

Having an Outgroup College Roommate Affects Future Interracial Interactions

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## Abstract

This study followed same-race (White/White) and interracial (White/non-White) roommate pairings living in campus dormitories. Data for this study were collected from 140 first-year White college students who were tracked across three phases during a one-year time span, the third phase being an in-lab video-taped interracial interaction with a Black confederate. Specifically, this study evaluated the cognitive and behavioral effects of regular interactions with either a same-race or other-race roommate on race-related attitudes and behavioral tendencies. Results suggest that there are a number of positive effects stemming from interactions with an other-race roommate such as coming to have a more diverse set of friends, thinking that diversity is more important, and learning more about oneself. Positive effects were also seen through participants' self-reported and nonverbal behavior during the lab interaction: White participants with other-race roommates were rated as being less anxious, more pleasant, less controversial, and more physically engaged during an interaction with a Black stranger. Thus, the results show that despite past research highlighting negative outcomes of having interracial roommates, these relationships can help lessen interracial anxiety and increase positivity toward racial outgroups in future interracial settings. Future directions, including investigation of non-White individuals, are discussed.

*Keywords:* interracial relationships, roommates, intergroup contact, interracial interactions

### Having an Outgroup College Roommate Affects Future Interracial Interactions

Most college graduates can remember the excitement, anxiousness and anticipation they felt the summer before freshman year as they prepared to move to campus. For most students, the experience marks the first time they will be living on their own. And for some, it also marks the first time that they will be living with someone of another racial or ethnic background. So does living with someone of another racial or ethnic background change one's perspectives, beliefs, and behavioral tendencies toward racial outgroups?

Our country is becoming increasingly more diverse by the day. As a result, the ability to understand, accept, and get along with those who are different is extremely important for today's youth, especially those entering college who will be exposed to new types of people on a regular basis. Amidst such increasing diversity, though, the United States remains a very segregated country. In fact, many individuals still have very few interactions with diverse populations before entering college (Frankenberg & Lee, 2002; Mouw & Entwisle, 2006; Stearns, Buchmann, & Bonneau, 2009). Little research has followed individuals by directly examining the impacts of their residential experiences with others of their same race versus others of other races. What happens when individuals who have had very few interactions with others who are racially different move to settings that places them in such an environment? How does this experience change their cognitive and behavioral tendencies in subsequent situations?

It is the assumption of many colleges and universities that these diverse living situations have direct impact on students' subjective experiences and attitudes regarding diversity, and can influence future interactions in diverse settings (Hurtado, 2005; Pike & Kuh, 2006). But few studies have actually been conducted to examine this set of predictions. Previous studies have examined interracial roommate experiences and the effects of intergroup contact (e.g., Phelps et

al., 1998; Shelton & Richeson, 2005) on race-related ideologies and other self-report measures (Boisjoly, Duncan, Kremer, Levy, & Eccles, 2006; Phelps et al., 1998; Shelton, Richeson, & Salvatore, 2005). But despite the well-studied contact hypothesis—that under specific conditions interpersonal contact is the best way to reduce prejudiced or negative thoughts about an outgroup member (Allport, 1954; Pettigrew & Tropp, 2006)—less is known about the long-term effects that stem from regularly occurring interracial interactions or how interracial roommate experiences affect a college student's perceptions and behaviors in other diverse contexts.

### **Negative Outcomes of Interracial Interactions and Roommates**

Interracial interactions allow researchers to examine how interpersonal perceptions and biases affect behavior. A typical interracial interaction study is a single time point interaction which almost always involves a White and a Black participant (Plaut, 2010). These two people are likely to have beliefs and expectations about one another which in turn affect the interaction either negatively or positively. Through various questionnaires and other in-lab tasks, participants' racial attitudes and levels of comfort before, during and after the interaction can be measured to study what affects those interactions (i.e., Dovidio, Kawakami, & Gaertner, 2002; Kawakami, Phillips, Steele, & Dovidio, 2007; Plant, 2004; Richeson & Shelton, 2003; Shelton & Richeson, 2006; Shelton, Richeson, Salvatore, & Trawalter, 2005). For example, one study asked White participants to complete the racial attitude Implicit Association Test (IAT; Greenwald, McGhee, & Schwartz, 1998) to get a measure of participants' implicit or internal bias toward African-Americans to see if one's level of bias affected the upcoming interracial interaction. At the end of the interaction participants were also asked to complete a brief questionnaire about how they felt during the interaction and about their partner. They found that IAT scores predicted

how positively they were seen by Black but not White interaction partners, showing how levels of bias can affect interracial interactions (Shelton et al., 2005).

These types of interaction studies (much like the interracial roommate literature) tend to focus on the experiences of the majority-race participant to examine prejudice reduction (Pettigrew & Tropp, 2000). Because of this focus on the majority-raced individual, many studies often highlight the negative outcomes linked to interracial interactions and experiences such as interpersonal conflict, decreases in abilities to effectively communicate with a racial outgroup member, increasing levels of anxiety, negative affect, and a depletion of cognitive resources and abilities after an interracial interaction occurs (De Dreu & Weingart, 2003; Jackson, 1992; Plant & Butz, 2006; Shelton & Richeson, 2006; Richeson & Trawalter, 2005).

Regarding interracial roommate experiences more specifically, similar negative outcomes have been reported. Interracial roommate pairings living in dormitories have been found to be more likely to dissolve or break up than same-race roommate relationships (Shook & Fazio, 2008; Towles-Schwen & Fazio, 2005). Additionally, interracial roommate pairings have been shown to experience less positive emotion, have fewer feelings of intimacy or closeness, and have less overall satisfaction with each other (Phelps et al., 1998; Shook & Fazio, 2008; Trail, Shelton & West, 2009). Finally, interracial roommate pairings have been reported to have fewer joint activities with each other in comparison to same-race roommate pairings and therefore less overall involvement, enjoyment and time spent with each other (Shook & Fazio, 2008; Towles-Schwen & Fazio, 2005). Overall, interracial roommate studies have again focused on the experience of the majority-raced roommate, so little is known about the experiences of minority students within these setting. In sum, these findings for interracial roommates parallel results

found in other interracial interaction studies, namely that such cross-race interactions have the potential for a variety of negative social outcomes for majority-raced individuals.

### **Positive Outcomes of Interracial Interactions and Roommates**

Although many studies have focused on the negative outcomes of interracial interactions, some studies have shed light on positive outcomes of diversity. Researchers have found that exposure to diversity has led to improved flexibility and level of thoughtfulness (Phillips & Loyd, 2006; Phillips, Mannix, Neale, & Gruenfeld, 2004). To extend the idea that diversity increases creativity or the ability to come up with ideas, one study found that a racially diverse group of students not only produced more ideas in number but were also rated by coders as being more effective at a brainstorming task than was a racially homogeneous group (McLeod, Lobel & Cox, 1996). Other studies have found that college students with more racial outgroup friendships and interracial interactions showed less ingroup bias and lower intergroup anxiety levels at the end of college and increased cultural knowledge (e.g., Antonio, 2001; Chang, 1996; Levin, van Laar & Sidanius, 2003; Page-Gould, Mendoza-Denton, Alegre, & Siy, 2010).

