Ethnicity as a social context for the development of African-American adolescents[☆]

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Abstract

Does anticipated future racial discrimination undermine African-American adolescents' academic motivation and performance? Do face-to-face experiences with racial discrimination at school undermine African-American adolescents' academic functioning? Does African-American ethnic identity buffer these relations? This paper addresses these questions using two waves of data from a longitudinal study of an economically diverse sample of African-American adolescents living near Washington D.C. The data were collected at the beginning of the 7th grade and after the completion of the 8th grade. As expected, the experiences of day-to-day racial discrimination at school from one's teachers and peers predicted declines in grades, academic ability self-concepts, and academic task values. A strong, positive connection to one's ethnic group (our measure of ethnic identity)

reduced the magnitude of the association of racial discrimination experiences with declines in both academic self-concepts and school achievement. Most youth responded to anticipated future discrimination with increased academic motivation.

Many different conceptual approaches have been used to understand the diverse influence of race/ethnicity on development (Garcia Coll et al., 1996; Graham, 1992; McLoyd, 1991). Until quite recently, the most common approach was to compare race/ethnic groups on such outcomes as school achievement, academic motivation, mental health, and problem behaviors with little or not attention to possible mechanisms and experiences that might underlie such differences. More recently, scholars are beginning to investigate a variety of possible mediators of these group differences — mediators such as family income and wealth, parents' mental health, neighborhood quality, and school quality (c.f., Eccles, Wigfield, & Schiefele, 1998). In this paper, we focus on more proximal psychological process directly linked to racial/ ethnic group membership — processes directly linked to experiences of stigma and racial discrimination. We believe that race and ethnicity influence psychological development most directly through race/ethnicity-related social situations and psychological processes, such as stereotypes, experiences of ethnic discrimination, ethnic identity, and ethnic socialization.

Building on the work of people like Fordham and Ogbu (1986), Steele and Aronson (1995), Sellers, Smith, Shelton, Rowley, and Chavous (1998), and Phinney (e.g., 1990), we use longitudinal data to study the relation of ethnic identity and experiences of racial discrimination to academic and social functioning among African-American adolescents. We then link the race-related processes proposed by these theorist to theories of risk and protection (e.g., Sameroff, Bartko, Baldwin, Baldwin, & Seifer, 1998); and to Eccles' expectancy-value theory of academic identity formation and academic engagement (e.g., Eccles, 1994). We had two major goals for the analyses summarized in this paper: (1) to examine the association of personal experiences of daily face-to-face racial discrimination at school with changes in academic motivation and engagement over the junior high school years, and (2) to examine whether some aspects of ethnic identification can buffer the negative effects of these experiences.

We also wanted to examine the extent the African-American adolescents in this study showed signs of the emergence of oppositional identities as proposed by Fordham and Ogbu (1986). According to this perspective, African-American adolescents should lower the value they attach to school as they become increasingly aware of likely future racial discrimination in educational and occupational arenas. We contrasted this perspective with a more agentic perspective. African-American parents have long stressed the importance of getting a good education as the best weapon their children can have against racial discrimination (Clarke, 1983; Comer, 1988, 1996). According to this perspective, we should find a positive association between anticipated future racial discrimination and school motivation.

Risk and protective theories of human development

According to the literature on risk factors, there are many developmental risks that threaten adolescents' healthy development (Werner, 1993). Variation in these constitutional and environmental hazards should affect the likelihood that adolescents will have academic, socio-emotional, and behavioral problems. In addition, the likelihood that any particular psychosocial hazard will lead to problematic outcomes should be affected by the presence of promotive and protective factors in adolescents' lives. Some individual characteristics and environmental conditions serve as both promotive and protective factors, while others act as one or the other. Promotive factors protect children and adolescents from environmental or constitutional risks by counteracting the effects of psychosocial threats (Sameroff et al., 1998). Protective factors serve as buffers so that the relation between risks and problematic developmental outcomes are attenuated (Garmezy, Masten, & Tellegen, 1984; Jessor, Van Den Bos, Vanderryn, Costa, & Turbin, 1995). The probability of problematic development depends on the combination of risks, promotive factors, and protective factors present in an adolescent's life.

There are several reasons that this conceptual framework of risks, promotive factors, and protective factors is a useful tool for conducting research on adolescents' experiences of racial discrimination. First, personal experiences of racial discrimination are one type of risk. Second, because not all individuals are negatively affected by racial discrimination, racial discrimination is believed to increase the probability of negative outcomes instead of directly causing these negative outcomes (Essed, 1990; Phelan, Yu, & Davidson, 1994). Third, the framework of risks, promotive factors, and protective factors incorporates components that are agentic and facilitative of positive development. Studies of race/ethnic influences have been criticized for focusing only on individual weaknesses, deficit environments, or negative consequences (Graham, 1992; McLoyd, 1991). This particular model acknowledges that there also are psychological and/or environmental strengths that can deflect (or protect against) the negative outcomes associated with ethnic discrimination.

