

The Influence of Ethnic Discrimination and Ethnic Identification on African American Adolescents' School and Socioemotional Adjustment

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ABSTRACT Do experiences with racial discrimination at school predict changes in African American adolescents' academic and psychological functioning? Does African American ethnic identity buffer these relations? This paper addresses these two questions using two waves

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of data from a longitudinal study of an economically diverse sample of African American adolescents living in and near a major East Coast metropolis. The data were collected at the beginning of the 7th grade and after the completion of the 8th grade. As expected, experiences of racial discrimination at school from one's teachers and peers predicts declines in grades, academic ability self-concepts, academic task values, mental health (increases in depression and anger, decreases in self-esteem and psychological resiliency), and increases in the proportion of one's friends who are not interested in school and who have problem behaviors. 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 academic self-concepts, school achievement, and perception of friends' positive characteristics, as well as the association of the racial discrimination experiences with increases in problem behaviors.

Many different conceptual approaches have been used to understand the diverse influence of ethnicity on psychological development (McLoyd, 1991; Graham, 1992; Garcia Coll et al., 1996). By far, the most common approach focuses on ethnic group differences in psychological outcomes, such as school achievement, academic motivation, mental health, and problem behaviors (e.g., Fleming & Offord, 1991; Gibbs, 1990; Dillard & Perrin, 1980). There are also numerous studies of ethnic group differences in the correlates of various developmental outcomes (e.g., Steinberg, Dornbusch, & Brown, 1992; Stevenson, Chen, & Uttal, 1990). Finally, some researchers investigate whether a single theoretical model is supported by data from different ethnic populations (e.g., Rowe, Vazsonyi, & Flannery, 1995; Wong, 1990; Castro, Maddahian, E., Newcomb, M.D., & Bentler, 1987). In these comparative studies, the influence of ethnicity is operationalized and examined only in terms of ethnic group differences in outcomes and correlations.

There is no doubt that this comparative approach to studying ethnicity and psychological development has provided valuable information. Studying ethnic group differences, however, unveils only a small part of how ethnicity influences development. Ethnicity's influence on psychological development also operates through ethnic social situations and psychological processes, such as stereotypes, experiences of ethnic discrimination, ethnic identity, and ethnic socialization. There are potentially many ethnic

constructs pertinent to developmental studies, but few of these have been defined, operationalized, and systematically studied.

In fact, in some comparative studies, findings of ethnic group differences are often inferred to be indicative of group differences in ethnic contexts or psychological processes (Phinney & Landin, 1998). This intention is often conveyed by explanations in the introduction and/or discussion sections in which the authors attribute ethnic group differences to such factors as ethnic identity, ethnic discrimination, different histories of oppression, and different cultural beliefs even though these constructs were not measured (see Phinney & Landin, 1998, for examples). It is impossible to determine the role of these ethnic processes or situations in psychological development unless the proposed ethnic constructs are examined explicitly. This is our goal in this paper. 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.

The purpose of this study is to examine whether personal experiences of ethnic discrimination and ethnic identification are potential threats to the psychological development of African American adolescents. In addition, we want to know whether ethnic identification serves as a protective factor that reduces the potential harms of ethnic discrimination for African American youth. This study helps fills two major gaps in the literature. First, there are few systematic quantitative studies on ethnic minority adolescents' personal experiences of ethnic discrimination. Second, there are even fewer studies that have looked at ethnic protective factors that mitigate the effects of personal experiences of ethnic discrimination.

The Phenomenon of Ethnic Discrimination During Adolescence

One of the challenges of studying the influence of ethnicity on psychological development is that there are few specific theoretical tools already in place. Instead, researchers interested in ethnic phenomena need to borrow from the many theories and conceptual frameworks available in the larger field of child development (Garcia Coll et al., 1996). These include Bronfenbrenner's ecological model, the framework of developmental risks and protective factors, Sameroff's transactional model, and Eccles's person-environment-stage

fit model (Sameroff, 1995; Bronfenbrenner, 1986; Eccles, Midgley, Wifield, & Buchanan, 1993; Jessor, Van Den Bos, Vanderryn, Costa, & Turbin, 1995). Although these general theoretical frameworks do not specifically address how ethnicity influences development, their general axioms and propositions can be applied to the study of ethnicity and development. With regard to the study of ethnic discrimination, the work on risks, promotive factors, and protective factors offers a useful framework for conceptualizing the role of ethnic discrimination in adolescents' psychological 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 affect the likelihood that adolescents will have academic, socioemotional, and behavioral problems. In addition, the likelihood that any particular psychosocial hazard will lead to problematic outcomes is 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, Bartko, Baldwin, Baldwin, & Seifer, 1998). Protective factors serve as buffers so that the relation between risks and problematic developmental outcomes are attenuated (Jessor et al., 1995; Garmezy, Masten, & Tellegen, 1984). 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 the conceptual framework of risks, promotive factors, and protective factors is a useful tool for conducting research on adolescents' experiences of ethnic discrimination. First, personal experiences of ethnic discrimination are one type of risk. Second, because not all individuals are negatively affected by ethnic discrimination, ethnic discrimination is believed to increase the probability of negative outcomes instead of directly causing these negative outcomes (Essed, 1990; Phelan, Davidson, & Yu, 1994). Third, the framework of risks, promotive factors, and protective factors incorporates components that are agentic and facilitative of positive development. Studies of ethnic influences have

been criticized for focusing only on individual weaknesses, deficit environments, or negative consequences (Graham, 1992; McLoyd, 1990). This particular model acknowledges that there are psychological and/or environmental strengths that can deflect (or protect against) the negative outcomes associated with ethnic discrimination.

Ethnic discrimination as a potential risk factor

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, adolescents whose parents are neglectful or generally not involved in their lives are more likely to do poorly in school, engage in problem behaviors, and have friends who are involved in delinquent activities, than are adolescents whose parents who are supportive of their daily activities (Connell, Spencer, & Aber, 1994; Eccles, Early, Frasier, Belansky, & McCarthy, 1997). Similarly, young children who are teased or picked on by their peers at school are more likely to do poorly in school, have low self-esteem, and feel lonely than are children who are not so victimized (Ladd, 1990; Wentzel & Asher, 1995). Finally, there is an increased probability for negative academic and socioemotional outcomes when adolescents feel that their teachers do not respect or care about them as individuals (Eccles, 1993; Goodenow & Grady, 1993; Wentzel, 1997). When families, schools, 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, ethnic discrimination can convey to individuals that they are devalued because of their ethnic group membership. Discriminatory behaviors also communicate that one is different and not part of the "in-group" (Crocker, Major, & Steele, 1998). In accord with the findings on families, schools, and peers as risk factors, such affronting and depreciative ethnic experiences are likely to increase the probability of negative developmental outcomes. Although few researchers have looked at ethnic discrimination as a risk factor, ethnic discrimination does potentially threaten the healthy development of children and adolescents and therefore fits the definition of a risk factor.

