



HHS Public Access

Author manuscript

J Am Acad Child Adolesc Psychiatry. Author manuscript; available in PMC 2023 June 17.

Published in final edited form as:

J Am Acad Child Adolesc Psychiatry. 2022 April ; 61(4): 544–553. doi:10.1016/j.jaac.2021.05.020.

Race-Related Stressors and Resources for Resilience: Associations with Emotional Health, Conduct Problems, and Academic Investment among African American Early Adolescents

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Abstract

Objective.—African American youth in the United States grow up in a society with a long, pervasive and living history of interpersonal and institutional racism. This study examined whether race-related stressors (awareness and experiences of racism) and resources for resilience (racial-ethnic connectedness and perceptions of embedded achievement) were associated with emotional health, conduct problems, and academic investment among African American early adolescents. Embedded achievement is the belief that achievement is a part of one’s racial or ethnic group identity.

Method.—Participants were recruited from an urban school and youth club (N=75, mean age=11.6, 71% male participants). Structured interviews were administered to youth.

Results.—Adjusting for age and gender, racial-ethnic connectedness and embedded achievement were associated with less emotional problems and conduct problems. In addition, embedded achievement was associated with greater academic investment. Racial-ethnic connectedness modified associations between awareness and experiences of racism and emotional problems; racism was associated with more emotional problems, but only among youth with lower levels of racial-ethnic connectedness. Youths’ perceptions of embedded achievement modified an association between experiences of racism and conduct problems; experiences of racism were associated with more conduct problems, but only among youth with lower perceptions of embedded achievement.

Conclusion.—Race-related resources for resilience appear to promote emotional, behavioral, and academic well-being among African American youth and to confer protection when youth are confronted with the stress and adversity of racism. Health professionals can advocate for policies and practices to combat racism and foster racial pride and connectedness among youth of color.

Keywords

African American; racism; racial-ethnic identity; resilience; adolescence

Introduction

African American youth in the United States grow up in a society with a long, pervasive and living history of interpersonal and institutional racism.^{1,2} In the education, housing, employment, and juvenile and criminal justice systems, there are policies, practices, and cultural norms that have contributed to significant racial disparities in opportunity, wealth, and health.^{1,2} Against this backdrop of structural adversity, young people may experience instances of interpersonal racism and develop a heightened awareness of racism. At the same time, awareness and experiences of racism may catalyze youth's formation of, immersion in, and commitment to their racial-ethnic identity.³ The purpose of this manuscript is to examine whether youths' awareness and experiences of racism are associated with emotional problems, conduct problems, and academic investment, and whether two hypothesized protective constructs, youths' racial-ethnic connectedness and perceptions of embedded achievement, weaken associations between racism and emotional, conduct, and academic problems.

Current Context of Racism in the United States

The United States in the twenty first century has been characterized by both a rise in organized resistance to systemic racism and oppression, and increased visibility of extremist white nationalism.⁴⁻⁶ Black Lives Matter, a grassroots civil rights movement, was catalyzed in 2013 when George Zimmerman, a neighborhood watch volunteer, was acquitted of shooting and killing Trayvon Martin, an unarmed African American 17-year-old on his way home from buying iced tea and Skittles from a convenience store in Sanford, Florida.^{4,5} Since then, the Black Lives Matter movement has continually engaged in nonviolent active resistance against the dehumanization and devaluation of black and brown lives.⁴ In contrast, there has also been increased visibility of far right, white nationalist extremist views in mainstream U.S. discourse, targeting Black and Muslim Americans, undocumented immigrants, and refugees.⁶ This discourse has also been matched with increased racial violence, including the Emanuel African Methodist Episcopal Church massacre in Charleston, South Carolina, and a stark increase in the rate of hate crimes, which, in 2017, was the highest rate in over a decade.^{7,8}

In July 2016, Philando Castile, a 32-year-old African American man, was shot and killed by a police officer in Falcon Heights, Minnesota, as he sat in his driver's seat after being pulled over for a broken taillight.⁹ This event was witnessed by Mr. Castile's girlfriend and her 4-year-old daughter, who were passengers in the vehicle. Several years later, in May 2020, George Floyd, a 46-year-old African American man, was killed in Minneapolis police custody after allegedly purchasing cigarettes from a corner store with a counterfeit \$20 bill.¹⁰ The nature of his death, which occurred after his neck was knelt upon by a police officer for over 8 minutes, sparked a nation-wide uprising among Black Lives Matter activists and allies, as well as reactionary counter-protests among White extremist groups.¹¹

These events contextualize the local and national climate in which the current research is situated. Data for the present study were collected in the same region that Philando Castile and George Floyd's killings took place, and within a year of Philando Castile's death.