But fewer studies have formally investigated whether there are positive outcomes from living with someone from another racial or ethnic background. One study did find, however, that African American students paired with White roommates in college actually showed an increase in their GPA, but they could only speculate that those African American students may have been better able to adjust to college because they lived with someone who could assist them in learning about the norms of a new predominately White environment, so this finding is still debated (Shook & Fazio, 2008). Furthermore, studies also illustrated that one's level of intergroup anxiety and the automatically activated racial attitudes or stereotypes one feels or experiences within a diverse context actually decrease over time for students in interracial

roommate pairings and the more positive those roommate relationships are the more likely Whites are in socializing and integrating their Black roommate in their lives (Shook & Fazio, 2008; Shook & Fazio, 2011).

Regarding roommate relationships more specifically, another study found that people with interracial college roommates who perceived high commonality with their roommate demonstrated reliably higher levels of friendship (West, Pearson, Dovidio, Shelton, & Trail, 2009), while van Laar et al., 2005 also showed that students who were paired earlier in their college career with an other-race roommate reported more positive affect for racial outgroups. Most recently, one study illustrated that White individuals who had more positive experiences with their other-race roommates were more likely to integrate that person into their life (Shook & Fazio, 2011). But these studies mainly utilized self-report measures and no true behavioral outcomes, highlighting the lack of research regarding the positive outcomes or how the impacts of these residential interracial experiences carry over into future diverse interactions or contexts.

### **The Current Study**

The main objective of this study is to extend the existing literature related to interracial interactions past the one-time, lab-based interactions that are normally used by psychologists, and instead, follow same-race and interracial roommate pairings over the course of one year in college dormitories. My objective is to examine residential interracial interactions to more closely examine the extent to which there are both negative and positive outcomes that can come from living with someone from another racial background.

This study aimed primarily to examine experiences with same-race and other-race college roommate pairings over time as a means to see how these experiences impact college students' race-related ideologies and their perceptions of both their racial ingroup and outgroup. Second,



this study aimed to measure how college students' cognitive tendencies and behavior in future diverse contexts are affected after living with a roommate from another racial background. In order to examine these questions, a one-year study was designed which would allow me to collect not only self-report data on attitudinal measures but also behavioral measures using an in-lab interracial interaction context. Background on these various outcome measures is provided in the sections that follow.

**Attitudinal Changes.** One set of outcomes that might be affected by living with someone of another race would be a person's attitudes or ideologies related to their racial perceptions. Past roommate studies examined these effects through asking participants about the ethnicity of their roommates, diversity of their friends and dating partners, perceptions of racial outgroups, and through collecting information about the amount of time they spent with their roommates in addition to their overall satisfaction with their living situation (e.g., Phelps et al., 1998; Shelton et al., 2005; Shook & Fazio, 2008; van Laar et al., 2005). To investigate the attitudinal changes seen among people in this study who were either living with same- or other-race roommates, I designed online surveys for participants to complete both before they moved to college and after one semester of living with their respective roommates. These surveys included questions about participants' exposure to diversity, percentage of friends from diverse backgrounds, various racial ideologies, perceptions of their own ethnic identity, knowledge about other ethnic groups, and questions concerning their roommate expectations and experiences. I hypothesized that after one semester, White participants with other-race roommates would think more positively about other racial groups, have a more diverse set of friends, and learn more about themselves and other racial/ethnic groups in comparison to participants with same-race roommates due to positive exposure to their other-race roommates.

**Cognitive Effects.** Although studied previously within interracial interaction studies, cognitive changes concerning one's mental abilities and implicit biases may also be affected by living with an other-race roommate. Richeson and Trawalter (2005) found that the Stroop (1935) color-naming task which measures a person's response inhibition abilities was greatly affected after stressful experiences such as interracial interactions. Interracial contact has been shown to impair a person's Stroop performance because these experiences often cause a person to self-regulate their behavior much more which in turn depletes them of any additional attentional capacity, hence resulting in slower response times on this task. Therefore, in the present study participants completed the Stroop task after their interracial interaction to measure their cognitive depletion. I predicted that participants with other-race roommates would have lower Stroop scores (or faster response times) in comparison to participants with same-race roommates because they would have used fewer cognitive resources during the interaction.

Lastly, the Black/White IAT (Greenwald et al., 1998) is usually used as a preinteraction individual difference measure (e.g., Richeson & Shelton, 2003), but it can also be affected by primes or experimenter exposure and therefore used as a measure of change (i.e., Lemm, 2001; McConnell & Liebold 2001). Thus, in order to measure participants' internal bias toward African Americans (the race of their interaction partner) after the interaction, participants completed the Black/White IAT. I expected that participants with other-race roommates would have lower IAT scores (or show lower bias toward African Americans) due to the interracial interaction going more positively in comparison to participants with same-race roommates.

**Behavioral Changes.** Although rarely studied to date, living with someone of another racial/ethnic background could also change one's behavior toward racial outgroup members or within future diverse settings or interaction scenarios. Past research has examined these

outcomes through measuring behavioral indicators such as anxiety and motivation to not appear prejudiced within lab-based interracial contexts (i.e., Chen & Bargh, 1997; Dovidio et al., 1997; van Laar et al., 2005), but research has not yet linked residential exposure to other-race individuals with behavioral changes in subsequent interactions. To test for such changes, I invited participants to an in-lab social interaction study with a Black confederate participant so that I could analyze how exposure to either a same-race or other-race roommate translated into future behavior with a racial outgroup member. During this interaction, the topic of conversation was always “affirmative action” which has been used in past interracial interaction studies both as a topic to study before an interracial interaction (Shelton et al., 2005; Sommers, Warp, & Mahoney, 2008). Since the topic itself is directly focused on racial or diversity issues, it was shown in these studies to increase the salience of the interracial nature of the interaction. Participants were to complete both a pre- and post-interaction questionnaire comprised of questions focusing on the feelings and emotions experienced during interracial interactions (see Shelton et al., 2005).

Additionally, past studies have demonstrated that Black individuals may be especially sensitive to reading the behaviors displayed during interracial interactions (Shelton, 2000; Vorauer & Kumhyr, 2001). Moreover, in the present study the confederates in each interaction have a first-hand look at both participants’ verbal and nonverbal behavior during the interactions. Thus, in the present study, confederates also completed the same pre- and post interaction questionnaires so that I could measure how both participants and confederates felt during the interaction. Based on past interaction studies and the contact hypothesis (Allport, 1954; Wright, Aron, McLaughlin-Vlope, & Rope, 1997), I predicted that White participants with other-race roommates would be significantly less anxious, be able to speak about a race-related topic more

effortlessly and interact overall more positively in a novel interracial setting in comparison to participants who lived with someone of their own racial background. I also expected that this behavior would be noted by the confederate interaction partners.