Findings from social psychological research support the prediction that ethnic discrimination is a potential risk factor. Research

from social psychology indicates that different forms of ethnic devaluation threaten college students' and other adults' psychological well-being. One type of ethnic devaluation that has received tremendous attention in social psychology is the phenomenon of stereotype threat (Steele & Aronson, 1995). 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. Research with African American college students indicate that these anxieties resulted in decreases in valuing of school, effort to do well on academic tasks, and performance 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 (Salgado de Snyder, 1987; Amaro Russo, & Johnson, 1987). Moreover, adults' experiences of discrimination in the workplace affect both work satisfaction and work performance (Salgado de Snyder, 1987; Amaro et al., 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). Furthermore, White, African American, and Asian American college students' awareness of ethnic discrimination is negatively related to their evaluation of their own ethnic group (Luhtanen & Crocker, 1992).

A few studies with adolescents have replicated some of these findings. For example, there is a negative relation between Hispanic high school students' awareness of ethnic discrimination and their evaluation of their own ethnic group (Phinney, Chavira, & Tate, 1993). Similarly, qualitative research has shown that perceived ethnic discrimination at school affects participation in school and socioemotional adjustment for some high school students of color (Phelan, et al., 1994).

In addition to these few studies on adolescents' experiences of ethnic discrimination, there is also some research with adolescents on adolescents' perception of future discriminatory barriers. 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 (Ogbu, 1978; Fordham & Ogbu, 1986; Mickelson, 1991; 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).

The findings from research on adolescents' perceptions of discriminatory barriers are consistent with those from studies with college students and other adults on stereotype threat and ethnic discrimination. The findings from these studies support the general proposition that different types of ethnic devaluation are potential threats to socioemotional and school functioning. In light of these past findings, personal experiences of ethnic discrimination are likely to increase the probability of negative outcomes during adolescence.

Ethnic 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, 1996a; Sellers, Smith, Shelton, Rowley, & Chavous, 1998). Numerous studies have looked at the implications of positive ethnic or racial identification on ethnic minorities' mental health. In particular, researchers have shown that attachment to one's ethnic group, or feeling a strong sense of connection to one's

ethnic group, is one 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). Few studies, however, have examined whether ethnic identification is a protective or promotive factor against the potential threats of ethnic discrimination.

Summary of Present Study

The present study examines two research questions related to adolescents' personal experiences of ethnic discrimination at school. First, we examined whether perceived discrimination by teachers and by peers is negatively related to academic, socioemotional, and behavioral indicators of psychological adjustment among African American adolescents. Based on prior research on developmental risks and on ethnic devaluation, perceived discrimination is predicted to relate to (1) academic motivation (Ogbu, 1978; Fordham & Ogbu, 1986; Mickelson, 1991; Taylor et al., 1994; Steele & Aronson, 1995); (2) school performance (Ogbu, 1978; Fordham & Ogbu, 1986; Mickelson, 1991; Steele & Aronson, 1995), (3) self-esteem (Steele & Aronson, 1995), (4) group-esteem (Phinney, et al., 1993; Luhtanen & Crocker, 1992), (5) psychological distress, including anger and depressive symptoms (Phelan Yu, & Davidson, 1994; Feagin, 1992), (6) selection of friends, (Ogbu, 1978; Fordham & Ogbu, 1986) and (7) problem behaviors (Jessor et al., 1995).

In addition, we looked at whether ethnic identification acts as a promotive and protective factor against the potential threats posed by experiences of ethnic discrimination. We predicted that ethnic identification compensates for the effects of ethnic discrimination and that ethnic identification also serves as a buffer that moderates the impact of ethnic discrimination on psychological adjustment.

METHODS

Participants

The participants in this study live in a county in Maryland where there have been tremendous demographic and political changes since 1960.

Historical and contemporary contextual information about this county is necessary to provide an overview of the racial context of these adolescents. One key contextual feature of this county is change: Prior to 1960, 85% of the residents in this county were White and political control was held by the Whites; by 1995, 51% of the households were African Americans and 43% were White, and Whites and African Americans had equal political control.

The county also has quite unique socioeconomic characteristics. The full range of SES is evident among both White and African American households. In 1991, less than 10% of White and African American residents would be classified as poor under the federal government's definition. In addition, the racial gap in earnings is much lower than the national average: For example, the median income in 1990 for Whites was \$47,000 and for African Americans \$41,000. In 1990, African Americans earned 82% of what Whites earned, compared to a national figure of 60%. Because of the comparable sociodemographic background of African American and White residents, this county offers a unique opportunity to study the development of African American and White adolescents.

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 began as part of larger longitudinal, evaluation study—the Study of Adolescents in Multiple Contexts (Cook et al., 1999). The two longitudinal studies differed slightly in their focus and method of data collection; because the data were collected collaboratively, extensive information is available about the adolescents and their families. In the Study of Adolescents in Multiple Contexts, the researchers invited all entering 7th-grade students in the county school district to participate in their study in 1990, 1991, and 1992. They administered questionnaires in school to students whose parents gave their consent at the beginning of 7th grade (Time 1) and at the end of the adolescents' 8th grade (Time 2). These questionnaires asked for information about the adolescents' perceptions of their families, their friends, and their own psychological attitudes and behaviors.

Of the approximately 5000 adolescents in the second cohort (1991), 1480 adolescents and their families also participated in the MADIC Study. These families were included based on parental willingness and a stratified sampling procedure designed to get proportional representations of families from each of the 23 junior high schools being studied. The first wave of data was collected when the adolescents were in 7th grade (1991). This data collection coincided with the first wave of data collection on this cohort of the Study of Adolescents in Multiple

Contexts. In the MADIC Study, the target youth and primary caregiver were interviewed at home and completed a self-administered questionnaire. The second wave of MADIC data was collected 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. Most of the data used in the present paper are from the MADIC Study. The school record data (academic marks for seventh and eighth grades and standardized test scores from elementary school) and the measures of adolescent's report of problem behaviors are from the Study of Adolescents in Multiple Contexts.

Only the 336 African American males and 293 African American females who participated in both waves of data collection in both of the larger studies are included in the present study. Unlike many studies with African Americans, the African American adolescents in this study were drawn from families across the full range of SES. The median income range for the African American adolescents' families in 1991 was \$45,000–\$49,999 and for the White adolescents' families was \$50,000–\$54,999. The primary caregivers' average levels of education were the same in the two ethnic groups: Fifty-four percent had received a high school diploma and 40% had obtained a college degree.

