



Published in final edited form as:

Dev Psychol. 2019 November ; 55(11): 2440–2450. doi:10.1037/dev0000810.

Social Inclusion and Exclusion in Same-Race and Interracial Peer Encounters

Shelby Cooley,

Community Center for Educational Results, Seattle WA

Amanda R. Burkholder,

University of Maryland

Melanie Killen

University of Maryland

Abstract

This study investigated children's and adolescents' predictions of inclusion and evaluations of exclusion in interracial and same race peer contexts. The sample ($N = 246$) consisted of African-American ($n = 115$) and European-American ($n = 131$) children and adolescents who judged the likelihood of including a new peer, evaluated the group's decision to exclude the new peer, and provided reasons for their judgments. European-American participants, particularly adolescents, viewed same-race inclusion as more likely than interracial inclusion. In contrast, African-American participants viewed interracial and same-race inclusion to be just as likely, and evaluated all forms of exclusion to be more wrong than did their European-American counterparts. The findings are discussed with respect to peer messages about interracial peer encounters and the conditions that are necessary for prejudice reduction.

Keywords

Racial bias; prejudice; social exclusion; interracial peer groups; moral judgments

Children perceive and make judgments about whom to include or exclude from various social groups and activities. While some decisions to exclude others are based on individual traits, such as shyness or social withdrawal (Rubin, Bukowski, & Parker, 2006), children also consider intergroup categories such as gender, race, and ethnicity as relevant factors within peer exclusion contexts (Killen, Mulvey, & Hitti, 2013; Nesdale, 2004; Rutland & Killen, 2015). In fact, children often use stereotypes, biases, and prejudice about members of social groups to inform their decisions on whom to include or exclude—a process referred to as intergroup social exclusion (Brown, 2017; Cooley, Elenbaas, & Killen, 2016; Horn, 2003). In these cases, when the child's decision to include or exclude others is *solely* attributed to the individual's group membership, the basis for the decision may be a form of prejudice (Burkholder, D'Esterre, & Killen, 2019).

A common form of intergroup social exclusion in childhood is *interracial social exclusion*—exclusion based solely on an individual's racial group membership (Dovidio, Glick, & Rudman, 2005). Interracial social exclusion is motivated by both implicit and explicit racial

biases that are often present in early childhood and can be sustained throughout the lifespan (Levy, Lytle, Shin, & Hughes, 2015; Ruck, Park, Crystal, & Killen, 2014; Rivas-Drake, et al., 2014). If present, these racial biases may influence how children form and maintain social relationships (Kinzler & Spelke, 2011; Newheiser, Dunham, Merrill, Hoosain, & Olson, 2014; Shutts, Pemberton Roben, & Spelke, 2013), resulting in ingroup preference and in many cases prejudicial attitudes of racial outgroup members (Baron & Banaji, 2006; Dunham, Baron, & Banaji, 2006; Liu et al., 2015; Renno & Shutts, 2015).

These ingroup biases influence peer contexts, including children's inclusion and exclusion preferences, especially among ethnic majority children (McGlothlin & Killen, 2006; Møller & Tenenbaum, 2011; Ruck & Tenenbaum, 2014; Shutts et al., 2013). By four years-old, European-American children more readily predict same-race friendships instead of interracial friendships (Shutts et al., 2013), and this effect is exacerbated among European-American children attending ethnically homogenous schools with low levels of intergroup contact (McGlothlin & Killen, 2006). Moreover, ethnic majority children who hold stereotypes about racial outgroup members and prioritize ingroup functioning have lower expectations for interracial inclusion than their ethnic minority and non-stereotype-holding peers (Hitti & Killen, 2015; Ruck & Tenenbaum, 2014).

While much of the early intergroup literature has focused on bias among ethnic majority status children (e.g., European-American children), more recent research has pointed to the importance of including both ethnic majority and minority children in order to investigate how status may differentially shape interpretations of intergroup contexts (Crystal, Killen, & Ruck, 2008; Dovidio, Gaertner, & Saguy, 2007; Roberts, Williams, & Gelman, 2017). Research on ethnic majority and minority children's predictions and evaluations of interracial social exclusion has shown that there are some group differences in how instances of exclusion are processed (Crystal et al., 2008; Killen, Henning, Kelly, Crystal, & Ruck, 2007).

In one study, 9-, 12- and 15-year-old participants from different racial backgrounds evaluated interracial peer scenarios in which European-American peers excluded an African-American peer from several different social activities (Killen et al., 2007). Findings indicated that, on average, children viewed race-based exclusion as wrong due to moral reasons (such as lack of fairness or justice). When non-race based reasons were used to explain why majority peers excluded minority peers (such as lack of shared interests, parental discomfort, and peer pressure), ethnic minority participants viewed it as more wrong than did their majority counterparts and also reasoned more about empathy.

The role of bias among ethnic majority status groups (often in the form of negative outgroup attitudes and stereotypes) serves to maintain hierarchies, power, and privilege (Killen, Elenbaas, & Rizzo, 2018; Rivas-Drake, et al., 2014). This contrasts ethnic minority status groups as the recipients of bias. For example, at an early age African-American (but not European-American) children receive messages from their parents concerning racial bias and discrimination (Brown, 2017; Harris-Britt, Valrie, Kurtz-Costes, & Rowley, 2007; Hughes & Bigler, 2011). These messages, along with direct experiences with prejudice, can lead African American youth to be both optimistic for and apprehensive about intergroup

social encounters. Yet, negative outgroup attitudes held by minority status children serve a different set of structural goals (e.g., protection from bias) than held by European-American youth (Brown, 2017). It is thus important to consider a child's own group membership to understand the full picture of children's intergroup attitudes, and specifically how they may also be benefiting from intergroup friendships.

To test children's evaluations of exclusion that reflect societal patterns of social status, many intergroup studies have depicted interracial exclusion contexts in which the ethnic majority status group (e.g., European American) excludes a minority status peer group (e.g., African American) (for a recent exception with immigrant status as the social group of reference, see Thijs, 2017). In these studies, it is often shown that African-American children evaluate interracial exclusion more negatively than their European-American counterparts (Crystal et al., 2008; Killen et al., 2007). What remains unknown, however, is whether the findings generalize to other compositions of interracial peer encounters, such as when a minority status group rejects a majority status peer (e.g., an African-American group excluding a European-American peer), or same-race peer exclusion encounters. This is necessary to investigate because ethnic minority status children may view interracial exclusion as wrong because they view the exclusion as wrong and potentially a representation of ingroup bias among the higher status group, or because they identify with the excluded individual (or both reasons). We propose that the asymmetry in children's evaluations of exclusion is related to the interracial context as well as the race of the excluded peer.

For instance, African-American children in previous studies may have been particularly perceptive to the act of exclusion itself, due to past experiences with exclusion and discrimination (Brown, 2017; Beaton et al., 2012; Ruck, Park, Killen, & Crystal, 2011). Indeed, ethnic minority children who perceive exclusion as discriminatory are especially likely to reject the act as wrong (Thijs, 2017). Further, as cited earlier, the racial socialization literature has demonstrated that African-American children and adolescents, more so than their European-American peers, receive messages about race and bias early in life and are likely to perceive racial exclusion as wrong stemming from parental messages about the potential world of discrimination that they may encounter (Hughes, McGill, Ford, & Tubbs, in press; Pahlke, Bigler, & Suizzo, 2012; Seaton, Yip, Morgan-Lopez, & Sellers, 2012). It would then be expected that African-American children would evaluate all forms of interracial exclusion negatively, regardless of the racial group membership of the excluded child.

However, African-American children could also be reacting to the specific racial group membership of the excluded child. Specifically, in previous studies these children viewed a racial ingroup member excluded from an activity, while European-American children viewed a racial outgroup member excluded. In this scenario, African Americans could be sensitive to the exclusion of their ingroup member, instead of the broader interracial nature of the event. Thus, it is necessary to investigate whether African-American *and* European-American children differentially evaluate multiple forms of exclusion (interracial and same-race exclusion) and whether their evaluations change as a function of a shared group membership with the excluded peer.

Further, research has shown that investigating how children and adolescents predict the *inclusion* of peers often reveals biases and stereotypic expectations not apparent when only asking participants to evaluate instances of *exclusion* (Hitti & Killen, 2015). Predictions about inclusion are a subtler and thus often more effective paradigm because they involve a potentially positive (inclusion) and negative (not including) outcome, whereas directly asking about whom to exclude has a primarily negative valence (Møller & Tenenbaum, 2011). There is evidence that children evaluate selective ingroup inclusion as less negative and more acceptable than blatantly excluding someone on the basis of group membership (Hitti & Killen, 2015; Killen, Lee-Kim, McGlothlin, & Stangor, 2002). With age, children increasingly condone selective ingroup inclusion due to concerns for maintaining group norms or functioning, such as lacking of shared interests with outgroup members, or having common goals with ingroup members (Hitti & Killen, 2015; McGlothlin & Killen, 2005; Stark & Flache, 2012). Therefore, including a measure of children's predictions of interracial inclusion provides additional information about the nature of children's biases, in addition to their evaluations of interracial exclusion.