Daily experiences of racial discrimination as potential risk factors

Being in an uncaring and unsupportive environment where individuals do not feel a sense of relatedness is an important risk factor (Jessor et al., 1995). For example, children who are teased or picked on by their peers at school are more likely to do poorly in school, to have low self-esteem, and to feel lonelier than children who are not so victimized (Kochenderfer & Ladd, 1996; Ladd, 1990; Wentzel & Asher, 1995). Similarly, there is an increased probability for negative academic and socio-emotional outcomes when adolescents feel that their teachers did not respect or care about them as individuals (Eccles et al., 1993; Goodenow & Grady, 1993; Wentzel, 1997). Thus when teachers, peers, and other socializing agents communicate messages of devaluation that undermine individuals' feelings of relatedness to that context, there is an increased likelihood of negative developmental outcomes. In a similar manner, experiences of day-to-day racial discrimination at school are likely to communicate messages that one is not valued and not expected to succeed in this setting and that one is not part of the "in-

group" (Crocker, Major, & Steele, 1998). Thus, such affronting and depreciative racialized experiences are likely to increase the probability of negative developmental outcomes.

Findings from social psychological research on stereotype threat (e.g., Steele & Aronson, 1995) support this prediction. Stereotype threat occurs when individuals' awareness of society's negative stereotypes about their social group leads them to be anxious about engaging in behaviors that confirm those stereotypes, particularly those pertaining to intellectual abilities. Under conditions that make one's race salient, African-American youth do worse than expected on standardized tests. Similarly, correlational studies suggest that African-American and Hispanic adults' personal experiences of ethnic discrimination are associated with poor mental health, including feelings of anger and depression (Amaro, Russo, & Johnson, 1987; Jackson et al., 1994; Salgado de Snyder, 1987). Moreover, adults' experiences of discrimination in the workplace affect both work satisfaction and work performance (Amaro et al., 1987; Salgado de Snyder, 1987). African-American college students' reports of discrimination at predominantly White colleges have substantial bearing on both adjustment to college and mental health (Feagin, 1992).

A few studies with adolescents have replicated some of these findings. For example, qualitative research has shown that perceived ethnic discrimination at school affects participation in school and socio-emotional adjustment for some high school students of color (Phelan et al., 1994). Similarly, the recent work by Sellers, Chavous and their colleagues and by Eccles and her colleagues has shown that racial discrimination undermines the development of African-American adolescents (Chavous et al., 2003; Rowley, Sellers, Chavous, & Smith, 1998; Sellers & Shelton, 2003; Wong, Eccles, & Sameroff, 2003).

Perceptions of future racial discrimination

Several researchers have also proposed a link between perceptions of future racial discrimination and school motivation. Many adolescents of involuntary minority groups, such as African-Americans, Mexican Americans, and American Indians, are aware that they may encounter educational and job discrimination in the future (e.g., job ceilings). Findings from qualitative research indicate that some African-American and Hispanic adolescents respond to this awareness by disengaging from mainstream institutions, such as school (Ogbu, 1978). Their academic disidentification includes: (1) disaffection with school, including low educational expectations and poor academic motivation, (2) association with friends who support negative attitudes towards school, and (3) poor school performance and attainment (Fordham & Ogbu, 1986; Mickelson, 1991; Ogbu, 1978; Taylor, Casten, Flickinger, Roberts, & Fulmore, 1994). Furthermore, adolescents' perceptions of future institutional discrimination can also lead adolescents to embrace these attitudes and behaviors as integral components of their ethnic identity (Ogbu, 1978).

Alternatively, adolescents and their parents may respond to anticipated future racial discrimination with a more agentic response. Several qualitative accounts of the racial

socialization by African-American parents stress the importance that these parents placed on education being the best defense their children could have against a racist society (e.g., Clarke, 1983; Comer, 1988, 1996). Even though their children were very likely to be confronted with racial discrimination in many aspects of their future adult lives, these parents felt their children's future would be better to the extent that the children had succeeded in school and had acquired as much education as possible. Consequently, many African-American leaders have worked very hard to insure that high quality education is available to African-American children. To the extent that a similar set of dynamics is going on in the families of the participants of the present study, we predict a positive rather than negative association between anticipated future discrimination and academic motivation. We also predict that this will be true for families in which the parents report high levels of daily racial discrimination in their work place because these parents are likely to be particularly sensitive to the need to arm one's children with as much education as possible in order for them to be able to deal as effectively as possible with the kinds of racial discrimination they (the children) are likely to face in their future jobs.

Racial group identification as a promotive and protective factor

Given that there is little research on adolescents' experiences of ethnic discrimination, it should be no surprise that there is also little research on the promotive and protective factors that reduce the potential negative effects of ethnic discrimination. Because experiences of ethnic devaluation assault adolescents' sense of relatedness to their surroundings, psychological or environmental variables that facilitate adolescents' feelings of belongingness can compensate for and/or buffer against the potential threats posed by ethnic stigma (Goodenow & Grady, 1993; Grotevant & Cooper, 1998). One potential promotive and/or protective factor is adolescents' identification to their ethnic group.

Different theories of ethnic identity suggest that for adolescents of color, a healthy identification with one's ethnic group is a psychological buffer against prejudice and discrimination (e.g., Cross, 1991; Phinney, 1996; Sellers et al., 1998). Numerous studies have looked at the implications of positive ethnic or racial identification on ethnic minorities' mental health, and results from contemporaneous research, using different operational definitions of ethnic identification, generally show that ethnic identification is an important protective factor. In particular, researchers have suggested that attachment to one's ethnic group, or feeling a strong sense of connection to one's ethnic group, is a dimension of ethnic identity that may play a key role in maintaining psychological health as well as in managing different forms of ethnic devaluation. For example, social psychological research indicates that feeling a sense of relatedness to one's ethnic group is associated with higher self-esteem and better mental health for Asian Americans, Hispanic/Latinos, and African-Americans (Crocker, Luhtanen, Blaine, & Broadnax, 1994; Phinney, 1996). Few studies, however, have examined whether ethnic identification is a protective or promotive factor against the potential threats of ethnic discrimination.

