ETHNIC DISCRIMINATION AND ETHNIC IDENTIFICATION:
THE INFLUENCE ON AFRICAN-AMERICANS' AND WHITES' 
SCHOOL AND SOCIO-EMOTIONAL ADJUSTMENT

by

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Ethnic discrimination and ethnic identification: The influence on African-Americans' and Whites' school and socio-emotional adjustment

INTRODUCTION

Ethnicity impacts children's and adolescents' lives in many different ways, and many different conceptual approaches have been used to understand the diverse influence of ethnicity on psychological development. By far, the most common approach is the comparative one in which ethnic group differences in psychological outcomes, correlations, or theoretical models are examined (McLoyd, 1990; Graham, 1992; Garcia Coll, Crnic, Lamberty, Waskik, Jenkins, Vazquez Garcia, & McAdoo, 1996). For example, there is substantial research that looks at ethnic group differences in developmental outcomes, such as school achievement, academic motivation, mental health, and problem behaviors (e.g., Dornbusch, Mont-Reynaud, Ritter, Chen, & Steinberg, 1991; Fleming & Offord, 1991; Gibbs, 1990; Dillard & Perrin, 1980). There are also numerous studies that examine ethnic group differences in the correlates of these developmental outcomes (e.g., Steinberg, Dornbusch, & Brown, 1995; Stevenson, Chen, & Uttal, 1990). Other research looks at 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 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 that are pertinent to developmental
studies, but few of these have been defined, operationalized and systematically studied in child and adolescent research.

Interestingly, 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 of the article where the authors attribute ethnic group differences to such factors as ethnic identity, ethnic discrimination, different histories of oppression, and different cultural beliefs despite the fact that they did not measure these ethnic constructs in their study (see Phinney & Landin, 1998, for examples). Simply inferring that ethnic group differences are due to specific ethnic processes or social conditions is questionable because ethnic group differences may be due to many factors, including both ethnic and non-ethnic influences. Unless these constructs are explicitly examined, it is difficult to determine the role of these ethnic processes or situations in psychological development.

The inferences of comparative studies pointedly show that research on ethnic social situations and psychological processes is needed. This, however, does not mean that attention to between-group variability should be dropped completely. In studies of ethnic processes and situations, there are many times in which potential differences due to being a member of a different ethnic group have to be considered and acknowledged. For example, Ruggiero & Major (1998) found that both Asian and Black college students minimize the extent to which they attribute poor performance to ethnic discrimination and that this minimizing of attribution to discrimination had deleterious effects on Asians' and Blacks' performance self-esteem. Although Ruggiero and Major found that this ethnic psychological phenomenon, minimizing the attribution to discrimination, operates similarly in Asians and Blacks, they also found that this phenomenon was stronger for Asians. Thus, even when an ethnic process appears to be operating similarly for members of different ethnic groups, there still may be potential ethnic group differences.
There are a variety of factors that may contribute to these ethnic group differences. One contributing influence is that each ethnic group may have a different culture and history surrounding a seemingly similar ethnic phenomenon. For example, although ethnic discrimination is a potential threat to the healthy development of all individuals (Crocker, Major, & Steele, 1998), different histories of oppression, different prejudices and stereotypes underlying each group's experiences of discrimination, and variation in pervasiveness of discrimination for different groups may affect the severity and the form of the negative impact that ethnic discrimination has on psychological development. Furthermore, differences in these larger global ethnic group "contexts" may give seemingly similar ethnic constructs distinct meaning. For example, in the United States, a strong ethnic identification for Whites may have a different meaning than a strong ethnic identification for African-Americans (Phinney, 1996). Consequently, ethnic constructs should be examined in a manner that is sensitive to potential differences in global ethnic group contexts. That is, the influence of ethnic processes and situations should be studied within each ethnic group, especially if one of the ethnic group is White.

Although ethnicity is seldom thought of being a relevant influence of Whites' psychological development, ethnicity may affect those Whites who are part of ethnically heterogeneous settings. Most research, except for studies of prejudice and racism, portray ethnicity as having an influence only on the development of children and adolescents of color. In the United States today, increasingly more White youths are living in racially integrated neighborhoods, attending schools with students from many ethnic groups, and participating in organizations with members of diverse backgrounds. These changes in school and neighborhood demographics increase the likelihood that ethnic phenomenon such as ethnic discrimination and ethnic identification, may have an influential role in White youths' development. Nevertheless, there may still be group differences between adolescents of color and Whites in terms of meaning, influence, and measurement of these ethnic constructs.
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The present study examines the influence of one ethnic phenomenon on Whites and African-Americans' psychological well-being. Given that there is a limited number of studies that have focused on specific ethnic variables with children and adolescents, there are a multitude of ethnic processes and situations that warrant greater attention. One phenomenon that merits additional attention is children's and adolescents' experiences of ethnic discrimination.

The Phenomenon of Ethnic Discrimination during Adolescence

One of the challenge of studying the influence of ethnicity on psychological development, especially those ethnic constructs that have not received much empirical attention, is that there seems to be few theoretical tools already in place to guide researchers. Although there are not many developmental theories specifically about ethnic discrimination, racial socialization, or other ethnic constructs, there are many theories and conceptual frameworks from the larger field of child development that researchers could borrow (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' person-environment-stage fit model (Sameroff & Fiese, 1975; Bronfenbrenner, 1975; Eccles, Midgley, Winfied, & Buchanan, 1993; Jessor, Van Den Bos, Vanderryn, Costa, & Turbin, 1995). These general theoretical frameworks do not specifically address how ethnicity influences development, but, the general axioms and propositions within each of these theories can be applied to the study of ethnicity and development. With regards to the study of ethnic discrimination, the work on risks, promotive factors, and protective factors offers one instrumental 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). The varying presence of these constitutional and environmental hazards affects the likelihood that adolescents have academic, socio-emotional, and behavioral problems. Even when adolescents are faced with a similar number of risk factors, there are individual differences in the probability that adolescents are negatively affected by these threatening conditions.
The likelihood that psychosocial hazards lead to problematic outcomes is affected by the extent there are promotive and protective factors in adolescents' lives. Some individual characteristic and environmental conditions serve as both promotive and protective factor 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 psychological maladjustment depends on the combination of risks, promotive factors, and protective factors that are present in adolescents' lives.

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 conceived as one type of risks that affect development. It is important to keep in mind that personal experiences of ethnic discrimination are not the only risks in adolescents' lives. Second, ethnic discrimination is thought of increasing the probability of negative outcomes instead of causing these negative outcomes. This is more reflective of reality since not all individuals are negatively affected by ethnic discrimination. Third, the framework of risks, promotive factors, and protective factors incorporates components that are agentic and facilitative of 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 deflect the negative outcomes associated with ethnic discrimination.

