

Perceived Discrimination and Interracial Contact: Predicting Interracial Closeness among Black and White Americans*

LINDA R. TROPP

University of Massachusetts, Amherst

This research examines whether perceptions of discrimination moderate relationships between interracial contact and feelings of interracial closeness among black and white Americans, using survey responses gathered by the National Conference for Community and Justice (2000). Results indicate that the general association between contact and interracial closeness is significantly weaker among black respondents than among white respondents. Moreover, while contact relates consistently to greater interracial closeness among white respondents, perceived discrimination moderates this relationship among black respondents, such that significant contact effects are not observed for those who perceive considerable discrimination against their racial group. At the same time, other results suggest that contact in the form of interracial friendships may help to augment black Americans' reports of interracial closeness, and diminish the role of perceived discrimination. Implications of these findings for future studies of contact between members of racial minority and majority groups are discussed.

Although the effects of interracial contact have been debated for several decades (see Allport 1954; Jackman and Crane 1986; Pettigrew and Tropp 2006), a growing body of research suggests that interracial contact can promote positive orientations toward members of other racial groups. Findings from cross-sectional (Ellison and Powers 1994; Sigelman and Welch 1993) and longitudinal (Levin, van Laar, and Sidanius 2003) studies provide converging evidence that interracial contact fosters positive feelings across group boundaries. Moreover, a recent meta-analysis of hundreds of contact studies (Pettigrew and Tropp 2006) shows a significant association between interracial contact and positive attitudes that is enhanced by the most rigorous research studies.

Despite this extensive literature, few studies have investigated whether contact can promote positive interracial orientations among members of both racial minority and majority groups. As with many areas of research, prior contact studies have assumed that the same basic psychological processes underlie contact effects for members of different racial groups (see Hunt et al. 2000). Thus, research on interracial contact has tended to neglect the perspectives of racial minority groups (Ellison and Powers 1994; Forman and Rodriguez 2003), and researchers have only begun to stress the importance of examining contact effects for people on both sides of the interracial relationship (see Sigelman and Welch 1993).

Though limited in number, such studies suggest that the positive effects of contact may be more modest for members of racial minority groups than for members of racial majority groups (see Ellison and Powers 1994; Forman and Rodriguez 2003). Examining these trends using meta-analytic procedures confirms that contact effects are significantly weaker for racial minority groups than for racial majority groups, even after a range of methodological variables have been controlled (Tropp and Pettigrew 2005a). Still, little is known regard-

* Portions of the research reported in this paper were presented at the 2004 Claremont Symposium on Applied Social Psychology: *Stigma and Group Inequality*. Special thanks to Renae Cohen for her assistance in providing access to survey data collected by the National Conference for Community and Justice. Correspondence regarding this manuscript may be sent to: Linda R. Tropp, Department of Psychology, Tobin Hall, 135 Hicks Way, University of Massachusetts, Amherst, MA 01003; tropp@psych.umass.edu.

ing the psychological mechanisms that might account for these divergent patterns of responses (Sigelman and Welch 1993), and more work is needed to examine the perceptions and experiences that contribute to minority and majority group members' views of relations between their groups (Bobo and Fox 2003).

In part, some researchers have proposed that contact effects tend to be weaker among members of racial minority groups because they are more likely to come into contact with members of the racial majority group (see Butler and Wilson 1978; Forman and Rodriguez 2003; Sigelman and Welch 1993). At the same time, researchers have importantly noted that perceptions and experiences associated with contact also differ qualitatively for members of racial minority and majority groups. For example, within the context of black-white relations, a number of studies show that black and white Americans sharply differ in their views of interracial relations (Gallup Organization 2001; Kluegel and Bobo 2001), with most black Americans perceiving substantial discrimination against their racial group (Sigelman and Welch 2001). Indeed, racial discrimination continues to play a significant role in the lives of black Americans (see Feagin 1991), and the persistent recognition of discrimination is likely to worsen how members of racial minority groups feel toward the racial majority group (see Tropp 2003). Consistent with this view, other work suggests that perceptions of discrimination often contribute to predicting racial minority group members' interracial attitudes, while such perceptions are generally unrelated to interracial attitudes among members of the racial majority group (see Alexander, Brewer, and Livingston 2005; Monteith and Spicer 2000).

These trends suggest that perceived discrimination is often a defining feature of the interracial relationship among members of racial minority groups, while perceived discrimination is less likely to be considered relevant among members of the racial majority group. As such, perceptions of discrimination may inhibit the extent to which contact could promote positive feelings toward the racial majority among members of racial minority

groups, while it would be unlikely to curb contact effects among members of the racial majority group. Thus, a central goal of the present research is to test whether perceived discrimination moderates the relationship between interracial contact and positive interracial orientations for members of a racial minority group (i.e., black Americans), yet not for members of a racial majority group (i.e., white Americans).