Summary of our goals

In this paper, we examine four broad issues related to adolescents' personal experiences of ethnic discrimination at school: First, we examine the link of both anticipated future educational and occupational race discrimination and daily experiences of racial discrimination at school with two aspects of school motivation (ability self concepts and perceived task values) and achievement. Second, we compare the impact of anticipated perceived future discrimination with that of daily experiences of racial discrimination at school on school motivation and achievement. Third, we examine whether perceived daily face-to-face experiences of racial discrimination by teachers and by peers are negatively related to changes in academic motivation and performance over the junior high school years. Fourth, we examine whether the impact of daily experiences of racism are moderated by one particular aspect of racial identity — namely, one's sense of connectedness based on one's racial group membership.

The Maryland Adolescent Development in Context Study

The data reported in the present paper are from the Maryland Adolescents Development in Context (MADIC) Study being conducted by Eccles, Sameroff and their colleagues. MADIC is a longitudinal study of normative development in a unique population of African-American and European American youth and their families living near Washington D. C. during the 1990s. The participants live in a county in Maryland where there have been tremendous demographic and political changes since 1960— changes that created a unique historical context in which to grow up. Prior to 1960, 85% of the residents in this county were White and political control was held by the European Americans; by 1995, 51% of the households were African-Americans (43% were European American), and both groups had considerable political control. As a result of these demographic changes, a normal distribution of family SES, centered firmly in the middle class, was characteristic of both of these two racial/ethnic groups: In 1991, less than 10% of both groups would have been classified as poor according to the Federal Government's criteria. In addition, the racial/ethnic gap in family levels of education, occupation, and earnings was much lower than the national average (e.g., the median income in 1990 was $47,000 for the European American families and $41,000 for the African-American families).

1480 adolescents and their families were recruited into the study based on a stratified sampling procedure designed to get proportional representations of families from each of 23 of the public junior high schools in the county—each of these schools contained only 7th and 8th grades. Initial recruitment was done through the schools; final recruitment was done through telephone as appointments were made for the in-home interviews.

The first wave of data (Time 1) was collected when the adolescents were just beginning 7th grade (1991). The second wave of data (Time 2) was collected during the summer following the adolescents' completion of 8th grade (1993). Of the original 1480 families, 1067 families participated in the second wave of data collection. School record data

provided the academic marks for the 7th and 8th grade and the standardized test scores from elementary school. Most of the data reported in this paper are based on the 336 African-American males and 293 African-American females who participated in both waves of data collection. The median income range for these African-American adolescents' families in 1991 was $45,000–$49,999 (versus $50,000–$54,999 for the European American adolescents' families). Fifty-four percent of the parents had received a high school degree and forty percent had obtained a college degree.

Overview of the major new measures discussed in this paper

Because of the large number of scales included in this study, there is insufficient space to provide a detailed description of all of the measures discussed in this paper. A complete description of all the scales can be obtained from the corresponding author and from our web page www.rcgd.isr.umich.edu/garp. The focal new measures for this paper include (1) adolescent's perception of racial discrimination by teachers and peers at school, adolescents' anticipation of future racial discrimination at work and in education, and the adolescents' own racial group identification; (2) the adolescents' reports of their possible future selves; (3) the adolescents' parents' perceptions of racial discrimination at work and in the community, and (4) adolescents' academic ability self concepts and subjective task values.

Adolescents' perceptions of daily face-to-face racial discrimination

Perceived discrimination by peers and perceived discrimination by teachers were measured at Time 2, using a new scale developed by the staff of MADICS. The adolescents reported the frequency with which they experienced negative treatment at their school because of their race by their peers and by their teachers. The perceived discrimination by peers scale included three items that asked about the frequency they felt they got into fights, were not associated with, and were not picked for particular teams or activities because of their race. The Cronbach's alpha for this scale was .86. The perceived discrimination by teachers scale included 5 items asking how often they felt that their teachers called on them less, graded them more harshly, disciplined them more harshly, discouraged them from taking a class, and thought they were less smart because of their race. The Cronbach's alpha for this scale was .88. Both measures used a 5 point scale with 1=never, 2=a couple of times a year, 3=a couple of times each month, 4=a couple of times each week, 5=everyday.

Adolescents' perceptions of future racial job and educational discrimination

The adolescents were asked whether or not they felt it would be harder for them to get ahead in life because of their race (yes or no).

Parents' perceptions of racial discrimination at work and in the community

The parents were asked two questions: (1) how often they received poorer treatment in stores or restaurants because of their race (five point scale with *1=almost never* and *5=almost daily*); and (2) compared to people of other races, how many opportunities for job advancement did they get at work (five point scale with *1=a lot fewer* and *5=a lot more*). The second question was reverse coded for the analyses summarized in this paper.

Adolescents' racial group cultural–capital identity

We measured racial group identification by asking about the adolescents' feeling of positive connection to their racial/ethnic group. These four items asked whether they felt close to friends because of similar race/ethnicity, believed that people of their race/ethnicity had a rich heritage, felt they had rich traditions because of their race/ethnicity, and felt supported by people of their own race/ethnicity. The Cronbach's alpha for this scale was .69. The items were answered with a five point Likert-type scale with *1=not at all true of me, 3=somewhat true of me, and 5=extremely true of me*.