Adverse Impacts of Racism on Youth's Well-being and Academic Investment

Interpersonal and structural inequities and violence experienced by African American communities in the United States may be broadly conceptualized as *race-related stressors*. Awareness and experiences of racism are related, but separate sources of stress that can have detrimental effects to individuals' well-being across the life course.¹² A recent review by Benner and colleagues found that personally experienced racial/ethnic discrimination was associated with greater levels internalizing symptoms (eg, depression, anxiety) and externalizing symptoms (eg, delinquency), as well as lower levels of academic achievement, engagement, and motivation among ethnically diverse (Black, Latinx, Asian, and Native) youth aged 10 through 20.¹³ To a lesser extent, research has examined the effects of vicarious discrimination (i.e., discrimination targeted toward one's social group, rather than oneself; eg, "You have heard kids at school making jokes or saying bad things about African Americans").¹⁴ In a recent review of research on associations between vicarious racism and child health among predominantly African American children, 48% of reviewed studies found that vicarious racism was associated with internalizing or externalizing symptoms.¹⁵ It is conceivable that awareness of racism towards one's social group can negatively impact academic investment, which includes both behavioral engagement (eg, completing school work and following school rules), as well as cognitive engagement (ie, youth's motivation, effort, and investment in learning).¹⁶ In a sample of ethnically-diverse elementary school students from Chicago, a majority (68 percent) of children demonstrated knowledge about racial stereotypes (eg, "Whites think Blacks aren't smart") by the age of 10.¹⁷ Internalization of such attitudes could potentially lead to reduced academic investment.

Effects of Racial Identity on Youth's Well-being and Academic Investment

Race-Related Resources for Resilience—Some youth possess factors that are protective and may minimize the likelihood that awareness and experiences of racism will result in emotional, conduct, or academic problems. One potential source of resilience for African American youth may be their racial-ethnic identity. Oyserman, Gant, and Ager developed a model of racial-ethnic identity comprised of three components: racial-ethnic connectedness, embedded achievement, and awareness of racism.¹⁸ *Racial-ethnic connectedness* is youths' sense of positive belonging to and pride in the community, history, and traditions of their racial or ethnic group.¹⁹ *Embedded achievement* is the sense that achievement is a part of what it means to be a member of one's racial or ethnic group, and that the achievement of some members of one's group will help other members to succeed.¹⁹ Youths' racial-ethnic connectedness and embedded achievement may serve as race-related resources for resilience. The third component of Oyserman and colleagues' model of racial-ethnic identity, awareness of racism, is youths' "sense of self as subject to prejudice, racism, and exclusion from opportunities by White society," and may be conceptualized as a race-related stressor.¹⁸ Race-related resources for resilience, such as racial-ethnic connectedness and embedded achievement, may exert positive effects on

well-being and academic investment and buffer African American youth from the negative impacts of race-related stressors.

Race-Related Resources for Resilience: Health Promoting Effects—Positive perceptions of racial-ethnic identity are associated with emotional and behavioral health.^{20,21} For example, in a study of Native American (28.8%), African American (28.5%), Latinx (9.5%) and White (33.2%) youth, strong ethnic identity (ie, “I have a strong sense of belonging to my ethnic group”) was associated with lower levels of depressive symptoms, anxiety symptoms, and externalizing behaviors across all racial and ethnic groups; further, these associations were mediated by self-esteem.²¹ A meta-analytic review by Miller-Cotto and Byrnes found that strong racial-ethnic identity was associated with greater academic achievement.²² For example, in a sample of African American and Latinx middle school students from Detroit, higher levels of racial-ethnic connectedness predicted a higher grade point average across two years.¹⁹ Collectively, research suggests that racial-ethnic connectedness may contribute to positive emotional, behavioral, and academic outcomes through greater sense of belonging and increased self-esteem.

Embedded achievement has consistently predicted academic achievement, both in cross-sectional²³ and longitudinal^{19,23,24} analyses. There is a dearth of research on possible associations between embedded achievement and indicators of youth emotional and behavioral health. Embedded achievement may promote emotional and behavioral health through increased sense of security in the success of one’s greater community, as well as the belief that one will make a valuable contribution to one’s group if one works to achieve. Embedded achievement may promote academic investment through increased motivation to succeed, not only for personal gain, but also for the well-being of the greater community.

Race-Related Resources for Resilience: Stress-Buffering Effects—Several studies have found that race-related resources for resilience are protective with respect to the impact of racial discrimination on internalizing symptoms.^{14,25–27} For example, in a study among predominantly Latinx (56%) and Black (19%) 7-year-old children, perceived experiences of racial-ethnic discrimination predicted increased internalizing and externalizing symptoms one year later, but only among children whose racial-ethnic identity (eg, “I understand pretty well what my ethnic background means to me”) was relatively less-developed compared to other children.²⁵ In one study of African American early adolescents, however, use of communalistic coping – a culturally-specific coping mechanism that relies on individuals’ interdependence with those around them (eg, I spend time with my family) – enhanced the association between discrimination stress and anxiety.²⁸ The authors suggested that African American youth who sought support from others may have suffered negative effects associated with re-experiencing or co-ruminating about discriminatory events. Other studies have found that race-related resources for resilience do not modify associations between racial discrimination and internalizing symptoms.^{20,29} In these studies, racial discrimination was associated with more internalizing symptoms, and stronger racial identity was associated with fewer internalizing symptoms (i.e., support for health promoting, “main” effects of race-related stressors and resources for resilience, but not stress-buffering, “interaction” effects).