Present Study

The current study investigated African-American and European-American children's and adolescents' evaluations of interracial and same-race peer encounters. Participants were 9- to 14-year-olds, capturing late childhood and adolescence when peer groups become increasingly important and children have a developing awareness of the group factors contributing to their social decisions (Abrams & Rutland, 2008; Recchia, Brehl, & Wainryb, 2012). Moreover, the rate of interracial friendships declines dramatically by early adolescence (Aboud, Mendelson, & Purdy, 2003; Hallinan & Teixeira, 1987), and adolescents are more likely than children to expect interracial social exclusion to occur (Crystal et al., 2008). Thus, this developmental timeframe is especially relevant for addressing questions about interracial peer exclusion and inclusion.

To directly manipulate the racial composition of the peers involved, children were shown digital illustrations of same-race and interracial peers making decisions in a familiar social situation (riding a school bus with friends) (see Figure 1). This method provided a means to focus on predictions of inclusion as well as evaluations of exclusion. Measures of these attitudes include children's judgments, evaluations, and social reasoning about the conditions in which inclusion is likely (or unlikely) and in which exclusion may be wrong (or permissible) (Killen et al., 2007; Newheiser & Olson, 2011; Ruck et al., 2011; Tropp & Prenovost, 2008).

Theoretical Model.

The social reasoning developmental (SRD) model (Killen & Rutland, 2011) guided this study. This approach draws on social domain theory (Smetana, Jambon, & Ball, 2014), and developmental social identity theories (Nesdale, 2004) to investigate the influences of morality and group processes on prejudice in evaluations of social exclusion. SRD posits that group identity, social conventions, individual preferences, and moral principles all impact evaluations of intergroup social exclusion.

Research motivated by the SRD perspective has found age related changes in children's awareness of group dynamics, such that with age children are increasingly able to weigh (or learn to negotiate) among competing claims, such as concerns for fairness, group functioning, and their own desires (Killen, Elenbaas, & Rutland, 2016). Yet, children's acquisition varies based on the specific socio-historical context of the groups (e.g., groups of equal vs. unequal social status), and can be impeded by individuals' level of intergroup contact and their adherence to prejudicial attitudes.

The SRD perspective theorizes that children's priority to the ingroup, group norms, or moral principles is related to intergroup dynamics, and group threat. In general, social conventional norms, such as group loyalty and mutual goals, aid in making groups work well and promote positive interpersonal interactions (Smetana et al., 2014). However, negative social conventional norms, such as group homophile (e.g., "we only hang out with people like us") and threat to the ingroup (e.g., limited resources) can promote children's use of group identity, group norms, social conventions, can result in children's use of prejudicial reasoning (Rutland & Killen, 2017). Conversely, positive intergroup dynamics can promote children's use of more inclusive and moral reasoning. Thus, SRD perspective sets forth a framework to understand how children use social information about groups to make intergroup decisions while also examining the nature of the intergroup setting and individual differences that impede or advance children's capacity to make just decisions and hold positive outgroup attitudes.

Hypotheses.

Regarding children's predictions about the likelihood of inclusion or exclusion, we predicted that (H1) European-American participants, but not African-American participants, would view interracial inclusion as less likely than same race inclusion, as European-American children report lower levels of interracial friendship potential than same-race friendship potential (McGlothlin & Killen, 2006; Shutts et al., 2013), and SRD posits that traditionally higher status groups (e.g., European American children) will be less likely to disrupt the status quo (Killen & Rutland, 2011). We also predicted that (H2) participants' expectations for interracial inclusion would decrease with age, especially among European Americans, as there is a decrease of interracial friendships reported over this developmental period (Aboud et al., 2003; Crystal et al., 2008), and interracial friendships thus may not provide a buffer against prejudicial attitudes (Killen & Rutland, 2011). Moreover, SRD dictates that, with age, children become increasingly aware of the broader social context and increasingly able to weigh multiple concerns, such as concerns for both fairness and ingroup loyalty norms (Killen et al., 2016). Thus, adolescents may be more likely to condone interracial exclusion, especially in cases in which other ingroup members may be unwilling to include.

Regarding children's evaluations of peer exclusion, we expected that (H3) participants would evaluate interracial exclusion as more wrong than same-race exclusion, given the additional moral concern of exclusion in an interracial context (Killen & Rutland, 2011). Additionally, we predicted that (H4) African-American participants would evaluate interracial exclusion as more wrong than would their European-American peers, regardless of whether it was the exclusion of an African-American or European-American child. This is

because African-Americans' prior experience with interracial exclusion may highlight the unfairness of excluding someone based on race and contribute to their identification with the excluded peer regardless of whether they were an ingroup member (Beaton et al., 2012; Ruck et al., 2011), as members of groups that are traditionally lower in status are often most affected by intergroup exclusion (Killen et al., 2016).

Regarding children's justifications, we expected that (H5) children who thought inclusion was likely and evaluated exclusion negatively would use more moral reasoning and promote the merits of inclusion in their justifications (Crystal et al., 2008; Møller & Tenenbaum, 2011), as moral reasoning is often associated with less prejudicial attitudes and an increased propensity for interracial friendships (Killen & Rutland, 2011). Conversely, (H6) children who predicted that inclusion was unlikely and children who evaluated exclusion as acceptable were expected to focus on peer pressure (conventional reasoning), as conventional norms often play a role in the development of prejudicial attitudes and ingroup bias in childhood and adolescence (Killen et al., 2007).

Method

Participants

Participants ($N = 246$; $n_{males} = 108$, $n_{females} = 138$) included self-identified African-American and European-American participants. The sample was divided between 9- to 11-year-olds ($n_{AfricanAmerican} = 52$, $M = 10.04$ years, $SD = .61$; $n_{EuropeanAmerican} = 67$, $M = 10.03$ years, $SD = .57$) and 12- to 14-year-olds ($n_{AfricanAmerican} = 63$, $M = 13.59$ years, $SD = .57$; $n_{EuropeanAmerican} = 64$, $M = 13.67$ years, $SD = .57$). Sample size was determined using a priori power analyses with the G*Power software (Faul, Erdfelder, Buchner, & Lang, 2009), and revealed that in order to detect small to medium effects, a minimum of approximately 244 participants would be necessary to test our hypotheses.

Children and adolescents were recruited from elementary and middle schools as well as summer camps serving low-middle- to high-middle socioeconomic status ranges in the mid-Atlantic region of the United States. Schools were specifically selected by diversity for the sample of interest (specifically containing large percentages of European American and African American participants). While individual or school-level socioeconomic status information was not collected, the sample was selected from a region of the Mid-Atlantic in which most participants, regardless of racial background, came from low-middle to upper-middle SES backgrounds.

It is not expected that the sample was confounded by race and SES (often reported for child development data) due, in large part, to the fact that the region in which the data were sampled has one of the highest income African American communities in the country. Other studies collected from this same population have shown few differences in average income levels between European American and African American participants when individual income was obtained through parental consent forms (e.g., Burkholder, Elenbaas, & Killen, 2019).

Procedure

The University of Maryland Institutional Review Board approval was obtained for the project “Children and adolescent’s interpretations of peer-based social exclusion” (approval number 1077935–1), and parental consent (for 9- to 12-year-olds) and adolescent assent (for 13- to 14-year-olds) were obtained prior to participation. In individual and small group settings at school, children and adolescents listened to instructions from trained research assistants and then filled out the survey. Surveys took between 20 – 25 minutes to complete.

Design and Measures

The current study was a between-subjects design where participants were assigned to one of three survey versions that differed in the pictured racial composition of the characters. In order to investigate whether children differentially evaluated interracial and same-race inclusion and exclusion, the study included three conditions (between subjects).

Specifically, there were two interracial conditions and one same-race condition:

1. Condition 1 portrayed an *interracial* context in which two European-American characters considered including or excluding an African-American peer;
2. Condition 2 portrayed an *interracial* context in which two African-American characters considered including or excluding a European-American peer; and
3. Condition 3 portrayed a *same-race* context where the race of all characters were matched to the race of the participant.

Thus, this study included conditions in which members of a higher status social group (European Americans) made decisions about a member from a lower status social group (African American) and a condition in which member of a lower status social group (African Americans) made decisions about a member of a higher status social group (European American), and a condition in which the members of the group were the same-race (matched to the participant). This design allowed the investigation of interracial inclusion and exclusion while testing and controlling for the effects of status and participant group membership within the intergroup context. The scenarios described in the survey were accompanied by professionally created digital illustrations of characters with an image of a yellow school bus (see Figure 1).