Adolescents' achievement motivation

In keeping with Eccles' expectancy-value theory, we measured three beliefs linked to ability self concepts and perceived task values as indicators of achievement motivation (Eccles & Wigfield, 1995). These three dimensions of academic motivation were also selected because experiences of ethnic devaluation have been shown to affect these aspects of academic motivation (Crocker et al., 1998; Mickelson, 1991; Ogbu, 1978; Taylor et al., 1994).

The academic ability self concept scale was a four-item measure that tapped adolescents' evaluation of their mathematical and other academic abilities both in general and compared to other students their age. The response scale was a seven point Likert scale anchored at the extremes with two sets of labels (*not very good/very good; much less good than other students/much better than other students*). The Cronbach's alpha for this scale was .77 at Time 1 and .80 at Time 2.

The personal importance that the adolescents placed on doing well in school was assessed with two items that tapped the importance the adolescents placed on math and other school subjects compared to other things that they did. Again the response scales were seven point Likert scales anchored at the extremes with *much less important* and *much more important*. The Cronbach's alphas for this scale exceeded .80 for both time points.

The adolescents' perception of school's utility value scale included 4 items that asked about the importance of school for kids like them, the usefulness of school compared to things they learn from parents and friends, the necessity of doing well in school for success later, and the utility of education for getting ahead for kids in their neighborhood. The response scale was a four point strongly agree to strongly disagree scale. Cronbach's alpha for this measure was .54 at Time 1 and .64 at Time 2.

Possible future selves

The students were asked to list up to five things they would like to be true of them when they were in high school. These open-ended questions were coded into general categories. The interrater agreement exceeded .80.

Academic achievement

Adolescents' 7th and 8th grade academic subjects (i.e., English, math, science, and health) grade point averages were obtained from school records. Their GPAs were measured on a five-point scale (1=F, 2=D, 3=C, 4=B, 5=A).

Questions 1 and 2: linking racial discrimination and academic motivation and performance

As noted earlier, there are many reasons to predict that perceptions of racial discrimination, either in the present or anticipated future discrimination, might influence African-American adolescents' school motivation and achievement. To investigate these connections in MADICS, we first looked at simple regression coefficients for the relation of all three of our measures of perceived racial discrimination with our indicators of school motivation and performance, controlling for family SES (indicated by parents' highest level of education). Interestingly, anticipated future discrimination was unrelated to all three indicators. In contrast, both measures of daily face-to-face discrimination at school significantly predicted all three of our indicators of school motivation and performance.

Given the popularity of hypotheses regarding the potential role of oppositional identity formation and disengagement from school as explanations of the underachievement of African-American youth, we also compared the responses of our African-American and European American junior high school students on their responses to our questions regarding both the personal importance of school and the more general utility value of school described above. Contrary to predictions based on Fordham and Ogbu (1986), we found no significant racial difference on either of these scales. If anything, although not significantly different, the African-American youth attached greater personal importance to school achievement than did the European American youth. The same pattern was true for our measure of the perceived general utility of education. In addition, in response the possible future selves question, doing well in school was the most frequently mentioned outcome by both groups of young people (mentioned by between 77% and 83% of the four race by gender groups). Finally, we also asked our participants to give us examples of what it means for a Black youth to act White. Less than 5% of the African-American youth mentioned anything to do with school motivation or performance. Thus, we found little evidence in this population of the emergence of oppositional identities grounded in school disengagement among our African-American participants.

However, before dismissing this hypothesis entirely, we looked further into our data to determine whether there might be subgroups who did evidence the beginnings of oppositional identity. First, we assessed whether the centrality of one's race to one's identity would moderate these associations. Ogbu and his colleagues (Ogbu, 1978) argued that oppositional identity would be particularly likely to occur for youth who placed great importance on their ethnic identity. Once again, we found little evidence of oppositional identity formation among the African-American youth in MADICS: We found a weak positive relationship between the importance the adolescents' attach to school achievement and the extent to which the African-American youth said that their racial group membership was central to their identities ($p < .05$): those youth who placed the greatest personal importance on their racial identity also placed the greatest personal importance and the highest level of general utility value on school achievement.

Finally, we looked at those African-American youth (approximately 5% of the sample) who had indicated that doing well in school was an example of "acting White". Here we found some evidence of the beginnings of oppositional identities. Among these youth,

there was a negative association between the centrality of their African-American identity and their academic motivation and achievement (Chatman, Taylor, & Eccles, 2001).

Question 3: Modeling the comparative associations of anticipated future discrimination versus daily experiences of racial discrimination with academic motivation and performance

Given the nature of the findings associated with questions 1 and 2, we next used OLS regression to do path analysis to look at the comparative associations of Time 2 perceived racial discrimination with Time 2 school motivation and achievement. These results are summarized in Fig. 1. We included both the youth's and their parents' perception of daily racial discrimination and the youth's anticipation of future discrimination. The results were very interesting. First, both the youth's anticipated future racial discrimination and the parents' reports of discrimination at work predicted higher levels of academic motivation, which, in turn, predicted higher GPA. These findings suggest that youth and parents in MADICS respond to anticipated discrimination in the work place agentically by increasing their commitment to educational success.