**Ethnic discrimination as a potential risk factor.** Prior research indicates that one risk factor is being in an uncaring and unsupportive environment where individuals do not feel a sense of relatedness (Jessor et. al., 1995). For example, research reveals that children and adolescents who had parents who were neglectful or generally not involved in their lives were
more likely to do poorly in school, engage in problem behaviors, and have friends who were involved in delinquent activities, than their counterparts who had parents who were supported of their daily activities (Connell, Spencer, & Aber, 1994; Eccles, Early, Frasier, Belansky, & McCarthy, 1997). Other research indicates that young children who were teased or picked on by their peers at school were more likely to do poorly in school, have low self-esteem, and feel lonely than children who were not victimized by their peers (Ladd, 1990; Wentzel & Asher, 1995; Kochenderfer & Ladd, 1996). In addition, prior studies show that there is an increased probability for negative academic and socio-emotional outcomes when adolescents felt that their teachers did not respect or care about them as individuals (Goodenow & Grady, 1993; Wentzel, 1997). When families, schools, peers, as well as other socializing agents, communicate messages of disregard that sever individual's feelings of relatedness to that context, this leads to the increased likelihood of negative developmental outcomes.

In a similar manner, ethnic discrimination conveys to individuals that they are devalued because of their ethnic identity. Discriminatory behaviors also communicate to people that they are different and are 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 situations also may 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 fit 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 their valuing of school, effort to do well on academic tasks, and performance on standardized tests.

In addition to the literature on stereotype threat, other research in social psychology illuminate that ethnic discrimination is another form of ethnic devaluation that may have marked psychological repercussions for college students and other adults. 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; Jackson, Brown, Williams, Torres, Sellers, & Brown, 1994). Moreover, adults' experiences of discrimination in the workplace affects 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 had substantial bearing on their adjustment to college as well as their mental health (Feagin, 1992). Furthermore, correlational research showed that White, African-American, and Asian American college students' awareness of ethnic discrimination was negatively related to their evaluation of their ethnic group (Luhtanen & Crocker, 1992).

There are a few studies with adolescents that have replicated some of the findings from research with college students and adults. For example, research indicates that for Hispanic high school students, there is a negative relation between awareness of ethnic discrimination and evaluation of one's ethnic group (Phinney, Chavira, & Tate, 1993). In addition, qualitative research shows that perceived ethnic discrimination at school affected participation in school and socio-emotional adjustment for some high school students of color (Phelan, Davidson, & Yu, 1994).

In addition to these few studies on adolescents' experiences of ethnic discrimination, there is also research with adolescents on another form of ethnic devaluation—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
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encounter educational and job discrimination in the future, such as job ceilings. Findings from qualitative research indicate that some African-American and Hispanic adolescents respond to perceptions of future discrimination by disengaging from mainstream institutions, such as school (Ogbu, 1978). The earmarks of their academic disidentification include (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, Flickinger, Roberts, & Fulmore, 1994). Furthermore, adolescents' perceptions of future institutional discrimination also emanate in adolescents embracing 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 different 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 also may have a negative impact on adolescents.

**Ethnic identification as a promotive and protective factor.** Given that there is little research on adolescents' experiences of ethnic discrimination, it should not be a surprise that there is also little research on the promotive and protective factors that reduces potential negative effectes 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 (Connell, 1990; 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
Ethnic discrimination and ethnic identification (e.g., Cross, 1991; Phinney, 1996a). 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 (Phinney, 1996b; 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 hypotheses related to adolescents' personal experiences of ethnic discrimination at school. Each of these hypotheses are examined for African-American and Whites. The first hypothesis is that perceived discrimination by teachers and by peers is negatively related to academic, socio-emotional, and behavioral indicators of psychological adjustment. 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-esteeem (Phinney et. al., 1993; Luhtanen & Crocker, 1992), (5) psychological distress, including anger and depressive symptoms (Phelan et. al., 1994; Feagin, 1992), (6) selection of friends, (Ogbu, 1978; Fordham & Ogbu, 1986) and (7) problem behaviors (Jessor et. al., 1995).

The second hypothesis is that ethnic identification acts as a promotive and protective factor against the potential threats posed by experiences of ethnic discrimination. That is, ethnic identification compensates for the effects of ethnic discrimination, and ethnic identification also serves as a buffer that moderates the impact of ethnic discrimination on psychological adjustment.
Methods

Participants

The participants in this study all live in a single county in Maryland where there have been tremendous demographic and political changes since 1960 (Cook, Habib, Phillips, Settersten, Shagle, & Degirmencioglu, in press). Historical and contemporary contextual information about the county where the adolescents in this study are developing 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 was much lower than the national average: For example, the median income in 1990 for Whites was $47,000 and for African-Americans was $41,000. In 1990, the 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 study are from two larger studies of the participants: the Maryland Adolescents Development in Context (MADIC) Study\(^1\) and the Study of Adolescents in Multiple Contexts (Cook, Habib, Phillips, Settersten, Shagle, & Degirmencioglu, in press)\(^2\). The two longitudinal studies differed slightly in their focus and method of data collection; but, because the researchers of both studies collected data conjointly, extensive information is available about the adolescents and their families. In the Study of Adolescents in Multiple Contexts, the researchers invited all entering seventh-grade students in a Maryland county school...
district to participate in their study in 1990, 1991, and 1992. They administered questionnaires to students whose parents gave their consent at the beginning of seventh-grade (Time 1) and at the end of the adolescents' eighth-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 seventh-grade (1991). This data collection coincided with the first wave of data collection 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 data was collected the summer following the adolescents' completion of eighth-grade (1993). Of the original 1480 families, 1067 families also participated in the second wave of data collection. All of the data used in the present paper are from the MADIC Study, except for the school record data (academic marks for seventh and eighth grades and standardized test scores from elementary, junior high and senior high school) and the measures of adolescents' ethnic group esteem and problem behaviors which are from the Study of Adolescents in Multiple Contexts.

Only the 965 African-American and White adolescents who participated in both waves of data collection in both of the larger studies are included in the present study. This subsample included 336 African-American males and 293 African-American females and 158 White males and 178 White females. 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 range for the African-American adolescents' families 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 degree and forty percent had obtained a college degree.

Although there was a comparable range of family income for the two ethnic groups, there was a wide range of differences in the way ethnic groups were distributed across junior high schools. The students attended schools in which the racial composition of the student body at each of the public junior high schools ranged from 99% African-Americans and less than 1% White to 33% African-Americans and 60% White students. The racial composition of the teachers at the school ranged from 25% African-American and 70% White teachers to 52% African-American and 47% White teachers.

**Measures of discrimination, connection to ethnic group, and control variables**

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 (See Appendix A). The adolescents reported the frequency with which they experienced negative treatment at their eighth-grade 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 (African-Americans: $\alpha = .86$; Whites: $\alpha = .88$). The perceived discrimination by teachers scale included 5 items about 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 (African-Americans: $\alpha = .88$; Whites: $\alpha = .87$).