**Nonverbal Behavior.** Past studies have shown that people tend to monitor their non-verbal behavior (i.e., body language, position, gestures, etc.) less often and less effectively than their verbal behaviors and that individuals tend to rely much more on reading these nonverbal cues when interpreting others' behaviors within an interaction setting (Dovidio, Kawakami, Johnson, Johnson, & Howard, 1997; Dovidio et al., 2002; Mehrabian, 1972). Therefore, these spontaneous behaviors are key to fully understanding how we interact with each other and perhaps are a more accurate way in judging interracial interactions where self-report measures can sometimes become blurred by personal biases or desires to not appear biased. In the present study, coders were recruited to code the videotaped interactions along dimensions such as how anxious, happy, and pleasant the participants appeared, as well how much they smiled and moved their bodies during the interactions. Such behaviors have been shown in past studies to predict a more positive interaction (Dovidio et al., 2002; Norton, Sommers, Apfelbaum, Pura, & Ariely, 2006; Richeson & Shelton, 2003; Shelton et al., 2005). Therefore, in line with the behavioral outcomes I predicted, I anticipated that participants with other-race roommates would also show more positive signs of non-verbal behavior (i.e., smiling more, more eye contact, less anxiety, more engaged) in comparison to participants with same-race roommates, due to the interaction proceeding more positively.

**Summary.** Overall, I hypothesized that having a roommate of another race would predict positive race-related ideologies and a positive change in how individuals behave within diverse contexts or situations (e.g., Pettigrew & Tropp, 2006; van Laar, Levin, Sinclair, Sidanius, 2004).

Specifically, I hypothesized that individuals with an other-race roommate would show an increase in positivity toward racial outgroups and feel more comfortable interacting with members of racial outgroups in future diverse settings.

## Method

### Participants and Design

This study took place across two separate academic school years. In the first year we recruited 69 White first-year undergraduate students (39 females); in the second year, we recruited 71 White first-year undergraduate students (37 females). All respondents were assigned a roommate and would be living in the on-campus dormitories. Of these 140 White first-year students, 95 (49 females) were from same-race roommate pairings (a White participant with a White roommate) and 45 participants (17 females) were from interracial roommate pairings (a White participant with a non-White roommate;  $n = 14$  with a Black roommate,  $n = 11$  with a Hispanic roommate,  $n = 20$  with an Asian roommate).<sup>1</sup>

We also collected data from Black participants ( $n = 26$ , 14 female), but at present this is not a large enough sample to run many statistical analyses regarding between-group differences in experiences in the dormitories.<sup>2</sup> While the analyses reported in this paper will focus primarily on the experiences of majority race (White) participants, I will present some preliminary data regarding Black students' attitudes across the first two phases, but the cognitive/behavioral effects of Black students remains an issue still in need of future investigation.

Students were recruited via e-mail and Facebook and asked to participate in an online study (*Phase I*) concerning expectations of college experiences in exchange for \$10. They were also told that they would be invited to participate in a similar online study at the end of their first semester in college (*Phase II*) for which they again would be compensated \$10. Finally, during

their second semester in college, participants were invited to an in-lab social interaction study where they were compensated \$20 for their time (*Phase III*). Participants were led to believe that *Phase III* was unrelated to the previous phases in this study as a means to control for the effects of possible carry-over information from questions asked in *Phases I* and *II*, which could have affected how they performed during the in-lab interaction.

## **Measures and Procedures**

### **Phase I**

Before participants actually moved into their dormitories on campus, they were sent an email invitation with a link to a brief, anonymous online questionnaire via SurveyMonkey which included measures of racial attitudes, ethnic identity, previous experiences in diverse settings, friend racial diversity, and expectations of their new roommate. Specifically, participants answered questions pertaining to what they thought their ideal roommate would be and thoughts they had about their roommate before meeting them in person (see Appendix 1).

### **Phase II**

After one semester in college, all participants were again invited to participate in another brief, online survey via SurveyMonkey comprised mainly of the same questions asked in *Phase I*. *Phase II* therefore allows me to measure changes seen after living with a roommate for one semester. Additional questions regarding specific campus experiences in relation to racial interactions, stigma and racial stereotype endorsement, and time spent with their roommates were also asked during this phase as a means to account for participant exposure to diverse contexts and populations outside of residential living experiences (see Appendix 1).

### **Phase III**

**In-lab Interaction.** During the participants' second semester of college they were invited from a different email account to participate in an ostensibly unrelated in-lab social interaction study in the Psychology department. All aspects of this phase involved different researchers than *Phases I* and *II* and also took place in a different location to control for any suspicion linking this phase directly to the previous phases. *Phase III* was used to measure levels of interracial anxiety before, during and after an interaction with an other-race confederate as a means to examine how students in an interracial living situation might behave differently in a future diverse interaction setting compared to students in a same-race living situation.

Participants were first greeted by a non-Black experimenter and were asked to take a seat at the table while waiting for the other participant to show up. A few minutes later, one of eight Black confederates who pretended as if he/she were just another participant in the study walked into the room telling the experimenter that they were also there for the social interaction study. These confederates were gender-matched to the actual participant (as was the participant's other-race roommate, of course) and were also blind to participant roommate race. Once the confederate had arrived, the researcher instructed the participant and the confederate that they would be having a conversation with each other and that they would be discussing both a campus issue and a social issues topic. All confederates were trained to respond comparably when entering the experiment room and during the interaction itself, but not in a scripted manner through a series of training sessions to standardize confederate responses. Confederates were instructed to be pleasant but not overly friendly to control for behavior across the interactions.

**Pre-interaction Questionnaire and Topic Selection.** Both the participant and the confederate then completed a pre-interaction questionnaire composed of questions from the Shelton et al. (2005) paper focusing on the feelings and emotions experienced during interracial

interactions. They made their ratings on a 7-point scale from 1 (*not at all*) to 7 (*very much*) indicating how much they felt certain emotions and how much they agreed with certain statements (e.g., how much do you think you will like your partner; how much do you think you will get along with your partner, see Appendix 2).

Next the experimenter told the participant and confederate that there would be two roles for the interaction—one person would be the interviewer and would ask the questions and the other person would be the interviewee—and that there would be two conversation topics which they would select randomly. The experimenter first asked the participant to select via ostensibly random draw which role they would be playing and then, to make the selections seem equally distributed, the experimenter next asked the confederate to select the first conversation topic. The participant always played the role of the interviewee while the confederate was always played the interviewer. Unbeknownst to all participants, the first topic for the interaction was always “Campus Adjustment,” or what it has been like so far for these first-year students to transition to a college setting. This was mainly a distracter conversation and was viewed as a less engaging topic of conversation overall in comparison to the second target conversation topic.

After the first conversation, the experimenter returned and allowed the participant to select the next topic of conversation—again via ostensibly random draw—and this topic was always “Affirmative Action.” This topic has been used in past studies as a means of heightening the salience of the interracial nature of the interaction (see Shelton, Richeson, Salvatore, & Trawalter, 2005; Sommers, Warp, & Mahoney, 2008). The confederate received a pre-written set of questions from the experimenter for both of these conversations as a means to control and limit the amount of variability that could occur within the interaction itself. Both of these interviews were 5 minutes long and were videotaped for later coding for non-verbal behavior.



