

Racial Identity, Social Context, and Race-Related Social Cognition in African Americans During Middle Childhood

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This study examined the effect of changes in racial identity, cross-race friendships, same-race friendships, and classroom racial composition on changes in race-related social cognition from 3rd to 5th grade for 73 African American children. The goal of the study was to determine the extent to which preadolescent racial identity and social context predict expectations of racial discrimination in cross-race social interactions (social expectations). Expectations of racial discrimination were assessed using vignettes of cross-race social situations involving an African American child in a social interaction with European Americans. There were 3 major findings. First, expectations for discrimination declined slightly from 3rd to 5th grade. Second, although racial composition of children's classrooms, number of European American friends, gender, and family poverty status were largely unrelated to social expectations, having more African American friends was associated with expecting more discrimination in cross-racial interactions from 3rd to 5th grade. Third, increases in racial centrality were related to increases in discrimination expectations, and increases in public regard were associated with decreases in discrimination expectations. These data suggest that as early as 3rd grade, children are forming attitudes about their racial group that have implications for their cross-race social interactions.

Keywords: African American, discrimination, racial discrimination, school context, social cognition

Adults use information gleaned from interactions with members of social groups (e.g., racial, ethnic, or gender groups) to form expectations about future interactions with members of those groups (Macrae & Bodenhausen, 2001; Shelton, Richeson, & Salvatore, 2005). These group-based schemas tend to reduce the cognitive effort needed to form judgments about others and so are considered cognitively economical. Children, too, develop cognitive schemes representing the behavior and motives of members of social groups and use this information to form expectations for future interactions with members of certain groups (Aboud & Skerry, 1984). In early childhood these schemes may be relatively

simple, reflecting the desirability of others as playmates. As children get older and gain more information about the power dynamics associated with categories such as race and gender, schemes become more complex with greater implications for future interactions with others (Quintana, 1994).

For children of color, expectations that Whites might discriminate against them may be particularly powerful. Research by Shelton et al. (2005) shows that ethnic minorities' prejudice expectations shape the nature of both day-to-day and in-lab cross-race interactions in college students, but there has been little exploration of this topic in younger children. This lack of attention to children's expectations for cross-race interactions is surprising given the growing body of literature concerning the development of prejudice awareness during middle and late childhood (e.g., McKown, 2004; Nesdale, Durkin, & Maass, 2004; Quintana & Vera, 1999). Little is known about the nature of children's expectations for discrimination in social settings or the factors that influence their development. The present study is an examination of the development of expectations of racial discrimination across a range of social settings in a sample of African American school-age children. We posit that discrimination expectations result both from internal cognitions about race and external social cues. The study examined how racial identity and certain aspects of the social context, such as classroom racial composition and the racial composition of friendship networks, influence the development of these expectations.

Expectations for racial discrimination fall under the broad area of social cognition. Social cognitions are the beliefs that underlie

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social perception, judgment, and behavior (Spencer, 1982; Verkuyten, 2004). Thus, the expectation that someone from another racial group would discriminate against a member of one's own group is an aspect of social cognition. The present study examined development in this race-based aspect of social cognition during middle and late childhood. This age period was chosen for several reasons. First, although children have relatively sophisticated views about racial discrimination and prejudice by age 10, there is more variability in this knowledge at age 8 (Brown & Bigler, 2005; McKown, 2004; Quintana, 1998; Quintana & Vera, 1999), suggesting that middle childhood is a time of significant growth in understanding of discrimination. Second, the cognitive skills that are thought to be precursors to mature understanding of discrimination are developing around 7 or 8 years of age. These include the tendency to use social comparison, perspective-taking skills, multiple classification skills, and understanding of complexity in others' intentions (Brown & Bigler, 2005; Eccles, 1999; Selman, 1980). Finally, middle childhood is a time when children's narratives regarding social groups, such as ethnic and gender groups, increasingly refer to internal characteristics such as values and beliefs (Quintana, 1994, 1998; Ruble et al., 2004). Whereas children under 10 tend to have very concrete views of race and ethnicity based narrowly on things like language use, food preferences, and skin tone, 10-year-olds have a clearer understanding of connections between social categories and more subtle things such as differential allocation of resources (Cooper, Garcia Coll, Thorne, & Orellana, 2005; Quintana, 1998). Therefore, it is important to capture changes in children's expectations of racial discrimination during this time.

Middle childhood is also an important time to assess the influence of race-related cognitions and changing social interactions. Although theories of identity development typically suggest that identity becomes more meaningful and consequential in adolescence, a number of researchers have posited that preadolescent children's racial identities and understanding of race-related issues are more sophisticated than the current literature would suggest (Cooper et al., 2005; Cross & Fhagen-Smith, 2001; Hirschfeld, 1995; Ruble et al., 2004). Ruble et al. (2004) found that children's sense of connection to racial groups increases significantly during middle childhood and that more research on the development of social identities around the ages of 7 to 10 is needed. In the current study we hypothesized that racial identity in middle childhood would be related to African American children's tendency to expect discrimination in cross-race interactions.

