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What is This?
Concerns about appearing prejudiced: Implications for anxiety during daily interracial interactions

J. Nicole Shelton, Tessa V. West and Thomas E. Trail

Abstract
We investigated the relationship between Whites’ and ethnic minorities’ concerns about appearing prejudiced and anxiety during daily interracial interactions. College roommate pairs completed an individual difference measure of concerns about appearing prejudiced at the beginning of the semester. Then they completed measures of anxiety and perceptions of their roommates’ anxiety-related behaviors for 15 days. Results indicated that among interracial roommate pairs, Whites’ and ethnic minorities’ concerns about appearing prejudiced were related to their self-reported anxiety on a daily basis; but this was not the case among same-race roommate pairs. In addition, among interracial roommate pairs, roommates who were concerned about appearing prejudiced began to “leak” their anxiety towards the end of the diary period, as indicated by their out-group roommate who perceived their anxious behaviors as increasing across time, and who consequently liked them less. The implications of these findings for intergroup relations are discussed in this article.

Keywords
intergroup contact, intergroup interactions, interracial roommates, prejudice

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People often enter social encounters with concerns about how they might be evaluated by others. Students, for example, may be concerned with being perceived as unintelligent during interactions with professors. Spouses may be concerned with being perceived as unlikable during interactions with their in-laws. One specific concern that people negotiate during intergroup interactions is their concern with appearing prejudiced. This concern can serve as a lens through which people view themselves, view others, and are actually viewed by others during interpersonal interactions (Crandall & Eshleman, 2003). The goal of the present research was to illustrate the extent to which Whites’ and ethnic minorities’ concerns about appearing prejudiced, measured prior to intergroup contact, have implications for anxiety and perceptions of one’s partner—in
particular liking—during interracial interactions among college roommates.

Interpersonal concerns about appearing prejudiced

In contemporary American society, holding or expressing prejudiced beliefs about a racial/ethnic group is not tolerated as much as it was in the past (Dovidio & Gaertner, 2004). As a result, many people have become quite concerned about appearing prejudiced towards racial out-groups. For example, as implied in a quote by George W. Bush in which he stated, “You can call me anything you want, but do not call me a racist!” (Williams, 2005), calling someone in American society racist can be quite offensive. To date, research on concerns about appearing prejudiced has focused on Whites. Undoubtedly, this is in part because, given the history of overt prejudice and discrimination by Whites against ethnic minorities as well as status and power differences between the groups, it may be more important for Whites not to express racial bias. Nonetheless, given that social norms are egalitarian, both Whites and ethnic minorities are likely to be concerned with appearing prejudiced, though Whites and minorities might differ in their mean level of concern. Moreover, these concerns may have similar consequences for the dynamics of interracial interactions, which is the focus of our research.

The perspective of Whites

Although Whites may unconsciously behave in a prejudiced manner, most Whites consciously deny any ill intent and are against unfair treatment toward minority groups (Dovidio, Kawakami, Johnson, Johnson, & Howard, 1997; Fazio, Jackson, Dunton, & Williams, 1995). Nevertheless, they are aware that their actions and inactions may be perceived as prejudiced, and thus either for internal (e.g., personal values) or external (e.g., societal norms) reasons they are motivated not to behave in a prejudiced manner in public settings (Legault, Green-Demers, Grant, & Chung, 2007; Plant & Devine, 1998). Whites’ concerns about appearing prejudiced have been shown to have negative effects for the self during intergroup interactions. Specifically, Whites’ concerns about appearing prejudiced are related to more self-reported anxiety (Shelton, 2003) and less enjoyment (Vorauer, Main, & O’Connell, 1998) during an interracial interaction, as well as more anxiety anticipating an upcoming interaction and the desire to avoid intergroup interactions (Plant & Butz, 2006). Disentangling internal and external sources of concerns about appearing prejudiced, Plant (2004) had non-Blacks complete measures of internal and external motivation to control prejudice, and then two weeks later, reflect upon their interracial interactions during the past two weeks. She found that, in predicting responses across the two weeks, non-Black participants high in internal motivation (i.e., motivated for personal values) consistently reported less anxiety about interracial interactions and less of a desire to avoid these interactions. However, non-Black participants high in external motivation (i.e., motivated by social norms) reported marginally more anxiety about interracial interactions. Taken together, these findings show that Whites’ concerns about appearing prejudiced, especially when the motivation is external, have harmful effects for the self during interracial interactions.