One longitudinal study provides mixed evidence on whether racial-ethnic identity is protective with respect to the association between racial discrimination and behavioral problems. Among African American (61%) and Latino (39%) youth in grades 5 and 8, the associations between discrimination and both aggressive behavior and delinquency were stronger among youth with high levels of ethnic identity exploration (e.g., “spent time trying to learn about ethnic group”) and low levels of ethnic identity affirmation (e.g., “strong sense of belonging to group”). Further, the association between discrimination and criminal offending was attenuated among youth with high levels of ethnic identity affirmation.³⁰ Thus, ethnic identity *affirmation* appeared to be protective, while ethnic identity *exploration* appeared to enhance the negative impacts of discrimination. Study authors hypothesized that high levels of ethnic identity exploration may “increase the salience of ethnicity and make encounters with discrimination more threatening,” which in turn may increase the risk of maladaptive coping with race-related stressors through aggressive behavior and delinquency.³⁰

Lastly, there is some evidence that racial-ethnic identity may be protective with respect to the association between racial discrimination and academic outcomes.^{23,31,32} For example, in a study of African American middle school students, a strong and positive connection to one’s ethnic group reduced the magnitude of the association between experienced racial discrimination and declines in youths’ recorded grade point average and youths’ perceptions of their own academic competency over two years.³¹ No research has examined whether embedded achievement modifies associations between racial discrimination and indicators of youth’s emotional, behavioral, or academic well-being.

The Present Study

The present study examines whether race-related stressors (awareness of racism and experiences of racism) and race-related resources for resilience (racial-ethnic connectedness and embedded achievement) are associated with African American youth’s emotional health, conduct problems, and academic investment. Additionally, it examines whether racial-ethnic connectedness and embedded achievement weaken potential associations between awareness and experiences of racism and emotional problems, conduct problems, and academic investment.

Method

The present research is a secondary analysis of data collected as part of a community-engaged project within an urban, Midwestern United States community. The project involved building a community coalition that selected, refined, implemented, and evaluated a prevention intervention to promote the well-being and future success of socioeconomically disadvantaged youth and their caregivers.^{33,34} While coalition efforts were intended to benefit all youth in the community, this project was part of a larger research collaboration to promote healthy life trajectories of African American men. For this reason, the coalition’s research partner recruited a small sample of African American boys aged 8–14 years from the coalition’s partnering K-8 school (n=25) to answer questions corresponding to coalition priorities. An additional source of funding allowed for the recruitment of 71 additional youth

aged 8–14 years from a second partnering organization, a local Boys & Girls Club. Youth recruited from the Boys & Girls Club were diverse with respect to gender (38% female participants, 62% male participants) and race/ethnicity (54% African American or Black, 14% Asian, 4% Hispanic, 3% White, 1% American Indian, 20% two or more races, 4% unknown). The present research is limited to 75 youth who identified as African American or Black (mean age=11.6, 71% male participants).

Approval to conduct research at the partnering school and local Boys & Girls Club was granted by the school district and the club's branch director, respectively, as well as the University researchers' IRB. In the 2017/2018 academic year, 81% of students at the partnering school received free or reduced price lunch. The club serves ethnically diverse families, most of whom are of lower socioeconomic status. An active consent procedure was utilized at the school, while a passive consent procedure was utilized at the club site. The only inclusion criterion for the club site was age of youth within 8–14 years, inclusive. At the school site, additional inclusion criteria included African American or Black race/ethnicity and male gender of the youth. African immigrants and refugees were excluded. Of 87 eligible youth at the school site, 25 participated (29% response rate). Of 320 invitations sent to families at the club site, 71 youth completed interviews. While this represents 22% of the invitations that were sent, only 70 interviews had been planned.

All letters of invitation, active consent forms, and passive consent forms explained that interviews of youth were being conducted to better understand issues related to the well-being and future success of youth, and to inform the way that staff and health professionals think about youths' behavior and plan programs to promote youths' well-being and future success. Structured interviews of youth were held at the site through which they were recruited. Study scales were administered by interviewers who read each question aloud to youth participants. Youth were shown scale response options on physical placards placed on the table in front of them. Youth indicated their self-reported response verbally or by pointing to the placard on the table. All youth were compensated with a \$20 gift card for participation in an interview. Participants were provided with a list of resources for academic support, emotional well-being and mental health, youth development opportunities, and family assistance. Interviewers were trained to recognize and alert investigators to issues of concern (e.g., emotional distress) that may require a response beyond the provision of the resource list.