In addition to racial identity, middle childhood is marked by increasing importance of friendships and school contacts and a greater tendency to select friends of the same racial background (Cooper et al., 2005; Rubin, Bukowski, & Parker, 1998). Thus, there is a greater opportunity for same- and other-race friendships to influence expectations for social situations. The central focus of the study, then, is on the extent to which racial identity, racial makeup of the friendship network, and classroom racial composition predict changes in expectations for discrimination in cross-race interactions for African American youth. The study goes beyond the age- or race-comparative studies that are prevalent in the literature and is one of the few longitudinal studies to examine the phenomenon.

Racial Identity and Social Cognition

Racial identity is defined as the significance and meaning of race to an individual's self-concept (Sellers, Rowley, Chavous, Shelton, & Smith, 1997). Racial identity includes, but is not limited to, the extent to which an individual defines himself or herself in terms of race (racial centrality), one's sense of pride in group membership and evaluation of the relative merits of the group (private regard), and beliefs about how others view the group (public regard). Although the connection between racial identity and expectations of discrimination in cross-race social interactions has not been examined directly, research relating racial attitudes to other aspects of social cognition and research examining connections between racial identity and self-reports of experiences of discrimination suggest that racial identity plays a role in the development of race-related social cognition—or in this case, expectations for discrimination.

Spencer (1982) was one of the first to relate racial attitudes and social cognition in her early work with African American preschool students. She found that young children had greater insight into others' affect when they were more aware of racial categories. A simple awareness of racial groupings was associated with understanding of others' emotions. The young age of Spencer's participants precluded examination of more sophisticated racial attitudes reflecting the personal meaning of race, but the results point to the connection between race and social knowledge. It is expected that these connections would be even stronger in older children who have had more cross-race social interactions and have better understanding of race-related social dynamics.

Although relatively little research has applied developmental theories and perspectives to the question of how social identities relate to beliefs about discrimination, this area of inquiry is certainly increasing, as is evidenced by a recent special issue of the *International Journal of Behavioral Development* (Rutland, Abrams, & Levy, 2007). Much of this work, though, focuses on the ways in which social identities shape children's prejudiced beliefs about or discrimination toward others as opposed to their beliefs about the likelihood of being the target of such beliefs or behavior. Brown and Bigler (2005) have offered one of the few theoretical models of these connections. They speculated that when race is an important part of children's self-concepts, they are more sensitive to social cues that would point to discrimination as a cause for negative interactions; that is, social identities shape interpretation of ambiguous events. This is in line with research with adults showing that racial identity, measured in a variety of ways, is positively related to perceived discrimination (Sellers, Caldwell, Schmeelk-Cone, & Zimmerman, 2003; Sellers & Shelton, 2003). Adults who report that their racial group membership is highly central to their sense of self tend to be more aware of discrimination (Sellers & Shelton, 2003), and when race is more salient to individuals they are more likely to interpret ambiguous events as discriminatory (Operario & Fiske, 2001). Although Brown and Bigler suggested that this relationship might not be present until mid- to late adolescence because of preadolescents' lack of a more mature racial identity, Cross and Fhagen-Smith (2001) noted that racial identity in middle and late childhood may indeed shape children's understanding of the social world in powerful ways. Thus, the connection between racial centrality and expectations of discrimination in middle childhood remains an empirical connection.

In addition to racial centrality, or the relative importance of race to the individual's self-concept (Sellers et al., 1997), children's evaluation of their racial group (private regard) and their beliefs about the ways in which others view the group (public regard) may also play a role in the development of expectations of discrimination in cross-race social interactions. Although these constructs have not been related to expectations of discrimination, they have been associated with participant reports of experienced discrimination. For example, a negative relationship between private regard and perceived discrimination was found among Turkish children. Verkuyten and Thijs (2000, as cited in Verkuyten, 2004) suggested that this reflected the damage to ethnic identity done by discrimination—that is, they posited that experiences of discrimination led to changes in identity. It is just as likely, however, that children who like their group less are more sensitive to discrimination. Brown and Bigler (2005) suggested that knowledge of discrimination and negative societal stereotypes contribute to the development of perceived discrimination. Thus, children who are aware that others sometimes view African Americans negatively may also expect more negative treatment in cross-race interactions. Research with African American adults shows that those who believe that others view African Americans more positively (i.e., have high public regard) tend to perceive less discrimination (Sellers & Shelton, 2003).