The negative experiences that Whites who are concerned with appearing prejudiced have, may be a result of the pressure on Whites to monitor their thoughts, feelings, and behaviors during interracial interactions (Dovidio & Gaertner, 2004; Monteith, 1993). For example, the desire to appear unbiased is so pervasive among Whites that they report not noticing that a person is Black, even when race is the most noticeable characteristic available (Norton, Sommers, Apfelbaum, Pura, & Ariely, 2007). As Norton et al. (2007) note, it is as if Whites believe: “If I do not notice race, then I cannot be racist” (p. 949). Moreover, Whites who are at most risk of being perceived as prejudiced—i.e., those with higher levels of racial bias—control their behaviors when they are concerned about appearing biased (Richeson & Shelton, 2007). Given the dearth of research taking a dyadic approach to studying interracial interactions, it is
not surprising that little research exists on how Whites’ concerns about appearing prejudiced influence their partner’s perceptions and experiences during the interaction. If Whites monitor their thoughts, feelings, and behaviors during interracial interactions in order to avoid being perceived as prejudiced, then their interaction partner is likely to be influenced by such self-regulatory processes. Successful self-regulation should reap positive partner effects. The only study, to our knowledge, that has explored the impact of Whites’ concerns on their partners’ perceptions, revealed that Blacks liked Whites who tried not to be prejudiced during an interaction more than they liked Whites who did not (Shelton, 2003). This suggests that despite feeling anxious and not enjoying the interaction, Whites who are concerned with appearing prejudiced appear successful at not allowing their anxiety to leak during brief interracial interactions. However, because this process is mentally and physically exhausting (Richeson & Shelton, 2007), the self-regulatory demands of controlling one’s thoughts, feelings, and behaviors are likely to break down over time, causing Whites who are concerned with appearing prejudiced to appear non-anxious during initial interactions but eventually begin to “leak” anxiety over time. Thus, we predict that when one is examining interactions over time, as in the present research, the more Whites are concerned with appearing prejudiced, the more anxious they will eventually appear to their ethnic minority partner across time. This increase in anxiety should be coupled with a decrease in liking; that is, the more Whites are concerned with appearing prejudiced, the less they will be liked by their partner.

The perspective of ethnic minorities

Because of evidence indicating that ethnic minorities have negative attitudes about Whites (Johnson & Leci, 2003; Monteith & Spicer, 2000), it is reasonable that they may be concerned with not appearing prejudiced during interactions. In the only research to our knowledge that has explored this issue, Plant (2004) suggests that, similar to Whites, Blacks are concerned with appearing prejudiced for internal reasons—they are personally against racial bias of all types—as well as for external reasons; they are sensitive to the repercussions of behaving in a biased way toward a powerful group. Furthermore, she found that the more Blacks were internally motivated to respond without prejudice at Time 1, the more they grew to expect Whites to respond without bias two weeks later (Plant, 2004). Unlike the research with Whites, however, researchers have not examined how ethnic minorities’ concerns about appearing prejudiced influence their own and their partner’s experiences during interracial interactions. Given that societal norms are against all people expressing prejudice, we predict that ethnic minorities’ concerns about appearing prejudiced will operate in a similar manner as Whites’ concerns. That is, similar to Whites, the more ethnic minorities are concerned about appearing prejudiced, the more anxiety they should experience during interracial interactions because of the negative social repercussions of allowing racial biases to leak through. Moreover, the effort associated with trying to show that one is not prejudiced is likely to be exhausting and difficult to maintain over time, in the same way it is for Whites. Thus, the more ethnic minorities are concerned with appearing prejudiced, the more anxious they will eventually appear to their White partners, which will be coupled with a decrease in liking by their White partners across time. Alternatively, however, Whites’ perceptions of their ethnic minority partners may not be a function of their partners’ concerns about appearing prejudiced. Ethnic minorities’ racial attitudes do not influence Whites’ experiences in an interracial interaction (Shelton & Richeson, 2006). Thus, it is feasible that ethnic minorities’ concerns about revealing those attitudes may also not be associated with Whites’ experiences, in this case, the extent to which Whites like their partners. Nonetheless, we suspect that the demands associated with regulating one’s thoughts, feelings, and behaviors over time are just as taxing for minorities as they are for Whites (indeed, interracial interactions are just as cognitively depleting for Blacks as they are for Whites;
Richeson & Shelton, 2007). As a result, across time, the ability to regulate one’s thoughts and behavior is likely to wane, leaving ethnic minorities’ anxiety about how they are appearing to their partner quite discernable.

The present research

In the present research, we examined the role that concerns about appearing prejudiced plays during interracial interactions in a natural setting—between college roommates—across time. The goals of our research were twofold. First, we examined how both Whites’ and ethnic minorities’ concerns about appearing prejudiced influence self-reported anxiety during daily interracial interactions. We predicted that the more both groups were concerned about appearing prejudiced, the more anxiety they would experience during daily interracial interactions. Second, we examined how both Whites’ and ethnic minorities’ perceptions of their roommates are a function of their roommate’s concerns about appearing prejudiced. That is, how much people like their roommate, for example, is a function of how much their roommate is concerned with appearing prejudiced. Based on the self-regulatory framework that it is difficult to control one’s feelings and behaviors on a regular basis over an extended period of time, we predict that Whites and ethnic minorities will perceive their roommates who have high concerns about appearing prejudiced as more anxious and will like them less across time.

Method

Participants

Seventy-nine same-sex freshmen roommate dyads participated in a study on roommate relationships for $50 and a chance to win monetary prizes in a lottery drawing. The sample consisted of 28 cross-race (White–ethnic minority) and 51 same-race (40 White–White and 11 ethnic minority–ethnic minority) roommate dyads. Moreover, 45 were female pairs and 34 were male pairs. Gender did not moderate our effects; thus, it will not be discussed further. The students were randomly assigned by university officials to be roommates during the summer prior to their freshman year.