This research will also consider whether these patterns of prediction vary depending on the nature of the interracial contact. Recent work suggests that, relative to more general forms of contact, contact in the form of interracial friendships can be especially effective in promoting positive interracial attitudes among members of racial minority and majority groups (Ellison and Powers 1994; Levin et al. 2003; Pettigrew 1997; Sigelman and Welch 1993). Interracial friendships have also been shown to enhance positive feelings toward the racial majority group among minority group members who have been exposed to racial prejudice (Tropp 2003). Thus, perceived discrimination may play a less prominent role in predicting interracial orientations when minority group members have interracial friendships, as these relationships would offer positive interracial experiences that could serve to inform their feelings toward the racial majority group as a whole.

In sum, the present research examines relationships between interracial contact, interracial closeness, and perceived discrimination among members of racial minority and majority groups (i.e., black and white Americans). Consistent with recent meta-analytic findings (Tropp and Pettigrew 2005a), interracial contact should generally be associated with greater interracial closeness, yet this association should be stronger among white Americans than among black Americans. Extending prior work, I also predict that perceived discrimination will moderate the relationship between interracial contact and closeness among black Americans, while such moderation will not be observed among white Americans. Moreover, I expect that perceived discrimination will become less useful for predicting interracial closeness when contact

involves interracial friendships, as compared to when more general forms of interracial contact are considered.

METHODS

Sample

To test these predictions, data will be analyzed from the *Taking America's Pulse* survey, sponsored by the National Conference for Community and Justice (NCCJ 2000). Between January and March 2000, responses to the NCCJ survey were gathered through telephone interviews, comprised of a nationally representative sample of over 2,000 adults in the continental United States. Although these data are cross-sectional and thereby limit our ability to examine causal relationships, a particular strength of this dataset is its inclusion of responses to the many variables of interest among large samples of racial minority and majority group members. Oversamples of racial minority respondents were drawn, such that the sample included responses from 995 non-Hispanic white Americans and 709 non-Hispanic black Americans (final response rate: 38.1%).¹ Analyses of these data use sample weights that take into account demographic characteristics of each racial sample, as well as variations in selection probabilities associated with the sampling procedures (see NCCJ 2000 for a more detailed description of weighting procedures). Responses from Hispanic American and Asian American respondents will not be examined in the present paper, as substantially smaller numbers of responses to the variables of interest were gathered from members of these groups.

Demographic Characteristics of Samples

As part of this survey, black and white respondents answered a number of demographic indicators, which will be used as controls in data analysis. Specifically, respondents were asked to report their age, gender, highest level of education, family income, political

ideology, and religiosity; their census region was also recorded (see Hughes and Tuch 2003; Kinder and Sanders 1996; Kluegel and Smith 1986).² Ranges and proportions of responses to these measures for black and white respondents are summarized in Table 1. Dichotomous codings are used to represent respondent race (white = 1), respondent gender (female = 1), and respondent geographical region (south = 1). Less than 1.5% of each racial sample provided no response to questions regarding age, gender, level of education, religiosity, and region. However, greater proportions of respondents offered no response to questions about their family income (8.9% of black respondents and 7.6% of white respondents) and political ideology (5.7% of black respondents and 3.3% of white respondents). For these two variables, sample means were substituted for respondents' missing values, in order to preserve as many cases as possible for data analysis (see Ellison and Powers 1994 for similar procedures); specifically, black sample means were substituted for black respondents, and white sample means were substituted for white respondents, since the respective responses tended to differ on these two variables.³

Overall, white respondents reported higher levels of education (mean = 4.79) than black respondents (mean = 4.08), $t(1694) = -8.83$, $p < .001$. White respondents also tended to report higher family incomes (mean = 4.48) than black respondents (mean = 3.63), $t(1702) = -10.39$, $p < .001$. By contrast, black respondents typically reported more liberal political attitudes (mean = 3.02) than white respondents (mean = 2.82), $t(1702) = 4.04$, $p < .001$. Black respondents also reported greater religiosity (mean = 3.27) relative to white respondents (mean = 2.91), $t(1690) = 6.13$, $p < .001$.

² Responses to the religiosity item have been reverse scored, so that higher scores correspond with more regular attendance of religious services (i.e., greater religiosity). Additionally, region was converted into a dichotomous south/non-south variable as has been done in other research (see Hughes and Tuch 2003).

³ Supplementary analyses revealed that patterns of results reported in this paper were identical, irrespective of whether the missing cases were or were not included.

¹ For the remainder of this paper, the term "white" will be used to refer to non-Hispanic white American respondents, and the term "black" will be used to refer to non-Hispanic black American respondents.