Social Context and Social Cognition

The social context, particularly schools and peer networks, may also play a role in shaping children's expectations of racial discrimination in cross-race interactions. Cooper et al. (2005) noted that during middle childhood, school becomes a central context for negotiating issues of race and ethnicity. Children learn both to recognize racial and ethnic differences and to make social connections across racial boundaries. In addition, Cooper et al. noted that school sets the stage for self-comparisons drawn across racial lines. Early research suggested that in race-dissonant school contexts—that is, schools where the child is in the numerical minority—ethnic minority children tend to view themselves more negatively (Clark & Clark, 1950; Spencer, 1984) and are more likely to experience race-related tensions (Rosenberg & Simmons, 1971). Contemporary research also has noted that social identities are especially salient in race-heterogeneous settings (Dutton, Singer, & Devlin, 1998; Ruble et al., 2004; Verkuyten, 2004), but also that children in segregated schools like members of out-groups less (Dutton et al., 1998) and are less likely to view hypothetical cross-race friendships as plausible (McGlothlin & Killen, 2005). Pettigrew (1998) found that integrated schools can provide opportunities for students of different backgrounds to connect and reduce negative intergroup views. Thus, the extant literature suggests that children may be more aware of race and discrimination in integrated schools but may also have better quality relationships with members of out-groups in those settings.

A more proximal indicator of social context is the composition of friendship groups. Cross-race friendships may mediate the relationship between school racial composition and race-related attitudes (Pettigrew & Tropp, 2000). Children in mixed-race school settings have more opportunities for cross-race friendships, and social contact theorists suggest that having meaningful cross-race friendships decreases prejudice and race-based social distance

(Aboud, Mendelson, & Purdy, 2003; Hunter & Elias, 1999; Pettigrew & Tropp, 2000). Most of this research, however, has been conducted with White participants or does not specify the race of the children, yielding little information on cross-race interactions for children of color (see Aboud et al., 2003, as an exception). Moreover, the focus of these studies tends to be on prejudicial attitudes against other groups as opposed to expectations for treatment of members of the participants' in-group. The current study examined the relationship between intergroup contact, as assessed by classroom racial composition and both same-race and cross-race friendships, on the development of expectations of discrimination in cross-race interactions.

Study Aims

The present study has two aims. The first is to describe changes in African American children's expectations of discrimination in cross-race interactions from third to fifth grade, a period known for the rapid increase in understanding about the social implications of race and other cognitive skills necessary for understanding prejudice and discrimination. The second aim is to examine the extent to which racial identity and the child's social context are associated with changes in children's expectations for cross-race social interactions, such as encounters with White peers or interactions with White teachers. The study used vignettes of cross-race social situations and asked children to report their expectations for the outcomes. The developmental analyses in this study were somewhat exploratory in that studies of discrimination expectations have not been conducted in this manner or with this population. The literature on prejudice awareness development suggests that children increasingly expect discrimination in cross-race social interactions during this age range. It may also be the case, however, that there is not a single developmental trajectory for these expectations. Context and identity, not maturation, may play a bigger role in the development of these beliefs. In terms of the connection between racial identity and expectations for racial discrimination, our hypothesis was that children for whom race is more important to their self-concepts (racial centrality), who feel more positively about African Americans (high private regard), and who believe that others view African Americans less positively (low public regard) would be more likely to expect that the child in the story would be racially discriminated against. Finally, we expected that students in more ethnically diverse schools who had fewer White friends would expect more discrimination.

Method

Participants

Seventy-three African American elementary-age children, who were recruited as infants into a longitudinal study of children's health and development, participated in the study (Roberts et al., 1995). For the initial study, 144 families were invited to participate over a 3-year period. Of 118 children and families who enrolled in the project, 73 children were included in this study. Excluded from this analysis were the 23 children who left their child care center prior to 12 months of age and were not followed subsequently, 11 who moved from the area, 5 who asked not to be followed into elementary school, 2 who were later diagnosed as having autistic

spectrum disorder or Asperger's syndrome, and 2 children who did not complete either the assessment of racial expectations or the assessment of racial identity. The present study focuses on these children in third and fifth grades. All but 3 children were tested at both time points. There were 41 girls and 32 boys. Children entered the study at a mean age of 8.2 months; 92% of the children lived with their biological mother; 30% of parents were married; and 74% were classified as low income (family income less than 185% of the federal poverty threshold). Mean level of maternal education at study entry was 12.5 years ($SD = 2.1$); 28% of mothers had less than a high school education, 28% had a high school diploma or GED, and 43% had more than 12th grade education, including technical training or college. By Time 1 (third grade) of the current investigation, mothers had 13.25 years of education ($SD = 1.97$), and 68% had more than a 12th grade education.

By third grade participants were enrolled in 40 different elementary schools located primarily in and around a small city in the southeast. These schools ranged from 9% to 100% African American and between 0% and 88% European American enrollment. Enrollment of children of other ethnicities tended to be relatively low.