Measures of discrimination, connection to ethnic group, and control variables Because of the large number of scales included in this study, there is insufficient space to include a more detailed description of the measures. Moreover, many of these measures have been described in other papers or are based on published work. Detailed information is provided for the unpublished variables that are the central foci of 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 measures for this report are adolescent's perception of ethnic discrimination and ethnic identification.

Perceived discrimination predictors. Perceived discrimination by peers and perceived discrimination by teachers were measured at Time 2, using a scale developed by the staff of MADIC. 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 not picked for particular teams or activities because of their race. Cronbach's analyses showed that this scale was internally consistent, $\alpha = .86$. The perceived discrimination by teachers scale included 5 items about how often students 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. This scale was also internally consistent, $\alpha = .88$. 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.

Positive connection to ethnic group. Adolescents' feeling of positive connection to their ethnic group was measured with four items developed by the staff of MADIC. These 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. Results of Cronbach's analyses yielded adequate internal consistency, $\alpha = .69$. The items were answered with a 5-point Likert-type scale with 1 = not at all true of me, 3 = somewhat true of me, and 5 = extremely true of me.

Control variables. The control variables included the following socio-demographic and background measures: gender, elementary school academic competence, and family's socioeconomic status. Each of these variables is controlled for because there may be differences in ethnic discrimination or feelings of connectedness due to these background variables. Socioeconomic status was a composite using information provided by the primary caregivers, including family's annual income, the highest educational level of either caregiver, and highest occupational status of either caregiver (Nam & Powers, 1983). The indicator of elementary school academic competence was their 5th-grade California Achievement Test scores.

In addition, school discrimination at Time 1 and self-reported psychological disengagement from school at Time 1 were included as control variables. Both of these indicators were included to control for perceptual biases linked to adolescents' prior disengagement from school. At Time 1, an open-ended question was asked about whether the adolescent had experienced differential treatment at school because of his or her race. A follow-up question ascertained the manner in which they were treated differently. A dichotomous variable was created in which all responses indicating no differential treatment or more positive differential treatment were coded 0 and all responses indicating negative differential treatment were coded 1.

The psychological disengagement scale was created by averaging the unit-weighted responses for 5 items (Roeser & Eccles, 1998). This particular measure tapped the extent that adolescents were psychologically alienated from school. The scale measured the degree adolescents

felt that school was boring, homework was a waste of time, and grades were not important. Internal consistency was adequate $\alpha = .70$.

Outcome measures

Achievement motivation. The adolescent measures tapped two aspects of achievement motivation at Time 1 and 2. According to Eccles's (Parsons, 1983) expectancy-value theory, key dimensions of achievement motivation include an adolescent's utility value, which is one's perception of the usefulness of a particular task for future goals, and an adolescent's beliefs about academic competence, which consist of evaluations of one's competence in a particular area. These two dimensions of academic motivation were selected because prior research suggests that ethnic devaluation may have substantial bearing on adolescents' beliefs about their competence and beliefs about the importance of school for the future (Crocker et al., 1998; Taylor, et al., 1994; Mickelson, 1991; Ogbu, 1978).

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 kids in their neighborhood getting ahead. The results of Cronbach's analyses for this measure yielded lower internal consistency at Time 1, $\alpha = .54$, than at Time 2, $\alpha = .64$.

The self-competency beliefs scale was a 4-item measure that tapped adolescents' evaluation of their mathematical and other academic abilities both in general and compared to other people their age. Internal consistency was .77 at Time 1 and .80 at Time 2. This scale is based on measures developed by Eccles and her colleagues (e.g., Eccles & Wigfield, 1995).

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

Mental health. Adolescent measures of mental health included depressive symptoms, anger, and self-esteem. The adolescent scale of depressive symptoms assessed the frequency of experiencing such symptoms as hopelessness, loneliness, sadness, and suicidal thoughts. The depressive symptoms measure at Time 1 was adapted from items on the Symptoms Checklist Revised (SCL-90-R; Derogatis, 1983; Derogatis, Rickels, & Rock, 1976) and the Time 1 measure was internally consistent, $\alpha = .72$. The depressive symptoms measure at Time 2 was assessed using Kovacs' (1992) Children's Depression Inventory (CDI). Internal reliability was .68.

Adolescents' reports of anger were tapped by a scale that consisted of 3 items from the SCL-90 (Derogatis, 1983; Derogatis et al., 1976): how frequently they felt so angry that they wanted to break something, felt like they could not control their temper, and felt so upset that they wanted to hit or hurt someone. This scale was internally consistent at Time 1, $\alpha = .72$ and Time 2, $\alpha = .86$.

The global self-esteem scale was created by taking the mean of the unit weighted responses to each of the 3 items. The global self-esteem measure was based on Harter's (1982) global self-worth scale. Adolescents rated how frequently they wish they were different, wanted to change themselves, and felt sure about themselves. Adequate statistical internal consistency was obtained for both Time 1, $\alpha = .60$, and Time 2, $\alpha = .66$.

Selection of friends. This domain of psychological functioning was included because prior findings indicate that adolescents' experiences of ethnic devaluation, particularly those associated with school, lead to adolescents' associating with peers who devalued school (Ogbu, 1978; Fordham & Ogbu, 1986). Adolescents' perception of their friends was measured by 7 items created by the staff of MADIC. Adolescents' report of friends' characteristics assessed the proportion of the adolescent's closest friends who did well in school, planned to go to college, liked to discuss schoolwork with them, and thought it was important to work hard in school. This scale also included items that assessed the proportion of the adolescent's closest friends who thought working hard to get good grades was a waste of time, skipped school, and cheated on school tests. These last three items were reverse-coded. Cronbach's alphas were adequate at both Time 1, $\alpha = .73$ and Time 2, $\alpha = .69$.

Problem behaviors. The adolescent measure of engagement in problem behaviors is based on the work of Elliott and his colleagues (1989). These eleven items asked about whether the adolescents have ever done the following: damaged property for fun, shoplifted, skipped classes, gotten involved in a gang fight, been sent to the principal's office, lied to parents about whereabouts, did risky things for a kick, stole or tried to steal a car or motorcycle, hit someone because of what they said or did, brought alcohol or drugs to school, and cheated on exams. Each item was coded 0 for never having done it and 1 for having done it at least once. The scale was created by adding these 11 items.

RESULTS

In this section, we first present descriptive statistics and zero-order correlations. Then the analyses strategies and the results of the

analyses pertaining to each of the research questions are described: (1) Do perceived discrimination by teachers and by other students pose as potential developmental risks? and (2) Does positive connection to an ethnic group serve as a promotive and/or protective factor against the potential threats of perceived discrimination?

Tables 1 and 2 summarize the means, standard deviations, and zero-order correlations among the variables. The results of correlational analyses indicated that perceived discrimination by peers and perceived discrimination by teachers were strongly correlated ($r = .67, p < .001$). Both perceived discrimination by peers and perceived discrimination by teachers were moderately related to connection to ethnic group ($rs = .24$ and $.27, ps < .001$).

