



# Beyond Homophily: The Boundary-Specific Effects of Interracial Contact

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## Abstract

Decades of research have confirmed and delimited the effects of interracial contact on racial attitudes. A shortcoming of this literature is its framing of interracial contact as a counterweight to homophily. Accordingly, researchers often measure interracial contact at the same-race/different-race boundary, such as in friendships and dating relationships. Rather than asking whether any interracial friendship leads to any interracial dating, I ask how much crossing a specific boundary actually leads to crossing other boundaries. Using the National Longitudinal Study of Adolescent to Adult Health (Add Health), I investigate the consequences of early interracial friendship for later interracial dating across six racial boundaries. The results show that interracial contact with a specific group increases the likelihood of interracial contact primarily with that same group and rarely with other groups. I conclude with implications for future research as well as social policy that relies on interracial contact.

**Keywords** Interracial contact · Friendship · Dating · Boundaries · Multiracial

## Introduction

Since Allport's statement on the contact hypothesis ([1954] 1985), social scientists have associated interracial contact with expansive consequences, for example, “the potential to reduce prejudice, promote greater access of minorities to majority resources and social capital, and [to] function as bridging ties that promote greater cohesion between racial groups” (Lichter, 2013: p. 374). Outside academia, supporters of desegregation programs and of other efforts to improve interracial relations have long relied on interpersonal contact as a major mechanism for social change (Quillian & Campbell, 2003). Decades of research have confirmed, delimited, and refined the theorized effects of interracial contact on racial prejudice (Boin et al., 2021; Pettigrew & Tropp, 2006, 2008).

A shortcoming of this literature is its framing of interracial contact as a counterweight to homophily, the tendency for individuals to affiliate with socially similar others (McPherson et al., 2001; Moody, 2001). Accordingly,

researchers often measure interracial contact at the same-race/different-race boundary. To illustrate, Emerson et al. (2002) ask their respondents whether “their own racial group” comprises less than 80 percent of their religious congregations, Bohmert and DeMaris (2015) ask their respondents how many “other race” friends they have, and Jacobson and Johnson (2006) construct an index of close friends, social outings, and home visits involving someone of “another race.” As a result, researchers have focused more on the closeness of interracial associates (e.g., friends vs. acquaintances) and less on the specific race of the associates that make contact “interracial” (e.g., friendships with Latinxs vs. friendships with Blacks). Because the same-race/different-race approach lumps together all different-race associates, it aggregates interracial contacts with different groups, thereby masking their potentially group-specific consequences.

An important exception is research on the secondary transfer effects (STEs) of intergroup contact (Boin et al., 2021; Pettigrew, 2009; Schmid et al., 2014; Tausch et al., 2010), which has found that intergroup contact is associated with reduced prejudice toward not only contacted outgroups but also noncontacted outgroups. In contrast to the primary transfer from positive contacts with *group A* to attitudes about *group A* as a whole, a secondary transfer can occur

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from contact with group A to attitudes about other groups. STEs occur through multiple mechanisms, but especially (1) the reappraisal of in-group identification that reduces its salience as a boundary for defining social similarity and (2) the reevaluation of prejudice in general initiated by cognitive inconsistency between changed prejudices toward group A and unchanged prejudices toward other out-groups. However, these researchers, primarily in psychology, have exclusively measured STEs in terms of changed attitudes, without confirming their consequences for behavior (Marrow et al., 2019). This omission risks assuming a high level of consistency between attitudes and action (Jerolmack & Khan, 2014), a particularly questionable assumption for racial attitudes (Pager & Quillian, 2005; Schuman et al., 1997).

I propose that participation in interracial romantic relationships comprises a critical behavioral outcome for exploring the consequences of interracial contact. Researchers have long interpreted intermarriage rates as firm indicators of the social distance between groups (Alba & Nee, 2003; Gordon, 1964). Despite a substantial increase in interracial marriages since 1970, fewer than 5 percent of marriages involving white spouses are interracial, and race remains the strongest social barrier to romantic unions, exceeding education, age, and religion (Laumann, 1994; Qian & Lichter, 2007; Rosenfeld, 2008). Researchers have found similar patterns for interracial friendships, especially those in childhood and adolescence (Quillian & Campbell, 2003). Furthermore, they have found that these friendships have enduring effects on the likelihood of interracial dating in adulthood, suggesting that interracial contact is a self-sustaining behavior (Kao et al., 2019; Shiao, 2018). Recent research has also recognized the importance of studying interracial dating because the use of marriage data underestimates the extent of non-marital interracial relationships and is biased by disparities in marriage rates among racial groups (Joyner & Kao, 2005).

Rather than asking whether any interracial friendship leads to any interracial dating, I ask how much crossing a specific boundary in friendship leads to crossing other boundaries in dating relationships. For example, do interracial friendships with Blacks lead to interracial dating with not only Blacks but also non-Blacks? More formally stated, do friendships crossing the Black/non-Black boundary lead to dating relationships not only crossing the Black/non-Black boundary, but also transferring to other interracial boundaries? Which racial boundary crossings transfer to other boundary crossings, and which crossings only lead to more crossings of the same boundary?

To address this question, I examine the consequences of different boundary crossings for each other in the National Longitudinal Study of Adolescent to Adult Health (Add Health). Add Health's friendship-nomination data and longitudinal design permit the examination of friendships in adolescence and their consequences for romantic relationships,

allowing me to mitigate key criticisms of cross-sectional analyses of contact effects (Marrow et al., 2019). Its large sample size and oversamples of African Americans and other non-White groups permit the analysis of interracial contact beyond Blacks and Whites. In this article, I examine the experiences of Add Health respondents with close, interracial contact across six boundaries: White/non-White, Black/non-Black, Asian/non-Asian, Latinx/non-Latinx, Native/non-Native, and Multiracial/Monoracial.<sup>1</sup>

First, I discuss how examining specific boundaries contributes to sociological research that has often examined interracial contact in terms of homophily (i.e., same-race vs. different-race contacts). Second, I describe how I use the National Longitudinal Study of Adolescent to Adult Health (Add Health) to estimate multilevel, multinomial logistic models of the consequences of interracial contact at different boundaries, while controlling for acculturation, opportunities for contact, compositional variations, network characteristics, and selection bias, a critical concern for research on intergroup contact. Third, I present my findings that interracial contact with a specific group increases the likelihood of interracial contact primarily with that same group and rarely with other groups, with boundary-specific variations especially at the white/non-white and black/non-black boundaries and significant though sparse evidence of intersectional complexity. Lastly, I discuss the implications of my findings for research on intergroup contact as well as public sociology that relies on interracial contact as a mechanism for improving race relations.

## Racial Homophily in Research on Interracial Contact

Until recently, much of the literature on interpersonal, interracial relations has compared interracial contact against homophily as both a social preference and a social outcome. Homophily as a preference influences individuals to select similar associates, allows associates to socialize each other as peers, and leads to the attrition of dissimilar associates, thereby producing homophily as an outcome (Rude & Herda, 2010). A critical subset of this process produces homogamy, the tendency for marriages between socially similar partners, which in turn allows families to socialize group identities that reinforce homophily as a preference and to discourage dating and even friendships that might lead to marriages across group boundaries (Kalmijn, 1998). Together, homophily and homogamy form a self-sustaining process from which individuals rarely deviate except in the presence of

<sup>1</sup> I capitalize all race categories to avoid naturalizing “whites” and “blacks,” and I use Latinx to avoid using the masculine “Latino” as gender neutral.

exogenous factors, in particular, declining social barriers (e.g., anti-miscegenation laws) and expanding opportunities for association outside one's group (Lichter, 2013). Structural racism is an important component of the homophily process, especially residential segregation which limits the availability of other-race groups as associates (Ray, 2019; Shiao & Woody, 2020; Vasquez, 2015). In contrast, opportunities for interracial contact allow propinquity—the propensity to form ties with others who share the same social situation—to work against homophily, instead of reinforcing it, as it does in homogeneous settings (Quillian & Campbell, 2003).

In its early forms, contact theory assumed a narrow conception of prejudice as irrationally held beliefs and attitudes, which could be lessened by interactions that allowed groups to learn about each other and see how similar they actually were (Pettigrew & Tropp, 2008). Since then, researchers have found that interracial contact has its effects less through its original mechanism of increasing knowledge about out-groups than through reducing anxiety about intergroup interaction and increasing intergroup empathy. The stronger effects of contact on the affective dimensions of prejudice help account for the finding that the effects of interracial contact are reduced when friendships are included in quantitative models (Jacobson & Johnson, 2006; Perry, 2013). Interracial contact through friendship allows for repeated interactions in multiple settings, the sheer quantity of which reduces the likelihood that the contacts will be primarily superficial (Byrd, 2014). Furthermore, friendships are affective relationships whose intimacy depends not only on the willingness to disclose information with each other but also on the interpretation of the listener's response as understanding, validating, and caring, which in turn motivates repeated interactions (Shelton et al., 2010). Indeed, for non-Whites, having interracial friendships is protective against feeling misunderstood in daily interracial interactions (Shelton et al., 2014). That said, interracial friendships can generate both trust and strain, depending on individuals' abilities to maintain a balance between downplaying and engaging with their racial differences (Rude, 2009).