Procedure

Children were recruited during their first year of life (between 6 and 12 months of age) from childcare centers in a small southern city and were followed prospectively. Initially, the study examined relationships between child health and development. As the children moved into elementary school, the focus of the study expanded to include a range of sociocultural variables, including racial identity, expected discrimination, and academic outcomes. Racial identity and social expectation measures were administered at a child development center in the summer following the third (mean age = 9.44, $SD = 0.42$) and fifth grades (mean age = 11.29, $SD = 0.49$). Each child was individually tested. The primary guardian was visited at home when children were in the third and fifth grades. All assessments of the child as well as home visits were conducted by an African American research assistant. All measures were read to the child and parent unless it was determined that the participant was a fluent reader. The children's responses to the racial stories were audiorecorded, and the dialogue was transcribed for use in coding.

Measures

Multidimensional Inventory of Black Identity (MIBI; Sellers et al., 1997). The Centrality (how important being Black is to a person's self-concept), Private Regard (evaluation of one's own ethnic group), and Public Regard (how others see Blacks) subscales of the MIBI were adapted for use with elementary-age participants. Items were reworded for young participants, and we attempted to make some abstract concepts more concrete. For instance, rather than asking participants to report the extent to which they "have a strong attachment to Black people," we asked the extent to which they "feel close to Black people." Responses were on a 5-point Likert-type scale from *strongly disagree* to *strongly agree*. Three subscale scores were created by reverse coding negatively worded items and taking the average of relevant items. This resulted in the creation of three subscales—a 5-item

Centrality scale ($\alpha = .80$), a 3-item Private Regard scale ($\alpha = .74$), and a 3-item Public Regard scale ($\alpha = .53$). Validity of this adaptation of the MIBI was examined by correlating the subscale scores with maternal ratings on the MIBI, proportion of friends who were Black, and measures of ethnic socialization. The child's Centrality score correlated with the proportion of students in the classroom who were Black ($r = .14$), number of Black friends ($r = .33$), and maternal MIBI rating of public regard ($r = .31$). The child's Private Regard scale scores correlated with ethnic socialization ($r = .18$), number of Black friends ($r = .16$), and maternal public regard MIBI scores ($r = .19$). The child's Public Regard scores correlated with ethnic socialization ($r = .16$), maternal MIBI Private Regard scores ($r = .19$), and Centrality scores ($r = .25$).

Racial stories task (Johnson, 1996). Expectations for cross-race social interactions (social expectations) were examined with the Racial Stories Task (Johnson, 1996). Four vignettes were read to the participants to assess their expectations for cross-race social situations involving European American teachers, peers, and school administrators. Each vignette consisted of a story with a child of the same age, race, and sex as the participant. In each case, the main character of the story was about to interact with European Americans. The participant was asked to imagine what would happen and to give a possible reason for that outcome. The first vignette described an African American child in a class with all European American students and a European American teacher. Participants reported whom they thought the teacher would call on if the African American child and a European American child both had their hands up, and why. The second vignette involved an African American child wanting to sit at a table of European American children. The participant was asked how the European American children would respond to his or her request to sit down, and why. The third vignette involved a kickball game. The participant was supposed to imagine whether the African American main character, who was good at kickball, would be chosen on a team that was all European American, and why. The fourth vignette involved two children in a fight, one who was African American and one who was European American. They both went to the principal's office, and the participant must imagine which of the two the principal would believe and which child would get punished, and why (both responses were included in composite calculations).

Children's responses to these vignettes were audiotaped and transcribed for coding. A single individual coded third- and fifth-grade transcripts, and a second individual coded 10% of the interviews to achieve reliability. Interviews were coded on several dimensions, but analyses for the current study focused on three scores: (a) the proportion of times that the participant reported that a negative outcome (e.g., that the teacher would call on the White student) would occur; (b) the proportion of times that the participant reported that a positive outcome (e.g., that the children would invite the Black student to sit with them) would occur; and (c) the proportion of times that the participant expected the main character to be discriminated against. We defined discrimination expectations as the case where the participant offered a negative and racial reason for an outcome (e.g., that the teacher would call on the White student because White teachers think Black students are not smart). To derive these scores, we divided the number of times that the participant gave the relevant response to the vignettes by 5, the total number of

vignettes. The result is a proportion ranging from 0 (i.e., expectations of discrimination for none of the vignettes) to 1 (i.e., expectations of discrimination in all of the vignettes). Intraclass correlations for composite variables ranged from .89 to 1.0.

Social contacts questionnaire (Rowley, 1999). This scale examined the number of African American and European American peers the child had. It was adapted from a similar scale by Wegner and Shelton (1995). This 10-item scale asked students to use a 4-point scale (a = 0, b = 1–2, c = 3–4, d = 5 or more) to indicate how many Black or White friends they have. An example item is, “How many close Black/White friends do you have?” The average of the 5 items related to Black friends was computed to create the Black friends score, and the average of the 5 items related to White friends was computed to create the White friends score.