Procedures

We recruited students during the first week of the school year to participate in a study about freshmen roommates and their college experiences. We informed students that it was important but not essential for their roommate to be involved in the study. As a result, we obtained roommate pairs as well as participants whose roommate did not participate in the study. Given that we are interested in how participants’ concerns about appearing prejudiced influenced their own and their roommate’s experiences, we excluded participants whose roommate did not participate in the study from all analyses. All participants who agreed to participate in the study attended an orientation session where they were told that they would complete a questionnaire during the session and a daily diary questionnaire during the next three weeks. The pre-diary questionnaire included demographic questions and several individual difference measures. After completing the pre-diary questionnaire, we gave participants instructions about how to complete the daily questionnaires. Specifically, we told participants that an e-mail with the URL for the diary webpage would be sent to them at the end of the day as a reminder to complete the diary questionnaire. We urged participants to complete a diary entry every night. An automatic e-mail was delivered to all participants who had not completed the diary questionnaire by 8 a.m. the following morning. Participants completed the diary questionnaire Sunday–Thursday for three weeks for a total of 15 days. At the end of the diary period, participants attended a post-diary session where they completed a final questionnaire, were informed of the purpose of the study, and received their payment.

Background measures

Race of roommate Participants indicated the race and sex of their roommate. All participants...
had a roommate of the same sex. In all of our analyses, we examined differences between Whites and members of ethnic minorities (i.e., Blacks and Latinos). We refer to the dichotomous variable that distinguishes individuals as a racial majority (i.e., White) member or racial minority (i.e., Black or Latino) member as minority status. Preliminary analyses were conducted comparing Blacks to Latinos to determine if the pattern of effects for these two groups differed. For all analyses reported herein, Blacks and Latinos demonstrated consistent effects. We did not include individuals who identified themselves as biracial or Asian because their experiences as ethnic minorities have been shown to be considerably different from those of Blacks and Latinos on college campuses (Shelton & Yip, 2007).

Concerns about appearing prejudiced We used the concern about acting prejudiced subscale of Dunton and Fazio’s (1997) Motivation to Control Prejudice scale. Participants indicated the extent to which they agreed with items such as “It is never acceptable to express one’s prejudices” and “If I have a prejudiced thought or feeling, I keep it to myself,” using a scale from 1 (strongly disagree) to 7 (strongly agree). The scale was acceptably reliable for Whites (α = .86) and ethnic minorities (α = .82).

Daily level measures Anxiety Participants completed eight items adapted from the Positive and Negative Affect Schedule and the Profile of Mood States (e.g., anxious, uncomfortable, uncertain) to assess how anxious they felt during interactions with their roommate that day using a scale from 1 (strongly disagree) to 7 (strongly agree). The items were combined to form an anxiety composite (α = .84, at the study midpoint), where higher values indicate more anxiety.

Anxiety-related behaviors Participants made daily ratings of their roommate’s anxiety-related behaviors. Schlenker and Leary (1982) noted that high levels of anxiety cause people to fidget a lot; impair their ability to communicate effectively, including speaking less often; and lead people to distance themselves from others, including avoiding eye contact and disclosing less information about themselves to others. Based on this work, we asked participants to rate the extent to which they agreed that their roommate “concealed his/her true opinions” and “had an easy time contributing to our conversations.” They answered these questions using a scale from 1 (strongly disagree) to 7 (strongly agree). Smiled, talked a lot, and contributed to conversations were reversed coded and combined with the other three items to form an anxious behavior composite (α = .86, at the study midpoint).

Liking Participants indicated the extent to which they agreed that they liked their roommate that day using a scale from 1 (strongly disagree) to 7 (strongly agree).

Data analyses strategy Our dataset includes dyadic data from dyad members measured over time. Our hypotheses center on how changes across time are moderated by the respondent’s and the roommate’s concerns about appearing prejudiced, as well as the respondent’s minority status and their roommate’s minority status. Given the complexity of our data and hypotheses, we provide in the following lines, a general description of the analyses we conducted.

Actor–partner interdependence model We used the actor–partner interdependence model (APIM) (Kashy & Kenny, 2000; Kenny & Acitelli, 2001) as an analytic framework. In the APIM, predictors of a respondent’s outcome are examined at two levels: (1) the path from the respondent’s own predictor to the respondent’s outcome is termed the actor effect; (2) the path from the respondent’s roommate’s predictor to the respondent’s outcome is termed the partner effect.
There are two facets of our model that reflect an APIM approach. First, we examine how a respondent’s own concerns about appearing prejudiced (the actor effect) as well as his or her roommate’s concerns about appearing prejudiced (the partner effect) predicted self-feelings of anxiety, perceived roommate anxious behaviors, and liking of roommate. Second, we used a method for the analysis of minority status effects that is based on the APIM. Treated the factorial approach, West, Popp, and Kenny (2008) demonstrate a strategy whereby minority status is treated as factor in a two (status of the respondent) by two (status of the roommate) full factorial design. To examine differences between the four types of individuals in our study (i.e., White respondents with White roommates, White respondents with roommates belonging to an ethnic minority, minority respondents with White roommates, and minority respondents with minority roommates), three parameters are simultaneously estimated: the main effect of status of the respondent (the actor effect), the main effect of status of the respondent’s roommate (the partner effect), and the interaction between status of the respondent and status of the roommate. The status of the respondent by status of the roommate interaction compares same-status to mixed-status dyads, and can be thought of as dyad-status. Note that if only an interaction between status of the respondent and status of the roommate is found (i.e., a dyad-status effect), then no difference exists between Whites and minorities within mixed-status dyads, and no difference exists between Whites and minorities within same-status dyads; only the type of dyad has an effect on the outcome (for a full explanation of this effect see West et al., 2008).