**Post-Interaction Stroop Task.** After the interaction was finished, both participants were told they would be completing two short computer tasks. The confederate was taken to another room to ostensibly use a different computer, leaving the actual participant alone in the interaction room. The participant then completed the Stroop (1935) color-naming task to measure their cognitive depletion or mental exhaustion after their interracial interaction. In incompatible trials, participants saw a color name (e.g., “blue”) in a font color different than what the word said (e.g., green) and responded with the font color using one of four labeled buttons the keyboard (red, yellow, green or blue). In control trials, participants saw a string of Xs, which was either red, yellow, green or blue in color and responded to the font color seen. Trials were preceded by a fixation cross and the inter-trial interval was 1500 ms. After a practice block of trials, participants completed 10 blocks of 12 trials each, for a total of 120 experimental trials. Scores were calculated by subtracting the average latency for the control trials from the incompatible trials, in that higher scores mean higher cognitive depletion (Stroop, 1935).

**Post-Interaction Implicit Association Test.** Next, the participant completed the Black/White IAT (Greenwald et al., 1998) to measure their implicit or internal racial bias toward African Americans. Participants saw White and Black male faces and positive and negative race-neutral words (e.g., joy, peace, pain, abuse) which they were asked to categorize into the appropriately listed category (White/Black or positive/negative) by pressing one of the two keys indicated on the keyboard. During one block of 40 trials, White faces and positive words shared one key while Black faces and negative words shared the other key, and in another block of 40 trials the opposite pairings were presented. Response times from these blocks of trials were subtracted from each other to calculate a pro-White bias.

**Post-Interaction Questionnaire.** After these two tasks were completed, the participant filled out a post-interaction questionnaire. Confederates also filled out this same questionnaire in another room. This questionnaire was similar to the pre-interaction questionnaire using the same 1 (*not at all*) to 7 (*very much*) rating scale, only with questions more specific to each of the two interaction topics discussed and pertaining to how they felt they performed during the interaction (e.g., how controversial they felt, how much they spoke, how much they felt they revealed about themselves during the conversation, see Appendix 2). At the end of the study participants were fully debriefed concerning the confederate in the study and the fact that this phase was connected to the previous two online surveys they completed about their experiences during their first semester in college.

**Nonverbal Interaction Behavior.** At the conclusion of the study, two coders, who were blind to condition and to the hypotheses of the study, were recruited to rate the participants' nonverbal behaviors by watching the video-taped interactions without any audio during which only the participant (and not the confederate) was visible. The coders were instructed to watch the interaction and using a scale of 1 (*not at all*) to 7 (*very much*), to respond to items such as how anxious, comfortable, and happy the participants seemed overall during the interaction (for similar measures, see Dovidio, Kawakami, & Gaertner, 2002; Norton, Sommers, Apfelbaum, Pura, & Ariely, 2006; Richeson & Shelton, 2003; Shelton et al., 2005).

## Results

There were no significant gender differences or differences found between participants recruited either in Year 1 or Year 2, so analyses were collapsed across these variables.

### Phases I and II—Online Surveys

In line with hypotheses, analyses focused on the differences between those White students who lived with a same-race roommate and those who lived with an other-race roommate. As expected, these two groups of participants were found to be statistically equivalent before entering college regarding: the diversity of their friends, their positivity ratings toward other racial groups, and feeling the same levels of comfort when interacting with people of other races, showing that both groups of White participants had similar overall experiences with people from different backgrounds. Furthermore, after one semester, White participants in both groups were also found to be statistically equivalent concerning: the percentage of time they spent with their roommate, how happy they were with their roommate, how much they considered their roommate their friend, and how well they got along with their roommate, demonstrating that all participants, no matter the race of their roommate had a positive experience (see Table 1). Lastly, none of the participants in this sample switched roommates.

To focus on the differences linked to spending one semester with their roommate, all of the following analyses concern *Phase II* responses. The total percentage of White and non-White friends reported by participants were calculated based on self-reported raw numbers. White participants with other-race roommates reported a significantly higher percentage of non-White friends ( $M = 51.48\%$ ,  $SD = 22.87$ ) in comparison to participants with a same-race roommate ( $M = 42.71\%$ ,  $SD = 19.40$ ),  $F(1, 138) = 5.97$ ,  $p < .02$ ,  $r = .20$ . Furthermore, participants with other-race roommates were also significantly more likely to agree than participants in same-race roommate pairings to agree with the following statements: “My roommate has a strong sense of their ethnic identity”  $F(1, 128) = 9.76$ ,  $p < .01$ ,  $r = .27$ , ( $M = 4.85$ ,  $SD = 1.74$ ;  $M = 3.82$ ,  $SD = 1.94$ ); “I have learned about another racial/ethnic group from my roommate”  $F(1, 133) = 21.25$ ,  $p < .01$ ,  $r = .37$ , ( $M = 4.21$ ,  $SD = 2.14$ ;  $M = 2.57$ ,  $SD = 1.97$ ); “I have a strong sense of my own

ethnic identity”  $F(1, 132) = 15.04, p < .01, r = .32, (M = 5.16, SD = 1.32; M = 4.04, SD = 1.86)$ ; and “I have learned about myself from my roommate”  $F(1, 131) = 3.67, p = .05, r = .17, (M = 4.51, SD = 1.63; M = 3.90, SD = 1.93)$ . All of these results reflect differences seen at *Phase II*, or after one semester White participants spent living with their roommate (see Table 2).

One negative outcome for White participants with other-race roommates was that they self-reported experiencing more discrimination based on their own ethnicity ( $M = 1.75, SD = 1.06$ ) than participants with same-race roommates ( $M = 1.40, SD = .95$ ),  $F(1, 134) = 4.04, p < .05, r = .17$ . Lastly, and contrary to hypotheses, participants with other-race roommates reported being lower in confidence regarding their abilities to respond when being viewed in a prejudiced manner ( $M = 4.16, SD = 1.67$ ) in comparison to those with same-race roommates who showed an increase in their confidence ( $M = 4.68, SD = 1.37$ ),  $F(1, 133) = 3.97, p < .05, r = .17$ . Results from Phase III, however, show that this particular self-report measure was not consistent with their performance in an actual interracial interaction (see Table 2).

**Black participants.** Preliminary analyses revealed that at the end of their first semester, compared to Black participants with Black roommates, Black participants with other-race roommates had a higher percentage of White friends,  $F(1, 20) = 6.21, p < .03, r = .48, (M = 44.57\%, SD = 28.15; M = 17.38\%, SD = 6.68)$ . There were no differences found in percentages of non-Black friends (i.e., a combined percentage of any friend other than a Black friend). Additionally, Black participants with other-race roommates were: less likely to report that their friends were the same race as they were,  $F(1, 19) = 4.22, p = .05, r = .43, (M = 3.50, SD = 2.25; M = 5.29, SD = .48)$ ; and were more likely to agree with the statement “I feel despite the different group at my school, there is the sense that we are all just one group,”  $F(1, 19) = 4.37, p = .05, r = .43, (M = 3.71, SD = 1.20; M = 2.71, SD = .49)$ . Black participants who had same-race

roommates also reported that having friends of different races was more important to them,  $F(1, 19) = 5.91, p < .03, r = .49, (M = 5.86, SD = .69; M = 3.93, SD = 2.02)$ . As with the White participants, Black participants reported no significant differences by roommate race in time spent with their roommates, getting along with their roommates, being friends with their roommates, or happiness with their roommates. Unlike White respondents however, Black students with other-race roommates did not report any gains in views concerning their own ethnic background or learning about other ethnic backgrounds (see Table 3).