Demographic interview. An interview was completed with the primary guardian to collect demographic information (i.e., family poverty status and maternal educational attainment) during a home interview in the child’s third-grade year. Although parents and children were not interviewed during the same session, the interviews occurred within a few months of each other and always during the same school year. Racial composition of the classroom was reported by the teacher.

Results

Preliminary Analyses

Table 1 contains means and standard deviations for all study variables.

Social context. The participants’ classrooms varied widely in terms of racial composition. On average, slightly more than half of the students in the target children’s classrooms were African American in third grade ($M = 53\%$; $SD = 31$) and fifth grade ($M = 51\%$; $SD = 30$). Only 3% of the children were in classrooms with less than 15% African American students. About a third of the students in the sample were in classrooms that were between 15% and 40% African American, a third were in classrooms that were between 40% and 80% African American, and a third were in

classrooms that were more than 80% African American. Although African American friendships were more common ($M = 3.11$, reflecting 3–4 friendships) than friendships with European Americans ($M = 2.01$, reflecting 1–2 friendships), only 6 students reported no friendships with European Americans, and a number of students reported having five or more cross-race friendships.

Social expectations. An initial concern, given the young age of the sample, was that responses to the social expectations vignettes would be bimodal, with some participants reporting uniformly positive and/or race-neutral expectations and other participants reporting discrimination in most cases. This was confirmed to some degree, in that 0 and 1 were the most prevalent scores for all outcomes (ranging from 9% of fifth graders offering racial reasons in all scenarios to 29% of fifth graders expecting discrimination in none of the scenarios). Still, these extreme ratings never constituted more than a third of the sample, and other scores were well distributed between those ends. Skewness scores on each outcome were very close to 0, and kurtosis tended to be moderate (i.e., less than two standard errors) and negative, reflecting the somewhat flat distribution that represented the full scale. The only difference in distributions from third to fifth grade was in the smaller number of fifth graders who gave negative and/or racial responses in every case.

Descriptive statistics for these variables showed that participants expected negative outcomes in about half of all scenarios. Expectations of racial discrimination (reasons that were both negative and racial) occurred slightly less frequently, and positive expectations even less frequently. Still, participants expected positive outcomes in about a third of all scenarios. The fact that scores on each of the social expectations variables included in this study decreased from third to fifth grades resulted from an increase in neutral responses. Descriptive analyses intercorrelated social expectations variables and correlated them with demographic and social context variables (see Tables 2 and 3). Although social expectation scores tended to be highly correlated within time ($r = .60$ to $.90$), correlations across time were more modest but positive. Social expectations were not significantly related to gender,

Table 1
Means and Standard Deviations for Racial Identity, Social Context Variables, and Child Race-Related Expectations

Racial identity	Third grade	Fifth grade	Range
	<i>N</i> = 73	<i>N</i> = 68	
	<i>M</i> (<i>SD</i>)	<i>M</i> (<i>SD</i>)	
Racial identity			
Centrality	3.85 (0.72)	3.67 (0.74)	2.2–5.0
Private regard	4.68 (0.54)	4.75 (0.45)	2.3–5.0
Public regard	3.48 (0.84)	3.44 (0.61)	1.0–5.0
Social context			
Proportion of Black students in class ^a	0.53 (0.31)	0.51 (0.30)	.07–.99
Number of Black friends	3.10 (0.58)	3.15 (0.65)	1.0–4.0
Number of White friends	2.04 (0.68)	2.10 (0.69)	1.0–3.8
Expectations for race-related outcomes			
Negative expectations	0.52 (0.37)	0.48 (0.34)	0–1.0
Negative and racial reasons	0.44 (0.37)	0.34 (0.32)	0–1.0
Positive expectations	0.33 (0.31)	0.30 (0.25)	0–1.0

^a Sample size is 67 for Grade 3 and 62 for Grade 5.

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Table 2
Correlations Among Social Expectations Variables Within and Across Grades

Variable	Grade 3			Grade 5		
	Negative expectations	Negative and racial reasons	Positive expectations	Negative expectations	Negative and racial reasons	Positive expectations
Grade 3 (n = 74)						
Negative expectations	—					
Negative and racial reasons	.90**	—				
Positive expectations	-.84**	-.71**	—			
Grade 5 (n = 68)						
Negative expectations	.18	.23	-.03	—		
Negative and racial reasons	.22	-.10	-.10	.75**	—	
Positive expectations	-.11	.08	.08	-.82**	-.60**	—

** $\alpha < .01$.

maternal education, family poverty status, or classroom racial composition. Although our hypotheses were built around students' reported interactions with European Americans, this variable was unrelated to expectations for cross-race interaction. In contrast, the number of African American friends in third grade significantly correlated with expectations of negative outcomes, expectations of positive outcomes, and the proportion of reasons that were both negative and racial in fifth grade.