Accordingly, researchers have expanded their focus from studying the effects of interracial contact on attitudes to studying its effects on actual behaviors. Emerson et al. (2002) find that survey respondents who had attended schools or lived in neighborhoods that were 20% or more different race were more likely to have more racially diverse social groups and friendship circles, to attend multiracial as opposed to a uniraical religious congregations, and to be interracially married. Stearns et al. (2009) find that their undergraduate respondents' proportion of interracial friendships prior to college had the largest effect on their proportion of interracial friendships in college. Keels and Harris (2014) find that college students who had more friends of any different

race in high school were more likely to date interracially in college. In brief, researchers have found that prior contact affects the racial composition of current social groups, religious congregations, dating relationships, and marriages; however, which racial boundaries are actually crossed in the earlier and later contacts?

## Beyond Contact with Any Different Race

Despite the robust effects of different-race contact, researchers have found that racial groups vary in their willingness to participate in interracial dating and friendship with specific groups, raising the possibility that these contacts have boundary-specific effects. Using census data, research on interracial marriage has documented that groups vary in their willingness both to out-marry and to marry specific groups (Qian & Lichter, 2007). Using online dating profiles, researchers have confirmed that Whites are the least open to out-dating and are less willing to date Blacks than to date other non-White groups who similarly are less willing to date Blacks (Bany et al., 2014; Hwang, 2013; Robnett & Feliciano, 2011).

Moreover, the patterns of dating exclusion are not merely the byproducts of socioeconomic dissimilarity. Despite their lower average socioeconomic status, Latinxs are the preferred out-dates for Asians, Blacks, and Whites, whereas Middle Easterners and East Indians are the most highly excluded groups, despite their higher average socioeconomic status (Robnett & Feliciano, 2011). In addition, this racial exclusion is often gendered: Asian males and Black females are more highly excluded than their opposite-gender counterparts; indeed Latinx women exclude Asian men more than Black men. This intersectional exclusion is especially evident among Blacks, the only non-White group in which women are more excluded than men (Bany et al., 2014).

Research on interracial friendships also finds similar group-specific disparities. White youth are much less likely than non-White youth to form interracial friendships, even in racially diverse schools (Joyner & Kao, 2000; Stearns et al., 2009), and non-Blacks are more likely to have interracial friendships with other non-Blacks than with Blacks (Quillian & Campbell, 2003). A race and gender intersection also appears in qualitative research that finds bonding conversations among same-race, same-gender friends about interracial romantic relationships. For example, Wilkins (2012) examines the salience of “interracial stories” that are shared among Black women about interracial couples composed of Black males and White females. Black women use these stories to mark race and gender boundaries and create a raced and gendered identity that links moral worth to sexual respectability. In brief, an exclusive focus on deviations from homophily falls short of capturing the complex

consequences of interracial interaction. How then might we better model the effects of interracial contact?

I propose that research on Multiracials provides an alternative approach. Similar to research on interracial contact, researchers have associated the increasing proportion of Multiracials in the United States with the potential to improve intergroup relations, especially by increasing ambiguity in the racial identification of children and introducing fluidity in the racial socialization of future generations (Telles & Sue, 2009). Researchers have also found significant variation in the racial identification of Multiracials, depending on the groups with which they identify (Doyle & Kao, 2007b; Gullickson & Morning, 2011; Lee & Bean, 2007). In Littlejohn's research on the interracial dating of Multiracials, she notes that social identity involves not only individuals' identification with an in-group but also "their choices about relevant outgroups rather than comparing themselves with every possible cognitively available outgroup" (2019: p. 180). She argues that Multiracials define their racial identities to include only others with whom they share some overlap in racial identity, rather than including other Multiracials. She finds that in comparison to Monoracial non-Blacks, only the Multiracials who partly identify as Black are more likely to date Blacks; similarly, in comparison to Monoracial non-Whites, only Multiracials who partly identify as White are more likely to date Whites.

Similarly, we might ask whether individuals who have contact with group A are any more likely to have subsequent contact with other groups (non-group A) than individuals who only have same-race contacts. For example, are Black adolescents who have White friends more likely to interracially date other non-Whites (e.g., Asians) during adulthood than Blacks who only have same-race (i.e., Black) friends? A partial answer can be found in Mark and Harris' (2012) study of the effects of college roommate's race, in which they find that White students assigned different-race roommates develop more friendships of their roommate's race but do not have more different-race friends not of their roommate's race. Their findings raise concerns about the reach of secondary transfer effects (STEs), particularly whether the effects of interracial contact with group A on individuals' attitudes about other groups also transfer to their social behavior.

Although social psychologists have verified the existence of STEs on attitudes, they have found that STEs are weaker than the effects of contact on attitudes about contacted groups (Pettigrew, 2009). Rather than affecting racial behaviors in a general way, interracial contact may only affect behaviors toward the specific groups that were in direct contact. If social boundaries are the subset of symbolic boundaries that constrain and pattern social behavior (Lamont & Molnár, 2002), STEs may remain in the domain of symbolic boundaries that do not affect behaviors. From here forward, I refer to the effects of contact with group A on behavior toward group

A as the *specific effects of interracial contact*, as distinct from the *general effects of contact*, that is, the extension of secondary transfer effects to behaviors toward other groups.

In sum, I hypothesize as follows:

**Hypothesis 1 (Specific Effects)** Having interracial friendships in adolescence with a specific group will increase the odds of interracial dating in adulthood with the same group.

**Hypothesis 2 (Absence of General Effects)** Having interracial friendships in adolescence with a specific group will not increase the odds of interracial dating in adulthood with other groups.

## Methods

Add Health is a uniquely comprehensive data set for exploring interracial friendship and dating along multiple racial boundaries. The study employs a multistage sample that began with a nationally representative sample of schools, from which it constructed a sampling frame of more than 100,000 students (Harris, 2009). In the first wave of data collection in 1994–1995, the study administered "in-school" interviews with an original sample of 90,118 students when they were 11 to 20 years of age, followed by in-home interviews in 1995 with a subsample of 20,745 students and 17,700 parents. The study returned to the in-home sample of students for three additional waves of interviews in 1996 (Wave II), 2001–2002 (Wave III), and 2007–2008 (Wave IV) when its respondents reached 24 to 32 years of age. In my analysis, I use Add Health's restricted-use data from Waves I, III, and IV.

Add Health collected friendship data in Wave I, using name generators to identify friends before asking about their individual characteristics (Smith, 2002), instead of asking direct questions more vulnerable to social desirability bias such as "What proportion of your friends are Black?" Add Health also collected data on dating relationships in multiple waves: up-to-three "special romantic relationships" in Wave I, an inventory of romantic relationships in Wave III, and an inventory of marriages, cohabitation partners, unions that resulted in pregnancy, and current and past romantic partners in Wave IV. Add Health's main limitation is its sample size, which is smaller than is typical in intermarriage studies that rely on census data with greater statistical power.<sup>2</sup>

<sup>2</sup> Add Health possesses other limitations. Besides the absence of data on early racial attitudes and insufficient power to analyze same-gender dating, Add Health also does not have indicators of having a multiracial extended family or friendship-nomination data for adulthood, which would permit examination of whether young adults select adult friends that resemble adolescent friends, regardless of whether adult dating partners arise from friendship networks (as debated in: Connolly, Furman, and Konarski 2000; Kreager et al., 2016).

To explore the consequences of interracial friendships for dating relationships, I use multinomial logistic regression models of interracial dating, defined as an individual's relationship history after Wave I of Add Health. I examine the effects of interracial friendships in Wave I on the likelihood of subsequent interracial dating with *group A* (e.g., Latinxs) as well as the likelihood of interracial dating with any other group (e.g., Asians, Blacks, Natives, Whites, and Multiracials). I rotate each of the six groups through the *group-A* placeholder in separate boundary models: Asian/non-Asian, Black/non-Black, Latinx/non-Latinx, Native/non-Native, White/non-White, and Multiracial/Monoracial.

## Key Variables

I construct the relationship-history variable by combining the relationship inventories in Waves III and IV into a three-category outcome:

- (1) Never dated interracially: Only had same-race partners in both Wave III and Wave IV, for example, a Black respondent who only reported Black partners,
- (2) Interracial dating with group A exclusively: Had any interracial relationships in Wave III or Wave IV but *only with group A*, for example, a Black respondent who interracially dated only Latinx partners and no other non-Black partners in the Latinx/non-Latinx-boundary model or a Black respondent who interracially dated only Asian partners and no other non-Black partners in the Asian/non-Asian boundary model, or
- (3) Interracial dating with any non-group A: Had any interracial relationships with groups *other than group A*, for example, a Black respondent who interracially dated White partners in the Latinx/non-Latinx-boundary model or a Black respondent who interracially dated Native partners in the Asian/non-Asian boundary. This category includes respondents who also reported group-A partners.