**Connection to ethnic group.** Adolescents' feeling of connection to their ethnic group included four items (See Appendix A). 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 (African-Americans: $\alpha = .69$; Whites: $\alpha = .77$).

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

In addition, prior 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 their 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. Adequate Cronbach’s alpha was obtained for the scale (African-Americans:
$\alpha = .75$; Whites: $\alpha = .70$).
Outcome Measures

The results of Cronbach analyses for the outcome variables are reported in Table 1. In general, there does not appear to be ethnic group differences in the internal consistency of the outcome variables. For most domains of psychological functioning, except for school grades and self and group evaluations, measures based on data from parents and adolescents were included.

Achievement motivation. The adolescent measures tapped three aspects of achievement motivation at Time 1 and 2. According to Eccles' (1983) expectancy-value theory, the following are key components of achievement motivation: (1) attainment value, which is defined as personal importance of doing something, (2) utility value, which is one's perception of the usefulness of a particular task for future goals, and (3) self-competency beliefs, which consist of evaluations of one's competence in a particular area. Two items tapped adolescent's perception of the importance of school (attainment value). 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. Self-competency beliefs scale was a four-item measure that tapped adolescents' evaluation of their academic abilities compared to other kids their age. With the exception of the measure of utility value at Time 1, each of these achievement motivation scales was internally consistent (See Table 1).

Two parent measures of adolescents' academic motivation were examined. One indicator tapped parents' perceptions of their child's academic engagement in school. This 6-item scale assessed the extent adolescent avoided challenging problems, gave up on difficult schoolwork, loved intellectual challenge, preferred easy academic work, kept trying hard, and felt confident to do well academically. The second scale included 2 items that looked at parents' perceptions of their child's academic abilities. Both scales had high internal consistency for both ethnic groups (See Table 1).
**Academic achievement.** Adolescents' seventh- and eighth-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).

**Mental health.** The parent and adolescent measures tapped both positive and negative dimensions of adolescents' mental health: depressive symptoms, anger, and psychological resiliency. 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 depressive symptoms measure at Time 2 was assessed using Kovacs' (1992) Children's Depression Inventory (CDI). The time 1 measure was internally consistent for both ethnic groups, and similar results were obtained for the Time 2 measure of depressive symptoms (See Table 1).

Adolescents' reports of anger were tapped by a scale that consisted of three items from the SCL-90 (Derogatis, 1983; Derogatis et. al., 1976): how frequent 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 and 2.

Adolescents' reports of psychological resiliency were examined by a scale that consisted of four items that ascertained how good they were at bouncing back from bad experiences, learning from mistakes, figuring out and carrying out solutions to problems (Furstenberg, 1992). This scale was internally consistent at Time 1 and 2 (See Table 1).

The parent measures of adolescents' mental health also assessed each of the aforementioned dimensions. A single-item indicator was used to tap parents' reports of adolescents' depressive symptoms. Parents were asked about the chance their child will suffer psychological problems like depression. As for anger, this 3-item parent scale examined the extent that adolescents shouted or yelled at their parent, hit or shoved their parent, and seemed to get angry easily. The parent scale of youth's psychological resiliency consisted of the 4 items in
the youth scale, which examined how good the adolescent was at bouncing back from bad experiences, learning from mistakes, figuring out and carrying out solutions to problems. The parent scales of adolescents' anger and psychological resiliency yielded adequate internal consistency (See Table 1).

**Self- and ethnic group esteem.** Only adolescents' reports of self-esteem and ethnic group esteem were ascertained. 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 this scale at Time 1 and 2.

The ethnic group esteem measure was a two-item scale. The items tapped how proud the adolescents felt about belonging to their ethnic group and how proud they were of their ethnic group's historical accomplishments. This scale revealed adequate internal consistency at Time 1 and 2.

**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 did not support conventional values and instead endorsed antisocial ones (Ogbu, 1978; Fordham & Ogbu, 1986). Two adolescent measures were included to examine the characteristics of adolescents' friends. Both were measured with seven 5-point Likert items taken from the Michigan Study of Adolescent Life Transitions scales (Eccles & Barber, 1993). Both perceived positive and negative school characteristics scales were included because they have been found to be distinct, but correlated, dimensions of perceived peer characteristics (Brown, Eicher, & Clasen, 1986; Clasen & Brown, 1985). The two scales were created by averaging the unit weighted responses for the items in each of the scales.
Adolescents' reports of friends' positive school characteristic assessed the number of adolescents' 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. Adolescents' reports of friends' negative school characteristics tapped the number of adolescents' closest friends who thought working hard to get good grades was a waste of time, skipped school, and cheated on school tests. Adequate Cronbach's alphas were obtained for adolescent scale of friends' positive school characteristics at Time 1 and 2. There was poor to adequate internal consistency for the adolescent measure of friends' school negative characteristics at Time 1 and 2.

The parent scale of adolescent's friends' positive characteristics included three items. This scale was assessed degree that adolescent's friends thought it was important to work hard, believed it was important to do what teachers said, and thought school was important. The parent scale of adolescent's friends' negative qualities consisted of three items. This measure examined the extent that parents (1) believed that their child's friends thought being popular was more important than doing well in school, (2) thought that their child's friends felt it was acceptable to break rules to do what their friends wanted, and (3) were worried about the negative influences of their child's friends. Both scales were internally consistent (See Table 1).

Problem behaviors. The adolescent measure of engagement in problem behaviors is based on the work of Elliott and his colleagues (Elliott, Huizinga, & Menard, 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, 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.
The parent measure of adolescent's problem behaviors consisted of 5 items that were internally consistent. These items included parents' reports of the chance child will be involved with drugs, will have a drinking problem, will get in trouble with the police, will be involved in gang activity, and will skip school. The response scale ranged from 1, indicating very low probability, to 6, signifying that it has already happened. This scale was internally consistent (See Table 1).

Results

In this section, we first present descriptive statistics and zero-order correlations. Then we describe the results of Confirmatory Factor Analyses (CFA) on our key predictor variables, for perceived ethnic discrimination and connection to ethnic group. Following the description of CFA results, 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 connection to ethnic group serve as a promotive and/or protective factor against the potential threats of perceived discrimination?

Descriptive analyses

Descriptive information about the participants' background, perception of discrimination, and connection to ethnic group are presented in Table 2. At both third- and fifth-grades, White children had higher California Achievement Test scores. There was no group difference on school disengagement.

African-Americans reported greater mean level of perceived discrimination by teachers than Whites. In addition, as shown in Figure 1, a larger proportion of African-Americans (58%) reported discrimination by teachers than Whites (40%). Where there was no mean difference in levels of perceived discrimination by peers, more Whites (49%) reported discrimination by other students than African-Americans (32%).

