

Affect and Understanding During Everyday Cross-Race Experiences

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The present research uses an event sampling method to test whether, compared to same-race interactions, everyday cross-race contact is better characterized by the presence of negative affect or the absence of positive affect. Everyday intergroup interactions have some positive and negative aspects, so the present research independently assesses positive affect and negative affect along with felt understanding and misunderstanding. Across 3 studies (Study 1, $n = 107$; Study 2, $n = 112$; Study 3, $n = 146$), we find that European, Asian, and African Americans report that everyday cross-race interactions generate less positive affect and felt understanding than same-race interactions. Yet cross-race interactions entail no more negative affect than same-race interactions. This supports the idea that positive emotions are mostly reserved for and experienced with the ingroup, rather than the idea that people feel animosity toward the outgroup. Given that nearly half of racial-minority group member's everyday interactions are cross-race, their daily encounters are typically less positive than those of racial-majority group members. Feeling less well understood as a result of cross-race contact may increase the likelihood that racial-minority group members question whether they belong on a college campus.

Keywords: intergroup interactions, race, affect, misunderstanding

Intergroup relations continue to be more positive than they have been in the past. Yet cross-race interactions still go less smoothly than same-race interactions (e.g., less cognitive capacity, less engagement and enjoyment, more anxiety, more hostile behavior), particularly when targets of prejudice have reason to expect discrimination (Butz & Plant, 2006; Richeson & Trawalter, 2005; Shelton, 2003; Shelton & Richeson, 2006; Shelton, Richeson, & Salvatore, 2005; Towles-Schwen & Fazio, 2006). Despite experiences with discrimination, some instances of intergroup contact go well (Mallett, Wilson, & Gilbert, 2008; Swim, Hyers, Cohen, Fitzgerald, & Bylsma, 2003). Indeed, rising rates of interracial marriage indicate that some people feel a close connection to others outside of their racial group (U.S. Census Bureau, 2010). The present research maps the affective terrain of daily interactions to better understand how they provide the opportunity to form close connections across racial divides.

Intergroup contact can both exacerbate and reduce prejudice. Sherif's early research on boys at a summer camp showed that, over time, creating competitive situations promoted prejudice whereas creating cooperative situations fostered friendship (Sherif, Harvey, White, Hood, & Sherif, 1961). This research informed the contact hypothesis which specified the conditions under which

contact should help, rather than hurt, intergroup relations (Allport, 1954). Subsequent research showed that repeated intergroup contact that provides friendship potential has the best chance of reducing discrimination (Pettigrew, 1998). Friendship's power to reduce prejudice stems from changing affective responses to outgroup members, which may be more important than changing stereotypes. Given the importance of intergroup friendship for reducing discrimination and conflict it is critical to understand the topography of everyday affective experiences, which are the building blocks of friendship.

Research on intergroup relations maps two distinct patterns of affective experience for cross-race, compared with same-race, interactions. First, cross-race interactions may be characterized by with no less positive affect and more negative affect (Hypothesis 1a). The first pattern of affect roughly corresponds to old-fashioned, blatant prejudice, which often occurs during times of intergroup conflict (Gaertner & Dovidio, 1986). Second, cross-race interactions may be characterized by less positive affect but no more negative affect (Hypothesis 1b). The second pattern of affect roughly corresponds to modern, subtle prejudice, which often occurs in the absence of a current intergroup conflict.

The present research captures the affectively laden experiences of cross-race and same-race contact to test which hypothesis better characterizes the positive and negative affect and felt understanding and misunderstanding in everyday interactions. Doing so adds to the existing cross-race contact research in two ways. First, we document the frequency and variability of affect that is experienced during cross-race experiences using everyday cross-race interactions that occur in a variety of contexts. Second, we compare cross-race and same-race experiences on a number of college campuses to test whether, in those situations, cross-race contact is

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best characterized by the presence of negative affect (Hypothesis 1a) or by a lack of positive affect (Hypothesis 1b).

Affect During Everyday Interactions

Everyday intergroup interactions have separate positive and negative aspects. Accordingly, the present research independently assesses positive affect (PA) and negative affect (NA). Although there has been an intense debate regarding the independence of PA and NA (e.g., Feldman Barrett & Russell, 1998; Watson, Wiese, Vaidya, & Tellegen, 1999), we believe that it is theoretically important to distinguish PA and NA in the context of cross-race interactions. Analogous to the findings that the lack of NA does not guarantee the presence of PA (e.g., Diener & Emmons, 1984; Schimmack, Bockenholt, & Reizenstein, 2002; Schimmack, Oishi, Diener, & Suh, 2000) and the elimination of depression and anxiety itself does not guarantee happiness (Seligman & Csikszentmihalyi, 2000), in the context of cross-race contact, more NA does not automatically mean less PA and less PA does not necessarily mean more NA. It is therefore important to measure both positive and negative affective experiences in cross-race interactions so that we may identify exactly which pattern of affective experiences (Hypothesis 1a or 1b) best characterizes cross-race, relative to same-race, interactions.

Classic definitions of prejudice support Hypothesis 1a by emphasizing the presence of negative affect and feelings of hostility toward an outgroup (e.g., Allport, 1954; Greenwald & Pettigrew, 2014). Indeed, Toosi Babbitt, Ambady, and Sommers (2012) meta-analysis of 40 years of research on dyadic intergroup contact shows that attitudes, affect, and behavior are more negative during cross-race than same-race interactions. More specifically, they find no difference in the experience of positive affect in cross-race, compared to same-race, interactions. However, there is a small but reliable tendency for people to report more negative affect in cross-race, compared with same-race, interactions though this tendency is stronger for racial-majority than racial-minority group members. Ong, Burrow, Fuller-Rowel, Ja, and Sue (2013) also find no less positive affect but more negative affect during cross-race interactions.

Additional support for Hypothesis 1a (i.e., cross-race contact primarily characterized by negative affect) comes from research on college roommates. Both Whites (Towles-Schwen & Fazio, 2006) and racial minorities (Shelton & Richeson, 2006) report lower satisfaction with a cross-race (White-Black) roommate compared with a same-race roommate. Additionally, Towles-Schwen and Fazio (2006) find that White college students who are assigned to live with a Black roommate are less satisfied with their roommate, report spending more time outside of the room, and are more likely to request a new roommate, compared with Whites who are assigned a White roommate. Given that cross-race roommate satisfaction is low and the tendency to exit the roommate relationship is high, we conclude that this type of daily intergroup contact is unpleasant.

More recent definitions of prejudice move away from an exclusive focus on the presence of negative affect to highlight feelings of ambivalence (Glick & Fiske, 1997; Katz & Hass, 1988). Aversive racism theory explains the awkward cross-race interactions that arise as a consequence of Whites' conflicted feelings of sympathy for and aversion to Blacks (Gaertner & Dovidio, 1986).

According to the theory, egalitarian Whites desire positive cross-race contact and an opportunity to present a nonprejudiced self. Yet, unconsciously held stereotypes frequently keep them from interacting with members of a different race, thus preventing them from obtaining their desired state of positive cross-race contact. Although aversive racism initially appears to support Hypothesis 1a's characterization of cross-race contact as having more negative affect than same-race contact, it may simply reflect pessimism toward the possibility of positive experiences, and therefore set the expectation for more negative affect. Of course expectations may be confirmed or disconfirmed during actual interactions.