I operationalize interracial friendship in Wave I as relative contact with friends of a specific race (i.e., group A). I measure their contact with group-A friends with the proportion of a respondent's network that is composed of group A friends<sup>3</sup> (e.g., the proportion of a Latinx respondent's

network that is Black). For each respondent, I define their network as the friends they themselves nominated (i.e., their *send* network).

I operationalize race using multiple measures for each respondent. In multiple waves, Add Health allows its respondents to self-classify by multiple race-categories (Asian, Black, Native, Other, and White), as well as by a single "ethnic" category (Latinx or non-Latinx), revealing a large subsample of multiple, inconsistent, or other-race identifiers. Following Shiao (2019), I use an entirely consistent specification of race: I classify the race of respondents as Asian, Black, Native, or White if they and their biological parents identified exclusively as (1) Asian and not Latinx, (2) Black and not Latinx, (3) Native and not Latinx, or (4) White and not Latinx, across 2+ panels. I classify respondents as Latinx if they and their biological parents consistently identified as Latinx across 2+ panels, regardless of their answers on the race question.<sup>4</sup> I classify respondents as Multiracial if they or their biological parents (1) ever identified with multiple races in a single panel while also not identifying as Latinx, (2) ever changed their identification between panels including being Latinx in one panel and not Latinx in another, and (3) ever identified as other race.<sup>5</sup>

## Analytic Strategy and Covariates

Because my dependent variable is a three-value categorical variable and Add Health respondents are nested in schools, I use structural equation modeling (i.e., the *gsem* command in Stata 15.1) to estimate multilevel, multinomial logistic models of interracial relationships with two levels (i.e., respondents and schools) with a random intercept for each school. At each of the six boundaries, I model interracial relationship history as the outcome of interracial friendship, race, and gender, while controlling for acculturation, opportunities for contact, compositional differences between groups, network characteristics, and selection bias. Table 1 provides an overview of the variables in the six models.

At each boundary, I estimate the odds of each interracial dating outcome relative to the base outcome of never dating

<sup>3</sup> I also conducted an exploratory analysis of different specifications of interracial friendship using AIC/BIC model fit criteria: (a) any group-A friends, (b) only group-A friends, (c) group-A/non-group-A heterogeneity, and (d) proportion group-A friends. In every comparison, the AIC and BIC values preferred the gradational measures to the dichotomized measures of interracial friendship by at least 7 points. These results indicate that the effects of interracial contact are more than the "threshold" effect of having any group-A friends. I use the proportion group-A measure as it is simpler to interpret than the heterogeneity measure.

<sup>4</sup> I classify respondents as non-Latinx if only their Latinx responses were missing and as Latinx if only their race responses were missing.

<sup>5</sup> Among Add Health respondents with one or more pairs of racial/ethnic information, Shiao (2019) finds that most inconsistent identifiers switch between Multiracial self-classification and single-race self-classification in different panels, and they recommend placing these respondents in the Multiracial category along with the smaller population of consistently Multiracial identifiers. Indeed 16% have multiple, changed, or other-race identifications, a percentage more than double the largest percentage of multiple-race responders in any single panel. In brief, the instability of Multiracial identification leads to the underreporting of Multiraciality in cross-sectional data (Doyle & Kao, 2007a).

interracially. I interpret (1) interracial dating with group A exclusively as indicating specific effects, and (2) interracial dating with other groups, either instead of or in addition to dating group A, as indicating general effects. I exclude group A from the respondent sample for each boundary. For example, the Latinx/non-Latinx-boundary model excludes Latinxs from the respondent sample, in order to examine the effect of friendships with Latinxs on the odds of interracial dating with Latinxs alone and interracial dating with any other groups. Rather than using group A as the reference group, I use Whites as the common reference group, except at the White/non-White boundary where I use Latinxs as the reference group.<sup>6</sup>

To examine race, gender, and intersectional variation among respondents at each boundary, I use indicator variables for gender (female), race (four categories excluding group A and the reference group), and four race x gender interaction terms, while also controlling for acculturation using an indicator for non-English dominant-language at home. Except at the Multiracial/Monoracial boundary, I include an indicator for whether a Multiracial respondent ever identifies as group A, for example, ever-Latinx Multiracials at the Latinx/non-Latinx-boundary (c.f. Littlejohn, 2019). These fixed effects also allow me to compare the experience of the same group across boundaries, for example, how Black females experience the Asian/non-Asian and Latinx/non-Latinx boundaries.

In every model, I include theoretically important covariates to guard against spurious relationships between the core variables. First, I control for opportunities for same-race friendships<sup>7</sup> in adolescence by using the proportion of same-race persons among students in respondents' schools (Wave I in-school) and among census-track neighbors in respondents' residential communities (Wave I contexts file based on 1990 U.S. census STF 3A data) (Joyner & Kao, 2000; Qian, 1997). Second, I control for compositional differences in the transition to adulthood by using respondents' completion of a bachelor's degree (Waves III and IV) and experience of criminal justice detention (Waves III and IV) (Joyner & Kao, 2005). Third, I use other network characteristics as controls for the potentially confounding effects of respondents' network size (number of send nominations) and school-level

variation in social segregation<sup>8</sup> (a preconstructed variable for school-level propensity for same-race friendships).

Fourth, I use behavioral proxies as selection controls for preexisting attitudes that may lead to both interracial friendship and interracial dating without one causing the other.<sup>9</sup> I use the self-report of any early interracial relationship with group A (i.e., in Wave I) to measure a disposition for interracial dating that may have preceded the formation of interracial friendships. I use the cumulative number of romantic relationships (across Waves I, III, and IV) to measure a disposition for dating experiences that may cause respondent-driven variations in opportunity for interracial dating. I use the self-report of any same-gender romantic relationships (in Wave I, III, or IV) to measure a disposition for nontraditional union forms, which is associated with both same-gender and interracial relationships (Rosenfeld, 2009); using this indicator also means that my models primarily estimate the likelihood of different-gender dating. Lastly, I control for the presence of adolescent dating relationships in the dependent variable by using an indicator for when the total duration of all relationships exceeds the time since the respondent turned 18 years of age.

## Descriptive Results

Table 2 reports the sample sizes and means of key variables for both the full sample at each racial boundary and by racial group except group A.<sup>10</sup> Focusing on the full sample column, at the White/non-White boundary, group A is Whites, and the respondents in the sample are non-Whites. Among non-White respondents, 44% had relationship histories that included only same-race partners, 22% had dated interracially with Whites exclusively, and 34% had dated interracially with other non-Whites (e.g., Asian respondents who reported black partners). Also, their friendships in Wave I were, on average, 22% White, and the percentage of Multiracial respondents who ever-identified as White is 67%.

Relative to the other boundaries, non-Whites at the White/non-White boundary had the lowest percentage of respondents that never dated interracially after Wave I (44%), whereas the highest percentage is found among Monoracials at the Multiracial/Monoracial boundary (68%). Non-Whites

<sup>6</sup> Had I used group A as the reference group, my models would estimate either the effects of interracial friendships with group A relative to group A's odds of interracial dating with any other groups (i.e., in the intercept) or the effect of friendship with group A regardless of whether they were interracial friendships or same-race friendships in the case of group A.

<sup>7</sup> Controlling for group size is standard in intermarriage research to avoid conflating social distance with opportunity for endogamy (Kalmijn, 1998). I extend this standard to control for opportunities for racial homophily in friendship.

<sup>8</sup> I use school-level segregation to control for aggregate variations in interracial trust beyond immediate friendships.

<sup>9</sup> I recognize these controls only reduce the possibility that a predisposition for contact makes both interracial friendship and interracial dating more likely.

<sup>10</sup> Add Health's sample of consistent and exclusive Native identifiers is too small for making reliable estimates; nevertheless, I include them as a reminder of their marginalization in racial/ethnic sociology (Glenn, 2015).