Measures

Experience of being an ethnic minority was assessed through three scales developed by Oyserman, Brickman, and Rhodes.³⁵ Of the 96 youth in the sample, 63 identified as African American or Black. Of 14 youth who identified as two or more races, 13 identified as African American or Black. One youth who identified as African American or Black did not complete the scales, yielding a sample size for the present study of 75. The Oyserman et al. scales include racial-ethnic connectedness, embedded achievement, and awareness of racism.³⁵ *Racial-Ethnic Connectedness* items assessed the extent to which youth felt a positive sense of connection to their community (e.g., It is important to think of myself as African American; 4 items). *Embedded achievement* items assessed the extent

to which youth believed that achievement is valued by their community, and that their own achievement can benefit their community (e.g., If I am successful, it will help other African American people; 4 items). *Awareness of racism* items assessed the extent to which youth perceived that others see them through lens of low, negative expectations (e.g., Some people will treat me differently because I am African American; 4 items). Using a modified 3-point scale (1=not at all; 2=a little; 3=very much), youth rated the extent to which items were true for them. Items were averaged to form composites. Cronbach's alpha indices of internal consistency for the three subscales among the 75 African American youth who completed this section were as follows: (1) connectedness ($\alpha=.56$); (2) embedded achievement ($\alpha=.72$); (3) awareness of racism ($\alpha=.53$). Prior psychometric testing with a sample of African American middle school-aged youth ($N=98$) demonstrated acceptable internal reliability for each of the three scales: (1) connectedness ($\alpha = .78$); (2) embedded achievement ($\alpha = .62$); (3) awareness of racism ($\alpha = .60$).¹⁹ Modifying response options to a 3-point scale likely reduced variance and led to lower internal consistencies in our sample.

One additional item was added to assess youth's experiences of being a racial, ethnic, or cultural minority (e.g., African American): In the past year, how often have you been treated badly by other people because you are an African American. Using a 3-point scale (1=not at all; 2=a little; 3=very much), youth rated the extent to which the item was true for them.

Emotional and conduct problems were assessed through the *Strengths and Difficulties Questionnaire* (SDQ) Youth Self Report Measure for Ages 11–17.³⁶ Using a 3-point scale (1=not true; 2=somewhat true; 3=certainly true), youth rated to the extent to which each item was true for the past 6 months. Cronbach's alpha indices of internal consistency among the 75 African American youth were as follows: *Emotional Symptoms* (e.g., I get a lot of headaches, stomach-aches or sickness; 5 items; $\alpha = .72$), and *Conduct Problems* (e.g., I get very angry and often lose my temper; 5 items; $\alpha = .62$). Items were averaged to form composites.

Academic investment was assessed through the cognitive and behavioral engagement scales developed by the National Center for School Engagement.¹⁶ Youth used a 3-point scale (1=not at all; 2=a little; 3=very much) to rate the extent to which items represented what they thought about school. Youth completed 19 items assessing *cognitive engagement* (e.g., I will graduate from high school) and 7 items assessing *behavioral disengagement* (e.g., I get in trouble at school). All 26 items were coded in the same direction and averaged to form a *total academic investment* composite ($\alpha=.85$).

Plan of Analyses

IBM SPSS Statistics 25 was used to conduct all analyses. Preliminary analyses examined distributions of and partial correlations between variables. Multiple linear regression analyses were used to test study hypotheses. All analyses adjusted for age and gender. Main effects of independent variables (race-related stressors and resources for resilience) on youths' emotional problems, conduct problems, and academic investment were first examined. Next, potential independent effects of race-related stressors and resources for resilience were examined. Potential effect modification was tested through a series of multiple linear regression analyses with a single interaction term between a race-related

stressor and resource for resilience entered into each model. Significant interactions were subsequently examined through simple effects tests and mean \pm one standard deviation interaction plots. For simple effects tests, a median split was used to divide the sample into “low” and “high” groups with respect to the race-related resource for resilience. The effect of the race-related stressor on the outcome was examined within groups who were low or high with respect to the race-related resource for resilience. Plots utilize regression output in which all predictors (race-related stressors and resources for resilience) were examined as continuous variables. Four points, corresponding to different combinations of being one standard deviation above or below the mean for each variable, were plotted: (1) high stress, high resource; (2) high stress, low resource; (3) low stress, high resource; (4) low stress, low resource. Given the sample size and exploratory nature of some analyses, adjustments were not made for multiple statistical tests.

Results

Table 1 summarizes means, standard deviations, and partial correlations among variables. Awareness and experiences of racism were correlated, although not to the point of being redundant ($r = .40$). Racial-ethnic connectedness and embedded achievement were also correlated ($r = .50$). Awareness of racism was positively correlated with embedded achievement ($r = .23$).

Neither awareness nor experiences of racism were significantly correlated with emotional problems, conduct problems, or academic investment. In contrast, racial-ethnic connectedness was correlated with fewer emotional and conduct problems. Embedded achievement was correlated with fewer emotional and conduct problems and greater academic investment. Lastly, conduct problems were correlated with more emotional problems and less academic investment.