Given the age-range of participants, the first page of the survey consisted of an instruction page with sample items for using the Likert-type scales (e.g., “How often did you play sports last week?” Which was followed by the words: Never, Once, A few times, Sometimes, Often, and All the Time, with small boxes under each item to check). Following the Likert-type example was a place to write one’s explanation (“Why did you play that much or that little?”) with a sample statement hand written in. The first page of the survey had the picture at the top with the scenario typed out next to it, followed by the assessments below on the same page. After completing the assessments, participants filled out their demographic information (race, gender, date of birth, and grade). To collect participants’ racial group membership, children were given a list of possible racial and ethnic group memberships and were read the following prompt:

If you were writing a **true** story about yourself and wanted to tell people about what you're like, which words would you use? Below are some words and you can choose as many as apply to you.

Because this study was interested in monoracial African American and European Americans' predictions and evaluations, only children who selected "Black" or "African American" only and "White" or "European American" only were included in the study. Children and adolescents who identified as multiracial or as another race were excluded from analyses.

Inclusion and Exclusion Paradigm.—The scenario was adapted from Killen and colleagues' (2007) *Intergroup Exclusion Task*. The following text was identical for all participants, with a boy-version and a girl-version (using gender matched names: Karen/ Kevin, Jane/Jason, and Diane/Daniel):

Karen likes sitting next to her good friends on the bus. Karen sits next to her friend Jane on the bus almost every day. A new girl named Diane started riding their bus. Karen only recently met Diane but she wants to invite her to sit with her and Jane. Jane, however, has not met Diane. Jane does not usually sit next to children she does not know. That day when Diane gets on the bus, there is an open seat nearby Karen and Jane.

Consistent with previous research (Killen et al., 2007), the scenario included both information supporting inclusion ("She wants to invite her to sit with her and Jane") and information supporting exclusion ("Jane does not usually sit next to children she does not know"). Therefore, participants weighed these competing concerns in the predictions of inclusion and evaluations of exclusion.

Prediction of Inclusion.—To examine participants' predictions about the likelihood of inclusion (or exclusion) from the seat on the bus, participants responded to the following written prompt, "How likely is it that Karen will invite Diane?". Responses were on a 6-point Likert-type scale ranging from 1 (*not likely at all*) to 6 (*really likely*). The depicted race of the characters varied by condition (see Table 1).

Evaluation of Exclusion.—To examine children's evaluations of exclusion, participants responded to the following written prompt, "Let's say that Karen decides not to invite Diane to sit there because she thinks her friend, who has never met Diane, might be uncomfortable. How good or bad is it for her to not invite Diane?". Responses were on a 6-point Likert-type scale ranging from 1 (*very bad*) to 6 (*very good*).

Justifications for Responses.—Open-ended reasoning was also collected to understand variance in children's justifications for each evaluation. Participants' justifications for their responses were captured by asking "Why?" after the Prediction of Inclusion and Evaluation of Exclusion prompts. Justifications were coded using categories drawn from the social reasoning developmental (SRD) model and social domain theory (Killen & Rutland, 2011; Smetana et al., 2014). The theory-driven coding system was comprised of three macro categories: Moral, Societal/Conventional, and Psychological (Smetana et al., 2014).

Moral Reasoning. Under SRD, moral reasoning refers to the prioritization of fairness, equal treatment, and concern for others' welfare. This includes references to the general wrongfulness of exclusion (unfairness) as well as the negative emotional consequences that exclusion may cause (others' welfare: psychological harm). For the current study, references to moral reasons were coded under one category which include both fairness and others' welfare: Wrongfulness of Exclusion/Merits of Inclusion (e.g., "He doesn't know him yet so he shouldn't exclude him just because of his skin color"; "She should invite her otherwise her feelings will be hurt").

Societal Conventional Reasoning. SRD posits that societal conventional reasoning, specifically reasoning about group concerns, is related to the development and acceptance of prejudicial beliefs and discriminatory behavior. For the current study, societal/conventional reasoning was coded under one category: Peer pressure (e.g., "It's not likely because she would be going against her friends").

Psychological Reasoning. Justifications that reference individual preferences or desires are categorized as psychological reasoning under SRD. The current study had one psychological reasoning category: Autonomy (e.g., "It's your choice what you want to do", "He shouldn't care what his friends think and just do what he wants").

Lastly for responses that did not explain "why" participants gave their evaluation, an "other" category was created: 4) Other/Uncodable (e.g., "Because I like them better"). All examples given were transcribed responses from participants in the current study.

Participants' responses could include up to two codes if they included two separate clauses that contained different codeable justifications (e.g., if a two clause response referenced both moral concerns and concerns for autonomy). Proportional data were used in the analyses for the reasoning data. Justifications were coded as 1 = full use of the category, .5 = partial use (if two codes were allocated), 0 = no use of the category (see Posada & Wainryb, 2008, for a full explanation of this data analytic approach). Because participants could use all, partial, or none of the justification codes, concerns about the interdependence of the data was not an issue (the data were independent for coding purposes). Three research assistants who were blind to the hypotheses of the study conducted the coding. On the basis of 29% of the interviews ($n = 72$), Cohen's $\kappa = .85$ for interrater reliability was achieved.

Results

Prediction of Inclusion.

To test our hypotheses (H1 & H2) relating to children's predictions about the likelihood of inclusion, we conducted a 2 (Age: Children, Adolescents) \times 2 (Participant Race: African American, European American) \times 3 (Condition: 1, 2, 3) ANOVA. This analysis revealed three significant effects.

First, a main effect for Condition was found, $F(2, 234) = 5.97, p = .003, \eta_p^2 = .049$. Post hoc Bonferroni analyses revealed that participants expected inclusion to be more likely in the same-race encounter ($M_{C3} = 4.49, SD_{C3} = 1.08$) than in the interracial encounter in which

European-American peers considered inclusion of an African-American peer ($M_{C1} = 4.05$, $SD_{C1} = 0.96$; $p = .006$) or the interracial encounter in which African-American peers considered inclusion of a European-American peer ($M_{C2} = 4.09$, $SD_{C2} = 1.20$; $p = .035$). There were no significant main effects of Participant Age, $F(1, 234) = 2.89$, $p = .090$, $\eta_p^2 = .012$, or of Participant Race, $F(1, 234) = .099$, $p = .753$, $\eta_p^2 = .000$.

Second, corresponding to our hypothesis (H1) that European-American participants would view interracial inclusion as less likely than same-race inclusion, we found a significant interaction between Condition and Participant Race, $F(2, 234) = 7.77$, $p = .001$, $\eta_p^2 = .062$. As shown in Figure 2, post hoc Bonferroni analyses revealed that European-American participants found same race inclusion (Condition 3) more likely than either interracial inclusion encounter (Conditions 1 and 2) ($ps < .010$). Additionally, European-American participants expected that same race inclusion (Condition 3) would be more likely than did African-American participants ($p = .001$), African-American participants, however, made no distinction between same-race and interracial peer encounters ($ps > .05$), but expected the interracial inclusion of an African-American peer by European-American peers (Condition 1) to be more likely than did European-American participants ($p = .021$).

Corresponding to our hypotheses (H1 & H2) that participants' racial group membership and age would influence their predictions of inclusion, we found a significant 3-way interaction for Condition by Participant Race and Age, $F(2, 234) = 3.44$, $p = .034$, $\eta_p^2 = .029$. As shown in Figure 3, European-American adolescents expected same-race inclusion to be more likely than African-American adolescents ($p < .001$) and European-American children ($p = .015$). Additionally, European-American adolescents expected same-race inclusion (Condition 3) to be more likely than either interracial inclusion encounter (Conditions 1 and 2) ($ps < .010$). African-American children and adolescents did not differ in their expectations of interracial and same-race inclusion ($ps > .05$).

Using the G*Power software (Faul et al. 2009), post-hoc tests were computed to detect power for the full model and for the 2-way and 3-way interactions. Results indicated a power level of .99 for the full model, .96 for the 2-way interaction, and .67 for the 3-way interaction.

Thus, our hypotheses (H1 & H2) were supported. European-American participants had greater expectations that others would include racially similar peers than peers of different races (regardless of the interracial nature of the encounter). This effect was driven primarily by European-American adolescents, who expected same-race inclusion to be more likely than African-American adolescents or European-American children, and same-race inclusion to be more likely than interracial inclusion.