**Table 1** Variables in models of relationship histories across 6 interracial boundaries

6 Boundaries	Group A/non-Group A (Group A = Asian, Black, Latinx, Native, White, Multiracial)
Dependent variable	Relationship history after Wave I panels, Add Health: <ul style="list-style-type: none"> <li>• Same-race partners only (Base outcome)</li> <li>• Dated interracially with Group A exclusively</li> <li>• Ever dated interracially with non-Group A (Any group besides Group A)</li> </ul>
Independent variables	
Interracial friendship	Proportion of Group-A friends (Contact with Group-A friends)
Race	Entirely Consistent responses across 4 Add Health panels with separate category for Multiracials (Respondents with multiple, changed, or other responses): <ul style="list-style-type: none"> <li>Black, Latinx, Native, Multiracial (Reference = White at Asian/non-Asian boundary)</li> <li>Asian, Latinx, Native, Multiracial (Reference = White at Black/non-Black boundary)</li> <li>Asian, Black, Native, Multiracial (Reference = White at Latinx/non-Latinx boundary)</li> <li>Asian, Black, Latinx, Multiracial (Reference = White at Native/non-Native boundary)</li> <li>Asian, Black, Native, Multiracial (Reference = Latinx at White/non-White boundary)</li> <li>Asian, Black, Latinx, Native (Reference = White at Multiracial/Monoracial boundary)</li> <li>Ever-Group-A Multiracial (Reference = Multiracials who never identify as Group A)</li> </ul>
Gender	Female
Race × Gender	Race × Female (4 interaction terms at each boundary)
Covariates	Non-English dominant-language at home
Acculturation	
Opportunities for same-race friends	Proportion same-race students at school Proportion same-race students in neighborhood (Census tract)
Compositional differences	Completion of Bachelors or higher degree Ever detained in a prison, jail, or juvenile detention center
Network characteristics	Number of friendship nominations made by respondent (network size) School-level propensity for same-race friends (network segregation)
Selection controls	Any interracial romantic relationship in adolescence with Group A (Wave I) Number of romantic relationships after Wave I Any excess romantic relationships in post-Wave I dating history Any same-gender romantic relationships

also had the highest percentage of respondents who dated interracially with group A exclusively (22% with Whites exclusively), whereas the lowest percentage was among non-Natives (1% with Natives exclusively). Non-Whites also had the highest percentage of group-A friends (22% White), whereas non-Natives had the lowest percentage of group-A friends (1% Native). The percentage of ever-group-A Multiracials is also the highest at the White/non-White boundary (67% of Multiracials are ever-White Multiracials), followed by ever-Natives, ever-Blacks, ever-Latinx, and lastly ever-Asians (20% of Multiracials). In brief, the modal kind of interracial crossing in romantic relationships, friendships, and multiracial identification was with Whites.

In the remaining columns, there are substantial group differences among their dating relationships with group A and friendships with group A. For every group of respondents, most interracial dating is exclusively with a specific group. For example, 10% of White respondents exclusively dated

Latinxs when they dated interracially, 4% dated Blacks exclusively, 3% dated Asians exclusively, 3% dated Multiracials exclusively, and 2% dated Natives exclusively. In brief, of the 27% of Whites who ever dated interracially, 22% exclusively dated a specific group, and for a plurality (10%), Latinxs were the specific group. Latinxs are also that group for Blacks and Natives, whereas for Latinxs, Asians, and Multiracials that group is mainly Whites. This same pattern appears in interracial friendships with specific groups, albeit accompanied by high percentages of Multiracial friends. For example, in the networks of White respondents, Multiracial friends comprise the largest percentage of different-race friends (9%), followed by Latinx friends (5%), whereas for Multiracial respondents, White friends comprise the largest percentage (44%), followed by Black friends (21%). I now turn to the models that estimate whether interracial friendship affects the likelihood of interracial dating, while controlling for a broad range of covariates.

**Table 2** Means for interracial contact in the analytic samples at 6 racial boundaries

Respondents	Full Sample	Whites	Blacks	Asians	Latinxs	Natives	Multiracials
All Boundaries	<i>N</i> = 10,206	4984	1707	574	1355	27	1559
White/non-White Boundary	5222						67% ever-White
Relationship history after Wave I							
Same-race partners only	0.44	Grp. A	0.72	0.53	0.50	0.26	0.05
Interracial with other non-Whites	0.34	Grp. A	0.21	0.26	0.23	0.67	0.61
Interracial with Whites exclusively	0.22	Grp. A	0.07	0.20	0.26	0.07	0.34
Proportion of White friends	0.22	Grp. A	0.06	0.15	0.18	0.18	0.44
Black/non-Black Boundary	8499						35% ever-Black
Relationship history after Wave I							
Same-race partners only	0.55	0.73	Grp. A	0.53	0.50	0.26	0.05
Interracial with other non-Blacks	0.38	0.23	Grp. A	0.44	0.44	0.70	0.76
Interracial with Blacks exclusively	0.07	0.04	Grp. A	0.02	0.06	0.04	0.20
Proportion of Black friends	0.06	0.02	Grp. A	0.03	0.05	0.03	0.21
Asian/non-Asian Boundary	9632						20% ever-Asian
Relationship history after Wave I							
Same-race partners only	0.58	0.73	0.72	Grp. A	0.50	0.26	0.05
Interracial with other non-Asians	0.39	0.25	0.27	Grp. A	0.48	0.74	0.90
Interracial with Asians exclusively	0.03	0.03	0.01	Grp. A	0.02	0.00	0.05
Proportion of Asian friends	0.02	0.01	0.01	Grp. A	0.03	0.00	0.07
Latinx/non-Latinx Boundary	8851						30% ever-Latinx
Relationship history after Wave I							
Same-race partners only	0.59	0.73	0.72	0.53	Grp. A	0.26	0.05
Interracial with other non-Latinxs	0.32	0.17	0.20	0.40	Grp. A	0.44	0.91
Interracial with Latinxs exclusively	0.08	0.10	0.08	0.07	Grp. A	0.30	0.03
Proportion of Latinx friends	0.07	0.05	0.08	0.09	Grp. A	0.22	0.12
Native/non-Native Boundary	10,179						42% ever-Native
Relationship history after Wave I							
Same-race partners only	0.58	0.73	0.72	0.53	0.50	Grp. A	0.05
Interracial with other non-Natives	0.40	0.25	0.27	0.46	0.47	Grp. A	0.94
Interracial with Natives exclusively	0.01	0.02	0.01	0.01	0.01	Grp. A	0.01
Proportion of Native friends	0.01	0.01	0.00	0.00	0.01	Grp. A	0.01
Multiracial/Monoracial Boundary	8647						
Relationship history after Wave I							
Same-race partners only	0.68	0.73	0.72	0.53	0.50	0.26	Grp. A
Interracial with other Monoracials	0.29	0.24	0.24	0.43	0.48	0.74	Grp. A
Interracial w/Multiracials exclusively	0.03	0.03	0.04	0.03	0.02	0.00	Grp. A
Proportion of Multiracial friends	0.09	0.09	0.11	0.13	0.07	0.17	Grp. A

## Comparing Specific Effects and General Effects Across Multiple Boundaries

Because of the complexity of the six boundary models, I report select coefficients in Appendix Table 3<sup>11</sup> and present

<sup>11</sup> Gsem is the only Stata command that permits multilevel, multinomial modeling; however, Stata only provides goodness of fit statistics useful for comparing gsem models (i.e., AIC and BIC) and not for assessing a single model, unlike for its associated command sem which however only estimates linear structural equation models.

graphs of their predicted probabilities in Figs. 1, 2, 3. At every boundary except the Multiracial/Monoracial boundary, the proportion of group-A friends has a positive and statistically significant effect on the odds of interracial dating with group A exclusively, relative to never dating interracially (i.e., the specific effects of interracial contact). In contrast, its effects on the odds of interracial dating with other groups (i.e., the general effects) are: (1) positive but not statistically significant at the Asian/non-Asian, Native/non-Native, and Multiracial/non-Multiracial boundaries, (2) effectively zero at the Black/non-Black boundary, and



(3) statistically significant but negative at the White/non-White boundary. The fixed effects for race and gender show substantial variations, most notably for being Multiracial or being Black and Female. The Black x Female interaction term is associated with a statistically significant and consistently lower likelihood of interracial dating for 8 of the 10 relevant outcomes (i.e., 2 forms of interracial dating x 5 boundaries at which Blacks are not group A). Also, the main effect for being Multiracial is positive and statistically significant on 6 of 10 outcomes, whereas the indicators for Multiracials who ever identify as group A (Ever-group A) are statistically significant on 7 out of 10 outcomes, in the positive direction for interracial dating with group A exclusively and in the negative direction for interracial dating with other groups.

Figure 1 presents six panels of graphs that show how having more interracial friendships with specific groups (i.e., proportion of group-A friends) affects the gender-specific predicted probabilities of the three relationship-history outcomes. *At almost every boundary*, as the proportion of group-A friends increases, the probability of interracial dating with group A exclusively rises (i.e., the thick line in each graph). In contrast, the probability of interracial dating with any non-group-A partners rises more slowly, is largely “flat,” or declines, and the difference between this outcome and the base outcome of only having same-race partners (i.e., never dating interracially) is only statistically significant at the White/non-White boundary. *In brief, the effects of interracial friendship on interracial dating are primarily concentrated at the specific boundaries crossed in adolescence.*

Notably, the probability of interracial dating with group A exclusively rises to its highest levels at the White/non-White boundary (i.e., as the proportion of White friends increases). For non-White males in particular, interracial dating with Whites exclusively (i.e., White females) overtakes the falling probability of never dating interracially and becomes the modal outcome as their friendships reach 70% White. Similar effects are evident for non-White females at the White/non-White boundary and for non-Black females at the Black/non-Black boundary. In both cases, interracial dating with group A exclusively (i.e., with White males and Black males, respectively) rivals or converges with the modal outcome of never dating interracially as their friendships reach the maximum of 100% group A. In almost all other situations, the rising probability of interracial dating with group A exclusively remains substantially below the falling probability of never dating interracially.