Table 1. Ranges and Proportions for Demographic Indicators Among Black and White Respondents

Variable	Range	Value	Proportion of Respondents	
			Black	White
Age	18-97	18-25	0.8%	10.0%
		26-40	31.6	31.3
		41-65	38.5	44.6
		66 or older	9.1	14.1
			100.0%	100.0%
Gender	0-1	Male	44.3%	48.4%
		Female	55.7	51.6
			100.0%	100.0%
Level of Education	1-7	8th grade or less	3.1%	1.5%
		Some high school	12.9	6.6
		High school degree	32.0	24.3
		Vocational/technical training	4.6	3.2
		Some college/university	27.2	25.7
		College/university degree	13.0	21.1
		Graduate/professional training	7.2	17.6
			100.0%	100.0%
Family Income	1-7	Less than \$10,000	12.4%	4.1%
		Between \$10,000 and \$20,000	15.2	10.1
		Between \$20,000 and \$30,000	19.5	15.2
		Between \$30,000 and \$40,000	21.1	20.3
		Between \$40,000 and \$60,000	14.4	19.1
		Between \$60,000 and \$100,000	13.0	20.2
		\$100,000 or more	4.4	11.0
	100.0%	100.0%		
Political Ideology	1-5	Very Conservative	5.9%	7.2%
		Conservative	21.5	30.8
		Moderate	45.2	40.3
		Liberal	19.5	15.3
		Very Liberal	7.9	6.4
		100.0%	100.0%	
Religiosity	1-5	Do not attend religious services	8.5%	19.7%
		Attend services several times a year	19.6	20.0
		Attend services about once a month	16.0	13.5
		Attend services about once a week	47.8	43.4
		Attend services daily	8.1	3.5
		100.0%	100.0%	
Region	0-1	Non-South	46.8%	55.5%
		South	53.2	44.5
			100.0%	100.0%

Measures of Independent and Dependent Variables

Relevant to the present analysis, respondents reported their contact experiences and feelings of closeness with respect to a number of groups. Reported contact with and closeness to blacks were used as indicators of interracial contact and attitudes among white

respondents. Similarly, reported contact with and closeness to whites were used as indicators of interracial contact and attitudes among black respondents.

Interracial contact

Respondents provided yes or no responses to two items regarding interracial contact. As a

general contact measure, participants first indicated whether they “now have contact or not with a person who is (white/black).” As a measure of close contact, only those respondents who reported having contact then indicated whether they “have contact with a (white/black) as a good friend.” Chi-square analyses revealed that black and white respondents did not meaningfully differ in the extent to which they reported having interracial contact, $\chi^2(1) = 2.01, p = .16$, or having a good friend in the racial outgroup, $\chi^2(1) = .04, p = .84$.

Interracial closeness

Respondents also reported generally “how close they feel to (whites/blacks)” with reverse-coded responses ranging from 1 (very far) to 5 (very close). Generalized feelings of closeness can be especially useful for assessing interracial attitudes, as affective indicators of attitudes typically show stronger relationships with contact than do other kinds of indicators (see Jackman and Crane, 1986; Tropp and Pettigrew, 2005b). Mean comparisons showed that black and white respondents did not significantly differ in their overall reports of interracial closeness (means = 3.68 and 3.63, respectively), $t(1654) = 1.24, p = .21$.⁴

Perceived discrimination

Additionally, respondents reported “how much discrimination there is against (whites/blacks) in our society today,” with reverse-coded responses ranging from 1 (none at all) to 4 (a great deal). Preliminary analyses showed that black respondents generally perceived more discrimination against their group

(mean = 3.43) than white respondents (mean = 2.37), $t(1691) = 24.89, p < .001$.

RESULTS

Data were analyzed in three stages.⁵ First, bivariate and partial correlations examined relationships between interracial contact, closeness, and perceived discrimination among black and white respondents. A hierarchical regression analysis then tested whether the relationship between interracial contact and closeness varies among black and white respondents, and whether perceived discrimination moderates this relationship. Finally, using only those respondents who reported having interracial contact, a separate hierarchical regression analysis examined whether the relationship between intergroup friendship and closeness varies among black and white respondents, and whether this relationship is moderated by perceived discrimination.

Relationships between Interracial Contact, Closeness, and Perceived Discrimination

Bivariate correlations between respondents' reports of interracial contact, closeness, perceived discrimination, and the demographic variables are presented in Table 2. Since relationships between interracial contact and closeness, and perceived discrimination and closeness, are of particular interest in the present research, these correlations have been examined both with and without controlling for age, gender, level of education, family income, political ideology, religiosity, and region.

Interracial contact was generally associated with greater reports of interracial closeness among black and white respondents. However, as predicted, the relationship between interracial contact and closeness was substantially weaker among black respondents, $r = .078$, *partial* $r = .069, p < .05$, relative to the relationship observed for white respondents, $r = .223$, *partial* $r = .238, p < .001, z = -2.98, p < .01$. Moreover, greater perceptions of discrimination corresponded with significantly less

⁴ Consistent with some earlier research (see Johnson and Marini 1998; Schuman, Steeh, Bobo, and Krysan 1997), female respondents generally reported greater interracial closeness (mean = 3.71) than male respondents (mean = 3.57), $F(1,1652) = 9.49, p < .01$. Interestingly, a Respondent Race \times Respondent Gender interaction also emerged, $F(1,1652) = 4.18, p = .04$. Among white respondents, females reported greater interracial closeness than males (mean = 3.73 and 3.52, respectively), $t(966) = -3.98, p < .001$; however, no significant difference between males and females emerged among black respondents (mean = 3.65 and 3.70, respectively), $t(686) = -.68, p = .50$.