**Growth curve modeling of dyadic data** We estimated multilevel statistical models using a method especially designed for the analysis of overtime dyadic data (Kashy, Donnellan, Burt, & McGue, 2008; Kenny, Kashy, & Cook, 2006). Our models were complicated by the issue of distinguishability of dyad members; specifically, White–minority dyads had members who were distinguishable from one another based on status (i.e., one partner was White, the other partner was an ethnic minority member), and minority–minority and White–White dyads had members who were indistinguishable from one another. As such, all dyads must be treated as indistinguishable (Kenny et al., 2006). Given that members were treated as indistinguishable, we used a statistical strategy illustrated by Kashy et al. (2008) for the analysis of growth curve models with indistinguishable dyads, using the SAS mixed procedure (version 9.1). It is important to note that the procedure can yield fractional degrees of freedom. In all models, predictor variables were grand mean centered, and time was centered at the midpoint of the study. In each model, we examined the overall effects of the three status variables (i.e., respondent status, roommate status, and their interaction), the overall effects of respondent and roommate concerns about appearing prejudiced, and all possible interactions between these variables on each outcome. Given that we used a growth curve modeling approach, we also examined how all of the status and concerns effects (and their interactions) changed across time. That is, each of the above interactions also interacted with time. Analyses were complicated by the fact that we found non-linear, cubic trends for perceptions of roommate’s anxious behaviors and liking. When non-linear cubic effects are found, it is necessary to also include the effects of linear and quadratic time. Although these effects were included in all of our models, we focus on reporting the non-linear effects. There were non-linear trends in how concerns about appearing prejudiced or racial status influenced perceptions. All of our models were fully saturated at the level of the fixed effects. That is, we included all possible main effects, two-, three-, and four-way interactions. Given the large number of parameters estimated in each model, we do not report every non-significant interaction, but only those that are of theoretical interest. Often in dyadic research, the random effects are of just as much theoretical interest as the fixed...
effects. For example, the degree to which dyad members co-vary in their day-to-day perceptions, co-vary in their perceptions at the starting point of the study, and co-vary in their changes across time, are all interesting theoretical questions. In the current study, however, we do not report the random effects (our focus is on the fixed effects), but it is important to note that they were estimated. In our models, we estimated several random effects (20 in total), including variances in the within-person linear, quadratic, and cubic slopes, variance in the intercepts, within-person covariance between the intercept and each of the three slopes. We also included the covariance between dyad members’ intercepts, slopes, and intercept–slope covariance. It is important to note that because dyad members were indistinguishable, parameter constraints were set on the variance–covariance matrix to account for the arbitrary distinction between person 1 and person 2 (see Kashy et al., 2008 for a complete description of the analysis strategy).

**Results**

Table 1 contains the means for concerns about appearing prejudiced, self-reported anxiety, perceived roommate anxious behaviors, and liking (the latter three pooled across time points) for mixed-race dyads and same-race dyads. Correlations between outcome variables are reported at the study midpoint (i.e., time 8). Patterns of correlations between outcomes at each of the time points are consistent with those reported at the midpoint.

Given theoretical work suggesting that concerns about appearing prejudiced may be more important for Whites than for ethnic minorities, we compared the mean differences on this measure for both groups. Results indicated that although Whites reported slightly higher levels of concerns about appearing prejudiced ($M = 5.29, SD = 1.03$) than did ethnic minorities ($M = 5.06, SD = 1.02$), the difference between these two groups was not statistically reliable, $t(156) = 1.36, p = .18$.

Are concerns about appearing prejudiced related to anxiety in daily interracial interactions?

We examined whether respondents’ and their roommates’ concerns about appearing prejudiced influenced self-reported anxiety during daily interactions.

**Self-reported anxiety** The main effects of time, $t(78.8) = −1.27, p = .21$, and concerns about appearing prejudiced, $t(145) = .52, p = .60$, were not statistically significant. Likewise, the respondent status by roommate status interaction, $t(76.8) = −1.00, p = .31$, was not significant. However, a marginally significant respondent status by roommate status by respondent concerns about

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<th>Mean (SD)</th>
<th>Self-reported anxiety</th>
<th>Anxious behaviors</th>
<th>Liking</th>
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<td><strong>Self-reported anxiety</strong></td>
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<td>Same-race</td>
<td>1.26 (.55)</td>
<td>—</td>
<td>.333**</td>
<td>−.327**</td>
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<tr>
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<td>.173</td>
<td>−.074</td>
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<tr>
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<td>—</td>
<td>—</td>
<td>−.683**</td>
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<td>—</td>
<td>—</td>
<td>−.471**</td>
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<tr>
<td><strong>Liking</strong></td>
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</tr>
<tr>
<td>Same-race</td>
<td>5.96 (1.31)</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Mixed-race</td>
<td>5.41 (1.41)</td>
<td>—</td>
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</table>