In addition, Table 2 reveals that African-Americans felt a greater connection to their ethnic group than Whites. For both ethnic groups the mean for this scale fell between 2 and 3.
This meant that on average both African-American and White adolescents reported feeling a little to somewhat connected to their ethnic group (See Appendix A). In addition, this scale was normally distributed for both ethnic groups.

Descriptive information on adolescents' reports of their psychological functioning at Time 2 are presented in Table 2. African-American adolescents perceived school as more important and perceived school as having greater utility value than White adolescents, but there were no difference in self-competency beliefs. White adolescents (compared to African-American adolescents) had higher GPAs. There was no ethnic group differences in either psychological resiliency or depressive symptoms. African-Americans (compared to White adolescents) reported greater anger, self-esteem, and ethnic group esteem than White adolescents. There was no difference in perceived characteristics of their friends. African-American adolescents (compared to White youths) reported engaging in more problem behaviors.

Table 4 shows descriptive information for the parent scales of adolescent's psychological functioning. White parents (compared to African-American parents) reported their adolescents as showing greater psychological resiliency, depressive symptoms, and anger. In comparison to African-American parents' perceptions, White parents perceived their children as associating with friends with more positive characteristics and fewer negative characteristics. There were no ethnic group difference in parents' perception of adolescents' academic competence or problem behaviors.

Zero-order Correlations

The results of correlational analyses indicated that perceived discrimination by peers and perceived discrimination by teachers were strongly correlated for African-Americans ($r = .67, p < .001$) and Whites ($r = .59, p < .001$). Perceived discrimination by peers was only modestly associated with connection to ethnic group for African-Americans ($r = .24, p < .001$) and Whites ($r = .25, p < .001$). Perceived discrimination by teachers was also moderately related to
connection to ethnic group for African-Americans ($r = .27, p < .001$) and Whites ($r = .25, p < .001$).

The bivariate correlations among the adolescent-reported psychological functioning variables are presented in Table 5, and the correlations among the parents' reports of adolescents' psychological adjustment are reported in Table 6. Table 5 generally reveals that adolescent indicators of different aspects of psychological adjustment were not highly correlated with one another. Table 5 also shows that the largest correlation was between two dimensions of academic motivation, self-competency beliefs and perception of the importance of school ($rs = .65$ to $68, p < .001$). Table 6 reveals that most of the correlations among the parent-reported measures were between $.15$ and $.50$, signifying low to moderate relations. The largest correlation was between academic engagement and beliefs about adolescents' academic competence ($rs = .60$ to $.63, p < .001$).

Table 7 shows the bivariate correlations between parent-reported and adolescent-reported outcome measures. In regards to African-Americans, the parent-reported variables are weakly to modestly correlated to their corresponding youth-reported indicators. In general, this is also true for Whites. Compared to the other indicators of adolescents' psychological adjustment, there is greater concordance between White adolescents' and White parents' evaluation of adolescents' academic abilities.

Confirmatory Factor Analyses of Ethnic Constructs

Confirmatory factor analyses (CFA), using EQS (Bentler, 1992), was conducted to determine whether the measures of perceived discrimination and connection to ethnic group tap similar latent constructs for Whites and African-Americans. In order to determine whether the measurement models were equivalent across groups, the models were compared by allowing the values of the paths to differ and then imposing equality constraints on the paths for both groups (Hoyle, 1995). These models were assessed by examining the difference in the chi-square goodness-of-fit test statistic over the difference in degrees of freedom between the constrained
and unconstrained models. If adding parameters, and thereby increasing the degrees of freedom, improves the fit of the model, the unconstrained model is accepted; if increasing the degrees of freedom does not make the fit of the model worse, the constrained model is accepted because it is a more parsimonious model than the unconstrained model.

The first CFA examined the two-factor model of perceived ethnic discrimination, with perceived discrimination by peers as one factor and perceived discrimination by teachers as the other one (See Figure 2). The results of the fully unconstrained model were $\chi^2 (38) = 212$, CFI = .96. After constraining the model to have equal factor loadings, the results were $\chi^2 (44) = 234$, CFI = .96. The comparative difference between these two models was $\chi^2 (6) = 22$, $p < .001$. Thus, the better fitting model is the fully unconstrained one, thereby indicating that the measures of perceived discrimination tap different latent constructs across ethnic groups.

The second CFA assessed the measurement equivalence of connection to ethnic group (See Figure 3). The results of the fully unconstrained model were $\chi^2 (4) = 5$, CFI = .99. After constraining the model to have equal factor loadings, the results were $\chi^2 (7) = 19$, CFI = .98. The comparative difference between these two models was $\chi^2 (3) = 14$, $p < .001$. These results indicate that connection to ethnic group is not measuring equivalent latent constructs across ethnic groups.

**Summary about Ethnic Constructs**

Both the descriptive information and the results of the CFA indicate that the hypotheses pertaining to perceived ethnic discrimination and connection to ethnic group should be looked at within each ethnic group. The descriptive statistics showed that there were ethnic group differences in adolescents' reports of discrimination by peers and teachers. In addition, African-Americans and Whites differed in terms of their report of their sense of connection to their ethnic group. Furthermore, the results of the CFA indicated that these measures were not equivalent across ethnic groups. The information from t-tests and CFA render it statistically inappropriate to conduct single sample analyses (Kraemer, personal communications).
Group differences in these ethnic constructs, however, do not signify that these constructs are not valid for each ethnic group. The standardized factor loadings of the ethnic constructs are generally above .5, which indicates that these items are fairly well linked to the latent construct (See Figures 2 and 3). In addition, Cronbach's analyses revealed that perceived discrimination by peers, perceived discrimination by teachers, and connection to ethnic group have adequate internal consistency for each ethnic group ($\text{Cron} > .69$).

**Perceived Discrimination as a Risk Factor**

To look at whether proximal situations of discrimination are risks, we conducted two sets of partial correlational analyses for each ethnic group. One set of analyses examined the relations between each of the perceived discrimination predictors and change in youth-reported outcome 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, 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, 1995). 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.

In addition, we also conducted another set of partial correlation analyses, in which the outcomes were based on parents' reports. Parents' reports of adolescents' psychological functioning were available at Time 2 only, so a corresponding Time 1 indicator could not be
included as a control variable in the analyses. Moreover, parents' reports of adolescents' self-esteem and group-esteem were not ascertained in the parent interviews and questionnaires.

**Partial correlational results for African-Americans.** A summary of the results from the partial correlational analyses are presented in Table 8. For the African-American adolescents, perceived discrimination by peers and perceived discrimination by teachers were significantly related to adolescents' reports of achievement motivation, self-competency beliefs, mental health (i.e., psychological resiliency, depressive symptoms, and anger), self-esteem, 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 school grades or adolescents' reports of ethnic group esteem.