⁵ For all analyses in this paper, two-tailed tests of statistical significance will be used.

Table 2. Correlations Between Measures of Interracial Contact, Interracial Closeness, Perceived Discrimination, and Demographic Variables Among Black and White Respondents

	Black		White		1	2	3	4	5	6	7	8	9	10
	Mean	(SD)	Mean	(SD)										
1. Age	40.81	(15.93)	46.06	(16.36)	—	.069	.070	-.001	.039	.061	-.020	-.146***	.003	.007
2. Gender	.56	(.50)	.52	(.50)	.055	—	.026	-.217***	-.038	.158***	.085*	-.004	.026	-.039
3. Level of Education	4.08	(1.60)	4.79	(1.65)	-.033	-.036	-.026	.430***	.164**	.122***	-.025	.180***	-.011	.201***
4. Family Income	3.63	(1.69)	4.48	(1.64)	-.046	-.119***	.354***	—	.074*	.041	-.069	.192***	.021	.110**
5. Political Ideology	3.02	(.98)	2.82	(.99)	-.110***	.016	.069*	-.007	—	-.111**	-.121***	-.014	-.007	.042
6. Religiosity	3.27	(1.12)	2.91	(1.25)	.115***	.133***	.024	.044	-.283***	—	.170***	.058	.053	.018
7. Region	.53	(.50)	.45	(.50)	-.006	.006	.133***	-.047	-.120***	.140***	—	-.039	.082*	-.105**
8. Interracial Contact	.91	(.29)	.89	(.31)	-.154***	-.011	.065*	.136***	.020	.022	.073*	—	.078*	.064
9. Interracial Closeness	3.68	(.82)	3.63	(.83)	.026	.127***	.002	-.044	.053	.088**	.030	.223***	—	-.116**
10. Perceived Discrimination	3.43	(.76)	2.37	(.93)	.062	.047	.187***	-.110***	-.154***	.021	.072*	.053	.031	—

Note. Correlations for black respondents are listed above the diagonal, and correlations for white respondents are listed below the diagonal.

* $p < .05$; ** $p < .01$; *** $p < .001$

interracial closeness among black respondents, $r = -.116$, *partial* $r = -.104$, $p < .01$, while no significant relationship between perceived discrimination and interracial closeness was observed among white respondents, $r = .031$, *partial* $r = .036$, $p > .30$, $z = -2.95$, $p < .01$. Additionally, the relationship between interracial contact and perceived discrimination was not significant either for black or white respondents, $r = .064$ and $.053$, respectively, $p > .05$.

Contact, Race, and Discrimination as Predictors for Interracial Closeness

A hierarchical least squares regression analysis then examined whether perceived discrimination moderates the relationship between interracial contact and closeness among black respondents, while such moderation would not be observed among white respondents. Age, gender, level of education, family income, political ideology, religiosity, and region were entered as predictors for interracial closeness at the first stage of analysis to control for potential effects of the demographic variables. Interracial contact, respondent race, and perceived discrimination (centered) were then entered as individual predictors at

the second stage. The two-way interaction between interracial contact and respondent race was entered at the third stage, to test whether it could account for variance in interracial closeness beyond that accounted for at the first two stages, thereby replicating trends from other recent research (see Sigelman and Welch, 1993; Tropp and Pettigrew, 2005a). Finally, the three-way interaction between intergroup contact, respondent race, and perceived discrimination was entered at the fourth stage to test whether the three-way interaction could account for a significant portion of variance in interracial closeness, beyond that accounted for by the two-way interaction at the third stage.

Table 3 summarizes the results from this analysis. The regression model was significant at Step 1, $R^2 = .016$, $F_{change}(7, 1616) = 3.715$, $p < .01$. Gender emerged as a significant predictor for interracial closeness, such that women tended to report greater closeness than men. Political ideology and religiosity were also significant predictors, such that respondents with more liberal political attitudes and greater religiosity tended to report greater interracial closeness. At Step 2, only interracial contact emerged as a significant predictor,

Table 3. Summary of Hierarchical Regression Analysis Using Interracial Contact, Respondent Race, and Perceived Discrimination as Predictors for Interracial Closeness