Reasoning for prediction of inclusion.—To test children's reasoning in their predictions of inclusion, a 2 (Prediction of Inclusion: Likely, Not Likely) \times 2 (Participant Race: African American, European American) \times 2 (Participant Age: Children, Adolescents) \times 3 (Reasoning: Wrongfulness of Exclusion/Merits of Inclusion, Autonomy, Peer Pressure) ANOVA with repeated measures on the last factor was conducted. The main effect of

Reasoning was significant, $F(3, 708) = 40.69, p < .001, \eta_p^2 = .147$. Post hoc Bonferroni analyses revealed that overall a higher proportion of children reasoned about peer pressure ($M = .42, SD = .46$) than about the wrongfulness of exclusion ($M = .31, SD = .43$) or autonomy ($M = .19, SD = .37$) ($ps < .001$).

Corresponding to our hypotheses (H5 & H6), there was a significant interaction effect for Reasoning and Prediction of Inclusion, $F(3, 708) = 21.42, p < .001, \eta_p^2 = .083$. As shown in Table 1, participants who thought inclusion was likely referenced the wrongfulness of exclusion or merits of inclusion (e.g., “You should include kids you don’t know”) significantly more than participants who thought inclusion was not likely ($p = .001$). Additionally, participants who thought inclusion was likely referenced Autonomy (e.g., “She should do what she wants”) at significantly higher proportions than participants who viewed inclusion as not likely ($p < .001$). Finally, participants who thought inclusion was *not* likely referenced Peer Pressure (e.g., “He won’t because his friend will be uncomfortable”) significantly more than did those who evaluated inclusion to be likely ($p < .001$).

There were no significant interactions between Reasoning and Participant Age, $F(3, 708) = 1.84, p = .138, \eta_p^2 = .008$, or Reasoning and Participant Race, $F(3, 708) = .45, p = .717, \eta_p^2 = .002$. Thus, our hypotheses (H5 & H6) were supported. Children who thought inclusion was likely highlighted the importance of making decisions independent from external pressure and the merits of including the peer while children who expected inclusion not to occur appealed to the needs of the friend group.

Evaluation of Exclusion.—To test our hypotheses (H3 & H4) relating to children’s evaluations of exclusion, we conducted a 2 (Age: Children, Adolescents) \times 2 (Participant Race: African American, European American) \times 3 (Condition: 1, 2, 3) ANOVA. This analysis revealed two significant effects.

First, a main effect for Participant Race was found, $F(1, 232) = 21.87, p < .001, \eta_p^2 = .086$, such that African-American children ($M = 2.54, SD = 1.16$) evaluated exclusion to be more wrong than did European-American children ($M = 3.22, SD = 1.03$). Next, a main effect for Condition was found, $F(2, 232) = 3.22, p = .042, \eta_p^2 = .027$. However, post hoc Bonferroni analyses revealed that participants did not evaluate interracial exclusion of an African American by European-American peers ($M = 2.74, SD = 1.18$) as statistically more wrong than interracial exclusion of a European American by African-American peers ($M = 3.13, SD = 1.12$) ($p = .088$), and neither interracial context differed significantly from participants’ evaluations of same-race exclusion ($M = 2.97, SD = 1.09; ps > 0.100$).

There was no main effect of Age, $F(1, 232) = .60, p = .440, \eta_p^2 = .003$. Thus, these hypotheses (H3 & H4) were partially supported. Overall, African-American participants evaluated exclusion more negatively than did European-American participants, regardless of the specific nature of the exclusion context. There was no difference, however, between children’s evaluations of same-race exclusion and exclusion in interracial contexts.

Reasoning for evaluation of exclusion.—To test children’s justifications for their evaluations of exclusion, a 2 (Evaluation: Bad, Good) \times 2 (Participant Race: African American, European American) \times 2 (Participant Age: Children, Adolescents) \times 3 (Reasoning: Wrongfulness of Exclusion/Merits of Inclusion, Autonomy, Peer Pressure) ANOVA with repeated measures on the last factor was conducted. The main effect of Reasoning was significant, $F(3, 711) = 63.69, p < .001, \eta_p^2 = .212$. Post hoc Bonferroni analyses revealed that, overall, a higher proportion of children reasoned about the wrongfulness of exclusion ($M = .45, SD = .45$), than peer pressure ($M = .42, SD = .45; p = .042$) or autonomy ($M = .07, SD = .25; p < .001$).

Corresponding to our hypotheses (H5 & H6), there was a significant interaction effect for Reasoning and Evaluation of Exclusion, $F(3, 711) = 33.06, p < .001, \eta_p^2 = .122$. As shown in Table 2, participants who negatively evaluated exclusion referenced the wrongfulness of exclusion or merits of inclusion (e.g., “It’s bad cause it will hurt his feelings”) significantly more than participants who thought exclusion was acceptable ($p < .001$). Additionally, participants who negatively evaluated exclusion referenced autonomy (e.g., “She should do what she wants”) at significantly higher proportions than participants who viewed exclusion as acceptable ($p = .006$). Finally, participants who viewed exclusion as acceptable referenced peer pressure (“It’s ok because her friend would have been uncomfortable”) significantly more than did those who evaluated exclusion to be wrong ($p < .001$).

There were no significant interactions between Reasoning and Participant Age, $F(3, 711) = 2.48, p = .060, \eta_p^2 = .010$, or Reasoning and Participant Race, $F(3, 711) = 1.18, p = .327, \eta_p^2 = .005$. Thus, our hypotheses (H5 & H6) were supported. Children who evaluated exclusion to be wrong highlighted the importance of making decisions independent from external pressure as well as the harm and general wrongfulness of exclusion on the part of the rejected child, while children who evaluated exclusion to be acceptable or warranted appealed to the need for keeping one’s friend comfortable rather than introduce them to a new peer.

Discussion

This study was the first to examine European-American and African-American children’s and adolescents’ predictions of inclusion and evaluations of exclusion in interracial and same-race peer contexts. This study revealed three central novel findings. First, with age, European-American participants were more likely to expect that their peers would include racially similar peers than include racially different peers, while African-American participants did not differ in their expectations for inclusion decisions between same-race and interracial encounters. Second, African-American participants considered exclusion less acceptable than did European-American participants, regardless of the racial composition of the peer exclusion context. Third, participants who thought inclusion was likely and participants who thought exclusion was wrong highlighted the importance of making decisions independent from external pressure and addressed the merits of inclusion. Conversely, participants who expected inclusion to be unlikely and participants who reported that exclusion was permissible appealed to the desires of the peer group.

Confirming our hypothesis (H1) European-American participants, but not African-American participants, viewed interracial inclusion as less likely than same race inclusion. This was the case whether the interracial context consisted of European Americans deciding to include an African American or African Americans deciding to include a European American. Specifically, European-American participants thought that both interracial inclusion contexts were less likely to occur than a same-race context in which all characters shared the same racial group membership. African-American participants, however, did not make this distinction. This is consistent with SRD, which posits that children from higher status backgrounds, such as European American children, have specific experiences that may contribute to decreased expectations of intergroup contact (Rutland & Killen, 2017).

Supporting our hypothesis (H2), this effect was primarily driven by European-American adolescents, who were more doubtful of interracial inclusion than were European-American children and African-American adolescents. As European American children age, both their access to interracial friendships decrease (Aboud et al., 2003; Crystal et al., 2008), and their adherence to (possibly negative) group norms increase (Killen et al., 2016), likely contributing to their decreased expectations about the likelihood of interracial inclusion.

These findings are in line with previous research with ethnic majority children that reveals ethnic majority children hold implicit and explicit ingroup biases about race (Baron & Banaji, 2006; Dunham et al., 2006; Dunham, Baron, & Banaji, 2008; McGlothlin & Killen, 2006). Importantly, while the current study provided evidence for these biases among European-American children and adolescents, it also revealed that African-American children and adolescents did not show these same ingroup biases. These findings reiterate the importance of including both ethnic majority and minority children in the same studies on racial bias, as ethnic minority children have different experiences than their majority status peers (Crystal et al., 2008; Killen et al., 2007).

Further, African-American participants evaluated all forms of exclusion as more wrong than European-American participants, partially confirming our hypothesis (H4). Previous research has examined children's evaluations of interracial encounters, finding that ethnic minority status children evaluate acts of exclusion in interracial contexts to be more wrong and make more references to moral reasoning than their majority status peers (Crystal et al., 2008; Killen et al., 2007).

Intergroup research has posited that African-American children's higher exposure to negative peer encounters and more frequent experiences with racial bias account for their different interpretations of social exclusion (Beaton et al., 2012; Ruck et al., 2011). However, this previous work primarily focused on contexts in which an African-American child was excluded by European-American peers. Without measuring African-American children's perceptions of interracial exclusion in multiple contexts as well as same-race exclusion, it remained unknown if this effect was due to the salience of exclusion itself or whether African Americans were responding to the exclusion of an ingroup member. The current study provided evidence that African-American children view both forms of interracial exclusion as equally wrong, whether their own racial group is in the role of excluded peer or the excluders.