We find support for Hypothesis 1b beginning with Brewer's (1999) proposal that intergroup relations are characterized more by love for the ingroup than hatred for the outgroup. Love for the ingroup may produce high levels of positive affect during same-race contact, making it virtually inevitable that one will experience less positive affect during cross-race contact. Brewer's (1999) argument also specifies that there is no particular animus toward the outgroup. Thus, we may find less positive affect, but no more negative affect, experienced with the outgroup. Greenwald and Pettigrew (2014) provide a similar argument that discrimination is motivated by love for the ingroup rather than animosity toward the outgroup. In fact, when Greenwald and Pettigrew (2014) reanalyzed existing data (Ziegler, Kirby, Xu, & Greenwald, 2013) they found that positive affect felt for the ingroup was much higher than negative affect felt for the outgroup. In sum, support for Hypothesis 1b has emerged relatively recently in research on intergroup relations. This may be due in part to the changing nature of prejudice with a shift away from blatant to more subtle discrimination, especially in the absence of direct conflict.

Understanding During Everyday Interactions

Considering additional forms of interpersonal affect, such as felt understanding and misunderstanding, will further enhance our knowledge of factors that facilitate intergroup friendship. The need to be understood is a core social motivation. Feeling *understood* by others is associated with several important outcomes including daily well-being (Oishi, Lun, & Sherman, 2007), forming and maintaining relationships, and deepening intimacy in general (Murray, Holmes, Bellavia, Griffin, & Dolderman, 2002; Reis, Clark, & Holmes, 2004; Reis & Patrick, 1996; Reis & Shaver, 1988). Feeling *misunderstood* also has important and unique consequences, including decreased liking and decreased interest in future attempts at friendship formation (Vorauer & Sakamoto, 2006). Moreover, research shows divergent correlates for PA, NA, felt understanding, and misunderstanding (Oishi, Koo, & Akimoto, 2008; Oishi, Miao, & Krochik, 2007), underscoring the importance of examining various aspects of affective outcomes in social interactions. Identifying factors related to increasing felt understanding and decreasing felt misunderstanding is essential given the positive benefits of intergroup friendship (Pettigrew & Tropp, 2006).

We expect that feeling understood or misunderstood by others will differ for cross-race and same-race experiences. We assume that people from a different social group do not share our values as much as people from our own social group (Kinder & Sears,

1981; McConahay, 1986). We also overestimate the extent to which our behavior clearly communicates the desire for friendship more so with outgroup, compared to ingroup, members (Shelton & Richeson, 2005; Vorauer, 2005). Further, people with different cultural backgrounds may prefer to use different types of information to understand each other (Hecht, Ribeau, & Alberts, 1989). For example, it might be important for people from Eastern cultures to feel that their collective self is understood whereas it might be important for people from Western cultures to feel that their individual self is understood (Oishi et al., 2008).

To date, research has not directly assessed feeling understood or misunderstood by same-race and cross-race peers. One study looked at a related construct: intimacy-building and intimacy-distancing. Trail and colleagues (2009) operationalized intimacy-building as the presence of behaviors such as smiling, appearing interested, and having an easy time contributing to conversation. *Intimacy-building* behaviors may occur if one feels *understood* by a conversation partner. They operationalized intimacy-distancing as the presence of behaviors such as concealing one's true opinions, avoiding eye contact, and generally feeling the other person is unlikable. A lack of understanding may produce intimacy-distancing behaviors. Both Whites and racial-minority students report less intimacy-building over time with cross-race roommates. Although Whites perceived a similar decrease in intimacy-building with same-race roommates, racial-minority students report no change in intimacy-building with same-race roommates. Both Whites and racial-minority participants report an increase in intimacy-distancing with their cross-race roommates, compared with their same-race roommates. Based on this study, we expect to find less understanding for cross-race than same-race roommates. Accordingly, we expect to find support for Hypothesis 1b in that cross-race interactions will be associated with less understanding but no more misunderstanding than same-race interactions.

The Present Research

We know that cross-race contact, especially friendship, can have positive outcomes such as increasing comfort with and liking of an outgroup (Herek & Capitano, 1996; Paolini, Hewstone, Cairns, & Voci, 2004; Pettigrew, 1997; Van Laar, Levin, Sinclair, & Sidanius, 2005) and decreasing prejudice toward the outgroup as a whole (Wright, Aron, McLaughlin-Volpe, & Ropp, 1997). Despite knowledge of the general outcomes of cross-race contact, we know little about the details of daily contact—especially about factors such as positive affect and understanding that contribute to friendship formation.

To test whether cross-race interactions are better characterized by the presence of negative affect (Hypothesis 1a) or the absence of positive affect (Hypothesis 1b), we investigate both positive and negative affective experiences. We conduct three “event-sampling” studies (Reis & Gable, 2000), measuring general (PA and NA) and interpersonal (understanding and misunderstanding) affect experienced during cross-race and same-race interactions in a variety of everyday contexts. To test generalizability, we conduct each study at a different type of institution, varying the size of the institution, region of country, and whether the

institution was public or private. Participants in all three studies carried a personal digital assistant (PDA) for 2 weeks, and recorded their affective experience after all social interactions that lasted more than 10 min (see Study 1 Method for details). In Studies 1 and 2, we examine affective experiences among European Americans and Asian Americans. In Study 3, we examine the experiences of African Americans, as well as European and Asian Americans.

Study 1

In Study 1, we investigate the overall quality of cross-race and same-race interactions for racial-minority and majority group members. Over a 2-week period, participants reported the general (PA, NA) and interpersonal (felt understanding and misunderstanding) affective quality of their social interactions after each naturally occurring interaction that lasted more than 10 min. They also reported whether their interaction partner was of the same or a different race.

Method

Participants. Participants were 107 students at the University of Minnesota, who responded to an advertisement in the student newspaper. Out of the 107 original participants, seven (6.5%) completed less than 10 valid reports for the 2-week period and were excluded from our analyses. Three (2.8%) additional individuals' data were lost because they forgot to recharge the personal digital assistant (PDA) during the 2-week period. Thus, the final sample consisted of 97 participants (87% of the original sample), 56 of whom identified themselves as European Americans (20 men, 33 women, and three did not provide this information) and 41 of whom identified themselves as Asians or Asian Americans (22 men, 18 women, and one did not provide this information). Participants received \$25 upon completion of the study.

Materials and procedures. Participants individually met an experimenter who gave them a PDA that was programmed with a short survey. Participants were asked to complete the survey each time they engaged in a social interaction that lasted more than 10 min over the next 2 weeks. Following Wheeler, Reis, and Bond (1989), we defined a social interaction as “any encounter with another person(s) in which the participants attended to one another and adjusted their behavior in response to one another” (Wheeler, Reis, & Bond, 1989, p. 81). The experimenter further defined a social interaction to include a face-to-face conversation, a shared activity (e.g., playing cards together), a phone conversation, or an instant message conversation, and gave examples such as “sitting silently next to someone in a group discussion is not an interaction, whereas talking with someone during the lecture for 10 min is.” Then, the experimenter explained how to use the PDA, read all the survey items with the participant, and made sure that all items were clearly understood. Finally, participants were informed that all entries would be automatically time-stamped.