Racial Identity and Expectations for Discrimination

A series of repeated measures analyses were conducted using general linear mixed models to test the extent to which developmental trajectories in cross-race social expectations varied as a function of the number of African American friends and racial identity (Singer & Willett, 2003). The proportion of reasons that were both negative and racial that children reported in Grades 3 to 5 was examined longitudinally. The other racial expectations were not analyzed due to their high correlation with this measure. The hierarchical linear model analysis included a random intercept for each child to account for correlations in the two repeated measures. Three models were fit using Proc Mixed in SAS V9.1 (SAS, Cary, NC). The first model was an unconditional model and included only time. The second model described the main effects for change

over time (labeled "Time" in Table 3) and for having more Black friends (labeled "Black friends" in Table 4) as well as whether having more Black friends was related differently to expectations in Grade 3 than in Grade 5 (labeled Time \times Black Friends in Table 4). In preliminary models, we also included the classroom racial composition in the first model. This variable did not statistically contribute and was missing for 6 children due to failure of the teacher to return the questionnaire. Therefore, it was omitted in subsequent analyses to avoid reducing the sample size. The third model added measures of racial identity and tested their main effects and whether they were related to expectations differently in Grade 3 and Grade 5. Private regard was not included because of lack of variability. Effect sizes were computed as the product of the coefficient times the standard deviation for the predictor divided by the standard deviation of the outcome when associations were statistically significant.

The results of this analysis are reported in Table 4, listing the coefficients, their standard errors, and effect size estimates for the two substantive models. Comparisons of the Level 1 variances from the conditional model and the subsequent models are reported as a measure of fit (note: all predictors in these models are Level 1 or time-varying predictors). The Step 1 model suggested that children reported slightly less expectation of discrimination

Table 3
Correlations Between Social Expectations Scores and Demographic Characteristics and Social Context (N = 68)

Variable	Male	Low-income	Maternal education (years)	Prop. of Black students in class	Number of friends		Racial identity		
					Black	White	Centrality	Public regard	Private regard
Grade 3									
Negative expectations	.03	.05	-.08	.18	.10	-.10	.18	-.23	-.01
Negative and racial reasons	.08	-.01	.05	.18	.19	-.05	.11	-.16	-.04
Positive expectations	.04	-.05	.01	-.19	-.14	.04	-.06	.27*	-.06
Grade 5									
Negative expectations	-.08	.04	-.10	-.04	.31**	.01	.26*	-.15	-.22
Negative and racial reasons	.02	.11	-.14	-.05	.36**	.13	.34	-.29	-.15
Positive expectations	.11	-.10	.18	-.08	-.32**	.05	-.19	.15	.18

Note. Prop. = proportion.

* $p < .05$. ** $p < .01$.

Table 4
Repeated Measures Regression Predicting Cross-Race Social Expectations From the Child's Racial Identity, School Racial Composition, and Interactions With African American Children (N = 73)

Predictors	Reasons negative and racial	
	B(SE)	d
Step 1		
Time	-0.10 (0.05)*	-0.15
Black friends	0.15 (0.05)**	0.27
Time × Black Friends	0.08 (0.09)	0.13
Step 2		
Time	-0.09 (0.05)	-0.13
Black friends	0.12 (0.05)*	0.21
Time × Black Friends	0.04 (0.09)	-0.06
Centrality	0.08 (0.04)*	0.16
Public Regard	-0.09 (0.04)*	-0.18
Time × Centrality	0.07 (0.07)	0.19
Time × Public Regard	-0.09 (0.08)	-0.19

* $p < .05$. ** $p < .01$.

over time (i.e., proportionately fewer of the reasons they gave for ambiguous actions were both negative and racial; $d = -0.15, p < .05$). In addition, more contact with Black friends was a positive predictor of expectations of discrimination ($d = 0.27, p < .01$), and the magnitude of this association did not change from Grade 3 to Grade 5. The inclusion of the contact with Black friends accounts for about 7% of Level 1 variance relative to the unconditional model.

The Step 2 model added two measures of ethnic identity. Results from the second model were largely consistent with hypotheses. Change over time in expectations of discrimination was not reliably detected when ethnic identity was also considered, whereas the amount of contact with Black friends remained a positive, significant predictor ($d = 0.21, p < .05$). In addition, children who reported higher levels of centrality ($d = 0.16, p < .05$) or lower levels of public regard ($d = -0.18, p < .05$) also reported proportionately more negative and racial reasons for ambiguous events. No evidence emerged suggesting that either measure of racial identity was related to expectations of discrimination differently in Grades 3 and 5. Comparison of the Level 1 variances from this model and the unconditional model suggested that contact with Black friends and racial identity accounted for 15% of the variance.