In contrast, the youth's perceptions of daily experiences of racial discrimination predicted lower academic motivation, which in turn predicted lower GPA. Interestingly, perceptions of racial discrimination from one's peers undermined only the value these youth attached to school. In contrast, perceptions of racial discrimination from one's teachers undermined both the youth's confidence in their own academic abilities and the value they attached to school. Thus, it is the daily experiences of racial discrimination that undermine the academic motivation of these African-American young people.
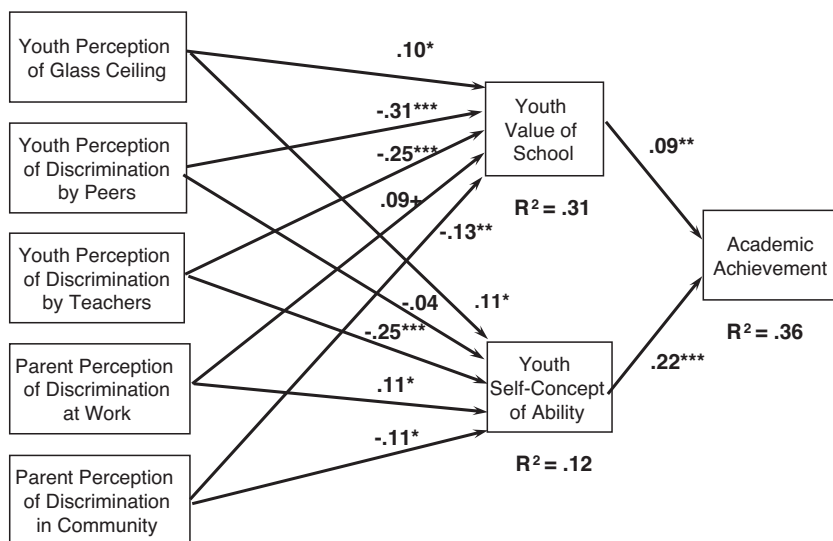

Fig. 1. Path analysis linking perceived discrimination to academic motivation and achievement.

Question 4: Assessing the protective function of racial/ethnic identity

In this section, we summarize our findings with regard to the following two questions: (1) Do perceived discrimination by teachers and by other students pose as potential developmental risks? and (2) Does positive connection to ethnic group serve as a promotive and/or protective factor against the potential threats of perceived discrimination? The work was originally reported in Wong et al. (2003).

Perceived discrimination as a risk factor

To look at whether proximal situations of discrimination are risks, we conducted partial correlational analyses examining the relations between our two Time 2 perceived racial discrimination measures and change in youth-reported academic motivation and academic GPA between Time 1 and 2. Change was examined by including the Time 1 measure as a control variable (Cohen & Cohen, 1983). We also partialled out the effects due to gender, family SES (indicated by a computed score derived from both parent education and parent occupation, Nam & Powers, 1983), elementary school academic competence, perceived

Table 1
Hierarchical regression results of perceived discrimination, connection to ethnic group, and their interaction on perceived importance of school, perceived utility value, and self competency beliefs for African-Americans

	Importance of school			Utility value of school		
	Step 1	Step 2	Step 3	Step 1	Step 2	Step 3
Gender	−0.7	−0.7	−0.7	−0.1	−0.1	−0.1
Socioeconomic status	.00	.00	.00	−0.5	−0.5	−0.5
Elem. sch. acad. comp.	.04	.04	.04	.12**	.11**	.1**
School disengagement (W1)	−.24***	−.24***	−.24***	−.15***	−.15***	−.16***
Perc. discrimination (W1)	.08*	.08*	.09*	−.01	.00	.00
Prior adjustment @ W1	.16***	.17***	.16***	.18***	.18***	.18***
Perceived sch. discrimination (W2)	−.20***	−.21***	−.23***	−.37***	−.38***	−.40***
Connect to ethnic group		.03	.04		.03	.04
Interaction			.07			.05
ΔR^2	.17	.00	.00	.29	.00	.00
ΔF-value for Step 1	$F(7,464)=$ 13.72***			$F(7,469)=$ 27.41***		
ΔF-value for Step 2	$F(1,463)=.37$			$F(1,468)=.42$		
ΔF-value for Step 3	$F(1,462)=1.66$			$F(1,467)=1.18$		
	Total adj. $R=.16***$ $F(9,462)=$ 10.82***			Total adj. $R=.***$ $F(9,467)=$ 21.47***		

Note: all predictor variables were centered. *$p<.05$, **$p<.01$, ***$p<.001$.

school discrimination at Time 1, and disengagement from school at Time 1 (see Wong et al., 2003 for full details). As we had predicted, the adolescents' perceived discrimination by both peers and teachers was negatively related to changes in the adolescents' reports of both the value they attach to academic achievement motivation and their academic self-competency beliefs. However, contrary to what we had expected, neither of the perceived discrimination measures predicted Time 2 school grades.

Connection to ethnic group as a promotive and protective factor

We next conducted hierarchical regression analyses to determine whether connection to ethnic group acted as a promotive and/or protective factor against the risks of perceived discrimination. For these analyses, we combined the perceived discrimination by peers and perceived discrimination by teachers because these two indicators were highly correlated, $r = .59$, $p < .001$, and as a consequence, entering both predictors simultaneously in the regression analysis would result in unreliable estimates (Licht, 1995).