Predictor Variables	Step 1			Step 2			Step 3			Step 4		
	<i>B</i>	(<i>SE</i>)	β	<i>B</i>	(<i>SE</i>)	β	<i>B</i>	(<i>SE</i>)	β	<i>B</i>	(<i>SE</i>)	β
Age	.000	(.001)	.004	-.002	(.001)	.032	.002	(.001)	.032	.002	(.001)	.032
Gender	.124	(.042)	.074***	.117	(.042)	.070**	.118	(.041)	.071**	.116	(.042)	.070**
Level of Education	-.005	(.014)	-.009	-.008	(.014)	-.016	-.007	(.014)	-.014	-.003	(.014)	-.006
Family Income	-.002	(.013)	-.004	-.013	(.013)	-.027	-.012	(.013)	-.025	-.011	(.013)	-.023
Political Ideology	.045	(.021)	.053*	.039	(.021)	.047	.038	(.021)	.045	.040	(.021)	.048
Religiosity	.047	(.018)	.068*	.041	(.018)	.059*	.042	(.018)	.061*	.043	(.018)	.062*
Region	.070	(.042)	.042	.061	(.041)	.037	.055	(.041)	.033	.052	(.041)	.031
Interracial Contact				.501	(.071)	.176***	.238	(.117)	.084*	.241	(.117)	.085*
Respondent Race				-.032	(.051)	-.019	-.405	(.142)	-.240**	-.475	(.146)	-.282***
Perceived Discrimination				-.031	(.024)	-.038	-.032	(.024)	-.038	-.088	(.037)	-.107*
Contact \times Race							.407	(.145)	.245**	.456	(.146)	.274**
Contact \times Race \times Discrim										.097	(.049)	.081*
$R^2_{Cumulative}$.016**			.046***			.050**			.053*
F_{Change}			3.715**			16.791***			7.949**			4.016*

Note. *B* = raw regression coefficient; *SE* = standard error of *B*; β = standardized regression coefficient.

* $p < .05$; ** $p < .01$; *** $p < .001$

contributing to a significant R^2 increment, $R^2_{change} = .030$, $F_{change}(3, 1613) = 16.791$, $p < .001$; levels of interracial closeness were generally higher among those who reported having contact than among those who did not have contact. Interracial contact remained a significant predictor at Step 3, while the two-way contact \times race interaction term also emerged as a significant predictor for interracial closeness, $R^2_{change} = .005$, $F_{change}(1, 1612) = 7.949$, $p < .01$. To interpret this interaction, supplementary regressions were conducted separately for black and white respondents, with the demographic variables entered at Step 1, and the interracial contact variable entered at Step 2. These analyses showed that, after controlling for the demographic variables, contact only marginally predicted interracial closeness among black respondents, $\beta = .072$, $R^2_{change} = .005$, $F_{change}(1, 666) = 3.25$, $p = .07$, while contact was a much stronger predictor for interracial closeness among white respondents, $\beta = .240$, $R^2_{change} = .055$, $F_{change}(1, 948) = 56.91$, $p < .001$.

At the fourth stage, the two-way interaction term remained significant, at the same time as the three-way contact \times race \times discrimination interaction term emerged as a significant predictor for interracial closeness, $R^2_{change} = .002$, $F_{change}(1, 1611) = 4.02$, $p < .05$. To interpret this interaction, supplementary regressions were conducted for respondents at each level of perceived discrimination, with the demographic variables entered at Step 1, interracial contact and respondent race entered at Step 2, and the two-way contact \times race interaction term entered at Step 3. These analyses showed that the contact \times race interaction was not significant for respondents who either perceived no, little, or some discrimination against their racial group, ts ranging from $-.96$ to 1.27 , $p > .20$. Instead, only a main effect of contact emerged for these groups of respondents, such that those who reported having contact tended to report greater interracial closeness, $\beta = .282$, $.218$, and $.155$, respectively, ts ranging from 3.54 to 4.60 , $p < .01$. However, among those who perceived a great deal of discrimination, the contact \times race interaction term was significant, $\beta = .373$, $t = 2.68$, $p < .01$. Subsequent analyses showed

that while contact still predicted greater interracial closeness among white respondents who perceived a great deal of discrimination against their group, $\beta = .319$, $t = 2.62$, $p = .01$, contact did not significantly predict interracial closeness among black respondents who perceived a great deal of discrimination against their group, $\beta = .046$, $t = .84$, $p = .40$.

Friendship, Race, and Discrimination as Predictors for Interracial Closeness

Using only responses from those who reported having interracial contact, a separate hierarchical regression analysis examined whether the relationship between interracial friendship and closeness varies among black and white respondents, and whether perceived discrimination moderates this relationship. Paralleling the previous analysis, age, gender, level of education, family income, political ideology, religiosity, and region were entered as predictors for interracial closeness at the first stage of analysis, and the interracial friendship, respondent race, and perceived discrimination variables were entered at the second stage. The two-way interaction term between interracial friendship and respondent race was then entered at the third stage, and the three-way interaction term between interracial friendship, respondent race, and perceived discrimination was entered at the fourth stage.