Quality of the interaction: General affect. Participants indicated the degree to which they felt happy, sad, pleasant, and unpleasant during the interaction using a 7-point scale ranging from *not at all* (1) to *extremely* (7). We computed the PA score by

taking the average of “happy” and “pleasant” ($\alpha = .82$), and the NA score by taking the average of “sad” and “unpleasant” ($\alpha = .72$).¹

Quality of the interaction: General felt understanding. Using the same 7-point scale, participants also reported the degree to which they felt generally understood (i.e., “understood” and “appreciated,” $\alpha = .80$) as well as the degree to which they felt generally misunderstood (i.e., “misunderstood” and “alienated,” $\alpha = .69$).²

Quality of the interaction: Specific felt understanding. Participants next reported the extent to which their interaction partner understood two specific aspects of the self, namely their personal self (i.e., their “personality” and their “abilities and skills,” $\alpha = .88$) and their collective self (i.e., their “social and cultural background” and their “social roles/situations,” $\alpha = .86$).

Event sampling partner characteristics. Finally, participants reported whether the interaction partner was the same sex, same race, same religion, and same nation, selecting one of the three options for each attribute: “same,” “different,” or “don’t know.”

Results and Discussion

Frequency of social interactions. Over 2 weeks, participants completed an average of 57.62 ($SD = 36.63$) reports. There were no racial/ethnic group differences in the number of reports, $t(95) = 1.26$, ns , $d = 0.26$. Females completed more reports than did males, $t(91) = 2.82$, $p < .01$, $d = 0.59$. There was no race-by-gender interaction in the number of reports completed, $F(1, 89) = 1.09$, ns , $d = 0.22$.

The mean proportion of cross-race interactions per individual was 0.12 ($SD = 0.16$) for European American participants, and 0.48 ($SD = 0.26$) for Asian Americans. Not surprisingly, Asian American’s daily social interactions were more often cross-race than European Americans, $t(95) = 8.48$, $p < .001$, $d = 1.74$. There were no gender differences in the proportion of cross-race interactions ($M = 0.27$ for men vs. 0.29 for women, $t(91) = -0.40$, ns , $d = -0.08$). There was also no race-by-gender interaction for the frequency of cross-race interactions, $F(1, 89) = 1.55$, ns , $d = 0.26$.

Quality of social interactions. Next, we tested whether the quality of everyday social interactions differed for cross-race and same-race encounters. Table 1 provides the descriptive statistics for all measures of the quality of social interactions. Because social interaction reports are nested within individuals, our data consist of two levels: within-person and between-person. Thus, social interaction reports are not independent across individuals but dependent, and therefore, violate the basic independence of observation assumption of traditional analyses (e.g., t tests, ANOVA; see Kenny, Kashy, & Bolger, 1998; Reis & Gable, 2000 for more details). To address this issue, we followed the recommendation by Kenny, Kashy, and Bolger (1998) and Reis and Gable (2000) and used hierarchical linear modeling (HLM 5.04 program; Raudenbush, Bryk, Cheong, & Congdon, 2001). The specific model that we tested was as follows:

Level 1: within-person

$$PA = \beta_{0j} + \beta_{1j} * \text{Type of Encounter} + \text{error},$$

where PA denotes positive affect, and Type of Encounter denotes

whether the interaction was same-race (0) or cross-race (1), and “j” denotes person “j.”

Level 2: between-person

$$B_0 = \gamma_{00} + \gamma_{01} * (\text{race/ethnicity}) + \gamma_{02} * (\text{gender}) + \mu_{0j}$$

$$B_1 = \gamma_{10} + \gamma_{11} * (\text{race/ethnicity}) + \gamma_{12} * (\text{gender}) + \mu_{1j},$$

where race/ethnicity was coded as European American = 0 and Asian American = 1, and gender was coded as male = 0, and female = 1.

The critical variable in this model is β_{1j} , which indicates whether the type of encounter was associated with the dependent variable (e.g., PA) for person “j.” Because European American was coded as the reference group, γ_{10} indicates whether a cross-race encounter was associated with less PA among European Americans, and γ_{11} indicates the degree to which the association between type of encounter and PA differed for Asian Americans and European Americans. Finally, γ_{12} indicates the degree to which the association between the type of encounter and PA differed between male and female participants.

We began by estimating this model for each dependent variable. We found no consistent racial/ethnic or gender differences for the dependent variables, β_j (i.e., neither race/ethnicity nor gender moderated the difference between the type of encounter and the dependent variable). Because a model that includes race/ethnicity at Level 2 does not allow for a direct significance test for β_j for the nonreference group (i.e., Asian Americans as a whole in this model), we estimated separate models for European Americans and Asian Americans. Doing so allows us to obtain a significance test regarding whether cross-race encounters differed from same-race encounters on the dependent variables for Asian Americans and European Americans. Thus, we conducted the analyses for each cultural group, separately.

General affect. Supporting Hypothesis 1b, Asian Americans reported feeling less PA in cross-race than in same-race encounters, whereas European Americans reported no difference in PA across types of encounters. In comparison, European and Asian Americans both reported no difference in NA for cross-race and same-race encounters (see Table 2).

General felt understanding and misunderstanding. European Americans reported marginally less felt understanding in cross-race, compared to same-race encounters, and the same effect was significant for Asian Americans. Both European and Asian Americans reported greater felt misunderstanding in cross-race, compared to same-race encounters.

Specific felt understanding of the personal and collective self. European and Asian Americans reported feeling that their personal and collective selves were less well understood in cross-race encounters, compared with same-race encounters.

In sum, in Study 1 we find the most consistent support for Hypothesis 1b: Compared with same-race contact, cross-race contact is characterized by less positive affect but no more negative

¹ Within-person correlations between PA and NA range from $-.60$ to $.23$ for all three samples. This variability is consistent with previous research that demonstrates the independence of PA and NA.

² It is common practice in research on understanding to provide separate assessments of these variables (e.g., Lun, Oishi, Coan, Akimoto, & Miao, 2010; Oishi, Krochik, & Akimoto, 2010).

Table 1
Descriptive Statistics for Studies 1–3

Dependent variable	Type of interaction	Study 1			Study 2			Study 3		
		<i>N</i>	<i>M (SD)</i>	Std. error mean	<i>N</i>	<i>M (SD)</i>	Std. error mean	<i>N</i>	<i>M (SD)</i>	Std. error mean
Positive affect	Same-race	3,914	5.05 (1.20)	.02	3,091	4.98 (1.17)	.02	2,995	5.08 (1.34)	.02
	Cross-race	1,687	4.75 (1.27)	.03	2,179	4.99 (1.14)	.02	2,187	4.87 (1.31)	.03
Negative affect	Same-race	3,913	1.64 (1.13)	.02	3,091	1.72 (1.09)	.02	2,995	1.84 (1.23)	.02
	Cross-race	1,686	1.64 (1.12)	.03	2,179	1.57 (.99)	.02	2,187	1.85 (1.25)	.03
Understanding	Same-race	3,909	4.93 (1.27)	.02	3,091	4.84 (1.22)	.02	2,995	5.20 (1.31)	.02
	Cross-race	1,684	4.77 (1.30)	.03	2,179	4.74 (1.17)	.03	2,187	4.87 (1.23)	.03
Misunderstanding	Same-race	3,910	1.66 (1.12)	.02	3,091	1.69 (.95)	.02	2,995	1.75 (1.08)	.02
	Cross-race	1,681	1.74 (1.10)	.03	2,179	1.65 (.95)	.02	2,187	1.79 (1.11)	.02
Personal self	Same-race	3,917	4.93 (1.33)	.02	3,091	4.74 (1.21)	.02	2,995	5.23 (1.28)	.02
	Cross-race	1,685	4.32 (1.58)	.04	2,179	4.47 (1.23)	.03	2,187	4.78 (1.28)	.03
Collective self	Same-race	3,916	4.89 (1.47)	.02	3,091	4.64 (1.37)	.025	2,995	5.35 (1.35)	.03
	Cross-race	1,687	4.18 (1.69)	.04	2,179	4.29 (1.37)	.03	2,187	4.62 (1.38)	.03