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 each of the perceived discrimination predictors and change in youth-reported outcome between Time 1 and 2. Change was examined

Table 1
Descriptive Statistics for Independent and Dependent Variables

	X	SD
<i>Independent variables:</i>		
5th-grade California Achievement Test score	481.04	48.62
School disengagement (T1)	2.36	.65
Perceived discrimination by teachers (T2)	1.70	.88
Perceived discrimination by peers (T2)	1.49	.83
Connection to ethnic group (T2)	2.77	.89
<i>Adolescent-reported dependent variables (T2):</i>		
Perceived utility value of school	4.10	.73
Self-concept of academic ability	5.23	.90
Friends' positive school characteristics		
Depressive symptoms	1.88	0.74
Anger	2.46	1.01
Self-esteem	3.96	0.87
Problem behaviors	4.63	2.74
School report of grades (T2)	3.50	.84

Table 2
Zero-order Correlations Among Youth-Reported Outcome Variables

	1	2	3	4	5	6	7	8	9	10	11	12
1. Importance of school	—											
2. Utility value of school	.41***	—										
3. Beliefs about acad. competence	.68***	.43***	—									
4. School achievement	.25***	.29***	.35***	—								
5. Self-esteem	.22***	.21***	.21***	.16***	—							
6. Ethnic group esteem	.10*	.23***	.17***	.12**	.11*	—						
7. Psychological resiliency	.36***	.28***	.43***	.21***	.34***	.17***	—					
8. Depressive symptoms	-.23***	-.30***	-.25***	-.19***	-.54***	-.10*	-.30***	—				
9. Anger	-.19***	-.21***	-.12**	-.29***	-.35***	-.05	-.21***	.46***	—			
10. Friends' pos. chars.	.33***	.36***	.32***	.17***	.12**	.14**	.33***	-.20***	-.11*	—		
11. Friends' neg. chars.	-.21***	-.35***	-.15***	-.13**	-.20***	-.17***	-.15**	.27***	.27***	-.37***	—	
12. Problem behaviors	-.24***	-.31***	-.22***	-.34***	-.25***	-.22***	-.20***	.28***	.33***	-.29***	.32***	—

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

by including the Time 1 measure as a control variable (Cohen & Cohen, 1983). We also partialled out the effects due to gender, SES, elementary school academic competence, perceived school discrimination at Time 1, and disengagement from school at Time 1.

The relations between perceived discrimination and change in psychological outcomes were assessed by using an instantaneous effect model instead of a lagged effect model because an instantaneous effect model is more appropriate for our kind of data (Long, 1993). The Time 1 data collection occurred during the early part of the adolescents' junior high school experience, and the second wave was collected around or soon after the time they completed junior high school. The measure of perceived discrimination at Time 2 is a better measure than the Time 1 indicator because an indicator of school discrimination at Time 1 would be a premature and inadequate assessment of adolescents' overall discrimination experiences at school.

A summary of the results from the partial correlational analyses are presented in Table 3. Perceived discrimination by peers and perceived discrimination by teachers were negatively related to adolescents' reports of achievement motivation, self-competency beliefs, psychological resiliency, and self-esteem. Perceived discrimination by peers and perceived discrimination by teachers were positively related to anger, depressive symptoms, perceptions of friends' negative characteristics, and problem behaviors. Only perceived discrimination by teachers was related to adolescents' perceptions of friends' positive characteristics. Neither of the perceived discrimination predictors was related to either school grades or adolescents' reports of ethnic group esteem.

Connection to ethnic group as a promotive and protective factor. We 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, a combined indicator of perceived discrimination by peers and perceived discrimination by teachers was used to measure adolescents' perceived discrimination at school because the two perceived discrimination variables 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).

Table 3
Summary of Results from Partial Correlation Analyses of the Relations
Between Perceived Discrimination by Peers and Teachers and
Psychological Adjustment for African-American Adolescents

	Perceived Discrimination by Peers	Perceived Discrimination by Teachers
Adolescent report of academic motivation		
Importance of school	-.16**	-.16**
Utility value of school	-.27***	-.30***
Beliefs about academic competence	-.15**	-.13*
Grades (from school records)	-.03	-.07
Adolescent report of mental health		
Psychological resiliency	-.20***	-.22***
Depressive symptoms	.36***	.41***
Anger	.26***	.35***
Adolescent report of self and group evaluations		
Self-esteem	-.17***	-.23***
Ethnic group esteem	-.06	-.03
Adolescent report of friends' characteristics		
Friends' positive characteristics	-.04	-.15*
Friends' negative characteristics	.30***	.27***
Adolescent report of problem behaviors	.20***	.29***

Note. All analyses included gender, SES, elementary school academic competence, prior discrimination, and school disengagement as control variables. Analyses with youth-reported outcomes also included T1 indicator that corresponded with the outcome measure as control.
* $p < .05$; ** $p < .01$; *** $p < .001$.

In the first step, 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 prior psychological adjustment were included. In step 2, connection to ethnic group was entered. In the remaining step, the interaction term of the product of perceived school discrimination by connection to ethnic group was added to the regression equation.

All variables were mean-centered and the interaction term was the cross-product term of the two centered variables (Cohen & Cohen, 1983; Jaccard, Turisi, & Wan, 1990).

Main effects. A summary of the results of the hierarchical regression analyses are presented in Tables 4 to 7. Connection to ethnic group had main effect influences on three of the outcomes. After controlling for sociodemographic and background variables, and perceived discrimination, connection to ethnic/racial group was positively related to changes in school achievement (See Table 5), psychological resiliency (See Table 6) and perceptions of friends' positive characteristics (See Table 7). The effect of connection to ethnic group on change in school achievement, psychological resiliency, and perception of friends' positive characteristics was approximately equal to the negative effect of perceived discrimination on these outcomes.

Interaction effects. There were interaction effects between connection to ethnic group and perceived discrimination on change in self-competency beliefs (See Table 4), school achievement (See Table 5), perception of friends' positive characteristics (See Table 7), and problem behaviors (See Table 7). Connection to ethnic/racial group accounted for an additional 1–2% of the variance in each of these outcomes. The patterns of these interactions are depicted in Figures 1 to 4. Overall, the patterns of the interaction effect appear similar across these outcomes. Figure 1 shows that as African Americans' connection to ethnic group increased, greater perceived discrimination was associated with smaller decreases in self-concept of ability. In addition, Figure 2 reveals that as connection to ethnic group increased, greater perceived discrimination was related to smaller decreases in school achievement. Figure 3 indicates that as connection to ethnic group increased, greater perceived discrimination was related to smaller decreases in perception of friends' positive characteristics. As shown in Figure 4, as connection to ethnic group increased, greater perceived discrimination was correlated with smaller increases in problem behavior. Furthermore, the interaction graphs show that across these four outcomes, adolescents who perceived high discrimination and had high connection to their ethnic group were doing as well or almost as well as their counterparts who perceived very little or no discrimination.