Table 2 summarizes results from analyses in which each outcome – emotional problems, conduct problems, and academic investment – was regressed on race-related stressors and resources for resilience. Neither awareness of racism nor experiences of racism were associated with study outcomes. When adjusting only for age and gender, racial-ethnic connectedness was associated with fewer emotional and conduct problems; these associations did not persist when race-related stressors and resources for resilience were entered into regression analyses simultaneously. Embedded achievement was associated with fewer emotional and conduct problems, as well as greater academic investment. When race-related stressors and resources for resilience were entered into regression analyses simultaneously, embedded achievement remained associated with fewer conduct problems and greater academic investment.

Table 2 also summarizes results from models with interaction terms. Racial-ethnic connectedness modified the associations between both awareness and experiences of racism and emotional problems. Figure 1 shows an illustrative example. Awareness of racism was associated with more emotional problems, but only among youth with low racial-ethnic connectedness ($B = 0.58$, 95% CI = [0.19, 0.96], $p < 0.01$). Among youth with high racial-ethnic connectedness, awareness of racism was not associated with emotional problems ($B = -0.00$,

95% CI=[-0.30, 0.30], $p=0.98$). This pattern was the same for the association between experiences of racism and emotional problems (not shown in a figure). Experiences of racism were associated with more emotional problems, but only among youth with low racial-ethnic connectedness ($B=0.24$, 95% CI=[-0.01, 0.49], $p=0.06$). Among youth with high racial-ethnic connectedness, experiences of racism were not associated with emotional problems ($B=-0.01$, 95% CI=[-0.30, 0.27], $p=0.94$).

Embedded achievement modified the association between experiences of racism and conduct problems (see Figure 2). Experiences of racism were associated with more conduct problems, but only among youth with low perceptions of embedded achievement ($B=0.25$, 95% CI=[0.07, 0.44], $p<0.01$). Among youth with high perceptions of embedded achievement, experiences of racism were not associated with conduct problems ($B=0.04$, 95% CI=[-0.16, 0.24], $p=0.70$).

Discussion

This study provides novel evidence about the effects of race-related stressors and resources for resilience on African American early adolescents' well-being. This study suggests that general awareness of racism, and not just personal experiences of racism may contribute to emotional problems among African American early adolescents when they lack a strong sense of connectedness to their racial/ethnic community. Additionally, this study suggests that embedded achievement – youth's sense that their community values achievement, and that their own achievement will benefit their larger community– may weaken the association between experiences of racism and conduct problems among early adolescents. Previous research has shown that embedded achievement is directly associated with academic achievement;^{19,23,24} the present study suggests that embedded achievement may also serve in a “stress buffering,” protective role.^{37,38} Consistent with health promoting effects observed previously, the present findings suggest that racial-ethnic connectedness and embedded achievement are directly associated with youths' emotional, behavioral, and academic well-being.^{19–24} Additionally, the present findings contribute to a growing body of evidence that racial-ethnic connectedness may weaken associations between experiences of racism and adverse outcomes, consistent with a stress buffering, protective role.^{14,25–27,30,31}

Study strengths should be considered alongside weaknesses. The cross-sectional study design of the present study limits the ability to make causal inferences from observed associations. Additional research with longitudinal study designs is needed to determine whether race-related resources for resilience are associated with youth's emotional, behavioral, and academic well-being over time, and whether these resources for resilience are protective against the association between racism and future negative health outcomes. Longitudinal research would also allow for the assessment of awareness and experiences of racism over time, as well as the degree to which adolescents' perceptions of racial-ethnic connectedness and embedded achievement remain constant or fluctuate over time. Additionally, because this study examined youths' experiences of racial discrimination in only the past year alone, future research should consider whether race-related resources for resilience continue to exert a protective effect against frequent or severe race-related stressors that may accumulate over time, or whether there are limits to the protective

effects of race-related resources for resilience. Future longitudinal research could be further strengthened by examining associations between race-related stressors and resources for resilience and objective outcome measures, such as standardized test scores, school graduation rates, and long-term indicators of health and well-being (e.g., presence or absence of diagnoses).

In addition to the cross-sectional study design, the present study utilized a relatively small sample along with a convenience sampling method. While these limitations may reduce generalizability to other populations of African American youth, the fact that some findings are consistent with past literature makes it more likely that novel findings may hold true for African American youth outside the study sample. Additionally, measures were presented to participants in the same sequence, which may have impacted responses if early items were attended to more carefully than later items. The low internal reliability estimates for some measures in the current study (racial ethnic connectedness, awareness of racism, and conduct problems) may impact the validity of findings involving these measures and reduce generalizability to similar samples of participants. Prior psychometric testing of the Oyserman et al. scales was conducted with a sample of African American middle school-aged youth, and did not include children as young as eight years in age, who are included in the present study.¹⁹ This difference could have impacted the internal reliability of the Oyserman et al. scales within the present sample. Lastly, the study sample consisted of a mixture of youth who identified either as solely African American or Black, or African American or Black and at least one other race or ethnicity. Multiple identities could have potentially impacted responses and observed associations (e.g., the degree to which adolescents are aware of or experience race-related stressors, feel connected to the African American/Black community, and feel a sense of embedded achievement; the degree to which aspects of African American/Black identity are health promoting and protective). However, race/ethnicity (African American/Black only versus African American/Black and at least one other race or ethnicity) was not correlated with any study variables, and adjusting for race/ethnicity in post-hoc analyses (not presented in Results) did not impact the findings in any way.