The racial socialization literature also corroborates an asymmetry among ethnic majority and minority children in their evaluations of exclusion. African-American children, more so than their European-American peers, are prepared for the potential world of discrimination and may be more perceptive of discrimination from both experience and discourse at home than ethnic majority peers (Brown, 2017; Hughes et al., in press; Pahlke et al., 2012; Seaton et al., 2012). Therefore, it is likely that African-American children have conversations about interracial encounters and personal experiences of interracial exclusion and discrimination that reinforce the moral wrongfulness of the exclusion decision (Beaton et al., 2012; Killen et al., 2007; Pahlke et al., 2012; Seaton et al., 2012).

There were no differences in children's evaluations of same-race or interracial *exclusion* contexts (in contrast to *inclusion* contexts) (H3). This may be because the majority of children recognized that exclusion was not warranted, regardless of whether it occurred in an interracial or same-race peer context. This finding also provides support for claims that predicting intergroup inclusion reveals more implicit and explicit biases than evaluations of exclusion (Hitti & Killen, 2015), as children must weigh both concerns for morality and autonomy with pressures from the group (Møller & Tenenbaum, 2011). Indeed, this study revealed biases among the European-American participants in their predictions of interracial versus same-race inclusion, even while evaluations of exclusion did not differ by the racial composition of the peer encounter. It is possible that, given the present study's sample size, small effects were not detected for higher level interactions between children's own racial group membership, the racial composition of the encounter, and their age on children's evaluations of exclusion. However, the three level interaction was not approaching significance, deeming this interpretation to be unlikely. Future research should therefore include larger and more diverse samples to continue to explore children's predictions, in addition to their evaluations, within peer inclusion and exclusion contexts in order to expose potential group level biases and concerns.

Additionally, research on children's racial biases revealed that intergroup contact may reduce children's overt racial biases, which in turn may impact their evaluations of interracial exclusion. In the current study, participants attended ethnically heterogeneous schools in a diverse metropolitan area. However, previous research has that that European American children attending racially homogenous schools hold more racial biases than European American children attending racial heterogeneous schools (McGlothlin & Killen, 2005; 2006). Thus, it may be that, with an overt act of bias such as interracial exclusion, European American children with low intergroup contact may be more accepting of interracial exclusion than European American children with high intergroup contact. Future research should extend these findings to new samples, especially samples with low levels of exposure to racial diversity.

Children's reasoning was consistent with our hypotheses (H5 & H6) and previous research (Crystal et al., 2008; Killen & Rutland, 2011; Møller & Tenenbaum, 2011). Participants who rejected exclusion highlighted the potential for harm and general wrongfulness of exclusion on the part of the rejected child. Conversely, children who favored exclusion appealed to the need for keeping one's friend comfortable rather than introducing him or her to the new peer. The external pressure of peers was salient in children's favorable evaluations of

exclusion while the moral valence of rejection was most important for those who evaluated exclusion as wrong. However, there were no differences in children's reasoning based on the race of the participant, which is different than previous research that found African Americans utilized more moral reasoning than European Americans (Beaton et al., 2012; Killen et al., 2007). Instead, reasoning primarily corresponded to children's expectations of inclusion and exclusion. This may be because scenarios used in previous research offered more complex reasons for exclusion, such as lack of shared interests, parental discomfort, and peer pressure (Killen et al., 2007). This study, however, only highlighted the possibility of a friend's discomfort if the character decided to include a peer. This may have tuned all participants into the specific peer pressures associated with inclusion, such as loyalty to their friend over a new peers or adhering to the social pressure to conform from peers, whereas previous research has shown wider differences when highlighting other sources of pressure like parents (Killen et al., 2007).

Future research should further explore multiple interracial and same race contexts that includes these multiple justifications for exclusion. In particular, the current study did not assess children's evaluations of same race encounters among outgroup peers. This is an important future direction, as children's judgments about same-race inclusion and exclusion among peers that share their racial group membership may differ from their judgments about inclusion and exclusion among peers who are the same race but not members of the participant's racial group. Previous research has shown that children do differentiate between ingroup and outgroup peer interactions. In one such study, children and adolescents viewed ingroup peers as more inclusive generally while they expected outgroup peers to be more exclusive and more likely to restrict their social interactions to members of the ingroup only (Hitti & Killen, 2015; Stark & Flache, 2012). Future studies should further explore this phenomenon to better understand how social group membership factors into children's understanding about and interactions with their peers.

Additionally, future research should continue to explore children's judgments about intergroup relationships in different social contexts. An important extension of this work would be the inclusion of other inter-racial and -ethnic dynamics beyond African-American and European-American children as well as specific intersections with other identities or traits to deepen the literature on compounding or mitigating factors when it comes to group dynamics. In particular, the current study did not collect data on participants' socioeconomic status. Because of longstanding relationship between intergenerational wealth and race within the United States (e.g., Oliver & Shapiro, 1995), future research should investigate children's predictions of inclusion and evaluations of exclusion among different wealth status groups, as well as how those groups might relate to other social groups like race. In this study, both European-American and African-American participants were recruited from middle class areas. Replicating these findings with lower and higher income status participants in both racial groups may provide additional information about the interplay of race and socioeconomic status on children's social judgments. Additionally, research should continue to compare children's predictions and evaluations to their individual preferences for inclusion and exclusion, as their own preferences do not always match their expectations for what others might prefer.

Research should also investigate how intergroup contact may play a role in children's predictions of inclusion and evaluations of exclusion. In particular, minority status students who attend schools in which they are the numeric minority may, by access alone, have more interracial friendships than their majority status counterparts. As interracial friendships are an important factor in reducing prejudice and bias, this could partially explain why African American participants were more negative about interracial exclusion in this study. The current study did not directly assess intergroup contact as a possible factor in children's judgments, so this hypothesis is beyond the scope of this study. However, since African American participants found all forms of exclusion (both same-race and interracial) as more wrong than their European American counterparts, there is some evidence that their judgments are likely impacted by their unique experiences with exclusion rather than solely increased interactions with outgroup members.

The current study contributes to a broader understanding of how children navigate intergroup peer relationships, and the origins of prejudice and bias. Inserting race within peer contexts makes inclusion and exclusion predictions and decisions more complicated and exposes the risk for racial bias and prejudice. Research in this field has opened the doors to further investigating the developmental sources of prejudice, knowledge of group dynamics, and moral reasoning that enable individuals to reject acts of bias and discrimination. To determine how best to reduce prejudice is an important goal. Therefore, it is imperative that future research continues to examine how children understand intergroup interaction and moral development before reaching adulthood, when biases often become entrenched and difficult to change.

The task for developmental research is to understand what factors contribute to children's behavior and judgments that result in prejudicial (and non-prejudicial) treatment. The challenges are great given that societal messages are often designed to perpetuate the status quo, established hierarchies, and power arrangements (Rutland & Killen, 2015). Further, biases based on race limit children's chances for making friendships with peers who they have common shared interests, values, and goals. It is these types of cross-race friendships that have been shown to reduce prejudice and bias and must be encouraged throughout childhood and adulthood (Tropp & Prenovost, 2008). This information is fundamentally important for the success of intervention efforts related to the policy goals of school integration, racial equity, and school preparation (Rivas-Drake et al., 2014; Rutland & Killen, 2015) – as well as with the additional goal of understanding how children's evaluations, judgments and reasoning change over time.