### **Phase III—Interracial Interaction**

Ninety-two White first year students (50 female) completed *Phase III*, 59 with same-race roommates and 33 with other-race roommates. No gender differences or confederate participant differences were found so analyses were collapsed across those variables.

**Participant Self-Report.** No significant differences were found within the pre-interaction questionnaire, but the post-interaction questionnaire revealed that White participants with other-race roommates rated themselves as significantly less anxious ( $M = 3.24, SD = 1.38$ ) during the interaction with the Black confederate than did Whites with same-race roommates ( $M = 3.78, SD = 1.45$ ),  $F(1, 90) = 3.74, p = .05, r = .20$ . Regarding the interaction itself, participants with other-race roommates rated themselves as being less controversial when speaking about affirmative action ( $M = 3.39, SD = 1.37$ ) than did participants with same-race roommates ( $M = 4.03, SD = 1.45$ ),  $F(1, 90) = 4.29, p < .05, r = .21$ , while also feeling they had to say less in the conversation  $F(1, 89) = 5.79, p < .02, r = .25, (M = 5.18, SD = 1.40; M = 5.76, SD = .885)$ , and that they revealed less about themselves and their attitudes  $F(1, 90) = 3.41, p = .06, r = .19, (M = 4.48, SD = 1.33; M = 5.00, SD = 1.36; see Table 4)$ .

**IAT and Stroop.** There were no significant differences found between White participants with other-race roommates or same-race roommates concerning their Black/White IAT scores  $F(1, 88) = .05, n.s., (M = .57, SD = .44; M = .55, SD = .40)$ . Although there were also no significant differences regarding their Stroop scores, the means from the Stroop task did reflect that participants with other-race roommates were slightly less cognitively depleted after the interracial interaction ( $M = 46.46, SD = 39.97$ ) than those with same-race roommates ( $M = 53.08, SD = 56.90$ ),  $F(1, 85) = .31, n.s$ , which trends in following past interracial studies (see Table 4).

**Confederate Report.** Results from the pre-interaction questionnaire completed by confederates again showed no significant differences by participant roommate race, but the post-interaction questionnaire revealed findings that converged with the participant ratings. Confederate participant ratings showed again that compared to Whites with same-race roommates, White with other-race roommates: were less excited or aroused,  $F(1, 90) = 5.29, p < .03, r = .24 (M = 2.88, SD = 1.39; M = 3.59, SD = 1.45)$ ; felt they had to speak less,  $F(1, 90) = 5.92, p < .02, r = .25 (M = 4.15, SD = 1.44; M = 4.85, SD = 1.24)$ ; elaborated less during the conversation,  $F(1, 90) = 3.77, p = .05, r = .20 (M = 4.52, SD = 1.73; M = 5.10, SD = 1.15)$ ; felt they had to be involved in the conversation less,  $F(1, 90) = 5.65, p < .02, r = .24 (M = 5.00, SD = 1.58; M = 5.68, SD = 1.14)$ ; and rated themselves as less controversial,  $F(1, 90) = 4.30, p < .05, r = .21, (M = 3.39, SD = 1.37; M = 4.03, SD = 1.45; see Table 5)$ .

**Nonverbal Behavior.** The two coders were found to be high in reliability across all traits examined (intraclass  $r = .78$ ) so their responses on all items were averaged to create one overall rating for each trait. The nonverbal coding results corroborate the conclusions seen from both the participant and confederate reports. Non-verbal behavior revealed that overall, participants with

other-race roommates were significantly: less anxious,  $F(1, 81) = 3.82, p = .05, r = .21$  ( $M = 2.22, SD = .59; M = 2.56, SD = .80$ ); more pleasant,  $F(1, 81) = 4.44, p < .04, r = .23$  ( $M = 3.54, SD = .91; M = 3.08, SD = .93$ ); smiled more often,  $F(1, 81) = 5.69, p < .02, r = .26$  ( $M = 2.80, SD = 1.01; M = 2.36, SD = .65$ ); and moved their bodies more which is a positive sign of a good social interaction (see Richeson & Shelton, 2003),  $F(1, 81) = 40.69, p < .01, r = .58$  ( $M = 2.82, SD = .79; M = 2.00, SD = .38$ ). A composite score was also calculated averaging across the three positive traits happy, pleasant, and smiling ( $\alpha = .90$ ) and this was also found to be significantly higher for participants with other-race roommates,  $F(1, 81) = 6.03, p < .02, r = .26$  ( $M = 2.99, SD = .94; M = 2.63, SD = .44$ ; see Table 6).

### Discussion

Despite past findings linking interracial roommate experiences with mostly negative outcomes and consequences, the present results demonstrate that there are positive effects for White individuals living with someone of another racial or ethnic background. Past roommate studies highlighted how little time interracial roommate pairings spent with each other, (e.g., Phelps et al., 1998; Shook & Fazio, 2008; Towles-Schwen & Fazio, 2006), but these studies only asked how much time they spent together outside of their rooms, which does not take into account all of the exposure roommates may have to each other within their dormitories. The present study showed no differences in the time spent either with same-race or other-race roommates, demonstrating that having an other-race roommate does not necessarily mean spending less time with them overall. The roommate pairings in this study also showed no differences in their happiness with having either a same-race or other-race roommate, supporting past findings in that participants with more positive attitudes tend to have a more stable interracial roommate relationship (Towles-Schwen & Fazio, 2006).

This study, unlike past work, also showed that White individuals living with an other-race roommate (whether Black, Hispanic or Asian) were found to have an increase in the overall diversity of their friends, a more positive and more educated perspective about racial outgroups, and they learned more about themselves and their own ethnic identity. Recent work has shown that social integration and acceptance of an other-race roommate is key for continuous positive contact and exchange with that person and creates positive attitudinal changes (Shook & Fazio, 2011), but that study only followed participants for three months and did not include any behavioral outcomes that stemmed from this positive outgroup contact.

Results from the first two phases of the present study also showed that people with other-race roommates decreased in their confidence regarding how they would respond or react in a situation where they were being viewed in a prejudiced manner. However, results from *Phase III* clearly demonstrate that other-race roommate participants interacted more positively with an other-race partner in comparison to those who lived with a same-race roommate, bringing to light a tangible behavioral outcome. This suggests that participants who lack this added exposure to diversity seem to create a false confidence regarding their abilities to interact within prejudiced situations—or that they simply haven't been exposed to as many interracial situations to know how to properly react within those contexts.