The present study's findings have implications for both practice and policy. Professionals who provide direct services to youth (e.g., psychiatrists, psychologists, teachers, community workers, social workers) should facilitate racial identity development among youth of color in order to foster racial pride and connectedness. For example, professionals could incorporate culturally responsive teaching, programs, and interventions into their practice. One example of a program taking this approach is Flourish Agenda's Camp Akili, a personal development and leadership summer camp for African American youth in Oakland, California, focused on increasing youth's social-emotional health through fostering racial-ethnic identity development as well as "cultural appreciation, agency, relationships, meaning and purpose, and future aspiration."^{39,40} Future research should evaluate and test the effects of public health campaigns and programs designed to prevent discrimination and protect against the adverse impacts of discrimination through fostering positive racial identity development.

Despite the limited amount of time available in a medical encounter, some practitioners have advocated for and implemented screening for potential determinants of health, such as adverse childhood experiences and social determinants of health (e.g., stability of housing and resources for nutrition, perceived safety).^{41,42} In the context of healthcare for racial and ethnic minority youth, screening for race-related stressors, such as discrimination, and race-related resources for resilience, such as racial-ethnic connectedness, may facilitate referral to community resources that can reduce stress, build resilience, and impact a wide range of outcomes, including emotional and behavioral well-being. The items utilized in this study could be a starting point to screen for race-related stressors and resources for resilience.

However, nurturing youths' race-related resources for resilience alone is not sufficient. Professionals and advocacy groups need to also reduce youths' exposure to race-related stressors through recognizing and eliminating racist practices within their communities, organizations, and institutions. For example, in 2008, families and community members in San Antonio, Texas, protested in response to the closing of a predominantly African American public high school, an action they saw as a continuation of historical neglect and oppression in their community.⁴³ As one parent stated, "How dare you rob us again... [We're] tired of ... the continual ... neglect and racism, redlining, ... whatever you want to call over all the years... You're going to try to take our school. This is a community thing."⁴³ Future research should evaluate the effects of advocacy efforts on the well-being of African American youth and their communities, both in circumstances where efforts are successful and are not successful in accomplishing aims.

Similarly, policymakers should promote anti-racist policies, such as increasing accountability for mistreatment and brutality among law enforcement, removing zero tolerance and other exclusionary punishment policies, funding community-based, culturally responsive alternatives to youth detention, and instituting an equitable distribution of state education funding.⁴⁴ Such policies would promote African American youths' health and well-being, both through reducing exposure to race-related stressors, and also reducing structural barriers to opportunity, wealth, and health. Similar policies have growing momentum; for example, in December of 2018, the Minneapolis City Council voted to approve the Minneapolis 2040 Comprehensive Plan, which focuses on eliminating barriers created by past discriminatory policies.⁴⁵

In conclusion, African American youth who possess race-related resources for resilience, such as racial-ethnic connectedness and a sense that their academic achievement will benefit others from their racial-ethnic community, exhibit less emotional problems and conduct problems and greater academic investment. Additionally, race-related resources for resilience appear to be protective against emotional and conduct problems when youth are confronted with the significant stress and adversity of racism. Efforts are needed to enhance positive racial identity formation among African American youth and to reduce the structural barriers that have led to historical and current forms of interpersonal and institutional racism.

Acknowledgements

This research was supported by the Center for Healthy African American Men through Partnerships (CHAAMPS), funded by the National Institute of Minority Health and Health Disparities through a grant from the National Institutes of Health (U54MD008620), as well as the Annie E. Casey Foundation. Content is the responsibility of the authors and does not necessarily represent the official views of the National Institutes of Health or the Annie E. Casey Foundation. The authors have no financial disclosures to report. The authors gratefully acknowledge participating members, community-based organizations, and families of the Hazel Park Area Coalition; Hazel Park Preparatory Academy (an International Baccalaureate World School) and Dr. Delores Henderson, Principal (retired); and the East Side Boys & Girls Club and Mr. Andrew Jones, Branch Director, 2001-2019.