References

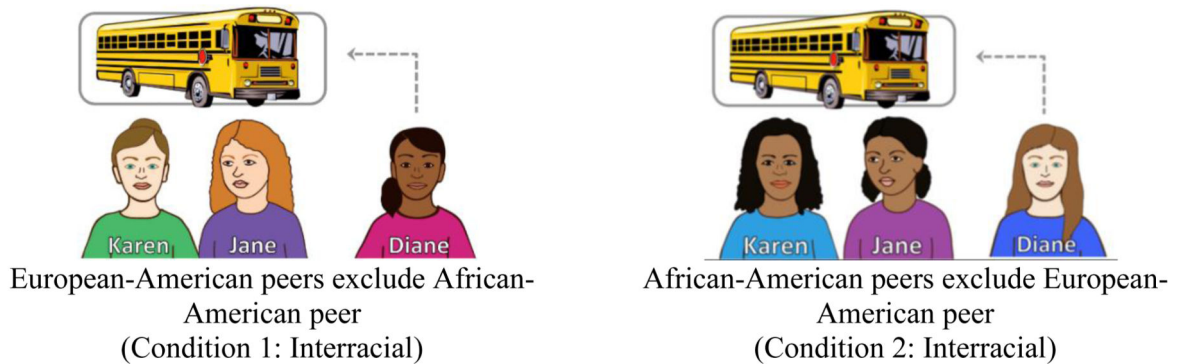
- About FE, Mendelson MJ, & Purdy KT (2003). Cross-race peer relations and friendship quality. *International Journal of Behavioral Development*, 27, 165–173. doi:10.1080/01650250244000164
- Abrams D, & Rutland A. (2008). The development of subjective group dynamics In Levy SR& Killen M. (Eds.), *Intergroup attitudes and relations in childhood through adulthood* (pp. 47–65). Oxford, UK: Oxford University Press.
- Baron AS, & Banaji MR (2006). The development of implicit attitudes: Evidence of race evaluations from ages 6 and 10 and adulthood. *Psychological Science*, 17, 53–58. doi:10.1111/j.1467-9280.2005.01664.x [PubMed: 16371144]

- Beaton AM, Monger T, Leblanc D, Bourque J, Levi Y, Joseph DJ, . . . Chouinard O. (2012). Crossing the divide: The common in-group identity model and intergroup affinity. *International Journal of Intercultural Relations*, 36, 365–376. doi:10.1016/j.ijintrel.2011.12.003
- Brown CS (2017). *Discrimination in childhood and adolescence: A developmental intergroup approach*. Taylor & Francis: London.
- Burkholder AR, D’Esterre AP, & Killen M. (2019). Intergroup relationships, context, and prejudice in childhood In Fitzgerald H, Johnson D, Qin D, Villarruel F, & Norton J. (Eds.), *Handbook of children and prejudice: Integrating research, practice and policy* (pp. 115–130). NY: Springer Press. doi:10.1007/978-3-030-12228-7
- Burkholder AR, Elenbaas L, & Killen M. (2019). Children’s and adolescents’ evaluations of intergroup exclusion in interracial and inter-wealth peer contexts. *Child Development*.
- Cooley S, Elenbaas L, & Killen M. (2016). Social exclusion based on group membership is a form of prejudice In Eds. Horn SS, Ruck MD, & Liben LS, *Advances in child development and behavior* (Vol. 51) (pp. 103–129). Burlington: Academic Press. doi:10.1016/bs.acdb.2016.04.004
- Crystal D, Killen M, & Ruck M. (2008). It’s who you know that counts: Intergroup contact and judgments about race-based exclusion. *British Journal of Developmental Psychology*, 26, 51–70. doi:10.1348/026151007X198910 [PubMed: 25505355]
- Dovidio JF, Gaertner SL, & Saguy T. (2007). Another view of “we”: Majority and minority group perspectives on a common ingroup identity. *European Review of Social Psychology*, 18, 296–330.
- Dovidio JF, Glick P, & Rudman LA (2005). *On the nature of prejudice: Fifty years after Allport*. Hoboken, NJ: Blackwell Publishing Ltd. doi:10.1002/9780470773963
- Dunham Y, Baron AS, & Banaji MR (2006). From American city to Japanese village: A cross-cultural investigation of Implicit race attitudes. *Child Development*, 77, 1268–1281. doi:10.1111/j.1467-8624.2006.00933. [PubMed: 16999797]
- Dunham Y, Baron AS, & Banaji MR (2008). The development of implicit intergroup cognition. *Trends in Cognitive Sciences*, 12, 248–253. doi: 10.1016/j.tics.2008.04.006 [PubMed: 18555736]
- Faul F, Erdfelder E, Buchner A, & Lang A-G (2009). Statistical power analyses using G*Power 3.1: Tests for correlation and regression analyses. *Behavior Research Methods*, 41, 1149–1160. [PubMed: 19897823]
- Hallinan MT, & Teixeira RA (1987). Opportunities and constraints: Black–white differences in the formation of interracial friendships. *Child Development*, 58, 1358–1371. [PubMed: 3665651]
- Harris-Britt A, Valrie CR, Kurtz-Costes B, & Rowley SJ (2007). Perceived racial discrimination and self-esteem in African American youth: Racial socialization as a protective factor. *Journal of Research on Adolescence*, 17, 669–682. doi:10.1111/j.1532-7795.2007.00540.x [PubMed: 20700391]
- Hitti A, & Killen M. (2015). Expectations about ethnic peer group inclusivity: The role of shared interests, group norms, and stereotypes. *Child Development*, 86, 1522–1537. doi:10.1111/cdev.12393 [PubMed: 26154412]
- Horn SS (2003). Adolescents’ reasoning about exclusion from social groups. *Developmental Psychology*, 39, 71–84. doi:10.1037/0012-1649.39.1.71 [PubMed: 12518810]
- Horn S. & Sinno S. (2013). Gender, sexuality, and discrimination In Killen M. & Smetana J. (Eds.) *Handbook of moral development* (Vol. 2, pp. 317–339). Hove, UK: Taylor & Francis, Ltd.
- Hughes D, McGill R, Ford K, & Tubbs C. (in press). Parents, peers, and schools as agents of racial socialization for African American youth In Hill N, Mann T. & Fitzgerald H. (Eds.) *African American children’s mental health: Development and context*. Westport, Connecticut: Greenwood Press.
- Hughes JM, & Bigler RS (2011). Predictors of African American and European American adolescents’ endorsement of race-conscious social policies. *Developmental Psychology*, 47, 479–492. [PubMed: 21142372]
- Killen M, Elenbaas L, & Rizzo MT (2018). Young children’s ability to recognize and challenge unfair treatment of others in group contexts. *Human Development*. doi:10.1159/000492804
- Killen M, Elenbaas L, & Rutland A. (2015). Balancing the fair treatment of others while preserving group identity and autonomy. *Human Development*, 58, 253–272. doi:10.1159/000444151