Table 4 summarizes the results from this analysis. Once again, the regression model was significant at Step 1, $R^2 = .015$, $F_{change}(7, 1459) = 3.11$, $p < .01$, with only gender and religiosity emerging as significant predictors for interracial closeness. At Step 2, interracial friendship also emerged as a significant predictor, contributing to a significant R^2 increment, $R^2_{change} = .049$, $F_{change}(3, 1456) = 25.52$, $p < .001$; levels of interracial closeness were significantly higher among those who reported having an outgroup friend than among those who did not. Interracial friendship remained a significant predictor at Step 3, while perceived discrimination, respondent race, and the two-way friendship \times respondent race interaction emerged as significant predictors for interracial closeness, $R^2_{change} =$

.008, $F_{change}(1, 1455) = 12.03, p < .001$. To interpret this interaction, supplementary regressions were conducted separately for black and white respondents, with the demographic variables entered at Step 1, and the interracial contact variable entered at Step 2. After controlling for the demographic indicators, having an outgroup friend significantly predicted interracial closeness among black respondents, $\beta = .111, R^2_{change} = .012, F_{change}(1, 610) = 7.63, p < .01$, yet having an outgroup friend was a substantially stronger predictor for interracial closeness among white respondents, $\beta = .293, R^2_{change} = .083, F_{change}(1, 844) = 79.93, p < .001$.

Additionally, although the three-way interaction term was not significant at Step 4, $R^2_{change} = .001, F_{change}(1, 1454) = .810, p = .37$, supplementary regressions showed that the predictive value of perceived discrimination varied among black and white respondents with and without outgroup friends. After controlling for demographic variables at the first stage of analysis, perceived discrimination did not predict interracial closeness among white respondents, irrespective of whether they reported having an outgroup friend, $\beta = -.025, R^2_{change} = .001, F_{change}(1, 652) = .41, p = .52$,

or no outgroup friend, $\beta = .020, R^2_{change} = .000, F_{change}(1, 180) = .067, p = .80$. At the same time, perceived discrimination predicted significantly less interracial closeness among black respondents who reported no outgroup friend, $\beta = -.260, R^2_{change} = .060, F_{change}(1, 128) = 8.58, p < .01$, while it did not significantly predict closeness among black respondents who reported having an outgroup friend, $\beta = -.058, R^2_{change} = .003, F_{change}(1, 471) = 1.49, p = .22$.

DISCUSSION AND CONCLUSIONS

The present findings reveal important differences in the nature of interracial relationships and contact effects among members of racial minority and majority groups. Consistent with other work (see Ellison and Powers 1994; Tropp and Pettigrew 2005a), results indicate that the relationship between contact and interracial closeness is generally weaker among black Americans than among white Americans. Moreover, in line with predictions, the findings extend prior work by showing that perceptions of discrimination moderate the relationship between contact and interracial closeness among black Americans,

Table 4. Summary of Hierarchical Regression Analysis Using Interracial Friendship, Respondent Race, and Perceived Discrimination as Predictors for Interracial Closeness

Predictor Variables	Step 1			Step 2			Step 3			Step 4		
	<i>B</i>	(<i>SE</i>)	β	<i>B</i>	(<i>SE</i>)	β	<i>B</i>	(<i>SE</i>)	β	<i>B</i>	(<i>SE</i>)	β
Age	.000	(.001)	-.006	.000	(.001)	-.001	.000	(.001)	.003	.000	(.001)	.004
Gender	.109	(.043)	.068*	.099	(.042)	.062*	.094	(.042)	.058*	.094	(.042)	.058*
Level of Education	-.005	(.014)	-.009	-.006	(.014)	-.012	-.003	(.014)	-.007	-.002	(.014)	-.004
Family Income	-.015	(.014)	-.032	-.022	(.013)	-.047	-.021	(.013)	-.045	-.020	(.013)	-.043
Political Ideology	.042	(.022)	.051	.033	(.022)	.041	.031	(.022)	.038	.031	(.022)	.038
Religiosity	.037	(.018)	.055*	.032	(.018)	.048	.031	(.018)	.046	.031	(.018)	.046
Region	.068	(.043)	.043	.044	(.042)	.027	.041	(.042)	.025	.039	(.042)	.024
Interracial Friendship				.420	(.049)	.218***	.222	(.075)	.115**	.223	(.075)	.116**
Respondent Race				.000	(.051)	.000	-.274	(.093)	-.169**	-.302	(.099)	-.186**
Perceived Discrimination				-.046	(.024)	-.057	-.047	(.024)	-.058*	-.070	(.035)	-.086*
Friendship \times Race							.344	(.099)	.214**	.364	(.102)	.226***
Friendship \times Race \times Discrim										.044	(.049)	.035
$R^2_{Cumulative}$.015**			.064***			.072***			.072***	
F_{Change}		3.110**			25.524***			12.032**			.810	

Note. *B* = raw regression coefficient; *SE* = standard error of *B*; β = standardized regression coefficient.

* $p < .05$; ** $p < .01$; *** $p < .001$

while such moderation is not observed among white Americans.