affect. General PA and NA did not differ across cross-race and same-race encounters, with the exception of Asian American's feelings of PA which was lower in cross-race encounters. However, both groups reported feeling less well understood on general and specific levels in cross-race, compared with same-race, encounters. Therefore in this study, both racial-majority and minority group members agreed that everyday cross-race encounters mainly differed from same-race encounters in terms of felt understanding and misunderstanding.

Study 2

Study 1 showed consistency in European and Asian Americans' perceptions of everyday cross-race and same-race expe-

riences. The results were based on students' experiences at the University of Minnesota (UMN). UMN is a large public university with the vast majority (78.83% of undergraduates in 2006) of the 60,000 students being European American. On such a campus, European Americans might have few cross-race interactions. In comparison, Asian Americans are likely to have extensive cross-race contact, some of which may be involuntary due to their numeric minority status. We conducted a second event sampling study at Carleton College to examine whether the findings from Study 1 would be replicated in a smaller, more intimate, campus context. Carleton College is a highly selective, private liberal arts college in Minnesota, with about 1,900 students (73% European Americans in 2006).

Table 2
Results [The Unstandardized Coefficient (Standard Error) *T*-Value] for the Affective Quality of Cross-Race Interactions

Dependent variable	Study 1		Study 2		Study 3	
European Americans						
Positive affect	−0.14 (.10)	−1.46	−0.08 (.06)	−1.44	−0.19 (.09)	−2.06*
Negative affect	0.15 (.10)	1.56	0.03 (.06)	0.56	0.13 (.09)	1.39
Understanding	−0.18 (.11)	−1.65 ⁺	−0.15 (.08)	−1.85 ⁺	−0.27 (.11)	−2.44*
Misunderstanding	0.34 (.11)	2.98**	0.05 (.06)	0.94	0.05 (.09)	0.55
Personal self	−0.55 (.16)	−3.53**	−0.21 (.08)	−2.67**	−0.42 (.14)	−3.09**
Collective self	−0.72 (.18)	−4.08**	−0.21 (.09)	−2.45*	−0.50 (.14)	−3.59**
Asian Americans						
Positive affect	−0.32 (.09)	−3.68**	−0.01 (.14)	0.09	−0.13 (.12)	−1.14
Negative affect	0.06 (.05)	1.10	−0.14 (.12)	1.19	0.01 (.08)	0.13
Understanding	−0.27 (.08)	−3.26**	−0.03 (.11)	0.23	−0.26 (.11)	−2.29*
Misunderstanding	0.15 (.07)	2.00*	−0.01 (.12)	0.05	0.11 (.07)	1.55
Personal self	−0.97 (.13)	−7.36**	−0.36 (.12)	3.00**	−0.45 (.11)	−4.19**
Collective self	−1.33 (.13)	−10.19**	−0.66 (.18)	3.56**	−0.91 (.13)	−6.93**
African Americans						
Positive affect	—	—	—	—	−0.31 (.10)	−2.95**
Negative affect	—	—	—	—	0.09 (.09)	1.00
Understanding	—	—	—	—	−0.46 (.13)	−3.65**
Misunderstanding	—	—	—	—	−0.01 (.11)	−0.06
Personal self	—	—	—	—	−0.44 (.15)	−2.99**
Collective self	—	—	—	—	−0.75 (.20)	−3.71**

⁺ $p < .10$. * $p < .05$. ** $p < .01$. *** $p < .001$.

Method

Participants. Participants were 112 students at Carleton College. Sixty-one self-identified as European Americans (28 men, 33 women), 24 self-identified as Asian Americans (17 men, seven women), eight self-identified as African Americans (three men, five women), four identified as Hispanic Americans (one man, three women), and nine self-identified as "other" (five did not provide this information). Out of the original 112 participants, nine participants (8%) provided less than 10 valid reports, and were excluded from our analyses. There was not enough data from African Americans and Hispanic Americans to allow for reliable data analyses. Therefore the final sample included 79 participants: 59 European Americans (26 men, 33 women), and 20 Asian Americans (13 men, seven women). All participants were paid \$25 for completing the study.

Materials and procedure. Materials and procedures were exactly the same as Study 1. Cronbach's alpha was .83 for PA, .73 for NA, .77 for overall felt understanding, .57 for overall felt misunderstanding, .84 for understanding the personal self, and .88 for understanding the collective self.

Results and Discussion

Frequency of social interaction. On average, participants completed 48.77 reports of social interactions ($SD = 28.39$) over the 2-week period. As in Study 1, there were no differences in the number of reports completed by European and Asian Americans, $F(1, 75) = 0.03$, ns , $d = 0.04$. Again, women completed more reports than men, $F(1, 75) = 6.47$, $p < .01$, $d = 0.59$ and there was no race/ethnicity-by-gender interaction in the number of reports completed, $F(1, 75) = 0.02$, ns , $d = 0.02$.

As in Study 1, we first examined the proportion of cross-race encounters. The average proportion of cross-race encounters was 0.19 ($SD = 0.14$) for European Americans and 0.77 ($SD = 0.21$) for Asian Americans. Again, Asian Americans had far more cross-race social interactions than European Americans, $t(77) = -14.05$, $p < .001$, $d = 3.20$. There was no gender difference in proportion of cross-race interactions ($M = 0.43$, 0.40, male and female participants, respectively), $t(97) = 0.49$, ns , $d = 0.10$, and there was no racial/ethnic-by-gender interaction for frequency, $F(1, 75) = .92$, ns , $d = 0.21$.

Quality of social interactions.

General affect. European and Asian Americans both reported no difference in PA or NA for cross-race and same-race encounters (see Table 2; see Table 1 for descriptive statistics).

General felt understanding and misunderstanding. Unlike Study 1, Asian and European Americans reported no significant differences in felt understanding or misunderstanding in their cross-race and same-race encounters. Like Study 1, European Americans reported feeling marginally less understanding in cross-race, compared with same-race, encounters.

Specific felt understanding of the personal and collective self. Replicating Study 1, European and Asian Americans reported feeling that their personal and collective selves were less well understood in cross-race encounters, compared to same-race encounters.