The results of the partial correlational analyses with the parents' reports of adolescents' psychological adjustment are reported in Table 7. Adolescents' perceptions of discrimination by peers and discrimination by teachers were both related to parents' reports of adolescents' academic engagement, anger, friends' positive characteristics, friends' negative characteristics, and problem behaviors. Perceived discrimination by peers was marginally related to parents' reports of adolescent's competency and psychological resiliency. Perceived discrimination by teachers was negatively associated with parents' reports of youths' psychological resiliency.

As expected, the results from the analyses with parents' reports of adolescent's psychological functioning are weaker than those with the adolescents' reports. Nevertheless, the two sets of partial correlational analyses revealed many similar results, including on the following dimensions of adolescent's psychological adjustment: academic motivation, psychological resiliency, depressive symptoms, anger, friends' positive characteristics, and problem behaviors.

**Partial correlational results for Whites.** For the White adolescents (See Table 8), perceived discrimination by peers and perceived discrimination by teachers were associated with
adolescents' reports of achievement motivation, academic competency, psychological resiliency, depressive symptoms, friends' negative characteristics, and problem behaviors. Only perceived discrimination by teachers was correlated with school achievement. Neither perceived discrimination variable was related to adolescents' reports of self-esteem, ethnic group esteem, and friends' positive characteristics.

The results of the partial correlational analyses with the parents' reports of adolescents' psychological functioning are presented in Table 8. Perceived discrimination by peers and perceived discrimination by teachers were related, at least at the marginal probability level of .10, to parents' reports of youth's achievement motivation, academic competence, perception of friends' positive characteristics, perception of friends' negative characteristics, and problem behaviors. Neither discrimination predictor was related to parents' reports of adolescents' psychological resiliency and anger.

In summary, the two sets of partial correlational analyses revealed similar results for the following dimensions of adolescent's psychological adjustment: academic motivation, anger, friends' negative characteristics, and problem behaviors.

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).

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

These analyses were conducted with only the adolescents' reports of psychological functioning. In field studies, it is statistically difficult to detect an interaction effect when predictors and outcomes are reported by the same individuals. Measurement error, collinearity among the predictors and their resulting cross-product term, and smaller residual variance render detecting true continuous moderator effects difficult. It is also the case that it is harder to detect significant relations between a predictor and outcome that are reported by different individuals than between a predictor and outcome that are reported by the same individual, even when the relations are true. The combination of detecting a continuous moderator effect in a field study and using predictors and outcomes reported by different individuals would exacerbate the probability of making a Type II error.

Main effects for African-Americans. A summary of the results of the hierarchical regression analyses for the African-Americans are presented in Tables 9 to 11. For the African-Americans, 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 change in school achievement (See Table 9), change in psychological resiliency (See Table 10) and change in perceptions of friends' positive characteristics (See Table 11). The effect of connection to ethnic group on change in school achievement, change in psychological resiliency, change in perception of friends' positive characteristics was approximately equaled to the negative effect of perceived discrimination on these outcomes.
Interaction effects for African-Americans. There were interaction effects between connection to ethnic group and perceived discrimination on change in self-competency beliefs (See Table 6), change in school achievement (See Table 9), change in perception of friends' positive characteristics (See Table 10), and change in problem behaviors (See Table 11). 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 4 to 7. Overall, the patterns of the interaction effect appear similar across these outcomes. Figure 4 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 5 reveals that as connection to ethnic group increased, greater perceived discrimination was related to smaller decreases in school achievement. Figure 6 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 7, 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.

Main effects for Whites. The results of the hierarchical regression analyses pertaining to connection to ethnic group for White adolescents are presented in Tables 12 to 14. As shown in Table 14, the only main influence of connection to ethnic/racial group was on change in ethnic group esteem. The analyses revealed that connection to ethnic group accounted for 5% of the variance in ethnic group esteem.

Interaction effects for Whites. There were significant interaction effects on change in perceived utility value of school (See Figure 8), change in school achievement (See Figure 9), change in depressive symptoms (See Figure 10), and change in friends' negative characteristics (See Figure 11). Figure 8 shows that as connection to ethnic group increased, greater perceived discrimination was associated with larger decreases in perceived utility value of school.
Similarly, Figure 10 indicates that as connection to ethnic group increased, greater perceived discrimination was related to larger increases in depressive symptoms. In addition, as connection to ethnic group increased, greater perceived discrimination was related to larger increases in perceived friends' negative characteristics (See Figure 11). In contrast to the figures pertaining to perceived utility value of school, depressive symptoms, and perception of friends' negative characteristics, Figure 9 reveals that as connection to ethnic group increased, greater perceived discrimination was associated with smaller decreases in school achievement.

Discussion

The results of the present study indicate that the phenomenon of ethnic discrimination has substantial bearing on the psychological development of African-American and White adolescents. The implications of several noteworthy findings are discussed. First, the latent constructs of perceived discrimination and connection to ethnic group are not equivalent across ethnic groups. Second, despite the differences in the latent constructs of ethnic discrimination for each ethnic groups, there are similarities in the pattern of results for the relations between perceived discrimination and psychological functioning. Third, the results revealed that feeling connected to one's ethnic group is a potential promotive and protective factor against the threats of perceived discrimination for African-American youths. Fourth, the data for White adolescents showed that feeling connected to their ethnic group was neither a protective or promotive factor against the risks of experiences of discrimination. 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.

Nonequivalence in Ethnic Constructs

Data from descriptive analyses and confirmatory factor analyses showed that the measures of perceived discrimination and connection to ethnic group are not tapping equivalent latent constructs for Whites and African-Americans. These data also indicated that these ethnic constructs are equally reliable and valid for both ethnic groups. Although ethnic discrimination
and connection to ethnic group are specific ethnic phenomena that are relevant to the lives of some African-American and White adolescents, these ethnic constructs differed in terms of what they are measuring for each ethnic group.

It makes sense that African-Americans' experiences of discrimination are not the same as Whites' experiences. African-Americans' longstanding history of oppression, society's denigrating stereotypes about African-Americans' intellectual abilities, and the pervasiveness of discrimination for African-Americans as a group affect the meaning and content of African-American adolescents' experiences of discrimination. In contrast, the experiences of discrimination of the White youths are not linked to a similar larger ethnic group context. As a result of these different historical and contemporaneous conditions of each ethnic group, discrimination because one is African-American is capturing a construct that is not the same as discrimination because one is White.

The same could be said for connection to ethnic group. Historically in the United States, ethnic identity has not been a salient aspect of identity for many Whites. In fact, strong identification with being White was often perceived as being a negative and undesirable personal quality associated with being racist. Nowadays, a strong White identity may have many meanings and is not limited to meaning that one is racist. In contrast, for many African-Americans, historical and contemporaneous conditions related to being an oppressed minority contribute to and shape the meaning of their ethnic identities. These different patterns in historical and current socialization of ethnic identity subsequently give rise to its different meanings for different ethnic groups.

