{rep} = .99, d = 0.65 \), and the Respondent Race × Partner Anxiety interaction was significant, \( t(1980.104) = -2.95, p_{rep} = .97, d = -0.55 \). Follow-up tests revealed that the relationship between partner anxiety and interest in future contact was significant for both respondents in same-race dyads, \( t(1949.14) = 2.56, p_{rep} = .93, d = 0.60 \), and those in mixed-race dyads, \( t(1992.40) = -2.55, p_{rep} = .99, d = -0.69 \). Specifically, respondents in same-race dyads were more interested in future contact the more anxious their roommate felt. Respondents in mixed-race dyads, however, were less interested in future contact the more anxious their roommate felt. This effect was primarily driven by Whites (\( p = .07 \)), rather than by minorities (\( p = .10 \)).

**DISCUSSION**

Although living with someone of a different racial or ethnic group can reduce prejudice (Van Laar, Levin, Sinclair, & Sidiarius, 2004), it can also provoke anxiety. Our findings show that people’s anxiety can create a web of harmful outcomes for intergroup relations. We found that how anxious people feel during daily interracial interactions depends not only on how anxious they felt on the previous day, but also on how anxious their partner felt during their interactions on the previous day. Moreover, in interracial interactions, partners’ feelings of anxiety, above and beyond respondents’ own anxiety, negatively predicted interest in future intergroup contact. Surprisingly, in same-race dyads, partner anxiety positively predicted respondents’ interest in contact. If people in same-race dyads attribute their partner’s anxiety to something outside of the relationship (e.g., an exam), then they may work hard to reduce their partner’s anxiety. They may justify their effort to make their partner comfortable by feeling as if they genuinely like their partner, increasing their interest in wanting to engage in future interactions. That is, people are more responsive to an in-group partner’s anxiety than to an out-group partner’s anxiety; this responsiveness increases intimacy and the desire for future interactions. Together, these findings show that one’s partner’s anxiety is just as important as one’s own anxiety (if not more important) in interracial interactions, and that the consequences of anxiety are markedly different in inter- and intraracial interactions.

Our research involved roommates who were randomly assigned to live together. Although we suspect that our findings would generalize to other settings (e.g., diverse work teams), there may be something unique about living in close quarters with an out-group person that yielded these findings. In addition, our findings are likely limited to intergroup interactions as people are just getting to know one another. Finally, it is not clear the extent to which partner anxiety in daily interactions extends to interest in out-group contact more generally, not just one’s current interaction partner.

### Table 1

<table>
<thead>
<tr>
<th>Respondent’s race</th>
<th>Partner’s race</th>
<th>White (Mean, SD)</th>
<th>Minority (Mean, SD)</th>
</tr>
</thead>
<tbody>
<tr>
<td>White</td>
<td>Majority</td>
<td>5.13 (0.05)</td>
<td>4.35 (0.11)</td>
</tr>
<tr>
<td>Minority</td>
<td>White</td>
<td>4.22 (0.11)</td>
<td>5.42 (0.10)</td>
</tr>
</tbody>
</table>

*Note.* Higher values indicate more interest in contact. Standard errors are given in parentheses.
Our findings offer insight into how to reduce tension in intergroup interactions. It is difficult to reduce one’s own intergroup anxiety. Ironically, one of the best solutions is to engage in more contact. One viable solution might be to make people aware that their anxiety and interest in intergroup contact is shaped by their partner’s anxiety. We do not mean to imply that people should blame the out-group for their lack of interest in intergroup contact (e.g., “I would interact with those people but they are so anxious”). Instead, if people recognized that their partner’s anxiety is shaping their experience in the interaction, then they may turn their attention to help reducing their partner’s anxiety or, if possible, try to correct for how much it influences their own experiences. Our findings also highlight the importance of examining what happens during interracial interactions in natural settings as opposed to the ultimate outcome (e.g., prejudice reduction) of interracial contact. It is clear that the interpersonal processes that happen during the interaction can undermine the long-term benefits of contact.

For many people, home is a safe haven—a place of comfort and ease. Our findings suggest that, depending on the ethnicity of one’s roommate, “home” may not feel like a safe haven for freshmen. As a result, university officials need to be advised that policies should be implemented to make sure that students feel comfortable on a daily basis in their dorms. The anxiety that students experience as they interact with others may be a barrier to intergroup relationships. The anxiety that is experienced across the racial divide may spin out of control across time, leaving people in a downward spiral of negative emotions that encourage them to avoid intergroup contact altogether. We are optimistic, however, that this downward spiral can be thwarted by openly discussing one’s anxiety with out-group members (Page-Gould, Mendoza-Denton, & Tropp, in press). In addition, we are optimistic that taking a relational approach—studying Whites’ and ethnic minorities’ anxiety simultaneously—will move researchers closer to understanding how to improve intergroup relations so that all individuals will be willing to reach across racial lines.

REFERENCES


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