For those individuals who were exposed to novel racial outgroup individuals (either directly through their roommate and/or through the increase of the diversity of their friends), it seems these experiences may have enabled those individuals to become not only more aware of racial differences, but also more cognizant of the complexity of interracial interactions. Through this exposure, those individuals perhaps were able to learn that the same strategy they use within one interracial context does not necessarily work in all other interracial settings, hence



supporting why those individuals reported feeling less confident in their abilities within prejudiced situations after living with their other-race roommate for one semester. This ongoing exposure to novel interracial contexts, may provide opportunities for those individuals to have more practice in adapting to novel interracial contexts, which in turn might lead toward higher confidence in their social interaction abilities. This is not say that individuals with same-race roommates were not trying their hardest to have a positive interracial interaction within this study, but it was clear through both their self-report and nonverbal behavior ratings that their anxiety within this novel interracial situation may have caused them to spend more cognitive effort in thinking about what to say during this interaction. This in turn may have left little mental capacity to control their nonverbal behaviors, resulting overall in a negative interracial experience. This of course remains an empirical question and future studies should examine these outcomes more specifically. The fact that this positive behavioral outcome was found for participants living either with a Black, Hispanic or Asian roommate is supported by two recent studies, one of which found that cross-group friends actually improves novel intergroup experiences due to people learning to associate outgroups with themselves (Page-Gould et al., 2010) and another of which highlighted that higher quality or more positive roommate relationships lead to lower intergroup anxiety and an increased likelihood of Whites integrating a Black roommate into their lives (Shook & Fazio, 2011). But the results in the present study extend those findings to now include positive behavioral effects stemming from simply living with someone of another race.

Therefore, this study highlights not only positive cognitive outcomes from living with someone of another racial background, but it also brings to light, for the first time, positive behavioral outcomes as well. Not only did participants who lived with an other-race roommate

self-report being less anxious and more positive during the interracial interaction, but confederate reports and non-verbal video coding of the interactions also showed the same findings—that White individuals who lived with other-race roommates for one school year were significantly less anxious, came across as less controversial, expressed more positive affect, and had a more enjoyable experience during an interracial interaction in comparison to those who lived with a fellow White student. In sum, these findings demonstrate that substantive interactions and residential exposure with members of a racial outgroup can shape subsequent interactions with novel outgroup members.

There were some limitations to this study, however. First, I was not statistically able to look at which races of other-race roommates led to more significant outcomes. Based on the data I do have, I now know that if White people live with any other racial group (i.e., not just a Black roommate), it positively affects future diverse interactions with Black individuals, since results were seen across all interracial roommate pairings. This demonstrates that residential exposure to any racial outgroup can generalize to facilitate future intergroup relations with other types of outgroup members. This is supported by past research which cites that the positive effects of outgroup contact can generalize from local outgroups to distant outgroups (e.g., Pettigrew, 1997; Pettigrew & Tropp, 2000).

Furthermore, the extended contact hypothesis states that in addition to direct exposure, indirect or vicarious exposure to outgroup members also helps to reduce prejudice (Allport, 1954; Turner, Hewstone, Voci & Vonofakou, 2008; Wright et al., 1997). This idea is consistent with the present data: having positive exposure with an other-race roommate (i.e., through roommate activities) results in learning more about a racial outgroup and having a more diverse set of friends, which in turn may lead those outgroup individuals to become included in a

person's view of their self. This, in turn, could reduce a person's overall intergroup anxiety levels which improves relations with all other racial outgroup members, not just the one to which they were immediately exposed. These, of course, are questions that future research should test empirically. Van Laar et al. (2005) found that the effects from having a Black roommate affected perceptions positively toward Hispanics and vice versa, but the data in the present study indicate that having a Black, Hispanic, or Asian roommate all lead Whites to be better able to interact with racial outgroup members in future diverse contexts. Future research should further examine the differences that may stem from living with different racial groups as well as assess whether living with someone randomly of another racial group versus a friend causes these same effects. Moreover, interracial roommate studies have been performed both on larger and smaller university campuses, but there has not yet been a study run to compare the experiences between these two types of educational settings. Running a study similar to this study at a public university would not only provide a larger participant pool with possibly a more diverse sample of participants, but it also could explore any differences that may exist between interracial roommate experiences on private and public school campuses.

Furthermore, our in-lab interaction only involved a Black confederate, so our results may not necessarily extrapolate in the same way toward interactions with other racial outgroups. Only one study to my knowledge has focused on comparing White/Black interactions to other types of interracial interactions. This study found that both White/Black interactions and White/Asian interactions caused more anxiety for White participants involved in comparison to same-race interactions, but participants interacting with Asians in comparison to Blacks also reported less anxiety overall (Littleford, Wright, & Sayoc-Parial, 2005). Based on these findings, I argue that the effects shown in the present study (i.e., the positive outcomes from interacting with a Black

individual) should therefore translate to less anxiety evoking interracial interaction settings, but since there is so little research beyond Black/White interactions, future research is needed to expand these findings toward interactions with other races and other genders (see Plaut, 2010).

Lastly, I also was not able to examine this paradigm with non-White participants, so we still do not know how living with an other-race roommate for minority individuals is similar or different from the experiences White individuals may have. Some studies have shown that intergroup contact can be less effective for minority individuals (Shelton, Richeson, & Salvatore, 2005; Tropp & Pettigrew, 2005), which would make comparing minority and majority-raced students' experiences with interracial roommates interesting to see if residential exposure to outgroup members also benefits minority students in the same way. With an increasingly diverse society, it is necessary for future studies to examine these angles concerning minority students at predominately White institutions, so that these effects can be fully explored for all populations.

In summary, this study represents the first to link the effects of exposure to racial outgroups through roommate experiences with how individuals interact within future interracial settings. It was found that these residential interactions and experiences in the dormitories directly impacted other interactions with racial outgroup members in a positive way, highlighting one pathway for improving intergroup relations. Small differences in racial attitudes and perspectives can have extremely profound influences on future behaviors as shown in this study. Therefore, future research is essential in further exploring residential and campus racial exposure to identify other paths people can take to improve race relations.

### **Conclusions**

Overall, I have highlighted that positive residential exposure to people of other races can and does translate into both cognitive and behavioral gains—one of the few positive findings to

be documented within the interracial roommate literature which highlights positive behavioral change. More importantly, this study centered on the experiences of a college-aged population who will later graduate and move on to other diverse contexts and situations such as work environments. Due to the increasing diversity present in today's society, it is crucial for researchers to be able to pinpoint what situational or experiential factors affect how one transitions from a homogeneous environment to more heterogeneous settings. Here I have shown that exposure to an other-race roommate is one pathway toward improving intergroup relations. Contact among different racial groups persists as a critical social issue, but through intergroup experiences and exposure, one may learn to acknowledge that outgroup member behaviors may actually reflect one's own behaviors, which would in turn find similarity rather than dissonance, reducing the distance so often seen between racial groups.

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## Footnotes

<sup>1</sup>Comparing participants recruited Year 1 and Year 2 revealed no significant differences other than that Facebook was used as a get-to-know your school and dorm tool only in Year 2. This difference, however, did not predict any of the outcomes reported in this study.