**Effects of Perceived Discrimination**

In our study, there is 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.

For Whites, perceived discrimination was related to academic motivation, characteristics of adolescents' friends, and problem behaviors. In addition, perceived discrimination was related to adolescents' reports of their mental health. The general pattern of the relations between perceived discrimination and the psychological outcomes appear similar across ethnic groups, despite the fact that the measures of perceived discrimination did not assess the same latent construct for Whites and African-Americans.

Four implications of these findings are discussed. First, perceived discrimination potentially affect African-Americans and Whites. Second, these results indicate that situations of ethnic discrimination potentially influence development during early adolescence. Third, proximal situations of ethnic discrimination are potential development risks. Fourth, situations of ethnic discrimination impact more than just academic motivation and school performance; they influence socio-emotional well-being, too.

Effect of ethnic discrimination on African-American and White adolescents. The results of the different sets of partial correlational analyses showed that there is a negative relation between perceived discrimination and healthy psychological adjustment for White adolescents. These results indicate that in an ethnically heterogeneous environment, ethnicity can have an influence on White adolescents. Except for studies about Whites as perpetrators of racial discrimination, there are few studies about the role of ethnicity in the lives of White youths. Given that demographers' project that by 2050, approximately 50% of the U.S. population will be of a "minority" group, it will become increasingly more important to study the influence of ethnicity for White youths under these changing demographic conditions (Detroit Free Press, May 14, 1997).

Furthermore, the similarity in the pattern of the results for African-American and Whites findings indicate that regardless of individuals' social address category, ethnically devaluing
situations are potential threats to psychological development. Much of research has
operationalized and measured the influence of ethnicity only in terms of individuals' ethnic group
membership. These results show that there is something other than ethnic group membership
that is influencing psychological development, and in this study, that influence has to do with the
the devaluing ethnic conditions in the school environment. This study's findings support the
idea that studying ethnicity in terms of ethnic group differences is not adequate. To ascertain a
more complete understanding of the role of ethnicity in psychological development, researchers
must also examine ethnic psychological processes and social situations.

**Ethnic discrimination during early adolescence.** Much of previous research has examined
situations of ethnic discrimination with older adolescents, college students, and adults (e.g.,
Ogbug, 1978; Taylor et. al., 1994). The present study's findings indicate that experiences of
ethnic discrimination also may 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). Experiencing
ethnic stressors in addition to the non-ethnic ones that early adolescents face, such as experiences
of discrimination, would 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, (Jacque—I was
thinking of citing research from your Schulenberg & Maggs chapter but I don't have
article. Could you fill in here? Plus could you send me a copy of the chapter for future
reference. Thanks.) 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., Ogbug, 1978; Fordham & Ogbug, 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. 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 functioning of adolescents. 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; Jessor et. al., 1995).

Proximal situations of ethnic discrimination and socio-emotional 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 for only 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 socio-emotional 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 have shown that the frequency and intensity of
everyday hassles are correlated with negative mental health (e.g., Delongis et. al., 1982;
Winberger, 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;
Jackson et. al., 1994). 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 socio-emotional 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
Ethnic discrimination and ethnic identification indicates experiences of school discrimination may have a more pervasive impact than only on those aspects of development that have to do with school. Adolescents who are alienated from school because of threats of ethnic discrimination may become negatively oriented towards school as well as feel substantial socio-emotional distress. Then the combined school disaffection and socio-emotional 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

In addition to connection to ethnic group tapping something different for Whites and African-Americans, the pattern of the results pertaining to connection to ethnic group were not similar. Therefore, the findings pertaining to connection to ethnic group are discussed separately for African-Americans and Whites.

Effects on African-Americans. As shown in Tables 6-9 and Figures 4-7, connection to ethnic group had both main and interactive effects on psychological adjustment for African-American adolescents: For African-Americans, connection to their ethnic group acts as a promotive and protective factor by compensating for and buffering against the threats 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 (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.

Where 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; Graham, 1992; Garcia Coll, Crnic, Lamberty, Waskik, Jenkins, Vasquez, Garcia, & McAdoo, 1996). Except for the relatively few studies on ethnic identity (e.g., Phinney, 1996a) and racial socialization (e.g., Bowman & Howard, 1985), there have 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' psychological development, particularly under threatening ethnic circumstances.

**Effects on Whites.** The data showed that connection to ethnic group does not serve as a promotive or protective factor for White adolescents. With the exception of ethnic group esteem, there was no main effect of connection to ethnic group across multiple outcomes (See Tables 10-13). The interaction between perceived discrimination and connection to ethnic group on perceived utility value of school, depressive symptoms, perceptions of friends' negative characteristics showed that as connection to ethnic group increased, perceived discrimination was more strongly associated with poor psychological adjustment. At the present, it is unclear what
the implications of these results are. There is very little information about what it means for White adolescents to be in an environment where they are not the "majority' and face negative messages about their ethnic identity. Additional research is needed in order to better understand these results.

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.

A second concern 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.

In addition, previous research 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 may 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 regards 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 they are the only ones who know 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 dependable to rely on teachers or other students as outside reporters of adolescent's 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 influence some White and 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.
References


Ethnic discrimination and ethnic identification


Footnotes

1 The MADIC Study is being conducted by Jacque Eccles, Arnold Sameroff, and their colleagues.

2 The study is being conducted by Tom Cook and his colleagues.

3 Because of the large number of scales included in this study, there is insufficient space to include a more detailed description of the measures, such as providing the exact items in each of the scales. 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 first author.

4 Both of these measures were created by one of the MADIC Study’s research staff, Elaine Belansky.

5 Within each ethnic group, there may be sociodemographic differences, especially gender and socioeconomic ones, in the hypothesized relations. These individual variations merit empirical attention but they are not the focus of the present study.

6 We did conduct post-hoc analyses to see if White adolescents of high ethnic connection were identifying themselves with a specific ethnic group, such as being Jewish, Italian, and so forth. The data indicated that this was no the case and that these adolescents thought of themselves as being “White.”
Figure Captions

Figure 1. Proportion of African-American and White adolescents who reported discrimination by their teachers or by their peers.

Figure 2. Unstandardized and standardized coefficients from multi-group Confirmatory Factor Analyses (using EQS) on measures of perceived discrimination.

Figure 3. Unstandardized and standardized coefficients from multi-group Confirmatory Factor Analyses (using EQS) on connection to ethnic group.

Figure 4. Interaction between perceived discrimination and connection to ethnic group on self-competency beliefs for African-American adolescents.

Figure 5. Interaction between perceived discrimination and connection to ethnic group on school achievement (GPA) for African-American adolescents.