In the first step, we entered the control variables (gender, SES, elementary school academic competence in elementary school, prior perceived experiences of discrimination at Wave 1 and disengagement from school at Wave 1), perceived school discrimination at Wave 2, and the adolescents' Time 1 score on the dependent measure — thus allowing one

Table 2
Hierarchical regression results of perceived discrimination, connection to ethnic group, and their interaction on school achievement, self-esteem, and group esteem for African-Americans

	Academy ability self concepts			School achievement (GPA)		
	Step 1	Step 2	Step 3	Step 1	Step 2	Step 3
Gender	−0.1	−0.1	−0.1	.10**	.10**	.10**
Socioeconomic status	−.06	−.06	−.06	.08*	.07*	.07*
Elem. sch. acad. comp.	.15**	.15**	.15**	.08*	.07	.07
School disengagement (W1)	−.17***	−.17***	−.17***	.00	.00	.01
Perc. discrimination (W1)	.05*	.05	.06	−.05	−.05	−.04
Prior adjustment @ W1	.31***	.31***	.30***	.67***	.68***	.67***
Perceived sch. discrimination (W2)	−.15***	−.16***	−.22***	−.06	−.07*	−.11*
Connect to ethnic group		.04	.07		.07*	.09*
Interaction			.12**			.08*
ΔR^2	.24***	.00	.01*	.63***	.004*	.004*
ΔF-value for Step 1	$F(7,461) = 20.97***$			$F(7,402) = 94.05***$		
ΔF-value for Step 2	$F(1,460) = .81$			$F(1,401) = 4.38*$		
ΔF-value for Step 3	$F(1,459) = 7.65**$			$F(1,400) = 4.59*$		
	Total adj. $R = .24***$ $F(9,459) = 17.48***$			Total adj. $R = .63***$ $F(9,400) = 75.45***$		

Note: all predictor variables were centered. *$p < .05$, **$p < .01$, ***$p < .001$.

to interpret the results in terms of change over time in the dependent measures. In Step 2, we entered connection to racial group. In the final step, we entered the interaction term of the product of perceived school discrimination by connection to ethnic group. All variables were mean-centered and the interaction term was the cross-product term of the two centered variables (Cohen and Cohen, 1983; Jaccard, Wan, & Turisi, 1990).

A summary of the results of the four hierarchical regression analyses is presented in Tables 1 and 2. As expected, perceptions of racial discrimination predicted declines in the adolescents' reports of the importance they attach to school, the utility value of school, and academic ability self concepts. In addition, perceptions of racial discrimination also predicted declines in GPA at Step 2.

More importantly, cultural connection to one's racial group predicted changes in academic GPA: After controlling for sociodemographic and background variables, GPA in grade 7 and perceived discrimination at both Time 1 and 2, connection to ethnic/racial group was positively related to 8th grade GPA. Furthermore, the effect of connection to racial/ethnic group on change in school achievement was approximately equal in size to the negative effect of perceived discrimination on these outcomes suggesting that a strong culturally connected identity with one's racial group can compensate for experiences of daily discrimination. We believe that this is an example of the promotive role of culture connectedness to one's racial/ethnic group.
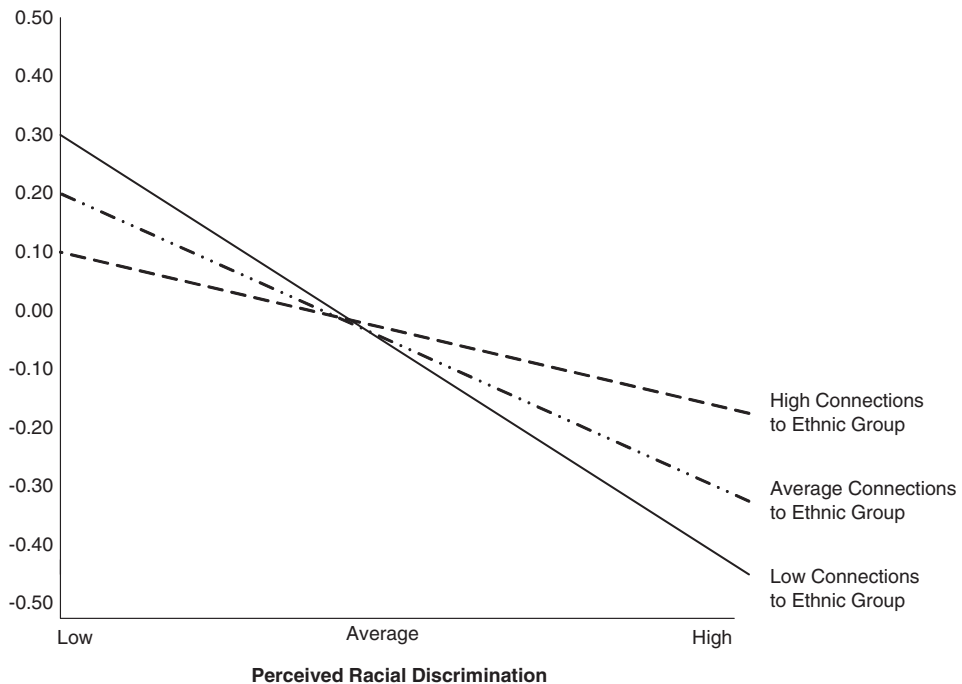