<sup>2</sup>Of the 26 Black participants, only 8 had same-race roommates and 18 had other race roommates.

Table 1

*Non-significant Differences for Roommate Participants*

<b>DV</b>	<b>Same-Race Roommates (M)</b>	<b>Other-Race Roommates (M)</b>	<b>F Value</b>
<b>Percent of Non-White Friends at Phase 1</b>	<b>30.27%, SD 23.44</b>	<b>27.81%, SD 23.40</b>	<b><math>F(1,124)=.31, n.s.</math></b>
<b>Positivity Toward Minorities at Phase I</b>	<b>6.17, SD = 1.26</b>	<b>5.86, SD = 1.32</b>	<b><math>F(1,139)=2.01, n.s.</math></b>
<b>Comfort With Other Races at Phase I</b>	<b>2.14, SD = 1.54</b>	<b>2.20, SD = 1.44</b>	<b><math>F(1,129)=.04, n.s.</math></b>
<b>Percent Time Spent With Roommate at Phase II</b>	<b>31.91%, SD = 26.85</b>	<b>29.66%, SD= 22.82</b>	<b><math>F(1,134)=.26, n.s.</math></b>
<b>Happy With Roommate at Phase II</b>	<b>5.33, SD = 1.78</b>	<b>5.12, SD = 1.89</b>	<b><math>F(1,135)=.41 n.s.</math></b>
<b>Friend with Roommate at Phase II</b>	<b>5.41, SD = 1.69</b>	<b>5.28, SD = 1.77</b>	<b><math>F(1,135)=.20, n.s.</math></b>
<b>Get Along With Roommate at Phase II</b>	<b>5.99, SD = 1.14</b>	<b>5.75, SD = 1.44</b>	<b><math>F(1,135)=1.63, n.s.</math></b>

*Note.* These represent differences seen both before moving to campus (*Phase I*) and after one semester living with their roommate (*Phase II*) as reported through participant self-reports.

Table 2

*Significant Differences for Roommate Participants Phase II*

<b>DV-Phase II</b>	<b>Same-Race Roommates (M)</b>	<b>Other-Race Roommates (M)</b>	<b>F Value</b>
<b>Percent of Non-White Friends</b>	<b>42.71%, SD = 19.40</b>	<b>51.48%, SD = 22.87</b>	<b><math>F(1,138)=5.97, p&lt;.02</math></b>
<b>Roommate Sense of Ethnic Identity</b>	<b>3.82, SD = 1.94</b>	<b>4.85, SD = 1.74</b>	<b><math>F(1,128)=9.76, p&lt;.01</math></b>
<b>Learned About Another Ethnic Group</b>	<b>2.57, SD = 1.97</b>	<b>4.21, SD = 2.14</b>	<b><math>F(1,133)=21.25, p&lt;.01</math></b>
<b>Strong Sense of Own Ethnic Identity</b>	<b>4.04, SD = 1.86</b>	<b>5.16, SD = 1.32</b>	<b><math>F(1,132)=15.04, p&lt;.01</math></b>
<b>Learned About Myself</b>	<b>3.90, SD = 1.93</b>	<b>4.51, SD = 1.63</b>	<b><math>F(1,131)=3.67, p=.05</math></b>
<b>Experience Discrimination</b>	<b>1.40, SD = .95</b>	<b>1.75, SD = 1.06</b>	<b><math>F(1,134)=4.04, p&lt;.05</math></b>
<b>Respond in Prejudiced Situation</b>	<b>4.68, SD = 1.37</b>	<b>4.16, SD = 1.67</b>	<b><math>F(1,133)=3.97, p&lt;.05</math></b>

*Note.* These represent differences seen for roommate participants seen after one semester living with their roommate as reported through participant self-reports.

Table 3

*Significant and Non-significant Differences for Black Participants Phase II*

<b>DV-Black Participants</b>	<b>Same-Race Roommates (M)</b>	<b>Other-Race Roommates (M)</b>	<b>F Value</b>
<b>Percent of White Friends</b>	<b>17.38%, SD = 6.68</b>	<b>44.57%, SD = 28.15</b>	<b><math>F(1,20)=6.21, p&lt;.03</math></b>
<b>My Friends Are the Same Race As I Am</b>	<b>5.29, SD = .48</b>	<b>3.50, SD = 2.25</b>	<b><math>F(1,19)=4.22, p=.05</math></b>
<b>"Sense We Are One Group"</b>	<b>2.71, SD = .49</b>	<b>3.71, SD = 1.20</b>	<b><math>F(1,19)=4.37, p=.05</math></b>
<b>Having Friends of Other Races is Important</b>	<b>5.86, SD = .69</b>	<b>3.93, SD = 2.02</b>	<b><math>F(1,19)=5.91, p&lt;.03</math></b>
<b>Percent Time Spent with Roommate</b>	<b>46.86%, SD = 26.54</b>	<b>31.93%, SD = 26.92</b>	<b><math>F(1,19)=1.45, n.s.</math></b>
<b>Get Along with Roommate</b>	<b>5.71, SD = .76</b>	<b>5.43, SD = 1.83</b>	<b><math>F(1,19)=.154, n.s.</math></b>
<b>Happiness with Roommate</b>	<b>5.57, SD = .78</b>	<b>4.50, SD = 2.18</b>	<b><math>F(1,19)=1.56, n.s.</math></b>

*Note.* These represent differences seen for Black roommate participants after one semester of living with their roommate as reported through participant self-reports.

Table 4

*Participant Self-Report Phase III*

<b>DV-Participant Report</b>	<b>Same-Race Roommates (M)</b>	<b>Other-Race Roommates (M)</b>	<b>F Value</b>
<b>Anxious</b>	<b>3.78, SD = 1.45</b>	<b>3.24, SD = 1.38</b>	<b>F(1,90)=3.74, p=.05</b>
<b>Controversial</b>	<b>4.03, SD = 1.45</b>	<b>3.39, SD = 1.37</b>	<b>F(1,90)=4.29, p&lt;.05</b>
<b>Felt Had to Communicate</b>	<b>5.76, SD = .89</b>	<b>5.18, SD = 1.40</b>	<b>F(1,89)=5.79, p&lt;.02</b>
<b>Revealed Information About Themselves</b>	<b>5.00, SD = 1.36</b>	<b>4.48, SD = 1.33</b>	<b>F(1,90)=3.41, p=.06</b>
<b>IAT Score</b>	<b>.55, SD = .40</b>	<b>.57, SD = .44</b>	<b>F(1,88)=.05, n.s.</b>
<b>Stroop Score</b>	<b>53.08, SD = 56.90</b>	<b>46.46, SD = 39.97</b>	<b>F(1,85)=.32, n.s.</b>

*Note.* Non-significant and significant self-report differences for White roommate participants after participating in the in-lab interracial interaction from participant self-reports.