*Note:* **$p < .01$.**
appearing prejudiced interaction was found, \( t(133) = -1.83, p = .07 \) (see Figure 1). As predicted, simple effects tests revealed that in the same-status dyads, concerns about appearing prejudiced were not related to anxiety, \( t(141) = -0.37, p = .71 \). However, in the mixed-status dyads, Whites and members of ethnic minorities who were more concerned about appearing prejudiced felt more anxious than those who were less concerned, \( t(123) = 2.23, p = .03 \). Note that this effect did not interact with time, indicating that minorities and Whites who were more concerned about appearing prejudiced felt consistently more anxious overall than did Whites and minorities who were less concerned about appearing prejudiced. In addition, no main effects were found for respondent or roommate minority status, indicating that the dyad-status effect was consistent for minorities and Whites in mixed- and same-status dyads.

Are concerns with appearing prejudiced related to partner’s perceptions?

We examined the extent to which respondent’s perceptions of their roommate are a function of how much their roommate is concerned about appearing prejudiced.

Anxious behaviors As described above, given that a large number of parameters are estimated in each model, we do not report all non-significant effects, but only those that are theoretically relevant. The overall effect of time was not significant, \( t(72.2) = 1.48, p = .14 \), nor was the overall effect of roommate concerns about appearing prejudiced, \( t(117) = -0.47, p = .64 \). A statistically significant respondent status by roommate status interaction was found, \( t(69.5) = -2.13, p = .001 \), indicating that Whites and ethnic minorities in mixed-status dyads perceived their roommates as engaging in more anxious behaviors than did Whites and ethnic minorities in same-status dyads. The two-way respondent status by roommate status interaction was qualified by a respondent status by roommate status by roommate concerns about appearing prejudiced by cubic time interaction, \( t(147) = -2.58, p = .01 \). Simple effects tests reveal that the effect of roommate concerns about appearing prejudiced on the cubic growth trajectory was significant for respondents in mixed-status dyads, \( t(138) = 2.63, p = .01 \), yet the effect was not significant for respondents in same-status dyads, \( t(154) = -1.05, p = .26 \) (see Figure 2a). Figure 2b demonstrates the pattern of results for individuals in mixed-status dyads whose roommates are one standard deviation above and below the mean on concerns about appearing prejudiced.

As shown in Figure 2b, the majority of the change in the trajectory appears to be in approximately the

![Figure 1](image1.png)

**Figure 1.** Respondents’ self-reported anxiety as a function of their concerns with appearing prejudiced.

![Figure 2a](image2.png)

**Figure 2a.** Respondents’ perceptions of their roommate’s anxious behaviors as a function of their roommate’s concerns with appearing prejudiced for same-status dyads.
last six days of the study; in contrast, there is little change across time in the first nine days of the trajectory. This non-linear pattern of little to no change followed by a linear increase or decrease is characteristic of the cubic trajectory. When data are best fitted with a cubic slope, it is very difficult to identify when exactly during the trajectory meaningful differences emerge between the groups. In the present data, the cubic slope appears to be picking up on two different linear trajectories: one linear trajectory during approximately the first nine days (or lack of a linear change), and a second linear trajectory during the final six days. In order to understand the nature of the cubic effect, we used piecewise regression as a complementary method. We simultaneously estimated one linear slope during days 1–9 (slope 1), and a second variable that estimated the linear trajectory of days 10–15 (slope 2).3 When both slopes are estimated in one model, it is possible to examine the linear slope (and what variables moderate it) during the first nine days of the trajectory, while simultaneously examining the linear slope (and what variables moderate it) during the final six days of the trajectory. Essentially, piecewise regression examines the extent to which the cubic trajectory for mixed-status dyads is actually characterized by two linear slopes.4

Results revealed that the effect of respondent status by roommate status by roommate concerns by slope 1 was not significant, $t(271) = -0.55$, $p = .58$, indicating that concerns about appearing prejudiced did not moderate the growth trajectory during the first nine days of the study. This result is consistent with the pattern of results illustrated in Figures 2a and 2b. However, there was a significant effect of respondent status by roommate status by roommate concerns by slope 2, $t(267) = -2.78$, $p < .01$. Consistent with results for the cubic slope model, follow-up tests indicated that for mixed-status dyads, the more concerned their roommate was about appearing prejudiced, the more respondent’s perceptions of their roommate’s anxiety consistently increased from day 9 to day 15, $t(245) = 3.21$, $p = .002$. For same-status dyads, there was no effect of roommate concerns about appearing prejudiced on slope 1, $t(298) = .78$, $p = .44$, or slope 2, $t(286) = -0.79$, $p = .43$. No effects were found for respondents’ own concerns about appearing prejudiced on their perceptions of their roommate’s anxious behaviors.