Fig. 2. Interactive effects of perceived discrimination and a cultural connection to one's racial group on academic ability self concepts for African-American adolescents. The *y* axis depicts standardized scores of the adolescents' academic ability self concepts.
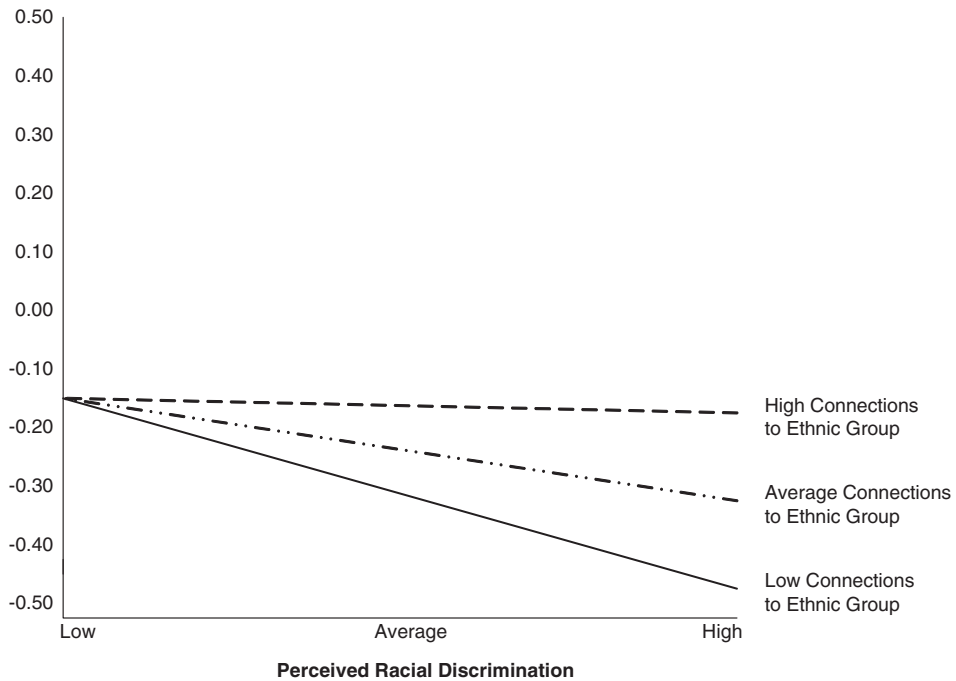
Fig. 3. Interactive effects of perceived discrimination and a cultural connection to one's racial group on school achievement (GPA) for African-American adolescents. The *y* axis depicts standardized scores for GPA.

Finally, there were significant interaction effects between a culturally connected racial identity and perceived discrimination on change in both academic self-competency beliefs and academic achievement (see Table 2). The patterns of these interactions are depicted in Figs. 2 and 3. Overall, the patterns of the interaction effect were very similar across both of these outcomes: As the African-Americans adolescents' culturally connected racial identity increased, greater perceived discrimination was associated with smaller decreases in both academic self competency beliefs (Fig. 2) and academic GPA (Fig. 3). Thus, those adolescents who perceived high discrimination but had a culturally connected racial identity were doing as well or almost as well as their counterparts who perceived very little or no racial discrimination.

General conclusions

The analyses summarized in this paper suggest three major conclusions: (1) Anticipated future racial discrimination can have multiple effects on the academic engagement of African-American early adolescents — for some this realization leads to increased engagement; for others it can lead to disengagement. (2) In contrast, daily experiences of racial discrimination can have profound negative effects on the development of African-American adolescents' academic motivation and achievement during the junior high

school years. (3) However, this negative effect is substantially reduced in those youth who have a strongly positive culturally connected racial identity. In the next sections, we discuss the implications of these findings.

Effects of perceived discrimination

We have found substantial evidence that African-American early adolescents' daily experiences of racial discrimination by peers and by teachers have the potential to seriously undermine African-American adolescents' academic motivation and school achievement. These results are consistent with findings of prior research with African-American high school students, college students, and adults showing that racial devaluation in school, work, or other settings is linked to increased anger and distress, decreased satisfaction with school or work, and even poorer health outcomes (e.g., Ogbu, 1978; Taylor et al., 1994). The findings summarized in this paper add to this body of work by demonstrating that experiences of racial discrimination influence the development of academic motivation and achievement during early adolescence as well. This is noteworthy because at this age adolescents are at an increased risk for declining school motivation, poorer self-perceptions, greater susceptibility to conforming to peers' negative influence, and involvement in problem behaviors (e.g., Berndt, 1979; Eccles & Midgley, 1989; Eccles et al., 1993). Thus it is very important that junior high schools do all they can to reduce experiences of racial discrimination. Wong et al. (2003) also demonstrated that these early experiences of racial discrimination undermine several other aspects of healthy development in these same youth: Daily experiences of racial discrimination predicted decreases in both self-esteem and mental health, as well as increases in problem behaviors and in involvement with risky peers. Each of these changes, in turn, is likely to further undermine these adolescents' school engagement and performance. Thus, it is doubly important that junior high schools do all they can to reduce the incidences of racial discrimination.