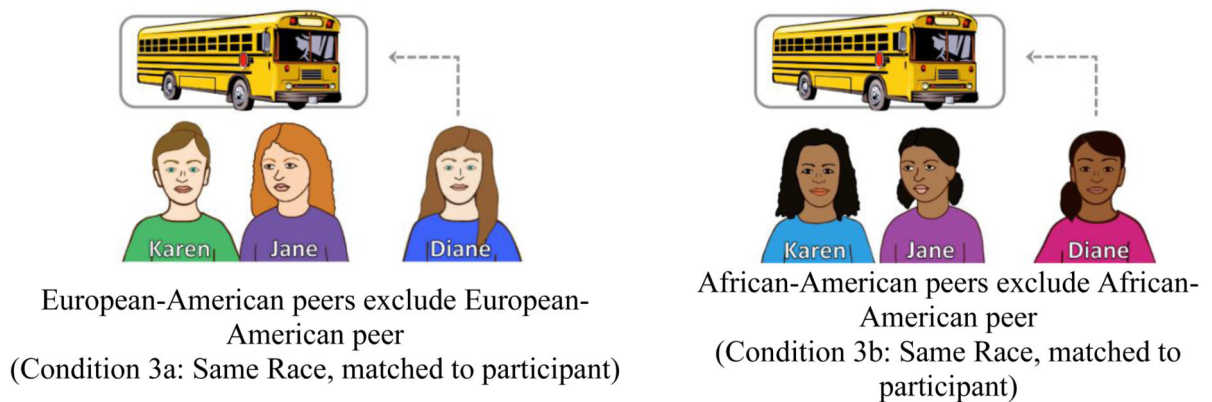
- Killen M, Henning A, Kelly MC, Crystal D, & Ruck M. (2007). Evaluations of interracial peer encounters by majority and minority U.S. children and adolescents. *International Journal of Behavioral Development*, 31, 491–500. doi:10.1177/0165025407081478 [PubMed: 25530645]
- Killen M, Lee-Kim J, McGlothlin H, & Stangor C. (2002). How children and adolescents evaluate gender and racial exclusion *Monographs for the Society for Research in Child Development*. Serial No. 271, Vol. 67, No. 4. Oxford, England: Blackwell Publishers. doi:10.1111/1540-5834.00218
- Killen M, Mulvey KL, & Hitti A. (2013). Social exclusion in childhood: A developmental intergroup perspective. *Child Development*, 84, 772–790. doi:10.1111/cdev.12012 [PubMed: 23170901]
- Killen M, & Rutland A. (2011). *Children and social exclusion: Morality, prejudice, and group identity*. New York, NY: Wiley/Blackwell Publishers. doi:10.1002/9781444396317
- Kinzler KD, & Spelke ES (2011). Do infants show social preferences for people differing in race?. *Cognition*, 119, 1–9. doi: 10.1016/j.cognition.2010.10.019 [PubMed: 21334605]
- Levy SR, Lytle A, Shin JE, & Hughes JM (2015) Understanding and reducing racial and ethnic prejudice among children and adolescents In Nelson TD (Ed.), *Handbook of prejudice, stereotyping, and discrimination: 2nd Ed.* (pp. 455–483). New York, NY: Psychology Press.
- Liu S, Xiao WS, Xiao N,G, Quinn PC, Zhang Y, Chen H, ... Lee K(2015). Development of visual preference for own-versus other-race faces in infancy. *Developmental Psychology*, 51, 500–511. doi:10.1037/a0038835 [PubMed: 25664830]
- McGlothlin H, & Killen M. (2005). Children's perceptions of intergroup and intragroup similarity and the role of social experience. *Journal of Applied Developmental Psychology*, 26, 680–698. doi:10.1016/j.appdev.2005.08.008
- McGlothlin H, & Killen M. (2006). Intergroup attitudes of European American children attending ethnically homogeneous schools. *Child Development*, 77, 1375–1386. doi: 10.1111/j.1467-8624.2006.00941.x [PubMed: 16999805]
- Møller SJ, & Tenenbaum HR (2011). Danish majority children's reasoning about exclusion based on gender and ethnicity. *Child Development*, 82, 520–532. doi: 10.1111/j.1467-8624.2010.01568.x [PubMed: 21410925]
- Nesdale D. (2004). Social identity processes and children's ethnic prejudice In Bennett M & Sani F (Eds.), *The development of the social self* (pp. 219–245). East Sussex, England: Psychology Press.
- Newheiser A, Dunham Y, Merrill A, Hoosain L, & Olson KR (2014). Preference for high status predicts implicit outgroup bias among children from low-status groups. *Developmental Psychology*, 50, 1081–1090. doi:10.1037/a0035054 [PubMed: 24219317]
- Newheiser AK, & Olson KR (2011). White and Black American children's implicit intergroup bias. *Journal of Experimental Social Psychology*. doi:10.1016/j.jesp.2011.08.011
- Oliver ML, & Shapiro TM (1995). *Black wealth/white wealth*. New York, NY: Routledge.
- Pahlke E, Bigler RS, & Suizzo M. (2012). Relations between colorblind socialization and children's racial bias: Evidence from European American mothers and their preschool children. *Child Development*, 83, 1164–1179. doi:10.1111/j.1467-8624.2012.01770.x [PubMed: 22537347]
- Posada R, & Wainryb C. (2008). Moral development in a violent society: Colombian children's judgments in the context of survival and revenge. *Child Development*, 79,882–898. doi:10.1111/j.1467-8624.2008.01165.x [PubMed: 18717896]
- Recchia HE, Brehl BA, & Wainryb C. (2012). Children's and adolescents' reasons for socially excluding others. *Cognitive Development*, 27, 195–203. doi:10.1016/j.cogdev.2012.02.005
- Renno MP, & Shutts K. (2015). Children's social category-based giving and its correlates: Expectations and preferences. *Developmental psychology*, 51, 533–543. doi:10.1037/a0038819 [PubMed: 25706588]
- Rivas-Drake D, Seaton E, Markstrom C, Quintana S, Syed M, ... Yip T. (2014). Ethnic and racial identity in adolescence: Implications for psychological, academic, and health outcomes. *Child Development*, 85, 40–57. doi: 10.1111/cdev.12200 [PubMed: 24490891]
- Roberts SO, Williams AD, & Gelman SA (2017). Children's and adults' predictions of Black, White, and multiracial friendship patterns. *Journal of Cognition and Development*, 18, 189–208. doi:10.1080/15248372.2016.1262374
- Rubin K, Bukowski W, & Parker J. (2006). Peers, relationships, and interactions In Damon W & Lerner R (Eds.), *Handbook of Child Psychology* (pp. 571–645). New York, NY: Wiley Publishers.

- Ruck MD, Park H, Killen M, & Crystal DS (2011). Intergroup contact and evaluations of race-based exclusion in urban minority children and adolescents. *Journal of Youth and Adolescence*, 40, 633–643. doi: 10.1111/j.2044-835X.2010.02021.x [PubMed: 21052799]
- Ruck MD, Park H, Crystal DS, & Killen M. (2014). Intergroup contact is related to evaluations of interracial peer exclusion in suburban and urban African American youth. *Journal of Youth and Adolescence*, 44, 1226–1240. doi:10.1007/s10964-014-0227-3 [PubMed: 25410478]
- Ruck MD, & Tenenbaum HR (2014). Does moral and social conventional reasoning predict British young people's judgments about the rights of asylum-seeker youth? *Journal of Social Issues*, 70, 47–62. doi: 10.1111/josi.12046
- Rutland A, & Killen M. (2015). A developmental science approach to reducing prejudice and social exclusion: Intergroup processes, social-cognitive development, and moral reasoning. *Social Issues and Policy Review*, 9, 121–154. doi:10.1111/sipr.12012
- Rutland A, & Killen M. (2017). Fair resource allocation among children and adolescents: The role of group and developmental processes. *Child Development Perspectives*, 11, 56–62. DOI: 10.1111/cdep.12211
- Seaton EK, Yip T, Morgan-Lopez A, & Sellers RM (2012). Racial discrimination and racial socialization as predictors of African American adolescents' racial identity development using latent transition analysis. *Developmental Psychology*, 48, 448–458. 10.1037/a0025328 [PubMed: 21875184]
- Shutts K, Pemberton Roben CK, & Spelke ES (2013). Children's use of social categories in thinking about people and social relationships. *Journal of Cognition and Development*, 14, 35–62. doi:10.1080/15248372.2011.638686 [PubMed: 23646000]
- Smetana JG, Jambon M, & Ball C. (2014). The social domain approach to children's moral and social judgments In Killen M. & Smetana JG (Eds.), *Handbook of moral development* (pp. 23–45). NY: Psychology Press.
- Stark TH, & Flache A. (2012). The double edge of common interest: Ethnic segregation as an unintended byproduct of opinion homophily. *Sociology of Education*, 85, 179–199. doi:10.1177/0038040711427314
- Thijs J. (2017). Children's evaluations of interethnic exclusion: The effects of ethnic boundaries, respondent ethnicity, and majority in-group bias. *Journal of Experimental Child Psychology*, 158, 46–63. doi:10.1016/j.jecp.2017.01.005
- Tropp LR, & Prenovost MA (2008). The role of intergroup contact in predicting children's inter-ethnic attitudes: Evidence from meta-analytic and field studies In Levy SR & Killen M. (Eds.), *Intergroup attitudes and relations in childhood through adulthood* (pp. 236–248). Oxford, U.K: Oxford University Press.

Interracial (Conditions 1 and 2) Female Versions



Same-race (Condition 3) Female Versions



Characters. Excluder: **Karen**; Friend: **Jane**; Target: **Diane**.

Premise. Karen likes sitting next to her good friends on the bus. Karen sits next to her friend Jane on the bus almost every day. A new girl named Diane started riding their bus. Karen only recently met Diane but she wants to invite her to sit with her and Jane. Jane, however, has not met Diane. Jane does not usually sit next to students she does not know. That day when Diane gets on the bus, there is an open seat near Karen and Jane.

Figure 1.

Participants viewed one of three conditions: 1) Interracial: an interracial peer encounter in which European-American peers excluded an African-American peer; 2) Interracial: an interracial peer encounter in which African-American peers excluded a European-American peer; 3) Same Race: a same race peer exclusion encounter matched to the race of the participant. Pictures and characters names were gender matched to participant gender identity.