Only at the Multiracial/Monoracial boundary do the general effects of contact seem larger than its specific effects. As the proportion of Multiracial friends increase, Monoracial males' and females' probability of interracial dating exclusively with Multiracials remains flat, whereas it is their probability of interracial dating with other groups (i.e., other Monoracials)

that increases. Even though their coefficients for interracial dating with other groups are not statistically significant, the potential finding of general effects at this boundary calls for further examination, given that Multiracials comprise the highest or second-highest proportion of interracial friendships for Monoracial Whites, Blacks, Asians, and Latinxs.

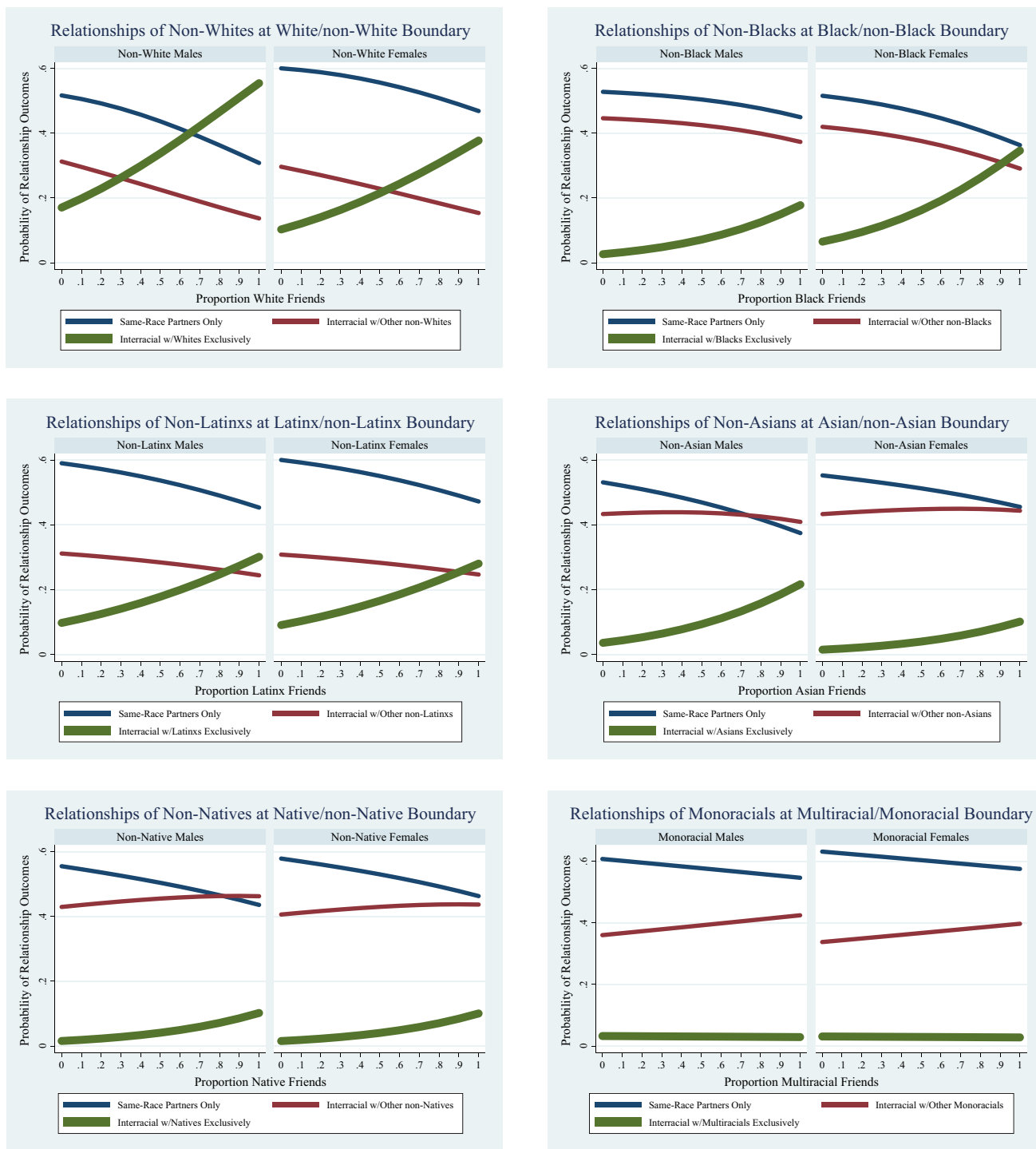
## Multiracials as Exceptions that Confirm the Rule

Further analysis suggests that Multiracials actually provide another case in which the specific effects of contact are stronger than its general effects. At the five Monoracial boundaries, being Multiracial appears to increase the likelihood of interracial dating with other groups (i.e., non-group A); however, this effect is relative to the outcome of never dating interracially, which within my models refers to Multiracials' dating other Multiracials exclusively. This “same race” outcome is never the mode at any boundary, raising the question of how Multiracials define endogamy. I explore this question by reexamining the effects of contact contingent on whether their identity overlaps with the boundary in question (Littlejohn, 2019).

Figure 2 presents graphs of how interracial friendships with group A affect Multiracials' probabilities of same-race and interracial dating. These graphs compare (1) Multiracials who *never* identify with group A (e.g., never-Asians such as black-whites at the Asian/non-Asian boundary) and (2) Multiracials who *ever* identify as group A (e.g., ever-Asians such as Asian-whites at the Asian/non-Asian boundary). Unlike in Fig. 1, the probability of only having same-race partners (i.e., never dating Monoracials) is low and largely flat across panels.

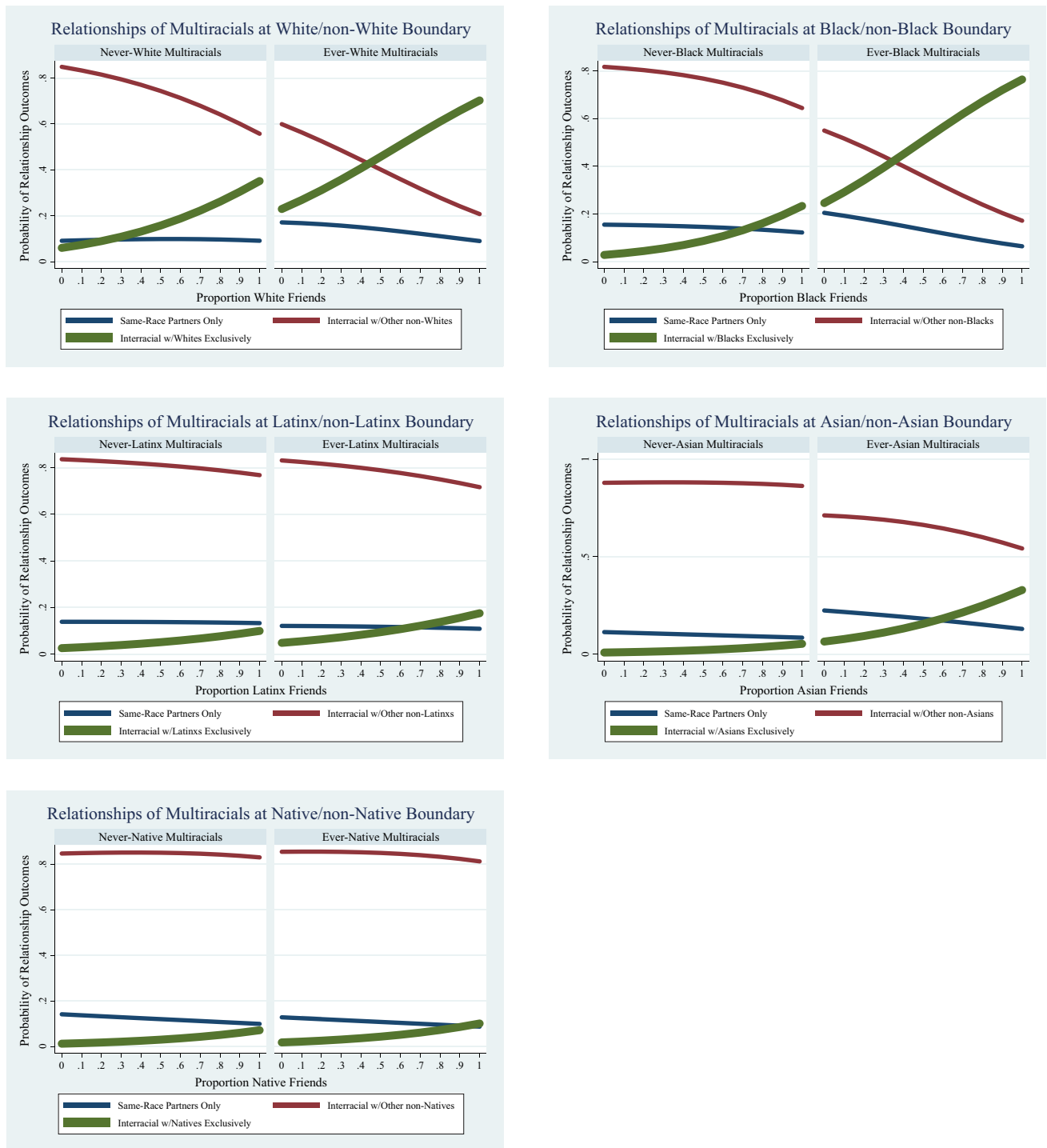
For Multiracial respondents who *never* identify as group A, the modal outcome at every boundary is interracial dating with non-group-A Monoracials, which declines as the proportion of friendships with a specific group increases (i.e., group A), whereas the probability of interracial dating exclusively with group A rises. At two boundaries (i.e., White/non-White and Black/non-Black), interracial dating with group A exclusively becomes the second-most-likely outcome, as friendships reach 40% White and 80% Black, respectively.