References

1. Feagin JR, Ducey K. *Racist America: Roots, Current Realities, and Future Reparations*. New York: Routledge, Taylor & Francis Group; 2019. doi :10.4324/9781315143460
2. Hillier A Searching for red lines: spatial analysis of lending patterns in Philadelphia, 1940–1960. *PA Hist*. 2005;72(1):25–47.
3. Cross WE, Vandiver BJ. Nigrescence theory and measurement: introducing the Cross Racial Identity Scale (CRIS). In: Ponterotto JG, Casas JM, Suzuki LA, Alexander CM, eds. *Handbook of Multicultural Counseling*. 2nd ed. Sage Publications, Inc.; 2001:371–393.
4. Clayton DM. Black Lives Matter and the Civil Rights Movement: a comparative analysis of two social movements in the United States. *J Black Stud*. 2018;49(5):448–480. doi :10.1177/0021934718764099
5. Day E #BlackLivesMatter: the birth of a new civil rights movement. *The Guardian*. 2015. Accessed November 23, 2020. <https://www.theguardian.com/world/2015/jul/19/blacklivesmatter-birth-civil-rights-movement>
6. Giroux HA. White nationalism, armed culture and state violence in the age of Donald Trump. *Philos Soc Crit*. 2017;43(9):887–910. doi :10.1177/0191453717702800
7. In Memoriam: The Charleston Massacre. *J Pan Afr Stud*. 2015;8(3).
8. Levin B, Reitzel JD. Report to the Nation: Hate Crimes Rise in U.S. Cities and Counties in Time of Division and Foreign Interference. CVR Repository 2018. https://csbs.csusb.edu/sites/csusb_csbs/files/2018%20Hate%20Final%20Report%205-14.pdf <http://hdl.handle.net/20.500.11990/975>. Accessed: 6/4/21
9. Smith M Video of police killing of Philando Castile Is publicly released. Accessed November 23, 2020. <https://www.nytimes.com/2017/06/20/us/police-shooting-castile-trial-video.html>
10. Hill E, Teigenthaler A, Triebert C, Jordan D, Willis H, Stein R. How George Floyd was killed in police custody. *New York Times*. 2020. Accessed November 23, 2020. <https://www.nytimes.com/2020/05/31/us/george-floyd-investigation.html>
11. Baker M, Bogel-Burroughs N. A city prepares for violent showdowns. *New York Times*. 2020. Accessed November 23, 2020. <https://www.nytimes.com/2020/09/25/us/portland-proud-boys-antifa-protests.html>
12. Clark R, Anderson NB, Clark VR, Williams DR. Racism as a stressor for African Americans. A biopsychosocial model. *Am Psychol*. 1999;54(10):805–816. doi :10.1037//0003-066x.54.10.805 [PubMed: 10540593]
13. Benner AD, Wang Y, Shen Y, Boyle A, Polk R, Cheng Y-P. Racial/ethnic discrimination and well-being during adolescence: a meta-analytic review. *Am Psychol*. 2018;73(7):855–883. doi :10.1037/amp0000204 [PubMed: 30024216]
14. Dotterer AM, James A Jr. Can parenting microprotections buffer against adolescents' experiences of racial discrimination? *J Youth Adolesc*. 2018;47(1):38–50. doi :10.1007/s10964-017-0773-6 [PubMed: 29052120]
15. Heard-Garris NJ, Cale M, Camaj L, Hamati MC, Dominguez TP. Transmitting trauma: a systematic review of vicarious racism and child health. *Soc Sci Med (1982)*. 2018;199:230–240. doi :10.1016/j.socscimed.2017.04.018
16. Finlay KA. *Quantifying School Engagement: Research Report*. National Center for School Engagement; 2006.