Table 4
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						Self-Competency Beliefs					
	Step 1		Step 2		Step 3		Step 1		Step 2		Step 3		Step 1		Step 2		Step 3	
	B	β	B	β	B	β	B	β	B	β	B	β	B	β	B	β	B	β
Gender	-.13	-.07	-.13	-.07	-.13	-.07	.02	.01	.02	.01	.02	.01	-.02	-.01	-.02	-.01	-.03	-.01
Socioeconomic status	.01	.00	.01	.01	.01	.01	-.04	-.04	-.05	-.04	-.05	-.04	-.08	-.06	-.08	-.07	-.08	-.06
Academic competence	.00	.04	.00	.04	.00	.04	.00	.12**	.00	.12**	.00	.12**	.00	.15***	.00	.15***	.00	.15***
School disengagement (T1)	-.38	-.25***	-.38	-.25***	-.38	-.25***	-.26	-.17***	-.26	-.17***	-.26	-.17***	-.27	-.17***	-.27	-.17***	-.27	-.17***
Prior perc. school discrimination (T1)	.23	.08	.23	.08	.23	.08	-.03	-.01	-.02	-.01	-.02	-.01	.17	.06	.17	.06	.19	.06
Prior adjustment (T1)	.15	.16***	.15	.16***	.15	.16***	.20	.20***	.20	.20***	.20	.20***	.31	.31***	.31	.31***	.31	.30***
Perc. school discrimination (T2)	-.19	-.17***	-.20	-.18***	-.21	-.19***	-.38	-.33***	-.39	-.33***	-.39	-.34***	-.19	-.15***	-.21	-.16***	-.29	-.22***
Connection to ethnic group (T2)			.02	.02	.02	.02		.02	.01	.02	.02	.02		.04	.04	.04	.05	.05
Interaction					.04	.02					.01	.01					.19	.13**
ΔR^2	.17***		.00		.00		.29***		.00		.00		.24***		.00		.01**	
Δ in F-value for step 1	$F(7, 464) = 13.72$ ***						$F(7, 469) = 27.41$ ***						$F(7, 461) = 20.97$ ***					
Δ in F-value for step 2	$F(1, 463) = .37$						$F(1, 468) = .42$						$F(1, 460) = .81$					
Δ in F-value for step 3	$F(1, 462) = 1.66$						$F(1, 467) = 1.18$						$F(1, 459) = 7.65$ ***					
Total Adj. R R2 = .16***							Total Adj. R R2 = .28***						Total Adj. R R2 = .24***					
$F(9, 462) = 10.82$ ***							$F(9, 467) = 21.47$ ***						$F(9, 459) = 17.48$ ***					

Note. All predictor variables were centered.
 * $p < .05$; ** $p < .01$; *** $p < .001$.

Table 5

Hierarchical Regression Results of Perceived Discrimination, Connection to Ethnic Group, and Their Interaction on School Achievement, Self-Esteem, and Group Ethnic Esteem for African Americans

	School Achievement						Self-Esteem					
	Step 1		Step 2		Step 3		Step 1		Step 2		Step 3	
	B	β	B	β	B	β	B	β	B	β	B	β
Gender	.20	.10**	.20	.10**	.20	.10**	-.09	-.04	-.09	-.04	-.09	-.04
Socioeconomic status	.09	.08*	.08	.07*	.08	.07*	-.02	-.02	-.02	-.01	-.02	-.01
Academic competence	.00	.08*	.00	.07	.00	.07	.00	-.02	.00	-.02	.00	-.02
School disengagement (T1)	.01	.00	.01	.00	.01	.01	-.02	-.02	-.02	-.02	-.02	-.02
Prior perc. school discrimination (T1)	-.15	-.05	-.13	-.05	-.13	-.04	-.10	-.03	-.10	-.03	-.10	-.03
Prior adjustment (T1)	.69	.67***	.69	.68***	.68	.67***	.48	.47***	.48	.47***	.48	.47***
Perc. school discrimination (T2)	-.07	-.06	-.09	-.07*	-.14	-.11**	-.19	-.14***	-.18	-.14**	-.18	-.14**
Connection to ethnic group (T2)			.08	.07*	.08	.07*			-.01	-.01	-.01	-.01
Interaction					.11	.07*					.00	.00
ΔR ²	.62***		.004*		.004*		.27***		.00		.00	
Δ in F-value for step 1	F (7, 402) = 94.05***											
Δ in F-value for step 2	F (1, 401) = 4.38*											
Δ in F-value for step 3	F (1, 400) = 4.59*											
Total Adj. R R2 = .63***	Total Adj. R R2 = .27***											
F (9, 400) = 75.45***	F (9, 468) = 19.78***											

Note. All predictor variables were centered.

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

Table 6
Hierarchical Regression Results of Perceived Discrimination, Connection to Ethnic Group, and Their Interaction on Psychological Resiliency, Depressive Symptoms, and Anger for African Americans

	Psychological Resiliency						Depressive Symptoms						Anger					
	Step 1		Step 2		Step 3		Step 1		Step 2		Step 3		Step 1		Step 2		Step 3	
	B	β	B	β	B	β	B	β	B	β	B	β	B	β	B	β	B	β
Gender	-.06	-.03	-.06	-.03	-.06	-.03	.22	.11**	.22	.11**	.22	.11**	.12	.06	.12	.06	.12	.06
Socioeconomic status	-.05	-.04	-.07	-.06	-.07	-.06	.03	.02	.03	.03	.02	-.07	-.06	-.08	-.07	-.08	-.07	-.08
Academic competence	.00	.15***	.00	.14**	.00	.14**	.00	-.08*	.00	-.08*	.00	-.08*	.00	.04	.00	-.02	.00	-.02
School disengagement (T1)	-.24	-.15***	-.25	-.16***	-.24	-.16***	.06	.04	.05	.04	.05	.03	.06	.03	.06	.04	.06	.04
Prior perc. school discrimination (T1)	-.26	-.09*	-.24	-.08	-.24	-.08	.13	.05	.13	.05	.13	.04	.10	.03	.10	.04	.10	.04
Prior adjustment (T1)	.30	.29***	.28	.28***	.28	.27***	.28	.28***	.28	.28***	.28	.28***	.30	.30***	.30	.30***	.30	.30***
Perc. school discrimination (T2)	-.12	-.10*	-.17	-.13**	-.19	-.14**	.57	.43***	.57	.44***	.60	.46***	.37	.29***	.36	.28***	.36	.28***
Connection to ethnic group (T2)			.14	.12**	.14	.12**			-.02	-.01	-.02	-.02			.05	.04		
Interaction					.04	.03					-.07	-.04					-.01	-.01
ΔR^2	.19***		.01**		.00		.32***		.00		.00		.22***		.00		.00	
Δ in F-value for step 1	$F(7, 467) = 16.31^{***}$						$F(7, 471) = 31.45^{***}$						$F(7, 470) = 19.74^{***}$					
Δ in F-value for step 2	$F(1, 466) = 7.64^{**}$						$F(1, 470) = .10$						$F(1, 469) = .93$					
Δ in F-value for step 3	$F(1, 465) = .31$						$F(1, 469) = 1.03$						$F(1, 468) = .03$					
Total Adj. R ²	$R^2 = .20^{***}$						Total Adj. R ² = .31***						Total Adj. R ² = .22***					
	$F(9, 465) = 13.73^{***}$						$F(9, 469) = 25.54^{***}$						$F(9, 468) = 15.42^{***}$					

Note. All predictor variables were centered.