Figure 6. Interaction between perceived discrimination and connection to ethnic group on perception of friends' positive school characteristics for African-American adolescents.

Figure 7. Interaction between perceived discrimination and connection to ethnic group on problem behaviors for African-American adolescents.

Figure 8. Interaction between perceived discrimination and connection to ethnic group on perceived utility value of school for White adolescents.

Figure 9. Interaction between perceived discrimination and connection to ethnic group on school achievement (GPA) for White adolescents.

Figure 10. Interaction between perceived discrimination and connection to ethnic group on depressive symptoms for White adolescents.

Figure 11. Interaction between perceived discrimination and connection to ethnic group on perception of friends' negative school characteristics for White adolescents.
Ethnic discrimination and ethnic identification
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**Table 1**: Summary of results from Confirmatory Analyses for Parents' Reports and Adolescents' Reports of Adolescents' Psychological Functioning.
Note. Data from parent reports of adolescents' psychological functioning are available at Time 2 only.

*86
96
88
9
96
96
96
96
Parent report of adolescent problem behaviors
Adolescent report of problem behaviors
<table>
<thead>
<tr>
<th></th>
<th>T-Value</th>
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Note: * p < 0.05, ** p < 0.01, *** p < 0.001

Connection to ethnic group (Time 2)
Adolescents' perception of discrimination by peers (Time 2)
Adolescents' perception of discrimination by teachers (Time 2)
School disengagement (Time 1)
Third-grade California Achievement Test score

<table>
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Table 2

Descriptive statistics for sociodemographic, background, risk, and protective variables.
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Note: *p < .05, **p < .01, ***p < .001

Adolescent report of problem behaviors

Friends' negative characteristics

Friends' positive characteristics

Adolescent report of friends' characteristics

Blended Group esteem

Self-esteem

Adolescent report of self and group evaluations

Aggression

Depressive symptoms

Psychological distress

Adolescent report of mental health

Grades (from school record)

Beliefs about academic competence

Expected utility value of school

Expected importance of school

Adolescent report of academic motivation

T-Value

SD

X

SD

Whites

African-Americans

Descriptive statistics for school grades and adolescent-reported measures of psychological functioning (Time 2)

Table 3
<table>
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<th>T-Value</th>
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Note: *p < 0.05, **p < 0.01, ***p < 0.001.
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</table>

Note: Zero-order correlations for African-Americans are reported below the diagonal, and correlations for Whites are reported above the diagonal.
### Table 6: Zero-Order Correlations Among Parent-Reported Outcome Variables

<table>
<thead>
<tr>
<th>Academic motivation</th>
<th>Beliefs about academic competence</th>
<th>Psychological resilience</th>
<th>Depressive symptoms</th>
<th>Anger</th>
<th>Positive characteristics</th>
<th>Negative characteristics</th>
<th>Problem behaviors</th>
<th>Friends, positive characteristics</th>
<th>Friends, negative characteristics</th>
<th>Other behaviors</th>
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</thead>
<tbody>
<tr>
<td>-0.75</td>
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<td>-0.29</td>
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<td>-0.30</td>
<td>-0.60</td>
<td>-0.50</td>
<td>-0.40</td>
<td>-0.60</td>
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</tr>
</tbody>
</table>

Note: Correlations are reported below the diagonal, and correlations for variables that are reported above the diagonal are asterisked.

* * * p < 0.001, ** p < 0.01, * p < 0.05.
| *** 22 | 10 ** | Parent report of adolescent’s problem behaviors
| *** 24 | 17 *** | Parent report of adolescent’s friends’ negative characteristics
| *** 32 | 16 *** | Parent report of adolescent’s friends’ positive characteristics
| *** 21 | 23 ** | Parent report of adolescent’s anger
| *** 21 | 22 ** | Parent report of depressive symptoms
| *** 28 | 25 ** | Parent report of psychological resilience
| *** 33 | 30 ** | Parent’s beliefs about adolescent’s academic competence
| *** 28 | 27 ** | Parent report of adolescent’s academic engagement
| *** 40 | 24 ** | Parent perception of adolescent’s importance in school

| Americas | Which | Africans

| Parent measures of adolescents’ psychological adjustment | Zero-order correlations between adolescent and...
<table>
<thead>
<tr>
<th><strong>Perceived</strong></th>
<th>4th Grade</th>
<th>8th Grade</th>
<th>12th Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>Discrimination by Teachers</td>
<td>-0.94</td>
<td>-0.92</td>
<td>-0.90</td>
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<tr>
<td>Discrimination by Peers</td>
<td>-0.78</td>
<td>-0.73</td>
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<td>Perceived</td>
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<td>0.70</td>
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Summary of results from partial correlation analyses of the relations between perceived discrimination by peers and teachers and psychological adjustment for African-American and White adolescents.

Table 8
<table>
<thead>
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<th>Note: All analyses included gender, race, elementary school academic competence, peer disaffiliation, and school disengagement as control variables.</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>+ 80′</td>
<td>* 0′</td>
</tr>
<tr>
<td>** 12′</td>
<td>+++ 26′</td>
</tr>
<tr>
<td>+ 60′</td>
<td>+ 60′</td>
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<tr>
<td>** 18′</td>
<td>* 11′</td>
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</table>

Parent report of adolescents' problem behaviors: + 80′, * 0′, + 60′, ** 18′; note differences.
### Table 9

Note: All predictor variables were centered. * = p < 0.05, ** = p < 0.01, *** = p < 0.001

<table>
<thead>
<tr>
<th>Predictor</th>
<th>Step 1</th>
<th>Step 2</th>
<th>Step 3</th>
<th>Step 1</th>
<th>Step 2</th>
<th>Step 3</th>
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<td>Importance of School</td>
<td>Utility Value of School</td>
<td>Self Competency Beliefs</td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>perceived importance of school</td>
<td>perceived utility value</td>
<td>and self competence beliefs for African Americans</td>
<td>perceived importance of school</td>
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<td>and self competence beliefs for African Americans</td>
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<table>
<thead>
<tr>
<th>Predictor</th>
<th>AR</th>
<th>Information</th>
<th>Connection to Ethnic Group</th>
<th>Perceived Self-Discrimination (W2)</th>
<th>Prior Achievement @ W1</th>
<th>Perceived Discrimination (W1)</th>
<th>School Discrimination (W1)</th>
<th>Ethnic Self-Acad Comp</th>
<th>Socioeconomic Status</th>
<th>Gender</th>
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Table II

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<td>Anxiety</td>
<td>Depression Symptoms</td>
<td>Psychological Resilience, depressive symptoms, and anger for African Americans</td>
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Hierarchical regression results of perceived discrimination, connection to ethnic group, and their interaction on psychological resilience and depressive symptoms.
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</tbody>
</table>

**Table 10**

Typical results of perceived discrimination, connection to ethnic group, and their interaction on:

- School achievement
- Self-esteeem
- Ethnic Group Esteem

**Note:** All predictor variables were centered. *p < 0.05, **p < 0.01, ***p < 0.001.
<table>
<thead>
<tr>
<th>Step</th>
<th>Problem Behaviors</th>
<th>Friends' Positive Characteristics</th>
<th>Perceived Discrimination</th>
<th>Gender</th>
<th>Socioeconomic Status</th>
<th>School Discipline (W1)</th>
<th>Peer Adjustment (W1)</th>
<th>Perceived Self-Discrimination (W2)</th>
<th>Connection to Ethnic Group</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Step 1</td>
<td>Step 2</td>
<td>Step 3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Step 1</td>
<td>Step 2</td>
<td>Step 3</td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>

Table 12: Hierarchical regression results of perceived discrimination, connection to ethnic group, and their interaction on perceptions of friends' positive characteristics and problem behaviors for African Americans.
<table>
<thead>
<tr>
<th>Step 1</th>
<th>Step 2</th>
<th>Step 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Utility Value of School</td>
<td>Importance of School</td>
<td>Self-Competency Beliefs</td>
</tr>
</tbody>
</table>

Note: All predictor variables were centered.

**p < .05, ***p < .001, ****p < .0001

Table 13: Hierarchical regression results of perceived discrimination, connection to ethnic group, and ethnic interaction on perceived importance of school, perceived utility value, and self-competency beliefs for Whites.
### Table 14

<table>
<thead>
<tr>
<th>Step 1</th>
<th>Step 2</th>
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</tr>
</thead>
<tbody>
<tr>
<td>Ethnie Group</td>
<td>Self-Estimaion</td>
<td>School Achievement (GPA)</td>
</tr>
</tbody>
</table>

Hierarchical regression results of perceived discrimination, connection to ethnie group, and their interaction on **GPA.**

- **Ethnie Group:** 
  - 0.05 < p < 0.01
  - p < 0.05

- **Self-Estimaion:** 
  - 0.05 < p < 0.01

- **School Achievement (GPA):** 
  - 0.05 < p < 0.01
  - p < 0.05

Note: All predictor variables were centered. **p < 0.05**.
<table>
<thead>
<tr>
<th>Variable</th>
<th>Step 1</th>
<th>Step 2</th>
<th>Step 3</th>
<th>Step 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Predictor</td>
<td>School Disadvantage</td>
<td>Peer Discrimination</td>
<td>Perceived Discrimination (W2)</td>
<td>Perceived Discrimination (W1)</td>
</tr>
<tr>
<td>Interaction</td>
<td></td>
<td></td>
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</tr>
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<tr>
<td>Step 4</td>
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</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Variable</th>
<th>Step 1</th>
<th>Step 2</th>
<th>Step 3</th>
<th>Step 4</th>
</tr>
</thead>
<tbody>
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<td>Predictor</td>
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<td>Peer Discrimination</td>
<td>Perceived Discrimination (W2)</td>
<td>Perceived Discrimination (W1)</td>
</tr>
<tr>
<td>Interaction</td>
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</tr>
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<td>Step 1</td>
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<tr>
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</tbody>
</table>

Hierarchical regression results of perceived discrimination, connection to ethnic group, and their interaction on psychological resilience and depressive symptoms and anger for Whites.
Table 16

<table>
<thead>
<tr>
<th>Step 1: Problem Behaviors</th>
<th>Peer Friends' Pos. Climate</th>
<th>Peer Friends' Neg. Climate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Step 2: Step 2</td>
<td>Step 3</td>
<td>Step 3</td>
</tr>
</tbody>
</table>

Note: All predictor variables were centered. * * * significant at p < 0.05, ** significant at p < 0.01, *** significant at p < 0.001.
Standardized coefficients are reported in parentheses.
Standardized coefficients are reported in parentheses below the paths. Unstandardized coefficients for each ethnic group are reported outside the parentheses, and coefficients for White are reported above the paths in bold and coefficients for African-Americans are reported above the paths in italics.

Note: Coefficients for African-Americans are reported above the paths in bold and coefficients for Whites are reported above the paths in italics.

Figure 3
Self-Competency Beliefs
(in std. dev. units)

Perceived Discrimination

Low
Average
High

Low Connection to Ethnic Group
Average Connection to Ethnic Group
High Connection to Ethnic Group

Figure 4
APPENDIX
Measures of Perceived Discrimination by Peers and Teachers
and Connection to Ethnic Group

Perceived Discrimination by Peers

How often do you feel that you get in fights with some kids because of your race? (1 = never; 2 = a couple of times each year; 3 = a couple times each month; 4 = once or twice each week; 5 = every day)

How often do you feel that kids do not want to hang out with you because of your race? (1 = never; 2 = a couple of times each year; 3 = a couple times each month; 4 = once or twice each week; 5 = every day)

How often do you feel like you are not picked for certain teams or other school activities because of your race? (1 = never; 2 = a couple of times each year; 3 = a couple times each month; 4 = once or twice each week; 5 = every day)

Perceived Discrimination by Teachers

How often do you feel that teachers call on you less often than they call on other kids because of your race? (1 = never; 2 = a couple of times each year; 3 = a couple times each month; 4 = once or twice each week; 5 = every day)

How often do you feel that teachers grade you harder than they grade other kids because of your race? (1 = never; 2 = a couple of times each year; 3 = a couple times each month; 4 = once or twice each week; 5 = every day)

How often do you feel that you get disciplined more harshly by teachers than other kids do because of your race? (1 = never; 2 = a couple of times each year; 3 = a couple times each month; 4 = once or twice each week; 5 = every day)

How often do you feel that teachers think you are less smart than you really are because of your race? (1 = never; 2 = a couple of times each year; 3 = a couple times each month; 4 = once or twice each week; 5 = every day)

How often have you felt that teachers/counselors discourage you from taking certain classes because of your race? (1 = never; 2 = once or twice; 3 = 3 or 4 times; 4 = 5 or 6 times; 5 = more than 6 times)
Connection to Ethnic Group

I have a close community of friends because of my race/ethnicity. (1 = not at all true of me; 2 = a little true of me; 3 = somewhat true of me; 4 = very true of me; 5 = extremely true of me)

People of my race/ethnicity have a culturally rich heritage. (1 = not at all true of me; 2 = a little true of me; 3 = somewhat true of me; 4 = very true of me; 5 = extremely true of me)

I have meaningful traditions because of my race/ethnicity. (1 = not at all true of me; 2 = a little true of me; 3 = somewhat true of me; 4 = very true of me; 5 = extremely true of me)

People of my race/ethnicity are very supportive of each other. (1 = not at all true of me; 2 = a little true of me; 3 = somewhat true of me; 4 = very true of me; 5 = extremely true of me)