Liking No main effect of cubic time was found, $t(77.8) = .64$, $p = .53$, but a main effect of linear time, $t(75.5) = -3.57$, $p = .001$, was found, indicating that people’s liking of their roommate declined over time. No overall effect of concerns about the roommate appearing prejudiced was found, $t(130) = .39$, $p = .70$. An overall effect of dyad-status, $t(77.9) = 2.78$, $p = .007$ was found, indicating that respondents in same-race dyads reported liking their roommate more than did respondents in mixed-race dyads. Results for the over-time effects of liking were consistent with results for anxious roommate behaviors. Specifically, a respondent status by roommate status by roommate concern’s about appearing prejudiced by cubic time interaction was found, $t(138) = 2.93$, $p = .004$. Simple effects tests revealed that the effect of roommate concerns about appearing prejudiced on the cubic growth trajectory was significant for respondents in mixed-status dyads, $t(133) = -2.07$, $p = .04$, and was also significant for respondents in same-status dyads, $t(138) = 2.17$, $p = .04$. Consistent with previous results, no effects were found for respondent or roommate status, indicating that
the effect of concerns about appearing prejudiced was consistent for minorities and Whites in mixed-status dyads, and minorities and Whites in same-status dyads. Consistent with the results for perceived roommate anxiety, when we examined the pattern of results for the mixed-status dyads, we found that the majority of the change in the trajectory appeared to be in approximately the last six days of the study; in contrast, there was little change across time in the first nine days of the trajectory (see Figure 3a). Because this pattern of results appeared the same as the results for anxious-related behaviors, we conducted the piecewise regression as in our previous analyses.

Results of the piecewise regression revealed that the cubic effect was not primarily driven by changes during the first nine days of the study; the effect of respondent status by roommate status by roommate concerns on slope 1 was not significant, $t(286) = 1.36, p = .18$. However, there was an effect of respondent status by roommate status by roommate concerns on slope 2, $t(240) = 2.55, p = .01$. Consistent with results for the cubic slope model (and consistent with results for anxious roommate behaviors), follow-up tests revealed a negative linear relationship between liking and roommate concerns about appearing prejudiced for mixed-status dyads, $t(237) = -2.00, p = .04$. As shown in Figure 3a, for mixed-status dyads, the more the respondent’s roommate was concerned about appearing prejudiced, the less the respondent reported liking his or her roommate from day 9 to day 15. For same-status dyads, there was no consistent pattern of effects; that is, there was no effect of roommate concerns about appearing prejudiced on slope 1, $t(275) = .58, p = .56$, or slope 2, $t(242) = 1.61, p = .11$ (see Figure 3b).

### Discussion

Intergroup interactions can be difficult. People try to manage their biases, expectations, and concerns during these interactions, sometimes with success whereas other times without it. Our results reveal that concerns about appearing prejudiced have serious implications for the dynamics of interracial interactions over time. The long-term picture is quite bleak from the perspective of the person who is concerned about appearing prejudiced. The more concerned they are, the more anxiety they experience during the interactions. Fortunately, they do not appear anxious to their out-group partner during the initial interactions. However, eventually their partner is able to pick up on their anxiety; perceived partner anxiety increased over time after the first nine days. Coupled with this increase in perceived anxiety is a decrease in liking for out-group members who are concerned about appearing prejudiced. We suggest that our effects are a result of a break down in self-regulatory processes. That is, people who are concerned about
appearing prejudiced are on guard for what they say and how they behave during the interaction. They are nervous about how they appear to their partner. Fortunately, they are able to “hide” their anxiety during initial interactions; in laboratory studies they are perceived as likeable during a brief interaction (Shelton, 2003). However, their attempt to control their feelings and behaviors begins to take a toll, such that they are no longer able to do so successfully; the current findings show that their partner perceives them as being more anxious and likes them less after multiple interactions across time. We do not suspect that the roommates in our study actually began to behave in a prejudiced manner across time, though that is certainly possible. Instead, we suspect that it was difficult to control their fears about how they were coming across in their interactions, and this started to leak out over time. Alternatively, our effects may not be related to self-regulatory processes per se. Instead, it is possible that as the roommates became used to living together, the social pressure to appear unprejudiced became less of an issue. However, a one-item daily measure of how concerned people were about appearing prejudiced that day, revealed that respondents who were concerned about appearing prejudiced (i.e., dispositional level of concern) remained concerned about appearing prejudiced on a daily basis across time: they did not show a decline in their concerns. An additional alternative explanation is that individuals become better able to perceive their roommates’ anxiety over time, thus accounting for increased perceptions in anxious behaviors. Although there is evidence to indicate that perceivers are more able to accurately detect emotions felt by in-group members than by out-group members (Elfenbein & Ambady, 2002; Gray, Mendes, & Denny-Brown, 2008), there is also evidence indicating that perceptions of anxiety are more accurate when the partner is an out-group member than an in-group member (Pearson et al., 2008), and that ethnic minorities are able to accurately assess Whites’ prejudice level based on non-verbal cues (Richeson & Shelton, 2005). To date, however, the majority of research examining accuracy for perceptions of in-group and out-group members’ emotions has only examined brief interactions in the laboratory. Future research is needed to examine this issue in diary methodologies as used in this research. The present findings contribute to the existing literature in several ways. First, our findings illustrate the importance of taking a dyadic approach to examining interracial interactions. They highlight that people’s experiences and perceptions in interactions are not solely about the concerns they bring to the interaction but are also about the concerns their partner brings to the interaction. For instance, we found that the level of roommates’ concerns about appearing prejudiced, but not participants’ own concerns about appearing prejudiced, influences how much participants like their roommate. These results are only obtainable taking a dyadic approach where the concerns of both people in the interaction are examined. From an actor’s perspective, we found that Whites’ and members of ethnic minorities’ own concerns about appearing prejudiced were related to their own anxiety level during daily interracial interactions. Related work has shown that Whites’ concerns about appearing prejudiced lead them to automatically perceive Black people as threatening (Richeson & Trawalter, 2008). Perhaps both Whites and minorities who are concerned about appearing prejudiced perceive interracial interactions as threatening and thus, they experience anxiety. From a partner’s perspective, we found that respondents who were paired with an out-group roommate who had high concerns about appearing prejudiced perceived that roommate as being more anxious and liked them less, compared to respondents paired with roommates who were less concerned, after approximately nine days of interacting. Together, these findings highlight the importance of examining dyadic interactions from the perspective of both individuals in the interaction, something that seems rather natural but is often not addressed in intergroup contact research.