These patterns of findings likely grow from broader differences in perspective between black and white Americans, in terms of how they view and experience relations between their groups (see Kluegel and Bobo 2001). Black Americans are regularly confronted with discrimination due to their racial group membership (Feagin 1991; Swim et al. 2001), and correspondingly, they are more likely to perceive discrimination against their group than are white Americans (Sigelman and Welch 2001). Black Americans may therefore see racial discrimination as more integral to the interracial relationship (see Alexander et al. 2005), such that perceiving discrimination would restrain the potentially positive effects of contact on their reports of interracial closeness. It should also be noted that more than half of the black respondents in this sample reported a great deal of discrimination against their racial group ($n = 396$, 56%), indicating the significance of perceived discrimination as a negative force in the interracial relationship from their perspective. Thus, although positive outcomes can often be achieved through interracial contact (Allport 1954; Pettigrew and Tropp 2006), the effectiveness of interracial contact may be diluted to the extent that members of racial minority groups perceive considerable discrimination against them.

At the same time, however, other results suggest that contact in the form of interracial friendships may help to counteract the detrimental effects of perceiving discrimination on interracial closeness. Beyond the general effects of contact, having a friend in the racial outgroup corresponded with greater reports of interracial closeness among both black and white respondents (see also Powers and Ellison 1995; Sigelman and Welch 1993). Moreover, perceptions of discrimination did not significantly predict interracial closeness among black respondents who reported having interracial friendships, while perceived discrimination significantly predicted interracial closeness among those who reported no interracial friendships. Taken together, these findings suggest that while discrimination stands as a prominent feature of the interracial rela-

tionship, friendships across racial boundaries may diminish the extent to which black Americans would rely on perceptions of discrimination in forming their intergroup attitudes.

In reflecting on these trends, there are likely to be limitations on the degree to which interracial contact could effectively enhance black Americans' feelings of interracial closeness. Admittedly, the proportions of variance predicted by the regression models are fairly modest in magnitude, though these estimates compare favorably with those reported in other studies of interracial contact (see Pettigrew and Tropp 2006 for a recent meta-analytic review). The present findings also indicate that, while significant, the relationships between interracial contact and interracial closeness still tended to be weaker among black respondents than among white respondents, even when the contact involved interracial friendships, and when perceptions of discrimination were taken into account. Thus, group differences in feelings of interracial closeness, and how these feelings relate to interracial contact, surely involve much more than what can be accounted for by reports of interracial friendships and perceptions of racial discrimination.

At least in part, the weak relationship between interracial contact and closeness among black respondents likely involves differences in numerical representation between black and white Americans in the larger society. Although black and white respondents reported similar degrees of current interracial contact in the present study, other work suggests that blacks typically experience more interracial contact than whites due to their smaller numerical representation (see Blau and Schwartz 1997). As such, the similar reports of contact found for black and white respondents may actually reflect a tendency for whites to inflate numbers of their interracial relationships and to exaggerate the closeness of those relationships (see Bonilla-Silva 2003), which could in turn affect the observed relationships between interracial contact and interracial closeness.

Additionally, the cross-sectional nature of the data limits our ability to draw firm conclu-

sions about the moderating role of perceived discrimination in the relationships between interracial contact and interracial closeness (see Jackman and Crane 1986). It could be that perceptions of discrimination moderate these relationships by curbing feelings of closeness and subsequently limiting people's willingness to engage in interracial contact, or by inhibiting the extent to which people experience interracial closeness when interracial contact occurs. Future studies using longitudinal data would be particularly useful in addressing this issue in order to provide greater clarification concerning the direction of relationships among these variables.

Nonetheless, the present research importantly extends prior work by offering a more refined analysis of the associations between interracial contact and closeness for members of racial minority and majority groups. Complementing other emerging perspectives (see Sigelman and Welch, 1993; Tropp and Pettigrew 2005a), findings from this research indicate that relationships between contact and interracial closeness tend to be weaker among black Americans than among white Americans. The present findings also point to the significant role that perceived discrimination can play in relationships between black and white Americans, along with showing how that role may vary depending on the nature of group members' interracial experiences. Future research should continue to explore the complexities associated with interracial relationships to enhance our understanding of the nature of contact effects for members of racial minority and majority groups.