In sum, experiences reported by participants on the small campus of Carleton College were similar to those of participants at UMN. Asian and European Americans reported feeling the same

amount of general PA and NA for both cross-race and same-race encounters. Both groups also reported feeling about the same amount of general understanding and misunderstanding for both cross-race and same-race encounters, with the exception of European Americans' felt understanding. Again, we found that feeling understood in terms of specific aspects of the personal and collective selves were lower for cross-race encounters than for same-race encounters, as rated by both European and Asian Americans. Thus, although cross-race and same-race contact were similar in many ways, we find some support for Hypothesis 1b in that there was an absence of positive affect rather than the presence of negative affect.

In addition to size, there are notable differences between the student body at Carleton College and UMN. First, because Carleton College's tuition is much higher (\$34,272 for tuition and fees in 2007) than UMN's (\$3,975 for tuition in 2007), it is likely that on average Carleton College students are from a higher socioeconomic status. Additionally, only about half of the students at Carleton College come from the Midwest, compared with the majority of UMN students. Thus, the few discrepancies between Studies 1 and 2 could be due to factors other than the campus context per se. It is noteworthy, however, that despite the differences between these two schools, patterns of affective experiences associated with cross-race interactions were similar. Thus, these findings are likely to be robust across different size campuses and across different types of student bodies. Overall, the first two event-sampling studies in different campus contexts demonstrated that although cross-race interactions tend to be lower than same-race interactions in felt understanding, they are no more maligned with misunderstanding or negative affect. Thus, replicating Study 1 we find support for Hypothesis 1b: cross-race interactions are characterized by less positive affect but no more negative affect.

Study 3

In Studies 1 and 2, we examined the topography of cross-race interactions among European and Asian Americans. In Study 3, we extend this investigation to include African Americans, another visible minority group that has a cultural and historical heritage distinct from Asian Americans. Although many Asian ethnic groups typically started out with low paying jobs and have been the subject of negative stereotypes (see Takaki, 1989 for review), many of their children were able to move up the social hierarchy and many subgroups have even acquired the stereotype of the "model minority" (see Sue & Okazaki, 1990 for exceptions). African Americans, in contrast, have not acquired increasingly positive stereotypes. These historical differences might produce distinct affective patterns in cross-race interactions among African Americans, compared with European and Asian Americans. We conducted Study 3 at the University of Virginia (UVA), which is a medium-size public university with about 13,000 full-time undergraduate students. At UVA, 8% of the undergraduate student body is African American, 11% is Asian American, and 64% is European American. The tuition and basic fees for the 2006–2007 academic year was \$8,035 for in-state students. Again, we examine the quality of everyday cross-race and same-race encounters.

Method

Participants. Participants were 146 students at the UVA. Fifty-two self-identified as European Americans (17 men, 35 women), 48 self-identified as African Americans (10 men, 37 women, one did not provide this information), and 46 self-identified as Asian Americans (12 men, 34 women). Out of the original 146 participants, 11 participants (7.5%) completed less than 10 valid reports and were excluded from our analyses. In addition, 10 participants' data (6.8%) was lost due to participant error (e.g., forgot to recharge PDA, broke or lost PDA) or experimenter error (e.g., overwrote the data). The final sample included 124 participants: 41 European Americans (12 men, 30 women), 41 African Americans (seven men, 34 women), and 42 Asian Americans (nine men, 33 women). Participants were paid \$25 for completing the experiment.

Materials and procedure. Materials and procedures were the same as Studies 1 and 2. Cronbach's alpha was .86 for PA, .78 for NA, .78 for overall felt understanding, .65 for overall felt misunderstanding, .85 for understanding the personal self, and .90 for understanding the collective self.

Results and Discussion

Frequency of social interactions. Over the 2-week period, participants completed an average of 36.74 reports ($SD = 21.86$). There were no differences in the number of reports completed by European, African, or Asian Americans, $F(2, 118) = 1.84, p = .16, d = 0.25$. As in Studies 1 and 2, women completed more reports than men, $F(1, 118) = 4.85, p < .05, d = 0.41$. There was no racial/ethnic-by-gender interaction in the number of reports completed, $F(2, 118) = 0.63, ns, d = 0.14$.

The average proportion of cross-race interactions was 0.18 ($SD = 0.16$) among European Americans, 0.42 ($SD = 0.29$) among African Americans, and 0.51 ($SD = 0.29$) among Asian Americans. As expected, Asian and African American participants' daily interactions were more often intergroup than European Americans', $t_s > 4.68, p_s < .001, d_s > 1.03$. There was no difference between Asian Americans' and African Americans' proportion of cross-race contact, $t(85) = -1.38, ns, d = -0.30$. As in Studies 1 and 2, there were no gender differences in contact across groups, $M = 0.35$ for male and 0.42 for female participants, $t(126) = -1.16, ns, d = -0.21$.

Quality of social interactions. We next test whether the quality of everyday experience differs for cross-race and same-race encounters, using exactly the same analytic approach described in Studies 1 and 2. Again, gender did not have a significant main effect or moderate any of the dependent variables. Thus gender is not included as a Level 2 predictor in the following analyses.

General affect. Supporting Hypothesis 1b, European and African Americans both reported experiencing less PA in cross-race, compared to same-race, interactions. European, Asian, and African Americans all reported no difference in NA between cross-race and same-race encounters (see Table 2; see Table 1 for the descriptive statistics).

General felt understanding and misunderstanding. Replicating Study 1, European Asian and African Americans reported feeling less understood in cross-race, compared with same-race, encounters. None of the groups reported a difference in feeling misunderstood for cross-race and same-race encounters.

Specific felt understanding of the personal and collective self. Replicating Studies 1 and 2, European, Asian, and African Americans reported feeling that their personal and collective selves were less well understood in cross-race encounters, compared to same-race encounters.

In sum, African Americans' experience largely paralleled reports of European and Asian Americans. On the whole, all three groups reported feeling less well understood in cross-race than in same-race interactions, and all three groups felt that the personal and collective aspects of the self were less well understood in cross-race than in same-race interactions. European and African Americans also reported less PA in cross-race than same-race interactions. However, none of the groups reported a difference in the experience of NA or felt misunderstanding between cross-race and same-race interactions. Therefore, Study 3 also supports Hypothesis 1b.

Meta-Analysis

We conducted a meta-analysis to investigate the strength and consistency of our results across studies for European and Asian Americans. For the purpose of comparison, we include the weighted d score for African Americans. We followed Wolf's (1986) recommendation to calculate the unbiased weighted d score for each outcome variable and its corresponding homogeneity test to determine whether the d scores differed across studies. Table 3 shows that, for the most part, effect sizes were consistent between studies. The one exception was Asian American's reports of feeling as if their collective self was understood; the difference was greater in Study 1 than in Studies 2 and 3.

According to Cohen (1992), d scores of 0.2, 0.5, and 0.8 correspond to small, medium, and large effect sizes, respectively. Effect sizes for the difference between cross-race and same-race interactions tended to range from medium to large. In all three groups, the cross-race interactions were more strongly associated with a lack of positive affective qualities (PA, understanding) than with the presence of negative affective qualities (NA, misunderstanding). This conforms to Hypothesis 1b: cross-race contact is associated with less positivity but no more negativity. Overall, the effect size of cross-race interactions for NA and misunderstanding

Table 3
Meta-Analysis (Studies 1–3) That Tests Whether Effect Sizes Differ for Each Outcome Variable for European Americans and Asian Americans, Respectively

Dependent variable	European Americans	Asian Americans	African Americans
Weighted d (homogeneity test) p -value			
Positive affect	−0.44 (0.33)	−0.54 (5.25)	−0.85
Negative affect	0.31 (0.65)	0.25 (0.93)	0.29
Understanding	−0.52 (0.42)	−0.66 (3.08)	−1.05
Misunderstanding	0.39 (3.21)	0.42 (1.38)	0.02
Personal self	−0.82 (0.48)	−1.55 (4.96)	−0.86
Collective self	−0.89 (1.62)	−2.18 (7.19)*	−1.07

Note. There were 2 degrees of freedom for the homogeneity tests. Statistics for African Americans were only based on one study, and therefore are simply the weighted d score.