Our results suggest that it is very likely that experiencing race/ethnicity-related stressors, such as experiences of racial and ethnic discrimination, in addition to the non-ethnic-related stressors commonly faced by early adolescents, will further increase the probability of negative developmental outcomes during this vulnerable period of human development (Eccles, Early, Fraser, Belansky, & McCarthy, 1997; Eccles, Lord, Roeser, Barber, & Hernandez-Jozefowicz, 1997; Eccles et al., 1993; Simmons, Burgeson, & Carlton-Ford, 1987). Furthermore, prior research indicates that risks encountered during early adolescence have long-term implications. For example, Eccles and her colleagues found that adolescents who report decreases in self-esteem as they make the transition to junior high school report worse psychological adjustment during high school than those who experience an increase in self-esteem (Eccles et al., 1997). Further research is needed to examine the long-term impact of negative ethnic treatment during early adolescence.

In contrast, anticipated future discrimination did not appear to be a risk factor for most of the early adolescents in MADICS. As we had expected, if anything, anticipated future racial discrimination predicted increased academic motivation and achievement in this population. These results are at odds with both prior theorizing and empirical research suggesting negative motivational consequences for anticipated future racial discrimination.

For example, in research with older adolescents, several investigators have concluded that adolescents' anticipation of future discrimination poses a threat to their psychological well-being (e.g., Fordham & Ogbu, 1986; Ogbu, 1978; Taylor et al., 1994). According to Ogbu and his colleagues, when involuntary minorities, such as African-Americans, become aware of the high probability that they will face future racial discrimination, they are likely to develop an oppositional identity in which they devalue and disidentify with school in order to identify with members of their own racial group. There are several differences between our study and the work of Ogbu and his colleagues that may contribute to differences in our findings. The most important difference lies in the fact that Ogbu's work focused on minority youth from disadvantaged socioeconomic backgrounds while the adolescents in MADICS were from families representing the full range of the socioeconomic spectrum. The circumstances and characteristics underlying racial and ethnic discrimination in middle class versus poverty-dominated socioeconomic contexts are likely to be quite different. Although African-American adolescents of all socioeconomic backgrounds are likely to encounter racial discrimination, the underlying meaning and the form of that discrimination should vary for African-American adolescents of different socioeconomic backgrounds. Thus, it is quite likely that adolescents from different socioeconomic contexts will interpret and respond to these racist experiences differently. Another key difference between these studies is the age of the participants: Ogbu and colleagues focused primarily on older adolescents; the results reported in this paper were based on early adolescents. It is possible that our youth will begin to disengage from academics as they get older and their experiences with racism accumulate over time.

Although differences in the foci of the study and in the background of the participants may contribute to the dissimilar results between our study and those of prior research, an alternative interpretation of these seemingly discordant findings is that our findings represent different ways that adolescents cope with racial discrimination. Some adolescents may respond to situations of racial discrimination by disengaging and disidentifying themselves from school. Other adolescents may cope with racial discrimination by identifying with school more strongly: These adolescents may see that doing well in school and getting a good education are important for overcoming and combating discrimination. Just as adults respond differently to the stressors in their lives, so do adolescents, and these different coping responses may affect psychological adjustment differently (Nolen-Hoeksema, Girgus, & Seligman, 1986). These results suggest that it is important for schools to emphasize the value of educational attainments for combating future racial discrimination.

Effects of connection to ethnic group

As shown in Tables 1 and 2 and Figs. 2 and 3, African-American adolescents' culturally connected racial group identity had both main and interactive effects on academic motivation and achievement: Thus, culturally connected racial identities appear to serve as both promotive and protective factors by both compensating for, and buffering against, the impact of perceived racial discrimination. These results are consistent with theoretical and empirical work on ethnic identity (e.g., Chavous et al., 2003) and the findings from research on racial socialization with African-Americans.

According to several prior studies, African-American parents continuously stress to their children the importance of getting a good education and working harder than youths of other ethnic groups to get ahead (Furstenberg, Cook, Eccles, Elder, & Sameroff, 1999; Hughes & Chen, 1997; Hughes & Johnson, 2001; Phinney & Chavira, 1995). Phinney and Chavira (1995) also found that African-American parents were particularly likely to use a form of racial socialization in which they emphasize academic achievement and discuss the problems of racism. Other work with adolescents of color indicates that building a sense of connection to one's heritage group is intertwined with emphasizing achievement and discussing discrimination (Branch & Newcomb, 1986). Thus, adolescents in this study whose families have helped them develop a bond to their racial group may have been socialized about discrimination as well as the importance of working harder in school. This is one plausible explanation for why adolescents who have a high cultural connection to their racial group maintain a positive orientation toward school despite high levels of perceived discrimination. Schools should help parents in these socialization efforts by providing examples and role models of the ways in which high levels of school engagement and achievement have facilitated the success of African-Americans.

Thus, our results clearly show that race and ethnicity can serve a positive and protective role in the lives of African-Americans. In the past, most of the research on ethnicity and development has attended to only the deficits, weaknesses, and risks associated with being African-American (Cross, 1991; Garcia Coll et al., 1996; Graham, 1992; McLoyd, 1991). Except for the relatively few studies on ethnic identity (e.g., Chavous et al., 2003; Phinney, 1996; Rowley et al., 1998; Sellers & Shelton, 2003) and racial socialization (e.g., Bowman & Howard, 1985; Hughes & Chen, 1997; Hughes & Johnson, 2001), there has been little research on how ethnicity facilitates the healthy development of African-American youths. The evidence in this study illuminates that the promotive and protective factors associated with ethnicity play a potentially important role in African-Americans' development, particularly under threatening racial/ethnic circumstances.

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