Second, our effects are consistent with and extend laboratory research on Whites’ concerns about appearing prejudiced. Previous research revealed that the more Whites were concerned about appearing prejudiced, the less they expected to enjoy an interracial interaction (Vorauer et al.,
and the more anxiety they reported when experiencing an interracial interaction (Plant & Butz, 2006; Shelton, 2003). This previous work was conducted in the laboratory with brief (15 minutes) or anticipated interactions. In contrast, we used a natural context where the stakes are higher for getting along, and thus the interactions are likely to be more important. Our work revealed a similar effect as the laboratory studies: people who were concerned about appearing prejudiced reported being more anxious than those who were less concerned. This is quite disturbing when considered against the backdrop that these individuals may avoid future intergroup contact because of their anxiety. Their avoidance is likely to prevent intergroup friendships from developing as well as prevent fears about interacting with out-group members to be reduced. If they are anxious, however, they may be less willing to work with out-group members to facilitate harmonious intergroup relationships. With respect to extending the literature, our data suggest that Whites and ethnic minorities who are concerned about appearing prejudiced are able to regulate their anxiety so that it does not leak out during initial interactions with their partner, but with repeated contact with the same person this regulation breaks down. Our partner effect suggests that with repeated contact over time, Whites’ and ethnic minorities’ anxiety begins to leak and can be picked up by their out-group partner. It would be difficult for data from one-shot, short interactions in the laboratory to have revealed this pattern.

At first, it may appear that our findings contradict research using the same population—college roommates—that has shown that Whites’ concerns about appearing prejudiced do not influence outcomes during interracial interactions. Specifically, Towles-Schwen and Fazio (2006) studied Whites who had been randomly assigned to have a Black roommate during their freshman year of college. They examined the extent to which Whites’ implicit racial attitudes and concerns about acting prejudiced predicted the longevity of their relationship with their roommate and how satisfied Whites were with it. Results revealed that Whites’ implicit racial attitudes predicted the longevity of the relationship, such that the more negative their attitudes, the more likely the relationship would dissolve by the end of the year. More relevant to the present research, Whites’ concerns about acting prejudiced, however, did not have a direct impact on the relationship’s longevity, nor did it moderate the implicit attitude and relationship’s longevity effect. That is, Whites who were concerned about appearing prejudiced were not more likely to stay together or be satisfied with their roommate than Whites who were less concerned about appearing prejudiced. Although Towles-Schwen and Fazio (2006) examined concerns about appearing prejudiced in a context in which Whites had the opportunity to interact with Blacks on a repeated basis, unfortunately, they did not assess Whites’ experiences and behaviors on a daily basis; instead they focused on what might be called the ultimate behavior in a relationship: dissolution. Future research should explore the outcomes we examined in the present research as well as dissolution as Towles-Schwen and Fazio (2006) explored in their work, making sure that both Whites and ethnic minorities are examined.

A third contribution of our research to the literature is made by our inclusion of ethnic minorities. The majority of research on intergroup contact has ignored studying contact from the perspective of ethnic minorities (cf. Shelton, 2000). For example, research on prejudice reduction strategies typically targets Whites; in Pettigrew and Tropp’s (2006) meta-analysis of intergroup contact, over 70% of the research solely examined Whites. We included both Whites and ethnic minorities as respondents in our study and, as a result, we were able to assess both of the groups’ concerns about appearing prejudiced. Our results revealed that ethnic minorities’ concerns about appearing prejudiced are not completely irrelevant for dyadic interactions. In fact, ethnic minorities’ concerns about appearing prejudiced have parallel effects for interracial interactions as do
Whites’ concerns. The more ethnic minorities were concerned about appearing prejudiced, the more anxiety they experienced during daily interactions with a White roommate, the more anxious they came across, and the less liked they were by their White roommates, during the final six days of the study. Therefore, in future research it would be useful for researchers to study ethnic minorities’ concerns about appearing prejudiced (not just their concerns about being the target of prejudice) because they are quite important for the dynamics of interracial interactions. Finally, by studying interracial dyads across three weeks we were able to discover specific time points that are likely to be pivotal in terms of when people’s experiences are apt to change during interracial interactions. We did not predict the specific day in which people’s experience would change; thus, more work is needed to understand why these relationships start to break down after approximately the first week. Understanding why the first week is crucial is important because it may help university policy makers as they make decisions about interventions that could improve housing arrangements, or it may be useful for any organization in which people have contact with the same out-group members on a daily basis.