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

Table 7

Hierarchical Regression Results of Perceived Discrimination, Connection to Ethnic Group, and Their Interaction on Friends' Positive Characteristics, Perceptions of Friends' Negative Characteristics, and Problem Behaviors for African Americans

	Perc. Friends' Pos. Charac.						Perc. Friends' Neg. Charac.						Problem Behaviors					
	Step 1		Step 2		Step 3		Step 1		Step 2		Step 3		Step 1		Step 2		Step 3	
	B	β	B	β	B	β	B	β	B	β	B	β	B	β	B	β	B	β
Gender	.23	.12**	.24	.12**	.23	.12**	.18	.09*	.18	.09*	.18	.09*	-.08	-.04	-.08	-.04	-.07	-.04
Socioeconomic status	.02	.02	.00	.00	.01	.01	-.02	-.01	-.02	-.01	-.02	-.01	-.01	-.01	-.01	-.01	-.01	-.01
Academic competence	.00	.13**	.00	.11*	.00	.11*	.00	-.02	.00	-.02	.00	-.02	.00	.03	.00	.03	.00	.04
School disengagement (T1)	-.28	-.19***	-.28	-.19***	-.28	-.19***	.20	.13**	.20	.13**	.20	.13**	.12	.08	.12	.08	.11	.08
Prior perc. school discrimination (T1)	-.14	-.05	-.13	-.05	-.11	-.04	-.04	-.01	-.04	-.01	-.04	-.01	.01	.00	.01	.00	.00	.00
Prior adjustment (T1)	.18	.18***	.17	.17***	.17	.17***	.27	.27***	.27	.27***	.27	.27***	.31	.33***	.31	.33***	.30	.32***
Perc. school discrimination (T2)	-.08	-.06	-.13	-.11*	-.22	-.17***	.46	.35***	.46	.35***	.47	.36***	.37	.28***	.37	.28***	.45	.35***
Connection to ethnic group (T2)			.00	.16***	.19	.17***		-.02	-.02	-.02	-.02	-.02		.01	.01	-.01	-.01	-.01
Interaction					.21	.14**					-.01	-.01				-.20	-.13*	
ΔR ²	.14***		.02***		.02**		.24***		.00		.00		.27***		0		.01*	
Δ in F-value for step 1	F (7, 470) = 11.87***						F (7, 467) = 22.22***						F (7, 343) = 19.32***					
Δ in F-value for step 2	F (1, 469) = 12.22***						F (1, 466) = .13						F (1, 342) = .01					
Δ in F-value for step 3	F (1, 468) = 8.91***						F (1, 465) = .04						F (1, 341) = 5.75*					
Total Adj. R R2 = .18***							Total Adj. R R2 = .24***						Total Adj. R R2 = .28***					
F (9, 468) = 12.04***							F (9, 465) = 17.23***						F (9, 341) = 15.83***					

Note. All predictor variables were centered.

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

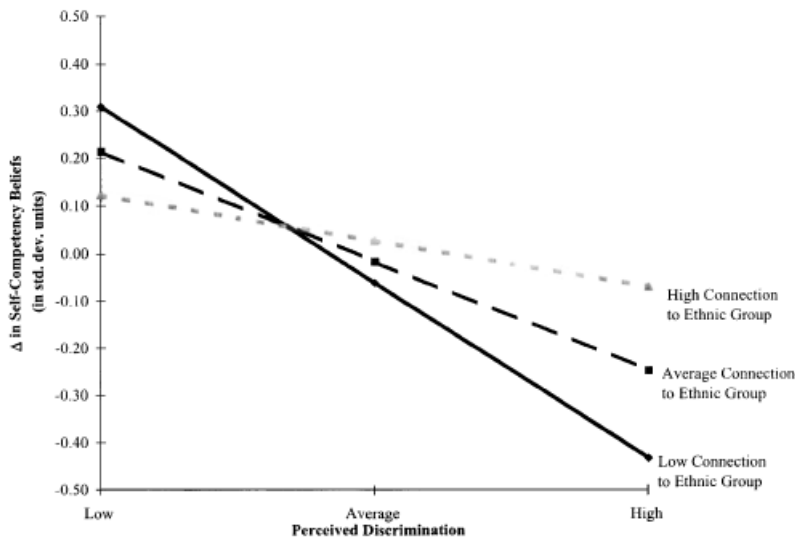


Figure 1
Interaction between perceived discrimination and connection to ethnic group on self-competency beliefs for African American adolescents.

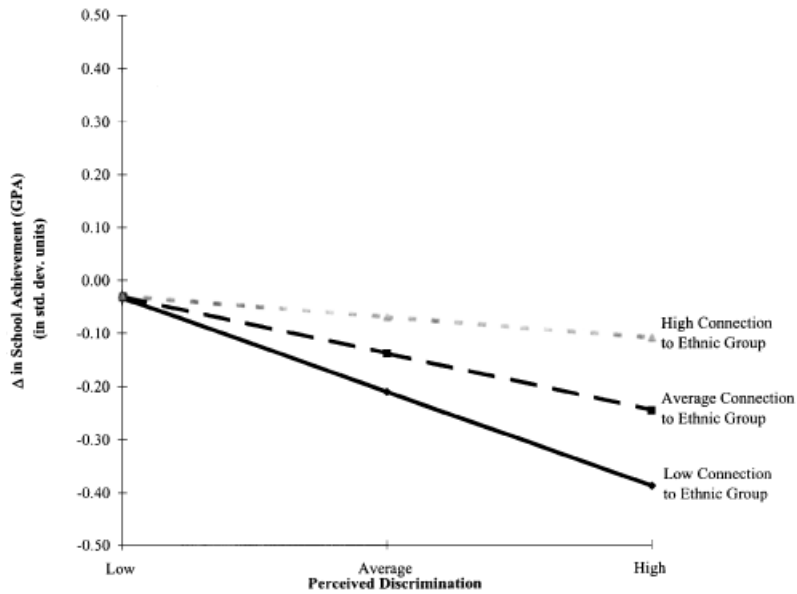


Figure 2
Interaction between perceived discrimination and connection to ethnic group on school achievement (GPA) for African American adolescents.