Discussion

The results of this study are further evidence of the interplay between social experiences, racial attitudes, and race-related social cognition. The study showed that both racial identity and contact with African American friends relate to children's expectations for discrimination in cross-race interactions in elementary school. When race was more important to the individual and when participants believed that others view African Americans more negatively, they were more likely to expect racial discrimination in interactions with European American peers and authority figures. Thus, both identity and context seem to shape African American children's race-related social cognition.

Developmental Patterns of Expectations for Cross-Race Social Interactions

In line with previous research, we found that children as young as third grade have some understanding of racial discrimination and believe that discrimination is at least one reason that African Americans like themselves experience negative social outcomes with Whites. On average, third graders used discrimination to explain negative social outcomes in about two of the five vignettes. However, despite research showing that perceptions of discrimination become more prevalent during middle and late childhood (McKown, 2004; Nesdale et al., 2004), our results showed a small but significant decrease in discrimination scores. This finding may indicate that discrimination expectations are a different construct than awareness of discrimination measured in other studies (e.g., McKown & Weinstein, 2003). The scores may also reflect increasing sophistication in students' understanding of social interactions. Fewer fifth-grade students had scores on either extreme (i.e., scores of 0 or 1); they were more likely to expect neutral outcomes (e.g., both children would be called on), and correlations between social expectations variables declined between third and fifth grades.

Although the study did not focus on children's positive expectations for cross-race interactions, it is important to note that these African American children frequently expected to have positive outcomes in these scenarios. Many children expected that the main character in the story would be well received by European American peers sitting at the lunch table or that the African American student would be invited to play kickball with European American peers. Although mean positive expectation scores were similar from third to fifth grade, about 28% of the sample increased in positive expectations over this period. Positive expectations were inversely correlated with negative outcomes and expectations of discrimination in third grade, suggesting that some children were not sophisticated enough to expect positive outcomes in some interactions and negative outcomes in others. These correlations were weaker in fifth grade, again suggesting increasing sophistication in the understanding of cross-racial interactions. More research examining positive aspects of cross-racial interactions is needed.

Racial Identity and Race-Related Social Cognition

The results presented here suggest that beliefs about both the in-group (i.e., racial centrality) and out-group (i.e., public regard), in the form of racial identity, influence thinking about cross-race social interactions. We hypothesized that having race as a more central component of one's self-concept and believing that others view African Americans more negatively would relate to greater expectations for discrimination in interactions with European American peers, teachers, and school administrators. Indeed, when race was relatively important to the child's self-concept (i.e., high racial centrality), they were more likely to expect discrimination. Although the present study assessed expectations for racial discrimination, not reports of actual events, and used an indirect measure of expectations, these results are consistent with previous studies that suggest that racial centrality is associated with higher levels of sensitivity to racial discrimination (e.g., Neblett, Shelton, & Sellers, 2004). Neblett et al. (2004) also found that racial

centrality was a moderator of the relationship between perceived discrimination and psychological well-being in a sample of college students such that individuals low in racial centrality were more negatively affected by discriminatory experiences than were individuals with higher centrality. Although relating social expectations to other outcomes was beyond the scope of this investigation, future research should determine if such a buffering effect of racial identity is present in younger participants as well.

In addition, public regard was negatively related to discrimination expectations. This result is in keeping with studies of African American adults' perceptions of discrimination (Sellers & Shelton, 2003) and with Brown and Bigler's (2005) contention that awareness of stereotypes and societal views of one's group relates to perceptions of discrimination. Believing that others have positive views of African Americans appears to lead children to believe that non-Blacks would treat African Americans favorably in social interactions. Future research should also examine the connection between public regard and reports of actual experiences of discrimination in children.

These results have important implications for the study of racial identity in preadolescent populations. They challenge views suggesting that immature racial identities are not consequential in children's developing understanding of discrimination (Brown & Bigler, 2005) and support theoretical views that preadolescent social identities can play a central role in children's negotiation of their social landscapes (e.g., Cross & Fhagen-Smith, 2001). Although it was clear that the participants' conceptions of race were fairly rudimentary, as evidenced by the distribution of the expectation scores, it was also the case that multiple aspects of racial identity were related to the children's expectations for these race-related interactions.

Social Context and Social Cognition

Despite the literature suggesting the contrary, classroom racial composition was not a significant predictor of race-related social cognition. Our data did not support research showing that children in more integrated settings perceived more discrimination (e.g., Rosenberg & Simmons, 1971) or research suggesting that diverse school settings might lead to smoother cross-race interactions (McGlothlin & Killen, 2005). Children in settings with more Whites did not appear to expect either more negative or more positive experiences. This may be a result of the sample. Very few of the students were in classrooms where fewer than 10% of their classmates were Black. Variability in race-related social experiences within these schools with relatively large African American populations may have been reduced. Results might have differed if more students were attending truly predominantly White schools.