* $p < .05$.

was small to medium, whereas it was medium to large for PA and understanding.

General Discussion

Instances of intergroup conflict remain a visible part of our daily lives. However, mapping the affective topography of everyday cross-race interactions reveals that rather than being dominated by negativity, most cross-race contact simply lacks as much positive affect as same-race contact. In support of Hypothesis 1b, some aspects of cross-race encounters are less positive, but many times they resemble same-race encounters. The main difference is that European, Asian, and African Americans consistently report feeling less well understood in cross-race interactions than they do in same-race interactions. In one case, Asian Americans report feeling less positive affect in cross-race, compared with same-race, interactions. Importantly, none of the groups report feeling more negative affect in cross-race encounters than they do in same-race encounters. This effect appears in three different campus communities and across three racial/ethnic groups. Clearly some differences remain between cross-race and same-race encounters, but it is promising to note that they do not differ on every dimension, and especially that they do not differ on many of the negative dimensions.

Given the different pattern of results for understanding of the collective self, it may be important for researchers to consider the level of specificity in their measures. Past research investigating general feelings of satisfaction with a roommate relationship (e.g., Towles-Schwen & Fazio, 2006) and general affective experience (e.g., Mallett et al., 2008) found varying patterns of results. To discover potential discrepancies between cross-race and same-race interactions, we may need to ask specific questions. Doing so could provide a more detailed depiction of everyday intergroup interactions. For example, it would be interesting to know at what point in a relationship feeling understood by an cross-race friend increases (e.g., 1 month, 6 months) and the extent to which those feelings are related to positive affect and, perhaps, even to attitudes toward the friend's social group.

It would be useful to further investigate expectations of being understood or misunderstood in cross-race, compared with same-race interactions. It could be the case that people expect to feel less well understood by members of different social groups, compared with members of their own social group. There are at least two different ways of dealing with the expectation of intergroup misunderstanding. One way is to simply avoid intergroup interactions as much as possible or to selectively engage in intergroup interactions where one has more positive expectations of being understood or at least not misunderstood. A second way is to actively try to compensate for the potential misunderstanding and to increase understanding. For example, one might engage in specific behaviors such as highlighting aspects of the self that are likely misunderstood or pointing out the things that the two have in common to form understanding on a different dimension. Doing so could result in a positive experience (Mallett & Swim, 2005; Mallett et al., 2008).

It would also be informative to investigate whether the affective experience differs depending on the groups involved. In the present research, European, Asian, and African Americans could have been interacting with any racial group that differed from their own.

The amount of misunderstanding may vary depending on the group that was encountered. We know that stereotypes are used most when a person is a stranger (Gudykunst, 1989; Miller & Steinberg, 1975). Therefore, the stereotypes of people from other groups could have influenced the quality of the experience, especially if the length of acquaintance was short. For example, African Americans might feel more misunderstood by European Americans than by Asian Americans, because African and Asian Americans are both members of minority groups and have likely shared similar experiences as members of numerical minorities. This point needs to be clarified in the future.

Regarding generalizability, these studies relied on convenience samples of college students. The universities in Minnesota and Virginia are not very racially diverse, and our results could be different in places like California where European Americans experience a good deal of cross-race contact and Asian Americans experience more same-race contact. Given the unique racial history of the United States, it may be important to discover whether the results of these studies could be replicated in Canada, the Netherlands, or Japan. It may also be interesting to test whether we find similar results for different types of social groups such as religion (same-religion, cross-religion) and political orientation (same-party, cross-party). Furthermore, if there is more active intergroup conflict (e.g., Israel and Palestine), we will probably find more support for Hypothesis 1a than Hypothesis 1b.

Intergroup contact that has acquaintance potential is the most effective in improving intergroup relations (Pettigrew & Tropp, 2006). Our research investigates how mere acquaintances may become friends. Intergroup misunderstanding is likely to occur at the beginning of a relationship (e.g., Vorauer, 2005), but it is possible that the longer European, Asian, and African Americans know each other, the more likely they are to feel understood by each other. When we feel understood, feelings of intimacy and liking increase (Murray et al., 2002; Reis et al., 2004; Reis & Patrick, 1996; Reis & Shaver, 1988). Therefore, opportunities to increase mutual understanding and positive affect are likely important elements of contact situations.

Conclusion

Our data largely conform to Hypothesis 1b in that people experience more positive affect and understanding in same-race than cross-race interactions. Three studies demonstrate that on average, everyday cross-race interactions generate less positive affect and felt understanding than same-race interactions; however, cross-race interactions entail no more negative affect than same-race interactions. Given that nearly half of racial-minority group member's everyday interactions are cross-race, their daily encounters on campus tend to be less positive than those of racial-majority group members. Feeling less well understood by their peers may have implications for the sense that they belong on a college campus. Consistently feeling as if one's peers understand where one is coming from may signal acceptance and belonging. In comparison, feeling continually misunderstood by one's peers may cause people to wonder if they belong. A growing body of research shows that coming from underrepresented backgrounds (e.g., first-generation, racial minority) affects every stage of higher education from choosing a major to staying in school and achieving high

grades (Stephens, Hamedani, & Destin, in press; Walton & Cohen, 2007).

Moreover, research on social baseline theory shows that compared with feeling understood, an experimentally induced feeling of being misunderstood makes painful experiences more painful (Oishi, Schiller, & Gross, 2012). Felt misunderstanding works, in part, by enhancing vigilance to potential signs of danger and reducing perceived efficacy. By extension, feeling misunderstood by one's cross-race peers may cause people to see cross-race contact as more challenging and depleting than same-race contact. It may also lower the amount of resources that one has to deal with stressful everyday college experiences (e.g., exams). However, getting to know people across group boundaries may reduce the difference between racial-minority and majority group members' daily affective experiences. In doing so, cross-race acquaintanceship may also increase the sense that one belongs and can succeed on campus.