For Multiracial respondents who *ever* identify as group A, the modal outcome is also interracial dating exclusively with non-group-A Monoracials, at least initially. However, their probability of dating group A exclusively rises more steeply than for their never-group-A counterparts. At the same two boundaries (i.e., White/non-White and Black/non-Black), dating group A exclusively becomes the modal outcome as their friendships become 50% White and 40% Black, respectively, whereas at the remaining boundaries, ever-Asian, ever-Latinx, and ever-Native Multiracials' probability of interracial dating with group A exclusively rises more



**Fig. 1** Effects of Friendships with Group A on Romantic Relationships at 6 Racial Boundaries. Source: Appendix Table 3. These panels present the predicted probabilities of three relationship-history outcomes at six boundaries, contingent on respondents' proportion of group-A friends. Each line represents the Monoracial respondents who in Wave I grew up in English-dominant homes, lived in census tracts with the mean proportion of same-race residents, attended schools with the mean proportion of same-race students and at

the mean for network segregation, nominated the mean number of friends, did not have interracial romantic relationships with group-A partners, and who by Wave IV, had not received Bachelors degrees, had not been in criminal justice detention, had the mean number of romantic relationships, had not had same-gender relationships, and had Wave IV relationship rosters covering fewer years than the years since Wave I. The thick lines highlight the boundary-specific effects of contact

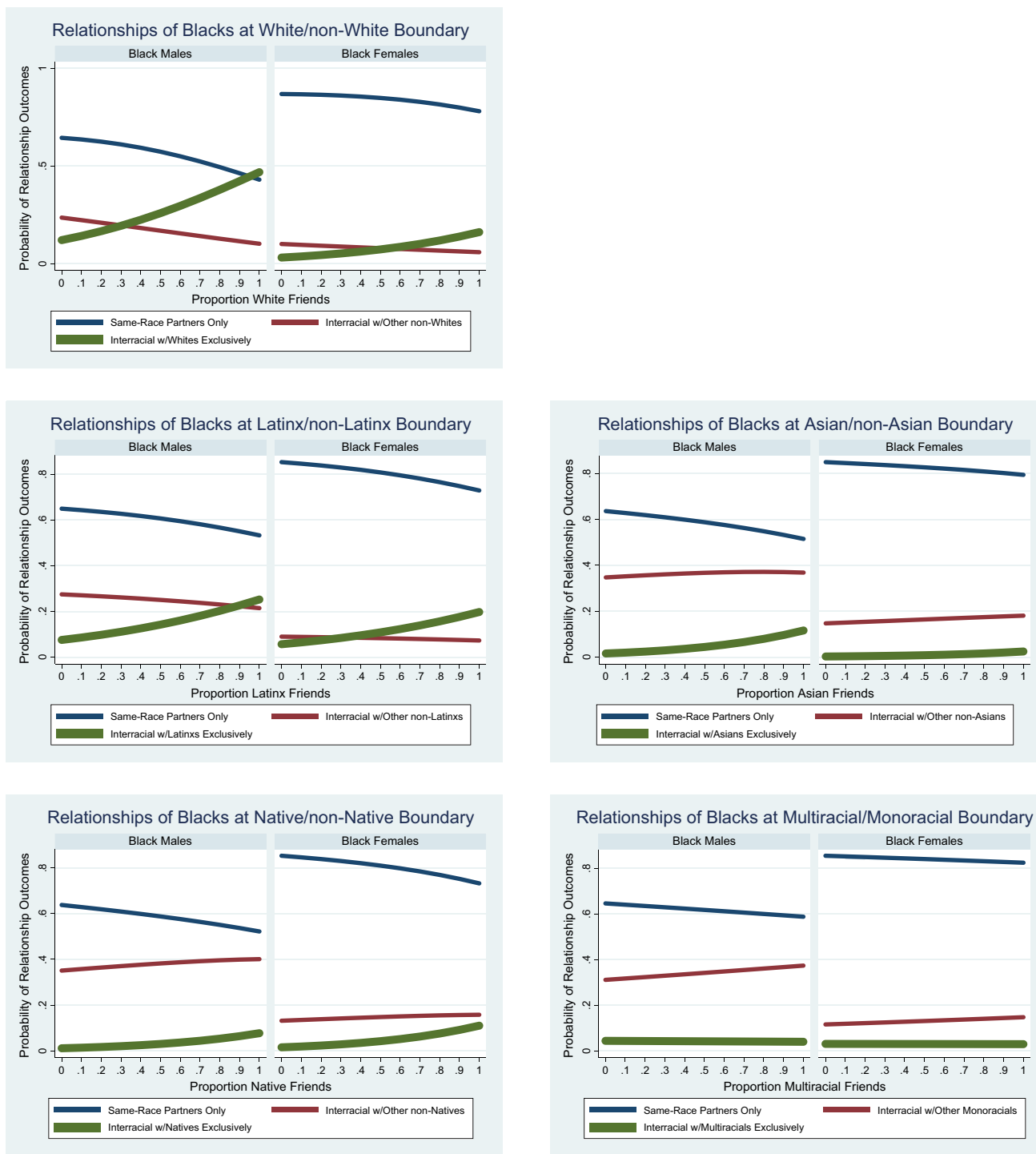


**Fig. 2** Effects of Friendships with Group A on Romantic Relationships of Multiracials. Source: Appendix Table 3. These panels present the predicted probabilities of three relationship-history outcomes at six boundaries, contingent on respondents’ proportion of group-

A friends. Each line represents the multiracial respondents with the same characteristics as the Monoracials in Fig. 1. The thick lines highlight the boundary-specific effects of contact

modestly to become the second-most-likely outcome. These patterns are consistent with Littlejohn’s argument that Multiracials define endogamy less in relation to other Multiracials than to the Monoracial groups with which they overlap in

identity, especially if they ever identify as Black or White (2019). Indeed my findings suggest that “partly interracial” friendships are an important mechanism for translating



**Fig. 3** Effects of Friendships with Group A on Romantic Relationships of black Females and black Males. Source: Appendix Table 3. These panels present the predicted probabilities of four relationship-history outcomes at six boundaries, contingent on respondents’ pro-

portion of group-A friends. Each line represents respondents with the same characteristics as in Fig. 1. The thick lines highlight the boundary-specific effects of contact (Color figure online)

Multiracials’ identity overlaps into social boundaries (i.e., affecting behavior).

Instead of potentially providing a case where interracial contact has general effects (i.e., Monoracials’ contact with

Multiracials “transfers” to contact with other Monoracials), it may be that Monoracials often experience their Multiracial friends not as “Multiracials” but as members of the Monoracial group that they cognitively associate with their

Multiracial friends (c.f. Feliciano, 2016). Specifically, Monoracials may experience their contact with Multiracials as equivalent to specific contact with either Whites or Blacks.

## Intersectional Variations in the Consequences of Interracial Contact

Across the boundary models, the Black  $\times$  Female interaction term is notable for always being larger than its main effects, which are also statistically significant on fewer outcomes and also less consistent in direction. In comparison, the Latinx  $\times$  Female and Asian  $\times$  Female interaction terms are statistically significant on much fewer outcomes and are also smaller than their main effects.<sup>12</sup> These findings suggest that the statistical value of race–gender intersectionality for modeling interracial contact rests primarily on the unique social experiences of Black females (Bany et al., 2014).

Figure 3 presents graphs of how interracial friendships with group A affects Black females' and Black males' predicted probabilities of same-race and interracial dating. As Black females' proportion of friendships with specific groups increases, their probability of never dating interracially declines but remains their modal outcome and substantially higher than the comparable probabilities for Black males as well as all other respondents (c.f., Fig. 1). Also, Black females' probabilities of dating other groups (non-group A) are substantially lower than the probabilities for Black males. Furthermore, the specific effects of contact with group A are visibly “flatter” for Black females than Black males at the White/non-White and Asian/non-Asian boundaries. Nevertheless, as seen in Fig. 1, as friendships with Blacks increase, non-Black males' probability of interracial dating with Blacks exclusively (i.e., Black females) rises, indicating an important counterweight to their gendered racial exclusion (Robnett & Feliciano, 2011).