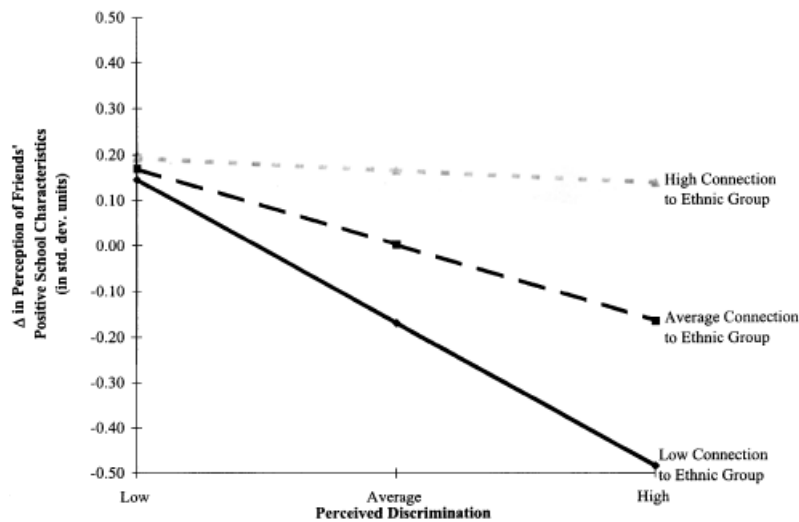


Figure 3
Interaction between perceived discrimination and connection to ethnic group on perception of friends' positive school characteristics for African American adolescents.

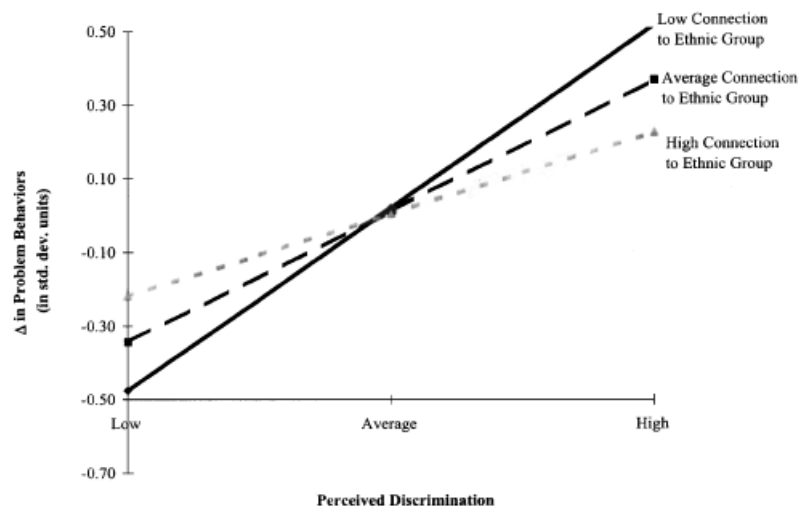


Figure 4
Interaction between perceived discrimination and connection to ethnic group on problem behaviors for African American adolescents.

DISCUSSION

The results of the present study indicate that the experience of ethnic discrimination has substantial bearing on the psychological development of African American adolescents. The implications of several noteworthy findings are discussed. First, subjective experiences of racial discrimination undermine African American adolescents' development in several domains of functioning. Second, a strong connection with one's ethnic group heritage and culture promotes positive development in several domains of functioning. Third, feeling connected to one's ethnic group can buffer the negative impact of perceived racial discrimination on the development of African American youth. In the next section, we discuss the implications of each of these findings, and then we conclude with a discussion of the limitations of the present study and suggestions for future research.

Effects of Perceived Discrimination

We found substantial evidence to show that African American adolescents' experiences of discrimination by peers and by teachers are potential risks. These experiences were potential threats to adolescents' academic motivation, positive mental health, and self-esteem. In addition, perceived discrimination increased the probability of engaging in problem behaviors and becoming involved with friends who had fewer positive qualities and more negative qualities. Thus, as predicted, proximal situations of ethnic discrimination do pose developmental risks across a wide range of functioning.

These results are consistent with findings of prior research with African American high school students, college students, and adults summarized in the introduction. Prior research indicates 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. Much of the previous research, however, has examined situations of ethnic discrimination with older adolescents, college students, and adults (e.g., Ogbu, 1978; Taylor et al., 1994). The present study's findings indicate that experiences of ethnic discrimination also influence development during early adolescence. This is noteworthy because, at this age, adolescents are at an increased risk for declining 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). Experiencing ethnic stressors, such as experiences of discrimination, in addition to the non-ethnic-related stressors commonly faced by early adolescents, can further increase the probability of negative psychological outcomes (Simmons, Burgeson, Carlton-Ford, Blyth, 1987). Furthermore, prior research indicates that risks during early adolescence have long-term implications. For example, Eccles and her colleagues found that adolescents who report increases in self-esteem as they make the transition to junior high school report better psychological adjustment during high school than those who experience a decrease in self-esteem (Eccles, Lord, Roeser, Barber, & Hernandez-Jozefowicz, 1997). Further research is needed to examine the long-term impact of negative ethnic treatment during early adolescence.

Proximal contexts of ethnic discrimination. The results also provide support that “proximal” situation of ethnic devaluation is a potential developmental risk factor. Previous research with older adolescents (e.g., Ogbu, 1978; Fordham & Ogbu, 1986; Mickelson, 1990; Taylor et al., 1994) revealed that adolescents’ perceptions of future discrimination are threats to their psychological well-being. The focus of prior research has been on situations of discrimination that adolescents are anticipating and are not necessarily part of their current social reality. In contrast, our study looked at situations of discrimination that early adolescents face in their everyday lives. This study showed that everyday experiences of ethnic discrimination by teachers and peers increase the likelihood that African American adolescents will experience academic and socioemotional difficulties. The findings of the present study augment previous research by showing that these proximal situations of ethnic discrimination are also threats to the healthy psychological development during adolescence. These results are consistent with prior research that reveals that alienating conditions in children’s and adolescents’ immediate social worlds are potential risk factors (Higgins & Parsons, 1983; Eccles et al., 1993; Jessor et al., 1995).