Note. (c) 2012 Illustrations by Joan Tycko

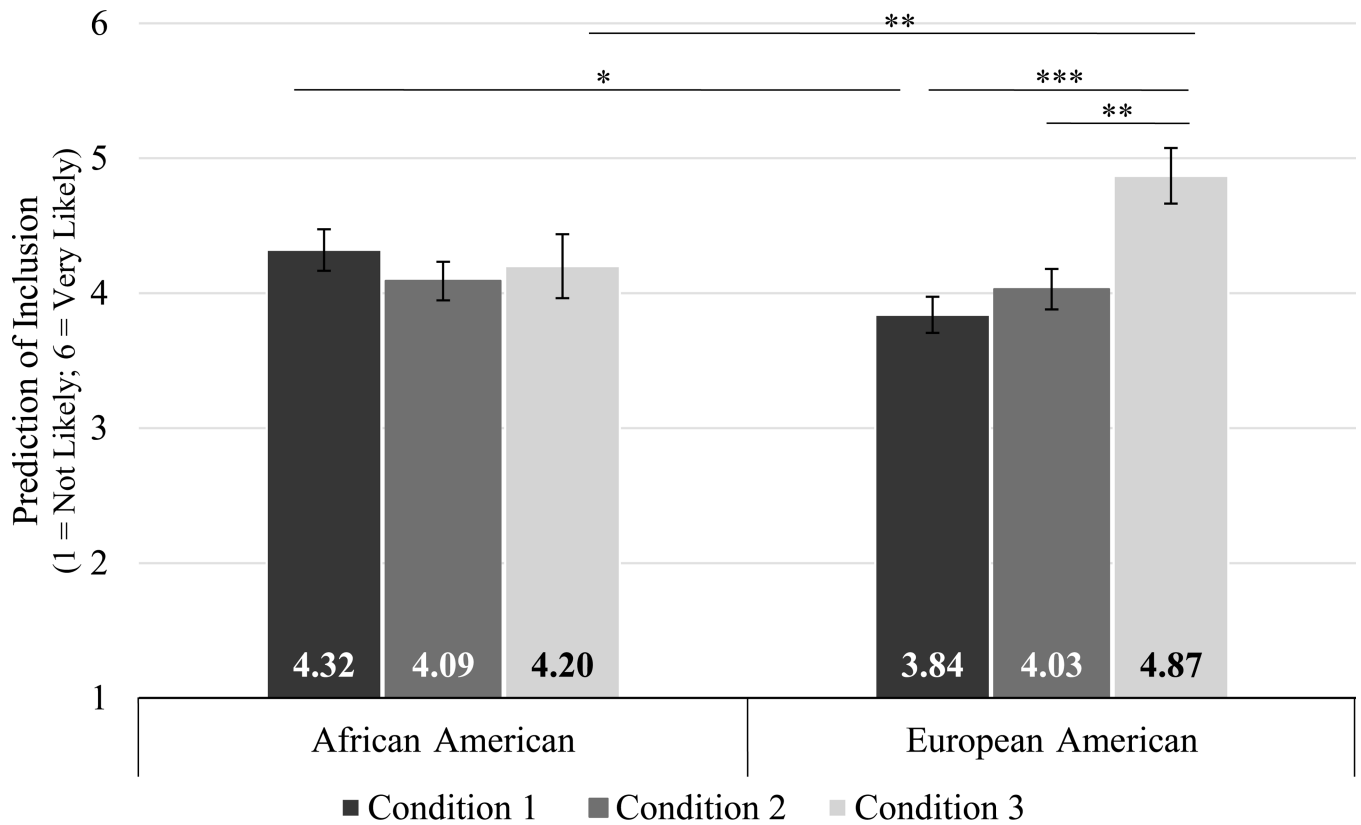


Figure 2.

Prediction of inclusion by racial composition and participant race. Higher scores indicate predicting greater likelihood of inclusion.

Note. Error bars represent standard errors of the mean and $*p < .05$, $**p < .01$, $***p < .001$.

Condition 1) Interracial: European-American peers excluded an African-American peer;

Condition 2) Interracial: African-American peers excluded a European-American peer;

Condition 3) Same Race: matched to the race of the participant.

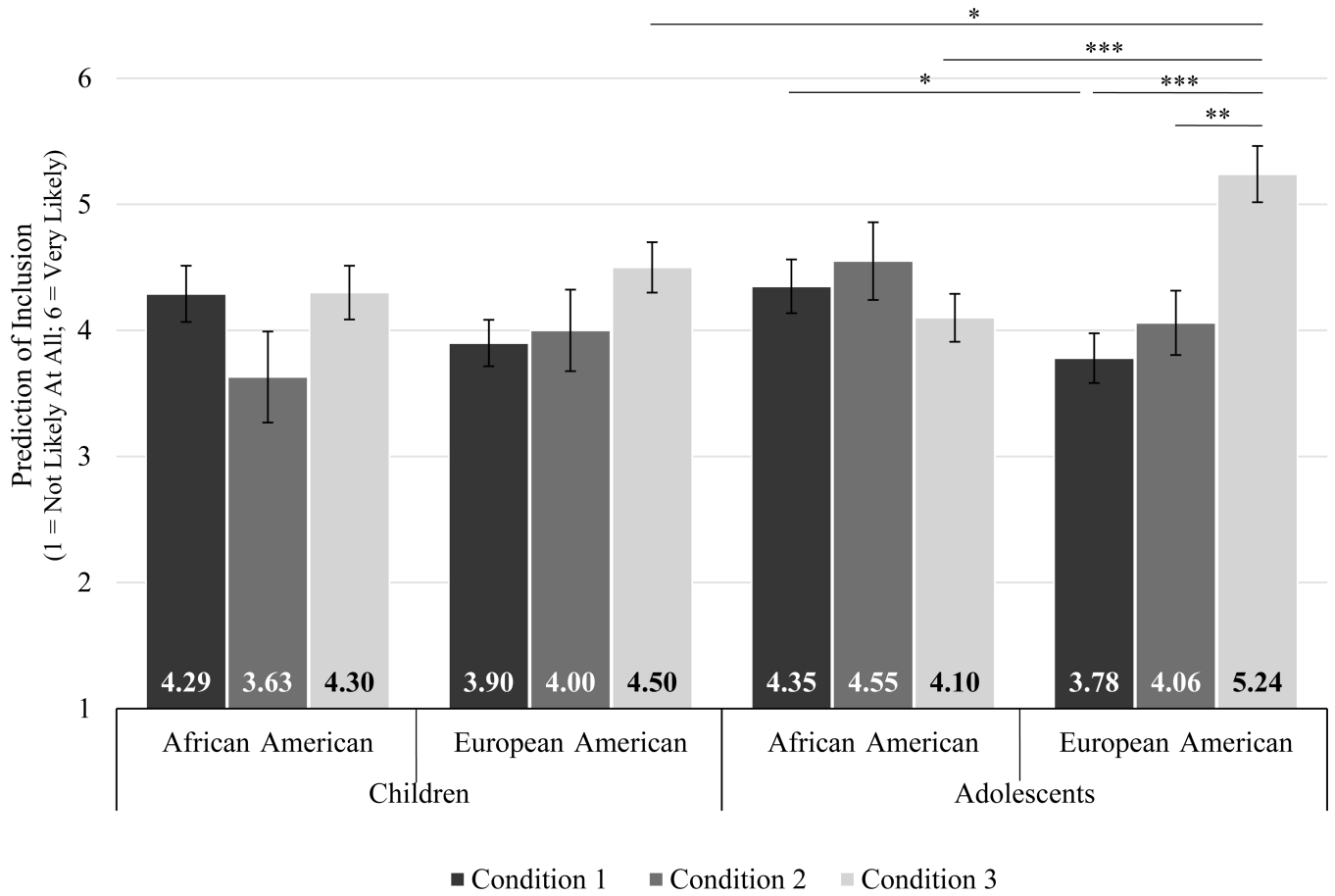


Figure 3.

Prediction of inclusion by racial composition, age and participant race. Higher scores indicate predicting greater likelihood of inclusion.

Note. Error bars represent standard errors of the mean and * $p < .05$, ** $p < .01$, *** $p < .001$.

Condition 1) Interracial: European-American peers excluded an African-American peer;

Condition 2) Interracial: African-American peers excluded a European-American peer;

Condition 3) Same Race: matched to the race of the participant.

Table 1

Proportion of Reasoning for Prediction of Inclusion

<i>Likelihood</i>	<i>n</i>	Wrongfulness of Exclusion	Autonomy	Peer Pressure	Other
		M (SD)	M (SD)	M (SD)	M (SD)
Not Likely	46	.11 ^a (.30)	.04 ^a (.21)	.81 ^a (.39)	.04 (.21)
Likely	200	.35 ^b (.45)	.23 ^b (.39)	.33 ^b (.42)	.09 (.27)

Note. Row proportions total to 1.0. Subscripts that do not match within a column indicate proportions that differ from each other at $p < .05$. Dichotomous responses were separated at the midpoint (Likert-type responses 1 – 3 were recoded as “Not Likely” while Likert-type responses 4 – 6 were coded as “Likely”).

Table 2

Proportion of Reasoning for Evaluation of Exclusion

<i>Evaluation</i>	<i>n</i>	Wrongfulness of Exclusion		Autonomy		Peer Pressure		Other	
		M	(SD)	M	(SD)	M	(SD)	M	(SD)
Bad	178	.55 ^a	(.45)	.10 ^a	(.29)	.30 ^a	(.41)	.05	(.22)
Good	68	.18 ^b	(.33)	.00 ^b	(.00)	.73 ^b	(.39)	.09	(.23)

Note. Row proportions total to 1.0. Subscripts that do not match within a column indicate proportions that differ from each other at $p < .05$. Dichotomous responses were separated at the midpoint (Likert-type responses 1 – 3 were recoded as “Bad” while Likert-type responses 4 – 6 were coded as “Good”).