References

- Allport, G. W. (1954). *The nature of prejudice*. Reading, MA: Addison Wesley.
- Brewer, M. B. (1999). The psychology of prejudice: Ingroup love or outgroup hate. *Journal of Social Issues*, 55, 429–444. <http://dx.doi.org/10.1111/0022-4537.00126>
- Butz, D. A., & Plant, E. A. (2006). Perceiving outgroup members as unresponsive: Implications for approach-related emotions, intentions, and behavior. *Journal of Personality and Social Psychology*, 91, 1066–1079. <http://dx.doi.org/10.1037/0022-3514.91.6.1066>
- Cohen, J. (1992). A power primer. *Psychological Bulletin*, 112, 155–159. <http://dx.doi.org/10.1037/0033-2909.112.1.155>
- Diener, E., & Emmons, R. A. (1984). The independence of positive and negative affect. *Journal of Personality and Social Psychology*, 47, 1105–1117. <http://dx.doi.org/10.1037/0022-3514.47.5.1105>
- Feldman Barrett, L., & Russell, J. A. (1998). Independence and bipolarity in the structure of current affect. *Journal of Personality and Social Psychology*, 74, 967–984. <http://dx.doi.org/10.1037/0022-3514.74.4.967>
- Gaertner, S. L., & Dovidio, J. F. (1986). The aversive form of racism. In J. F. Dovidio & S. L. Gaertner (Eds.), *Prejudice, discrimination, and racism* (pp. 61–89). Orlando, FL: Academic Press.
- Glick, P., & Fiske, S. T. (1997). Hostile and benevolent sexism: Measuring ambivalent sexist attitudes toward women. *Psychology of Women Quarterly*, 21, 119–135. <http://dx.doi.org/10.1111/j.1471-6402.1997.tb00104.x>
- Greenwald, A. G., & Pettigrew, T. F. (2014). With malice toward none and charity for some: Ingroup favoritism enables discrimination. *American Psychologist*, 69, 669–684. <http://dx.doi.org/10.1037/a0036056>
- Gudykunst, W. B. (1989). Culture and communication in interpersonal relationships. In J. Anderson (Ed.), *Communication yearbook* (Vol. 12, pp. 315–354). Newbury Park, CA: Sage.
- Hecht, M. L., Ribeau, S., & Alberts, J. K. (1989). An Afro-American perspective on interethnic communication. *Communication Monographs*, 56, 385–410. <http://dx.doi.org/10.1080/03637758909390271>
- Herek, G. M., & Capitanio, J. P. (1996). "Some of my best friends:" Intergroup contact, concealable stigma, and heterosexuals' attitudes toward gay men and lesbians. *Personality and Social Psychology Bulletin*, 22, 412–424. <http://dx.doi.org/10.1177/0146167296224007>
- Katz, I., & Hass, R. G. (1988). Racial ambivalence and American value conflict: Correlational and priming studies of dual cognitive structures. *Journal of Personality and Social Psychology*, 55, 893–905. <http://dx.doi.org/10.1037/0022-3514.55.6.893>
- Kenny, D. A., Kashy, D. A., & Bolger, N. (1998). Data analysis in social psychology. In D. T. Gilbert, S. T. Fiske, & G. Lindzey (Eds.), *The handbook of social psychology* (4th ed., Vol. 1, pp. 233–265). Boston, MA: McGraw-Hill.
- Kinder, D. R., & Sears, D. O. (1981). Prejudice and politics: Symbolic racism versus racial threats to the good life. *Journal of Personality and Social Psychology*, 40, 414–431. <http://dx.doi.org/10.1037/0022-3514.40.3.414>
- Lun, J., Oishi, S., Coan, J. A., Akimoto, S., & Miao, F. F. (2010). Cultural variations in motivational responses to felt misunderstanding. *Personality and Social Psychology Bulletin*, 36, 986–996. <http://dx.doi.org/10.1177/0146167210362979>
- Mallett, R. K., & Swim, J. K. (2005). Bring it on: Self-protective coping by targets of discrimination. *Motivation and Emotion*, 29, 407–441. <http://dx.doi.org/10.1007/s11031-006-9014-0>
- Mallett, R. K., Wilson, T. D., & Gilbert, D. T. (2008). Expect the unexpected: Failure to anticipate similarities leads to an intergroup forecasting error. *Journal of Personality and Social Psychology*, 94, 265–277. <http://dx.doi.org/10.1037/0022-3514.94.2.265>
- McConahay, J. (1986). Modern racism, ambivalence, and the Modern Racism scale. In J. Dovidio (Ed.), *Prejudice, discrimination, and racism* (pp. 91–125). San Diego, CA: Academic Press.
- Miller, G. R., & Steinberg, M. (1975). *Between people*. Chicago, IL: Science Research Associates.
- Murray, S. L., Holmes, J. G., Bellavia, G., Griffin, D. W., & Dolderman, D. (2002). Kindred spirits? The benefits of egocentrism in close relationships. *Journal of Personality and Social Psychology*, 82, 563–581. <http://dx.doi.org/10.1037/0022-3514.82.4.563>
- Oishi, S., Koo, M., & Akimoto, S. (2008). Culture, interpersonal perceptions, and happiness in social interactions. *Personality and Social Psychology Bulletin*, 34, 307–320. <http://dx.doi.org/10.1177/0146167207311198>
- Oishi, S., Krochik, M., & Akimoto, S. (2010). Felt understanding as a bridge between close relationships and subjective well-being: Antecedents and consequences across individuals and cultures. *Social and Personality Psychology Compass*, 4, 403–416. <http://dx.doi.org/10.1111/j.1751-9004.2010.00264.x>
- Oishi, S., Lun, J., & Sherman, G. D. (2007). Residential mobility, self-concept, and positive affect in social interactions. *Journal of Personality and Social Psychology*, 93, 131–141. <http://dx.doi.org/10.1037/0022-3514.93.1.131>
- Oishi, S., Miao, F., & Krochik, M. (2007, August). *Understanding and misunderstanding across cultures: An interview study*. Paper presented at the Stanford Cultural Psychology Conference, Stanford University, Palo Alto, CA.
- Oishi, S., Schiller, J., & Gross, E. B. (2013). Felt understanding and misunderstanding affect the perception of pain, slant, and distance. *Social Psychological & Personality Science*, 4, 259–266. <http://dx.doi.org/10.1177/1948550612453469>
- Ong, A. D., Burrow, A. L., Fuller-Rowell, T. E., Ja, N. M., & Sue, D. W. (2013). Racial microaggressions and daily well-being among Asian Americans. *Journal of Counseling Psychology*, 60, 188–199. <http://dx.doi.org/10.1037/a0031736>
- Paolini, S., Hewstone, M., Cairns, E., & Voci, A. (2004). Effects of direct and indirect cross-group friendships on judgments of Catholics and Protestants in Northern Ireland: The mediating role of an anxiety-reduction mechanism. *Personality and Social Psychology Bulletin*, 30, 770–786. <http://dx.doi.org/10.1177/0146167203262848>
- Pettigrew, T. F. (1997). Generalized intergroup contact effects on prejudice. *Personality and Social Psychology Bulletin*, 23, 173–185. <http://dx.doi.org/10.1177/0146167297232006>
- Pettigrew, T. F. (1998). Intergroup contact theory. *Annual Review of Psychology*, 49, 65–85. <http://dx.doi.org/10.1146/annurev.psych.49.1.65>