Proximal situations of ethnic discrimination and socioemotional adjustment. In addition to focusing on distal situations of ethnic discrimination, most of the prior research with adolescents has looked at the implications of ethnic discrimination only for school

outcomes, such as academic motivation and school performance (e.g., Ogbu, 1978; Mickelson, 1990; Taylor et al., 1994). The results of our analyses reveal that proximal situations of ethnic discrimination are also linked to indicators of socioemotional adjustment, such as mental health, selection of friends, and engagement in problem behaviors. These findings parallel the previous research on daily hassles with adults that has shown that the frequency and intensity of everyday hassles are correlated with negative mental health (e.g., Delongis, Coyne, Dakof, Folkman, & Lazurus, 1982; Weinberger, Hiner, & Tierney, 1987). Other research has shown that dealing with day-to-day situations of ethnic discrimination can have negative consequences on adults' emotional health (Salgado de Snyder, 1987; Armstead, Lawler, Gorden, Cross, & Gibbons, 1989; Essed, 1990). Studies have also indicated that college students' and high-school students' experiences of ethnic discrimination were related to emotional difficulties (Feagin, 1992; Phelan et al., 1994). Similarly, we found that early adolescents' experiences of ethnic discrimination are potential threats to their socioemotional well-being.

Moreover, our results showed that the relations between perceived discrimination to mental health, perceptions of friends' characteristics, and involvement in problem behavior appear as large as the relations of perceived discrimination to academic motivation. This indicates experiences of school discrimination may have a more pervasive impact than adolescent development. Adolescents who are alienated from school because of threats of ethnic discrimination may become negatively oriented towards school as well as feel substantial socioemotional distress. Then the combined school disaffection and socioemotional distress may be manifested in, as well as exacerbated by, involvement with similarly disaffected peers in problem behaviors (Fuligni & Eccles, 1993; Jessor et al., 1995; Hogue & Steinberg, 1995).

Effects of Connection to Ethnic Group

As shown in Tables 4–7 and Figures 1–4, connection to ethnic group had both main and interactive effects on psychological adjustment for African American adolescents: For African Americans, connection to one's ethnic group acts as a promotive and protective factor by both compensating for and buffering against the impact of perceived discrimination. These results are consistent with theoretical work on

ethnic identity and the findings from research on racial socialization with African Americans.

Prior research has revealed that African American parents continuously emphasized 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; Phinney & Chavira, 1995). Phinney & Chavira (1995) also found that among parents of color, African American parents were more likely than Mexican American and Japanese American parents to use a form of racial socialization in which they emphasized achievement and discussed 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 ethnic 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 connection to their ethnic group maintain a positive orientation towards school despite high levels of perceived discrimination.

Whereas our findings are consistent with prior research on racial socialization, they appear to contradict the research of Ogbu and his colleagues (e.g., Ogbu, 1978; Fordham & Ogbu, 1986). According to these researchers, when involuntary minorities, such as African Americans, are faced with discrimination, they develop an oppositional identity in which they devalue and disidentify with school in order to identify with members of their own ethnic group. There are several differences between our study and the work of Ogbu and his colleagues that may contribute to these discordant findings. One difference is that they focused on a distal situation of ethnic discrimination (i.e., perception of an anticipated job ceiling) and our study looked at a proximal facet of ethnic discrimination (i.e., perceived discrimination at school). It may be that the interplay between ethnic identification and proximal situations of ethnic discrimination is different than the interplay between ethnic identification and perceptions of a discriminatory job ceiling. Another difference between our study and Ogbu's work has to do with the sociodemographic backgrounds of the participants. In contrast to previous research in which the African American youths were primarily from disadvantaged socioeconomic backgrounds, the adolescents in our

study were from families who represented the full range of the socioeconomic spectrum. The circumstances and characteristics underlying ethnic discrimination in different socioeconomic contexts may be different. Although African American adolescents of all socioeconomic backgrounds may encounter discrimination, the underlying meaning and the form that the discrimination is expressed may be different for African American adolescents of different socioeconomic backgrounds. In addition, these different adolescents may interpret and respond to these situations differently.

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 these findings represent different ways that adolescents cope with ethnic discrimination. Some adolescents may respond to situations of ethnic discrimination by disengaging and disidentifying themselves from school. Other adolescents may cope with ethnic 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 also show that 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 (McLoyd, 1991; Cross, 1991; Graham, 1992; Garcia Coll, et al., 1996). Except for the relatively few studies on ethnic identity (e.g., Phinney, 1996a) and racial socialization (e.g., Bowman & Howard, 1985), there has been little research on how ethnicity facilitates the healthy development of African American youths. The evidence in this study illuminates the fact that the promotive and protective factors associated with ethnicity play a potentially important role in African Americans' psychological development, particularly under threatening ethnic circumstances.

Limitations

Several limitations of the present study need to be acknowledged. First, the correlational nature of these findings make it difficult to

determine causal flow. Additional longitudinal studies are needed in order to substantiate our hypothesized directionality of the relations between perceived discrimination and psychological adjustment.

Another limitation has to do with the self-report nature of our discrimination measures. It may be that these reports are confounded by perceptual biases of the individual and do not have anything to do with what is taking place in so-called objective reality. To a certain extent, self-reports of discrimination are related to individuals' perceptual biases. Specifically, previous experiences of perceived discrimination not only increase salience of these events but also enable individuals to better detect later incidents of ethnic discrimination.

Previous research, however, has indicated that attributions to personal discrimination tend to match what is taking place in reality. Ruggiero & Taylor (1995) set up an experimental situation in which people were told they might be discriminated against and found that it was only when people were told that the chances of being discriminated against were 100% or 90% that they made the attribution to personal discrimination. This evidence suggests that people's attribution to personal discrimination are fairly accurate perceptions and are reflective of so-called objective reality.

Furthermore, we would argue that self-report measures are one of the better measures of perceived discrimination that researchers currently have in regard to children's and adolescents' experiences of racial/ethnic discrimination at school. There are many low-frequency incidents that are hard to capture through observations without asking the child or adolescent because oftentimes he or she is the only one who knows and can remember these events. Our data showed that adolescents reported that these incidents happened, on average, about twice a year. It would be difficult for naturalistic observations to capture these infrequent events.

Neither is it more valid to rely on teachers or other students as outside reporters of adolescents' experiences of discrimination. Given that it is socially undesirable to admit that one is racist, it is unlikely that teachers and other children and adolescents would report that they treat students differently based on ethnicity. It also may be the case that teachers and other students do not realize that they are being ethnically discriminatory. In addition, because these

events did not happen to teachers or other adolescents personally, they may not have as strong of a recall of the situation as the person who was the target of ethnic discrimination.

Despite these limitations, the present study unveils compelling evidence that ethnic discrimination potentially influences some African American adolescents' psychological development. Additional studies are needed to examine how different types of ethnic devaluation affect adolescents of different ethnic groups in diverse geographic settings. Studies of these diverse dimensions and complex layers associated with ethnic discrimination are needed to understand the developmental implications of the phenomenon of ethnic discrimination in children's and adolescents' lives.

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