## Sensitivity Tests

Appendix Table 4 presents the primary sensitivity tests of my two hypothesized findings: (1) Are the specific effects of interracial friendship robust across groups of respondents? For example, does interracial friendship with Whites lead to interracial dating with Whites, not only for non-Whites in aggregate but also for Black respondents as well as Latinx respondents? (2) Are the general effects of interracial friendship negative or non-significant for all

interracial combinations? Specifically, does the failure of interracial friendship to transfer to interracial dating with noncontacted groups mask heterogeneity in whether contact effects transfer to noncontacted groups? The alternative model estimates a binomial outcome (Ever dated group A vs. never dated group A), on separate samples of White, Black, Asian, Latinx, and Multiracial respondents and examines the effects of group-A and non-group-A friends, both measured in proportions.<sup>13</sup>

Holding aside the unreliably large coefficients in certain models of ever dating Natives, the results are consistent with the main analysis, albeit with notable exceptions: Regarding specific effects, for Black respondents, friendships with Asians actually fail to lead to dating with Asians. Regarding general effects, for White and Asian respondents, friendships with non-Blacks actually transfer to dating Blacks, though these effects remain smaller than the specific effects of having Black friends. Lastly, for Multiracials who never identify with group A, friendships with other groups (non-group A) significantly *decrease* the odds of interracial friendship with every group A. These results suggest that Asians who only have same-race friends have a uniquely strong aversion to dating Blacks (even if they have had Asian friends) and that Multiracials are uniquely averse to dating noncontacted groups, if they do not overlap in racial identity (i.e., if the contacts are fully interracial instead of only partly interracial).

In addition, I examined the sensitivity of my hypothesized findings to alternative specifications of interracial dating. First, I examine whether the outcome of interracial dating exclusively with group A could reflect, not reduced prejudice toward group A, but rather internalized racism or fetishization of group A. I rerun the main analysis while excluding respondents who never report same-race dating by Wave IV, using that relationship history as a behavioral proxy for alternative motivations for interracial dating. At all six boundaries (not shown), I find that almost every specific and general effect remained in both the same direction and level of statistical significance as in Appendix Table 3, with only two exceptions: At the White/non-White boundary, the negative effect of White friends on the odds of interracial dating with other non-White groups (i.e., non-group A) becomes non-significant, and at the Black/non-Black boundary, the negative effect of Black friends becomes positive but remains non-significant and small. These results suggest that respondents with alternative motivations are responsible

<sup>12</sup> The Asian  $\times$  Female and Native  $\times$  Female interactions are excluded for one outcome to allow the Black/non-Black boundary model to converge.

<sup>13</sup> Byrd (2017) uses a similar approach to estimate the effects of group-A friends on group-A contacts including dating; however, their results are not comparable with mine or most of the literature, in part because their models only include interracial friendships as a covariate for their preferred variable, self-reported closeness with group A, which is a primary mechanism for the effects of friendship.

for the uniquely negative general-effect of white friendships but otherwise comprise a minor component of my findings.

Second, I explored potential heterogeneity in the effects of interracial contact on different levels of interracial dating. I used the relationship-type measures consistent across Waves II and IV to disaggregate interracial dating to (1) marriages, (2) cohabitation without marriage, and (3) other relationships without marriage or cohabitation, which I separately modeled. To illustrate, to model cohabitation, my outcome was (a) never dated interracially, (b) interracial cohabitation exclusively with group A, and (c) interracial cohabitation with any non-group A, excluding from the sample respondents who reported interracial marriages or only reported interracial other-relationships. Across boundaries (not shown), I find that most specific and general effects remained in both the same direction and level of significance as in Appendix Table 3, save for changes in direction for 7 non-significant effects (out of 36 coefficients) and 3 other exceptions that remained consistent with the main results.<sup>14</sup> These results suggest that the covariates in my main models are successful as controls for the varying attitudes and social contexts that distinguish levels of interracial dating.

## Conclusions

In this article, I have explored the heterogeneity of “interracial” contact by examining the consequences of different boundary crossings for each other. Using unique features of the National Longitudinal Study of Adolescent to Adult Health (Add Health), I have examined how interracial friendships in adolescence affect the likelihood of interracial dating by young adulthood, across six racial boundaries: White/non-White, Black/non-Black, Asian/non-Asian, Latinx/non-Latinx, Native/non-Native, and Multiracial/Monoracial. I find that having interracial contact with a specific group primarily increases the likelihood of later interracial contact with the same group, and I find little evidence that the secondary transfer effects (STEs) of contact (i.e., from contact with group A to attitudes about other groups) also transfer to social relations with other groups. In brief, STEs remain in the domain of symbolic boundaries and rarely

affect social boundaries with noncontacted groups (Lamont & Molnár, 2002).

I also find unique patterns at each boundary. Among the five forms of contact with Monoracial groups, interracial contact with Whites and Blacks has the largest effects. At no other boundaries does interracial dating exclusively with group A become, or nearly become, the most-likely outcome. Also, it is only at the White/non-White and Black/non-Black boundaries that interracial dating with group A exclusively becomes the second-most-likely relationship-history outcome for never-White and never-Black Multiracials, respectively. Furthermore, the sensitivity tests at the Black/non-Black boundary indicate an important exception to the prevailing absence of general effects: For Whites and Asians, having more non-Black friends is associated with a statistically significant increase in their likelihood of dating Blacks. These extreme patterns at the White/non-White and Black/non-Black boundaries are consistent with a tri-racial system anchored by Whites and Blacks (Bonilla-Silva, 2004), the two groups with the lowest participation in interracial friendship and dating.

Interracial contact at the Black/non-Black boundary is also notable for the magnitude of its gender differentiation. Unlike the effects of White friendships for both non-White males and females, the effects of friendships with Blacks are concentrated among non-Black females (i.e., resulting in interracial dating exclusively with Black males). Indeed, at the other boundaries, Black female respondents experience exceptionally high odds of never dating interracially. These findings suggest that for Black females, interracial dating depends more on whether their potential partners have ever had Black friends and less on their own interracial friendships.

The Asian/non-Asian boundary shows a similar but more modest gender differentiation. Interracial contact with Asians leads to higher probabilities of dating Asians for non-Asian males (i.e., with Asian females) than for non-Asian females (i.e., with Asian males). In comparison, interracial contact at the Latinx/non-Latinx boundary shows the least gender differentiation, in that interracial dating exclusively with Latinxs becomes the second-most-likely outcome for both males and females.<sup>15</sup> Similarly, the Native/non-Native boundary shows little gender differentiation. As friendships with Natives reach the maximum, interracial dating exclusively with Natives remains the least likely outcome for both non-Native males and females.

<sup>14</sup> At the White/non-White boundary, in the models for non-marriage non-cohabitation relationships, the negative effect of White friends on interracial dating with other non-White groups (general effect) increases substantially though it remains smaller than the positive effect of White friends on interracial dating exclusively with Whites (specific effect). At the Native/non-Native boundary, the specific effects of Native friends become smaller and non-significant in the models for marriages and non-marriage non-cohabitation relationships; that said, these non-significant specific effects remain larger than the (also non-significant) general effects in the same models.

<sup>15</sup> In additional analyses (not shown), I find Latinx respondents are the principal non-Whites who report interracial dating exclusively with Whites and the principal non-Blacks who report interracial dating exclusively with Blacks, consistent with intermarriage patterns (Saenz & Morales, 2015). Future research should examine whether friendships with Latinxs bridge the networks of Whites and Blacks.

My findings suggest that sociological research on interracial contact should cease measuring contact solely at the different-race/same-race boundary. Rather than expect any interracial contact to begin the general dissolution of racial boundaries, researchers should recognize that contact may have the more limited effect of *familiarization* with specific groups. Accordingly, I propose that sociologists shift their default conception of interracial contact from (1) different-race contact to (2) contact with a specific group, unless there is empirical evidence for secondary transfer effects. In brief, the question is not only whether people *get out* of their own group, but also *with whom* they have social contact.

My findings also have implications for research on Multiracials and their social networks. The rarity of exclusively “same race” dating among Multiracial respondents parallels the rarity of homophily in the friendship patterns of Multiracials (Doyle & Kao, 2007b; Kao et al., 2019). Instead, Multiracials are more likely to date Monoracials, particularly if they overlap in racial identity, consistent with how the friendships of Asian-White and Black-White Multiracials occupy an in-between space between (1) Asians and Whites and (2) Blacks and Whites, respectively. Indeed, Multiracials are uniquely averse to dating Monoracials not represented in their networks unless they overlap in racial identity. This suggests that for Multiracials, “interracial contact” might be better specified as contact with groups with which they do not overlap in racial self-classification. Researchers should examine how Multiracials experience contact with non-overlapping Monoracials, as well as how Monoracials classify and experience their Multiracial friends, depending on not only phenotype or racial appearance but also whether they overlap in racial identity as well as the racial composition of their respective networks.