The results regarding the relationship between cross-race and same-race friendships were partially in line with previous research and our hypotheses. Although social contact theory might suggest that having more European American friends would be associated with fewer negative and more positive expectations for cross-race interactions for African American youth (Aboud et al., 2003), the number of European American friends reported was unrelated to our social expectations measure. One explanation for this difference might be that our measure of friendships assessed the number of European American and African American friendships, not the

quality of those relationships (e.g., closeness, reciprocity, frequency of contact).

Less research has been conducted on the effect of same-race friendships on expectations for discrimination. Thus, it is difficult to place in a broader literature the finding that African American friendships were positively associated with expectations of discrimination. Two fairly direct explanations may fit the results. One is that children with more African American friends might experience more discrimination. White teachers and peers may believe that Black students with mostly in-group friendships are more stereotypical and less similar to themselves. Margie, Killen, & Sinno (2005) found that perceived similarity in cross-race pairings relates to beliefs about the likelihood of friendship development. Other research has found that African Americans with characteristics more stereotypic of the group are more likely to be targets of discrimination (Eberhardt, Davies, Purdy-Vaughns, & Johnson, 2006). A second direct explanation is that African American peer groups might socialize peers to expect discrimination from European Americans. We have no empirical basis for this possibility, but it should be considered.

It is also possible that one or more unmeasured variables might be at work. For example, having a mostly African American friendship network may reflect nationalistic or separationist racial ideologies. An investigation by Sellers et al. (1997) noted that African American college students who reported that their best friend was African American had higher nationalism scores and lower assimilation scores on a measure of racial identity ideology. Higher rates of nationalism might explain a greater tendency to expect negative interactions in these racially loaded situations. A second explanation might be found in the literature on racial socialization. Parental preparation for bias or discrimination could lead to both a greater tendency to choose African American friends and a greater tendency to expect negative interactions with European Americans (Hughes et al., 2006). Assessing parent socialization and other aspects of racial identity, such as ideology, was beyond the scope of this investigation but constitutes an obvious next step in this work.

Limitations and Strengths

The present study is an important step toward understanding the nature of race-related social cognition in middle to late childhood. The study moved beyond race- and age-comparative frameworks for understanding the development of prejudice awareness to examine within-group variability in a longitudinal design. In addition, the study demonstrated that early racial identity has some implications for race-related social cognition.

The study was also limited in a few ways. First, the sample is relatively small and nonrandom, diminishing the ability to generalize these results to other parts of the African American community. The study best generalizes to African American children attending moderately integrated schools in the south. The sample size also limited the number of factors that could be considered in the models.

Second, private regard had very little variability in this sample and was unrelated to social expectations. The lack of previous research on private regard in samples of this age makes it difficult to determine whether this ceiling effect reflects an issue in measurement or in normative development. Research on personal self-esteem suggests

that middle to late childhood is a time of rapidly increasing sophistication as self-esteem becomes less uniformly positive (Harter, 1998). Further work needs to be done to refine the measurement of racial identity measures for this population.

Third, using vignettes to study children's expectations for cross-race social interactions is an innovative way to measure children's understanding of the influence of race on social experiences; the stories were quite loaded, though, portraying the main character as African American and everyone else in the story as European American. Data on the racial composition of the children's schools suggest that these scenarios do not reflect the real-life experiences of the participants and may unduly prime the issue of race for the participants. Therefore, it would be inaccurate to suggest that a large number of African American children expect to be discriminated against in their interactions with peers, teachers, and school administrators. A more realistic interpretation is that the responses to the vignettes reflect a certain level of awareness of or sensitivity to racial discrimination. Although there are many indications that experiences of discrimination are negatively associated with socio-emotional and academic outcomes for students of color (Mickelson, 1990; Wong, Eccles, & Sameroff, 2003), other research suggests that awareness of discrimination is adaptive and a source of motivation (Oyserman, Gant, & Ager, 1995; Sanders, 1997). Future research linking responses to these vignettes to actual social behavior and experiential measures is needed.

In conclusion, this study provides evidence that children's understanding and expectations regarding the social world are influenced by both their own developing views about issues of race and social-contextual factors in their environment. It is likely that these are bidirectional processes, with friendship groups influencing identity and social cognition and with these factors influencing friendship choices (Cooper et al., 2005). Future research is needed to establish the long-term implications of the development of these expectations. Research with adults suggests that racial prejudice expectations relate to less positive interracial interactions for minorities (Shelton et al., 2005). The connection between discrimination expectations and the development of cross-race friendships may be obvious, but there may be other implications as well. For example, children of color who expect to be discriminated against by teachers may have diminished levels of classroom help-seeking or engage less in classroom discourse. Thus, these expectations may have both social and academic implications.

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