- Pettigrew, T. F., & Tropp, L. R. (2006). A meta-analytic test of intergroup contact theory. *Journal of Personality and Social Psychology*, 90, 751–783. <http://dx.doi.org/10.1037/0022-3514.90.5.751>
- Raudenbush, S. W., Bryk, A. S., Cheong, Y. F., & Congdon, R. (2001). *HLM5: Hierarchical linear and nonlinear modeling* (2nd ed.). Chicago, IL: Scientific Software International.
- Reis, H. T., Clark, M. S., & Holmes, J. G. (2004). Perceived partner responsiveness as an organizing construct in the study of intimacy and closeness. In D. J. Mashek & A. P. Aron (Eds.), *Handbook of closeness and intimacy* (pp. 201–225). Mahwah, NJ: Erlbaum.
- Reis, H. T., & Gable, S. L. (2000). Event-sampling and other methods for studying everyday experience. In H. T. Reis & C. M. Judd (Eds.), *Handbook of research methods in social and personality psychology* (pp. 190–222). Cambridge, UK: Cambridge University Press.
- Reis, H. T., & Patrick, B. C. (1996). Attachment and intimacy: Component processes. In E. T. Higgins & A. Kruglanski (Eds.), *Social psychology: Handbook of basic principles* (pp. 523–563). New York, NY: Guilford Press.
- Reis, H. T., & Shaver, P. (1988). Intimacy as an interpersonal process. In S. W. Duck (Ed.), *Handbook of personal relationships* (pp. 367–389). Chichester, UK: Wiley.
- Richeson, J. A., & Trawalter, S. (2005). Why do interracial interactions impair executive function? A resource depletion account. *Journal of Personality and Social Psychology*, 88, 934–947. <http://dx.doi.org/10.1037/0022-3514.88.6.934>
- Schimmack, U., Böckenholt, U., & Reisenzein, R. (2002). Response styles in affect ratings: Making a mountain out of a molehill. *Journal of Personality Assessment*, 78, 461–483. http://dx.doi.org/10.1207/S15327752JPA7803_06
- Schimmack, U., Oishi, S., Diener, E., & Suh, E. (2000). Facets of affective experiences: A Framework for investigations of trait affect. *Personality and Social Psychology Bulletin*, 26, 655–668. <http://dx.doi.org/10.1177/0146167200268002>
- Seligman, M. E. P., & Csikszentmihalyi, M. (2000). Positive psychology. An introduction. *American Psychologist*, 55, 5–14. <http://dx.doi.org/10.1037/0003-066X.55.1.5>
- Shelton, J. N. (2003). Interpersonal concerns in social encounters between majority and minority group members. *Group Processes & Intergroup Relations*, 6, 171–185. <http://dx.doi.org/10.1177/1368430203006002003>
- Shelton, J. N., & Richeson, J. A. (2005). Intergroup contact and pluralistic ignorance. *Journal of Personality and Social Psychology*, 88, 91–107. <http://dx.doi.org/10.1037/0022-3514.88.1.91>
- Shelton, J. N., & Richeson, J. A. (2006). Ethnic minorities' racial attitudes and contact experiences with white people. *Cultural Diversity & Ethnic Minority Psychology*, 12, 149–164.
- Shelton, J. N., Richeson, J. A., & Salvatore, J. (2005). Expecting to be the target of prejudice: Implications for interethnic interactions. *Personality and Social Psychology Bulletin*, 31, 1189–1202. <http://dx.doi.org/10.1177/0146167205274894>
- Sherif, M., Harvey, O. J., White, J., Hood, W., & Sherif, C. W. (1961). *Intergroup conflict and cooperation: The robbers cave experiment*. Norman, OK: University Book Exchange.
- Stephens, N. M., Hamedani, M. G., & Destin, M. (in press). Closing the social class achievement gap: A diversity education intervention improves first-generation students' academic performance and all students' college transition. *Psychological Science*.
- Sue, S., & Okazaki, S. (1990). Asian-American educational achievements. A phenomenon in search of an explanation. *American Psychologist*, 45, 913–920. <http://dx.doi.org/10.1037/0003-066X.45.8.913>
- Swim, J. K., Hyers, L. L., Cohen, L. L., Fitzgerald, D. F., & Bylsma, W. B. (2003). African American college students' experiences with everyday anti-black racism: Characteristics of and responses to these incidents. *Journal of Black Psychology*, 29, 38–67. <http://dx.doi.org/10.1177/0095798402239228>
- Takaki, R. (1989). *Strangers from a different shore: A history of Asian Americans*. New York, NY: Penguin Books.
- Toosi, N. R., Babbitt, L. G., Ambady, N., & Sommers, S. R. (2012). Dyadic interracial interactions: A meta-analysis. *Psychological Bulletin*, 138, 1–27. <http://dx.doi.org/10.1037/a0025767>
- Towles-Schwen, T., & Fazio, R. H. (2006). Automatically activated racial attitudes as predictors of the success of interracial roommate relationships. *Journal of Experimental Social Psychology*, 42, 698–705. <http://dx.doi.org/10.1016/j.jesp.2005.11.003>
- Trail, T. E., Shelton, J. N., & West, T. V. (2009). Daily interracial interactions and interpersonal behaviors. *Personality and Social Psychology Bulletin*, 35, 671–684. <http://dx.doi.org/10.1177/0146167209332741>
- U.S. Census Bureau. (2012, April). *Households and families: 2010*. Retrieved from <http://www.census.gov/prod/cen2010/briefs/c2010br-14.pdf>
- Van Laar, C., Levin, S., Sinclair, S., & Sidanius, J. (2005). The effect of university roommate contact on ethnic attitudes and behavior. *Journal of Experimental Social Psychology*, 41, 329–345. <http://dx.doi.org/10.1016/j.jesp.2004.08.002>
- Vorauer, J. D. (2005). Miscommunications surrounding efforts to reach out across group boundaries. *Personality and Social Psychology Bulletin*, 31, 1653–1664. <http://dx.doi.org/10.1177/0146167205277808>
- Vorauer, J. D., & Sakamoto, Y. (2006). I thought we could be friends, but . . . : Systematic miscommunication and defensive distancing as obstacles to cross-group friendship formation. *Psychological Science*, 17, 326–331. <http://dx.doi.org/10.1111/j.1467-9280.2006.01706.x>
- Walton, G. M., & Cohen, G. L. (2007). A question of belonging: Race, social fit, and achievement. *Journal of Personality and Social Psychology*, 92, 82–96. <http://dx.doi.org/10.1037/0022-3514.92.1.82>
- Watson, D., Wiese, D., Vaidya, J., & Tellegen, A. (1999). The two general activation systems of affect: Structural findings, evolutionary considerations, and psychobiological evidence. *Journal of Personality and Social Psychology*, 76, 820–838. <http://dx.doi.org/10.1037/0022-3514.76.5.820>
- Wheeler, L., Reis, H. T., & Bond, M. H. (1989). Collectivism-individualism in everyday social life: The Middle Kingdom and the melting pot. *Journal of Personality and Social Psychology*, 57, 79–86. <http://dx.doi.org/10.1037/0022-3514.57.1.79>
- Wolf, F. M. (1986). *Meta-analysis: Quantitative methods for research synthesis*. Beverly Hills, CA: Sage.
- Wright, S. C., Aron, A., McLaughlin-Volpe, T., & Ropp, S. A. (1997). The extended contact effect: Knowledge of cross-group friendships and prejudice. *Journal of Personality and Social Psychology*, 73, 73–90. <http://dx.doi.org/10.1037/0022-3514.73.1.73>
- Ziegler, S. A., Kirby, T. A., Xu, K., & Greenwald, A. G. (2013, January). *Implicit race attitudes predict vote in the 2012 presidential election*. Poster presented at the Political Psychology Preconference of the Annual Meeting of the Society for Personality and Social Psychology, New Orleans, LA.