Table 5

*Confederate Self-Report Phase III*

<b>DV-Confederate Report</b>	<b>Same-Race Roommates (M)</b>	<b>Other-Race Roommates (M)</b>	<b>F Value</b>
<b>Excited</b>	<b>3.59, SD = 1.45</b>	<b>2.88, SD = 1.39</b>	<b><i>F</i>(1,90)=5.29, <i>p</i>&lt;.03</b>
<b>Felt Had to Communicate</b>	<b>4.85, SD = 1.24</b>	<b>4.15, SD = 1.44</b>	<b><i>F</i>(1,90)=5.92, <i>p</i>&lt;.02</b>
<b>Elaborated During Conversation</b>	<b>5.10, SD = 1.15</b>	<b>4.52, SD = 1.73</b>	<b><i>F</i>(1,90)=3.77, <i>p</i>=.05</b>
<b>Felt Had to Be Involved</b>	<b>5.68, SD = 1.14</b>	<b>5.00, SD = 1.58</b>	<b><i>F</i>(1,90)=5.65, <i>p</i>&lt;.02</b>
<b>Controversial</b>	<b>4.03, SD = 1.45</b>	<b>3.39, SD = 1.37</b>	<b><i>F</i>(1,90)=4.30, <i>p</i>&lt;.05</b>

*Note.* Significant differences from the confederate's self-report after participating in the in-lab interracial interaction.

Table 6

*Non-Verbal Behavior Phase III*

<b>DV-Nonverbal Behavior</b>	<b>Same-Race Roommates (M)</b>	<b>Other-Race Roommates (M)</b>	<b>F Value</b>
<b>Anxious</b>	<b>2.56, SD = .80</b>	<b>2.22, SD = .59</b>	<b><i>F</i>(1,81)=3.82, <i>p</i>=.05</b>
<b>Pleasant</b>	<b>3.08, SD = .93</b>	<b>3.54, SD = .91</b>	<b><i>F</i>(1,81)=4.44, <i>p</i>&lt;.04</b>
<b>Smiles</b>	<b>2.36, SD = .65</b>	<b>2.80, SD = 1.01</b>	<b><i>F</i>(1,81)=5.69, <i>p</i>&lt;.02</b>
<b>Moves Body</b>	<b>2.00, SD = .38</b>	<b>2.82, SD = .79</b>	<b><i>F</i>(1,81)=40.69, <i>p</i>&lt;.01</b>
<b>Positive Composite (<i>α</i> =.90)</b>	<b>2.62, SD = .44</b>	<b>2.99, SD = .94</b>	<b><i>F</i>(1,81)=6.03, <i>p</i>&lt;.02</b>

*Note.* Significant differences in nonverbal behavior displayed by roommate participants during the in-lab interracial interaction.

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*Appendix 1: Phases I and II Roommate Experience Questions*

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*Phase I*

1. How would you describe your ideal roommate?
2. What role do you think a roommate should play in your life?
3. If you have not met or contacted your roommate yet, what do you think she/he will be like? If you have met or contacted your roommate already, what do you think of her/him?
4. On a scale from 1-7, I am happy that I will have a roommate instead of living in my own room.
5. On a scale from 1-7, based on what I know about my roommate already, I expect to get along well with him/her.
6. What is the race of your roommate?
7. Would having a roommate of a different sexual orientation cause problems for you?
8. Would having a roommate of a different race/ethnicity cause problems for you?
9. Would having a roommate of a different political affiliation cause problems for you?
10. Would having a roommate of a different religious background cause problems for you?

*Phase II*

1. What role does your roommate play in your life?
  2. What do you think of her/him?
  3. What is the race of your roommate?
  4. Are you still living with the same roommate that you were assigned to live with this year?
  5. What percentage of time do you spend with your roommate?
  6. On a scale of 1-7, I get along well with my roommate.
  7. On a scale of 1-7, I am friends with my roommate.
  8. On a scale of 1-7, I am extremely happy with my roommate.
  9. On a scale of 1-7, I participate in a variety of activities with my roommate. (i.e. dinners, movies, parties, studying...)
  10. On a scale of 1-7, I would prefer another roommate if I had the option.
  11. On a scale of 1-7, My roommate has a strong sense of their racial/ethnic identity.
  12. On a scale of 1-7, I have a strong sense of my own racial/ethnic identity.
  13. On a scale of 1-7, I have learned about myself from my roommate.
  14. On a scale of 1-7, I have learned about another ethnic/racial group from my roommate.
  15. On a scale of 1-7, The race of my roommate has caused some conflict for me.
  16. On a scale of 1-7, The sexual orientation of my roommate has caused some conflict for me.
  17. On a scale of 1-7, The political affiliation of my roommate has caused some conflict for me.
  18. On a scale of 1-7, The religious background of my roommate has caused some conflict for me.
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*Appendix 2: Phase III Pre- and Post-Interaction Questions*

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*Pre-Interaction Questionnaire*

1. On a scale of 1-7, how enthusiastic do you think you will feel during the interaction?
2. On a scale of 1-7, how tense do you think you will feel during the interaction?
3. On a scale of 1-7, how interested do you think you will feel during the interaction?
4. On a scale of 1-7, how suspicious do you think you will feel during the interaction?
5. On a scale of 1-7, how determined do you think you will feel during the interaction?
6. On a scale of 1-7, how anxious do you think you will feel during the interaction?
7. On a scale of 1-7, how excited do you think you will feel during the interaction?
8. On a scale of 1-7, how uncomfortable do you think you will feel during the interaction?
9. On a scale of 1-7, how well do you think you and your interaction partner will communicate?
10. On a scale of 1-7, how well do you think you will get along with your partner?
11. On a scale of 1-7, how much do you think you will like your partner?

*Post-Interaction Questionnaire*

1. On a scale of 1-7, how enthusiastic do you think you will feel during the interaction?
  2. On a scale of 1-7, how tense do you think you will feel during the interaction?
  3. On a scale of 1-7, how interested do you think you will feel during the interaction?
  4. On a scale of 1-7, how suspicious do you think you will feel during the interaction?
  5. On a scale of 1-7, how determined do you think you will feel during the interaction?
  6. On a scale of 1-7, how anxious do you think you will feel during the interaction?
  7. On a scale of 1-7, how excited do you think you will feel during the interaction?
  8. On a scale of 1-7, how uncomfortable do you think you will feel during the interaction?
  9. On a scale of 1-7, how well do you think you and your interaction partner communicated during the interaction?
  10. On a scale of 1-7, how much do you like your partner?
  11. On a scale of 1-7, to what extent is your partner a warm person?
  12. On a scale of 1-7, how likely is it that you and your partner might end up being friends?
  13. On a scale of 1-7, how much did you enjoy getting to know your partner?
  14. On a scale of 1-7, how much did you enjoy the interaction?
  15. On a scale of 1-7, to what extent did you keep your thoughts to yourself during the interaction?
  16. On a scale of 1-7, how much during the interaction did you elaborate on your thoughts?
  17. On a scale of 1-7, how involved were you during the interaction?
  18. On a scale of 1-7, how much did you reveal about yourself during the interaction?
  19. Did you know your partner before today? If so on a scale of 1-7, how well did you know your partner?
  20. Are you still living with your roommate you were assigned to at the beginning of the school year?
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