Limitations and future research

There are several limitations in the present research that should be addressed in the future. First, we did not distinguish between people’s internal and external concerns about appearing prejudiced. Plant and colleagues (Plant, 2004; Plant & Devine, 1998) have suggested that the reason underlying people’s desire to respond without prejudice has different implications for their behavior toward out-group members. Future work is needed to explore the extent to which internal and external pressures not to be prejudiced influence daily interracial interactions in which people have sustained contact over time with an out-group member. Based on Plant’s theorizing, we predict that internal motivations would be associated with positive outcomes, whereas external motivations would be associated with negative outcomes. A second limitation of our study is that we relied on respondents’ perceptions of their roommates’ anxiety-related behaviors instead of a direct assessment of how anxious their roommate appeared. This is problematic because we may have inadvertently trained participants to focus on their own and their roommate’s behaviors across time. Specifically, we could have made participants pay more attention to their own anxiety, making them more anxious over time. Although this is a problem, it might be offset by some of the advantages of using respondents’ perceptions of their roommates’ behaviors. Recent work suggests that perceived partner anxiety might be more influential in interracial interactions than actual partner anxiety. Pearson et al. (2008) had strangers in intergroup and intra-group dyads interact over a closed-circuit monitor either in real time or with a subtle temporal disruption (a one-second delay) in audio-visual feedback. People in intergroup dyads reported more anxiety and less interest in contact; they also perceived their partner as being more anxious, under temporal delay compared to the real-time condition. Furthermore, perceived partner anxiety but not actual partner anxiety influenced respondent’s interest in having another conversation with their partner. Also, focusing on non-verbal behaviors as opposed to self-report ratings of anxiety (e.g., “How anxious does your roommate appear?”) is a strength, because non-verbal behaviors have been shown to be instrumental in the communication process during interpersonal interactions (Patterson, 1982), especially intergroup interactions (Dovidio, Hebl, Richeson, & Shelton, 2006; Malloy & Ristikari, 2006; Miller & Malloy, 2003). Thus, people’s perceptions of their partner’s behaviors shed light on the interpersonal processes that occur during interracial interactions.

A third limitation is that our results do not address the direction of causation between liking and perceptions of roommate’s anxious behaviors. It is possible that the more respondents disliked their roommates, the more anxiety-related behaviors they perceived. Recall, however, that Whites and minorities in mixed-status dyads reported feeling more anxious the more concerned
they were about appearing prejudiced. It is likely that the roommates of concerned individuals picked up on behaviors that reflected concerned individuals’ anxiety, which played a role in them liking their roommate less. This argument is consistent with work showing that anxiety has detrimental effects on intergroup interactions, including decreased desire to engage in intergroup contact in the future (Pearson et al., 2008). Nevertheless, our findings are correlational in nature, and need to be interpreted as such.

**Moving beyond racial attitudes**

The degree to which intergroup contact effectively leads to prejudice reduction has been a topic of interest among social scientists for over 50 years (see Pettigrew & Tropp, 2006). Interest continues to grow as scholars focus on specific factors that moderate the effectiveness of intergroup contact; for example, examining how power and status moderate the successfulness of intergroup contact (Saguy, Dovidio, & Pratto, 2008). We believe the interplay between people’s concerns about appearing prejudiced and their actual experiences during interracial interactions may be important to examine with respect to prejudice reduction. If people feel more anxious and, over time, are liked less in interracial interactions because of concerns about appearing prejudiced, they may abandon these concerns and develop negative attitudes about out-groups. This would be quite ironic, of course, because concerns about appearing prejudiced, which on the surface seems like a healthy concern, may create hostility and prejudiced beliefs that undermine intergroup relations in a manner similar to actually being prejudiced against out-groups.

**Concluding thoughts**

Social norms in contemporary American society set the stage for people to be worried about making a social faux pas that could signal they are (sometimes erroneously) prejudiced. Our research highlights that people’s concerns about committing a social blunder have serious implications for their experiences and how they are perceived by their interaction partner. Perhaps making people aware that being concerned about appearing prejudiced is a step in the right direction to reducing prejudice, and that it is initially perceived positively by outgroup members (Shelton, 2003) will help reduce the anxiety people experience, thereby opening doors to more harmonious intergroup relations.

**Notes**

1. This dataset was used by West, Shelton, and Trail (2009); the research questions and results presented in this manuscript, however, do not overlap with those in the paper by these authors.
2. A session with a small sample of students revealed that the weekend was not ideal to collect data because students often go home, resulting in no contact with their roommates, or their being engaged in too many parties to complete the questionnaire in a way that would produce usable data.
3. Slope 1 is coded as follows: days 1–9 are coded as 1, 2, 3, 4 … 9 and days 10–15 are all coded as zero. Slope 2 is coded as follows: days 1–9 are all coded as zero, and days 10–15 are coded as 1, 2, 3 … 6. Although two slopes were estimated, the intercept was always time 1. Re-centering the intercept to be the midpoint does not change the results.
4. We chose day 9 because that is where the slope appears to change. Choosing day 10 revealed the same results.

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