REFERENCES

- Alexander, Michele, Marilyn Brewer, and Robert Livingston. 2005. "Putting Stereotype Content in Context: Image Theory and Interethnic Stereotypes." *Personality and Social Psychology Bulletin* 31: 781–794.
- Allport, Gordon. 1954. *The Nature of Prejudice*. Reading, MA: Addison-Wesley.
- Blau, Peter and Joseph Schwartz. 1997. *Crosscutting Social Circles: Testing a Macrostructural Theory of Intergroup Relations*. New Brunswick: Transaction.
- Bobo, Lawrence and Cybelle Fox. 2003. "Race, Racism, and Discrimination: Bridging Problems, Methods, and Theory in Social Psychological Research." *Social Psychology Quarterly* 66: 319–332.
- Bonilla-Silva, Eduardo. 2003. *Racism Without Racists: Color-Blind Racism and the Persistence of Racial Inequality in the United States*. Lanham, MD: Rowman and Littlefield.
- Butler, John and Kenneth Wilson. 1978. "The American Soldier Revisited: Race Relations and the Military." *Social Science Quarterly* 59: 451–67.
- Ellison, Christopher and Daniel Powers. 1994. "The Contact Hypothesis and Racial Attitudes among Black Americans." *Social Science Quarterly* 75: 385–400.
- Feagin, Joe. 1991. "The Continuing Significance of Race: Antiblack Discrimination in Public Places." *American Sociological Review* 56: 101–16.
- Forman, Tyrone and Matthew Rodriguez. 2003. "Intergroup Contact and Latinos' Racial Attitudes: Revisiting the Contact Hypothesis." University of Illinois at Chicago. Unpublished manuscript.
- Gallup Organization. 2001. *Black-White Relations in the United States: 2001 Update*. Washington, DC: Gallup Organization.
- Hughes, Michael and Steven Tuch. 2003. "Gender Differences in Whites' Racial Attitudes: Are Women's Attitudes Really More Favorable?" *Social Psychology Quarterly* 66: 384–401.
- Hunt, Matthew, Pamela Jackson, Brian Powell and Lala Steelman. 2000. "Color-blind: The Treatment of Race and Ethnicity in Social Psychology." *Social Psychology Quarterly* 63: 352–364.
- Jackman, Mary and Marie Crane. 1986. "Some of my best friends are black. . . : Interracial Friendship and Whites' Racial Attitudes." *Public Opinion Quarterly* 50: 459–86.
- Johnson, Monica Kirkpatrick, and Margaret Mooney Marini. 1998. "Bridging the Racial Divide in the United States: The Effect of Gender." *Social Psychology Quarterly* 61: 247–258.
- Kinder, Donald and Lynn Sanders. 1996. *Divided by Color: Racial Politics and Democratic Ideals*. Chicago: University of Chicago Press.
- Kluegel, James and Eliot Smith. 1986. *Beliefs About Inequality: Americans' Views of What Is and What Ought to Be*. New York: Aldine de Gruyter.
- Kluegel, James and Lawrence Bobo. 2001. "Perceived Group Discrimination and Policy Attitudes." Pp. 163–213 in *Urban Inequality: Evidence from Four Cities*, edited by Alice O'Connor, Chris Tilly, and Lawrence Bobo. New York: Russell Sage.
- Levin, Shana, Colette van Laar and Jim Sidanius. 2003. "The Effects of Ingroup and Outgroup Friendship on Ethnic Attitudes in College: A

- Longitudinal Study.” *Group Processes and Intergroup Relations* 6: 76–92.
- Monteith, Margo and C. Vincent Spicer. 2000. “Contents and Correlates of Whites’ and Blacks’ Racial Attitudes.” *Journal of Experimental Social Psychology* 36: 125–154.
- National Conference for Community and Justice. 2000. *Taking America’s Pulse: NCCJ’s Survey of Intergroup Relations in the United States*. New York: NCCJ.
- Pettigrew, Thomas F. and Linda R. Tropp. 2006. “A Meta-analytic Test of Intergroup Contact Theory.” *Journal of Personality and Social Psychology* 90: 751–783.
- Schuman, Howard, Charlotte Steeh, Lawrence Bobo, and Maria Krysan. 1997. *Racial Attitudes in America: Trends and Interpretations*. Cambridge, MA: Harvard University Press.
- Sigelman, Lee and Susan Welch. 1991. *Black Americans’ Views of Racial Inequality: The Dream Deferred*. Cambridge: Cambridge University Press.
- Sigelman, Lee and Susan Welch. 1993. “The Contact Hypothesis Revisited: Black-White Interaction and Positive Racial Attitudes.” *Social Forces* 71: 781–95.
- Swim, Janet, Lauri Hyers, Laurie Cohen, Davita Fitzgerald, and Wayne Bylsma. 2003. “African American College Students’ Experiences with Everyday Racism: Characteristics of and Responses to These Incidents.” *Journal of Black Psychology* 29: 38–67.
- Tropp, Linda R. 2003. “The Psychological Impact of Prejudice: Implications for Intergroup Contact.” *Group Processes and Intergroup Relations* 6: 131–49.
- Tropp, Linda R. and Thomas F. Pettigrew. 2005a. “Intergroup Contact and Prejudice among Minority and Majority Status Groups.” *Psychological Science* 16: 951–957.
- . 2005b. “Differential Relationships Between Intergroup Contact and Affective and Cognitive Dimensions of Prejudice.” *Personality and Social Psychology Bulletin* 31: 1145–1158.

Linda R. Tropp is Associate Professor of Psychology and Interim Director of the Psychology of Peace and Violence Concentration at the University of Massachusetts, Amherst. She has worked on several state and national initiatives to improve race relations in schools, and she serves on the Governing Council of the Society for the Psychological Study of Social Issues. She has also received the Gordon Allport Intergroup Relations Prize for her research on intergroup contact. Her research concerns experiences with intergroup contact among minority and majority status groups, identification with social groups, interpretations of intergroup relationships, and responses to prejudice and disadvantage.