Third, my findings have implications for understanding the reproduction of racial hierarchies. Whites and Blacks may anchor a triracial system but the intermediate “level” in the social hierarchy contains complex group relations. Consistent with Bonilla-Silva’s conception, groups that have higher levels of interracial contact with Whites are more likely to have friendships and dating relationships with Whites (Bonilla-Silva, 2004). On the other hand, this same specific effect is also evident for interracial contact between every group, including between Whites and Blacks. Rather than simply being populated by Honorary Whites, the intermediate level may be better characterized as a heterogeneous field of interracial familiarization (1) between specific groups, involving processes that are (2) more gender differentiated at some boundaries than others and that (3) socially register Multiracials as Monoracials, despite widespread, nominal recognition of their mixed ancestries.

That said, certain limitations reduce the conclusiveness of my results. I focus on intergroup contact at the racial boundary, whereas respondents’ actual group boundary may

be at a more restrictive scale or dimension, such as an ethnic boundary, a skin-tone boundary, or an acculturation boundary; thus, my base outcome (i.e., same-race partners only) may include outgroup partners (i.e., same race but different ethnicity) and my measures of interracial friendships may include in-group partners (i.e., different race, but same skin tone or same nativity). Researchers should examine whether interracial friendship increases the likelihood of panethnic dating and whether relative similarity in skin tone or nativity among interracial friends moderates the effects of interracial contact, even with contacted groups.

Also, I use interracial relationship history as my measure of the consequences of interracial contact, which is less restrictive than interracial marriage but may still be too restrictive. STEs may have behavioral consequences that are not indicated by individuals’ relationship histories, for example, in adult friendship, organizational membership, and political behavior. Researchers should examine whether interracial contact affects less-intimate behaviors toward noncontacted groups; indeed, these subsequent contacts may serve as a mechanism for the STEs that actually extend to relationships with (previously) noncontacted groups.

My findings also have important implications for public sociology, especially social policies, and movements that rely on interpersonal contact as a mechanism for improving race relations. The strength of its specific effects suggests that reducing racial prejudice in general may require contact with multiple groups; however, increasing the number of groups in a network limits the proportional representation of each group and also the level of contact with each group. Although many proponents of diversity policies promote contact with “infinite diversity in infinite combinations,” my results suggest that they should also consider prioritizing contact with specific groups, depending on their particular goals. Most obviously, if the goal is to reduce place-based racial inequalities, then decades of research on residential segregation recommend prioritizing intergroup contact with African Americans (Charles, 2009). Regardless, it is doubtful that increasing interracial contact will lead to widespread desegregation; more likely, it will reposition select individuals as honorary group members (Shiao, 2018), and at best, it will blur specific boundaries in specific places (Vasquez-Tokos, 2017).

Lastly, my quantitative findings raise questions regarding the qualitative nature of racial boundary change. As interracial contact changes individuals’ attitudes and behaviors toward specific groups, how do these changes affect the racial attitudes and behaviors of their networks as well as the cultural schema associated with their respective groups? Specifically, how do their family, community, and social institutions respond (Osuji, 2019; Vasquez, 2015)? In sum, the consequences of interracial contact

include both its specific effects for the individuals involved and also the responses of their networks and groups to their boundary-specific behavior.

## Appendix

See Tables 3 and 4.

**Table 3** Select coefficients in log odds from estimates of interracial relationships

Select variables	Relationship histories across group A/non-group-A boundaries					
	White/non-White	Black/non-Black	Asian/non-Asian	Latinx/non-Latinx	Native/non-Native	Multira- cial/Mono- racial
Outcome 1: Never dating interracially (Base outcome)						
Outcome 2: Interracial dating with group-A exclusively (Specific effects of interracial contact)						
Proportion of Group-A friends	1.77***	2.28***	2.19***	1.41***	2.12*	– 0.00
White	Group A	Reference	Reference	Reference	Reference	Reference
Black	– 1.14***	Group A	– 1.18**	– 0.47*	– 0.59	0.32
Asian	– 0.85***	– 0.20	Group A	– 0.75*	– 0.27	– 0.04
Latinx	Reference	0.96**	– 0.53	Group A	– 0.57	0.23
Native	– 2.41*	0.07	– 18.24	– 0.29	Group A	– 15.09
Multiracial	0.16	1.06*	– 0.1	0.19	0.72	Group A
Ever-group A	0.70*	1.85***	1.40**	0.77*	0.45	Group A
Female	– 0.32*	1.00***	– 0.77***	0.07	0.11	0.15
Black × Female	– 1.34***	Group A	– 1.21	– 0.64**	– 0.10	– 0.81*
Asian × Female	0.66*	Omitted	Group A	– 0.07	– 18.00	0.16
Latinx × Female (Latina)	Reference	– 0.32	0.08	Group A	– 1.40	– 0.54
Native × Female	2.35	Omitted	1.65	1.86	Group A	0.50
Multiracial × Female	0.26	– 0.11	0.69	– 0.49	0.43	Group A
Intercept (Outcome 2)	– 0.54***	– 3.25***	– 2.49***	– 1.68***	– 3.44***	– 3.01***
Outcome 3: Interracial dating with non-group-A (General effects of interracial contact)						
Proportion of Group-A friends	– 0.44*	– 0.04	0.27	– 0.05	0.34	0.28
White	Group A	Reference	Reference	Reference	Reference	Reference
Black	– 0.50**	Group A	0.08	0.22	– 0.01	– 0.09
Asian	– 0.63**	0.05	Group A	0.14	– 0.01	– 0.07
Latinx	Reference	0.79***	1.01***	Group A	0.89***	0.84***
Native	– 0.04	– 0.17	– 0.00	– 0.13	Group A	– 0.11
Multiracial	2.51***	2.24***	2.59***	2.74***	2.27***	Group A
Ever-group A	– 0.96***	– 0.66*	– 0.89***	0.14	0.1	Group A
Female	0.14	0.03	0.29***	0.24**	0.18*	0.16*
Black × Female	– 1.30***	Group A	– 1.45***	– 1.64***	– 1.46***	– 1.44***
Asian × Female	0.42	0.23	Group A	0.26	0.30	0.29
Latinx × Female (Latina)	Reference	– 0.33*	– 0.39*	Group A	– 0.31*	– 0.30*
Native × Female	1.74	1.31	1.45	1.18	Group A	1.47
Multiracial × Female	0.26	0.02	0.03	0.04	0.08	Group A
Intercept (Outcome 3)	– 0.51***	– 0.58***	– 0.69***	– 1.08***	– 0.59***	– 0.65***
Across-school variance	0.00	0.06**	0.04*	0.03	0.03*	0.05*
Individual-level N	5222	8499	9632	8851	10,179	8647

The boundary models in each column are multilevel, multimomial models of the odds of interracial relationships with group A for non-group-A respondents (e.g., non-Whites’ odds of never dating interracially, interracial dating with Whites exclusively, and interracial dating with other non-Whites), using nonimputed Add Health data

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



**Table 4** Sensitivity tests for respondent-specific effects of interracial friendships on interracial relationships

Respondents	Interracial friendship variables	Interracial relationship histories					
		Ever dated Whites	Ever dated Blacks	Ever dated Asians	Ever dated Latinxs	Ever dated Natives	Ever dated Multiracials
White respondents (N = 4984)	Proportion Group-A	Group A	2.17***	2.00**	0.67*	2.11*	– 0.15
	Prop. non-Group-A	Group A	0.80**	0.03	0.22	– 0.08	0.03
Black respondents (N = 1707)	Proportion Group-A	2.28***	Group A	– 0.34	1.33**	– 130.84	– 0.65
	Prop. non-Group-A	0.15	Group A	0.03	0.53	0.84	– 0.29
Asian respondents (N = 574)	Proportion Group-A	1.71*	2.59*	Group A	2.37***	– 136.91	– 0.09
	Prop. non-Group-A	0.28	1.51*	Group A	0.61	0.67	0.30
Latinx respondents (N = 1355)	Proportion Group-A	2.23***	2.59***	1.75*	Group A	3.08	1.20*
	Prop. non-Group-A	0.40	– 0.49	0.02	Group A	0.03	0.23
Multiracial respondents (N = 1559)	Proportion Group-A	1.86***	1.76***	0.90	0.60	0.85	Group A
	Prop. non-Group-A	– 0.82*	– 0.86*	– 0.90*	– 0.72*	– 0.4	Group A

Each combination of relationship history and respondent race represents a separate multilevel, binomial model of the odds of interracial relationships with group A (e.g., Black respondents' odds of ever dating interracially with Whites), using nonimputed Add Health data. Multiracial respondents are Never-group-A Multiracials

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

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## Declarations

**Conflict of interest** The author declares that they have no conflict of interest.

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