17. McKown C, Strambler MJ. Developmental antecedents and social and academic consequences of stereotype-consciousness in middle childhood. *Child Dev.* 2009;80(6):1643–1659. doi :10.1111/j.1467-8624.2009.01359.x [PubMed: 19930343]
18. Oyserman D, Gant L, Ager J. A socially contextualized model of African American identity: possible selves and school persistence. *J Pers Soc Psychol.* 1995;69(6):1216–1232. doi :10.1037/0022-3514.69.6.1216
19. Altschul I, Oyserman D, Bybee D. Racial-ethnic identity in mid-adolescence: content and change as predictors of academic achievement. *Child Dev.* 2006;77(5):1155–1169. doi :10.1111/j.1467-8624.2006.00926.x [PubMed: 16999790]
20. Sellers RM, Copeland-Linder N, Martin PP, Lewis RLH. Racial identity matters: The relationship between racial discrimination and psychological functioning in African American adolescents. *J Res Adolesc.* 2006;16(2):187–216. doi :10.1111/j.1532-7795.2006.00128.x
21. Smokowski PR, Evans CB, Cotter KL, Webber KC. Ethnic identity and mental health in American Indian youth: examining mediation pathways through self-esteem, and future optimism. *J Youth Adolesc.* 2014;43(3):343–355. doi :10.1007/s10964-013-9992-7 [PubMed: 23929530]
22. Miller-Cotto D, Byrnes JP. Ethnic/racial identity and academic achievement: A meta-analytic review. *Dev Rev.* 2016;41:51–70. doi :10.1016/j.dr.2016.06.003
23. Oyserman D, Harrison K, Bybee D. Can racial identity be promotive of academic efficacy? *Int J Behav Dev.* 2001;25(4):379–385. doi :10.1080/01650250042000401
24. Thomas H-MJ. Racial-ethnic identity and academic achievement: psychological and motivational Mediators. In. College Station, Texas: Texas A&M University; 2013. Accessed November 30, 2020. <https://oaktrust.library.tamu.edu/handle/1969.1/151133>
25. Marcelo AK, Yates TM. Young children’s ethnic-racial identity moderates the impact of early discrimination experiences on child behavior problems. *Cultur Divers Ethnic Minor Psychol.* 2019;25(2):253–265. doi :10.1037/cdp0000220 [PubMed: 30058832]
26. Stein GL, Supple AJ, Huq N, Dunbar AS, Prinstein MJ. A longitudinal examination of perceived discrimination and depressive symptoms in ethnic minority youth: the roles of attributional style, positive ethnic/racial affect, and emotional reactivity. *Dev Psychol.* 2016;52(2):259–271. doi: 10.1037/a0039902 [PubMed: 26569567]
27. Tynes BM, Umaña-Taylor AJ, Rose CA, Lin J, Anderson CJ. Online racial discrimination and the protective function of ethnic identity and self-esteem for African American adolescents. *Dev Psychol.* 2012;48(2):343–355. doi :10.1037/a0027032 [PubMed: 22369340]
28. Gaylord-Harden NK, Cunningham JA. The impact of racial discrimination and coping strategies on internalizing symptoms in African American youth. *J Youth Adolesc.* 2009;38(4):532–543. doi :10.1007/s10964-008-9377-5 [PubMed: 19636726]
29. Seaton EK, Upton R, Gilbert A, Volpe V. A moderated mediation model: racial discrimination, coping strategies, and racial identity among Black adolescents. *Child Dev.* 2014;85(3):882–890. doi :10.1111/cdev.12122 [PubMed: 23668685]
30. Williams JL, Aiyer SM, Durkee MI, Tolan PH. The protective role of ethnic identity for urban adolescent males facing multiple stressors. *J Youth Adolesc.* 2014;43(10):1728–1741. doi :10.1007/s10964-013-0071-x [PubMed: 24318745]
31. Wong CA, Eccles JS, Sameroff A. The influence of ethnic discrimination and ethnic identification on African American adolescents’ school and socioemotional adjustment. *J Pers.* 2003;71(6):1197–1232. doi :10.1111/1467-6494.7106012 [PubMed: 14633063]
32. Sanders MG. Overcoming obstacles: academic achievement as a response to racism and discrimination. *J Negro Educ.* 1997;66(1):83–93. doi :10.2307/2967253
33. Brady SS, Parker CJ, Jeffries EF, Simpson TY, Brooke-Weiss BL, Haggerty KP. Implementing Communities That Care: Challenges, solutions, and opportunities in an urban setting. *Am J Prev Med.* 2018;55(5S1):S70–S81. doi :10.1016/j.amepre.2018.05.019 [PubMed: 30670204]
34. Parker CJ, Winston III W, Simpson TY, Brady SS. Community readiness to adopt Communities That Care in an urban setting. *Am J Prev Med.* 2018;55(5S1):S59–S69. doi :10.1016/j.amepre.2018.05.022 [PubMed: 30670203]

35. Oyserman D, Brickman D, Rhodes M. Racial-ethnic identity in adolescence: Content and consequences for African American and Latino youth. In Fuligni A, eds, *Social Categories, Identities and Educational Participation* Russell Sage Foundation. 2007;91–114.
36. Goodman R The Strengths and Difficulties Questionnaire: a research note. *J Child Psychol Psychiatry*. 1997;38(5):581–586. doi :10.1111/j.1469-7610.1997.tb01545.x [PubMed: 9255702]
37. Kia-Keating M, Dowdy E, Morgan ML, Noam GG. Protecting and promoting: an integrative conceptual model for healthy development of adolescents. *J Adolesc Health*. 2011;48(3):220–228. doi :10.1016/j.jadohealth.2010.08.006 [PubMed: 21338891]
38. Cohen S, Janicki-Deverts D, Chen E, Matthews KA. Childhood socioeconomic status and adult health. *Ann N Y Acad Sci*. 2010;1186:37–55. doi :10.1111/j.1749-6632.2009.05334.x [PubMed: 20201867]
39. Loyd AB, Williams BV. The potential for youth programs to promote African American youth’s development of ethnic and racial identity. *Child Dev Perspect*. 2017;11(1):29–38. doi :10.1111/cdep.12204 [PubMed: 28503192]
40. Agenda Flourish. Our Agenda. 2019. Accessed November 23, 2020. <https://flourishagenda.com/>
41. Screening for Adverse Childhood Experiences. ACEs Aware. <https://www.acesaware.org/screening-for-adverse-childhood-experiences/>. Accessed March 19, 2021.
42. American Academy of Family Physicians. Social Determinants of Health: Guide to Social Needs Screening. https://www.aafp.org/dam/AAFP/documents/patient_care/everyone_project/hops19-physician-guide-sdoh.pdf. Published 2019. Accessed March 19, 2021.
43. Briscoe FM, Khalifa MA. ‘That racism thing’: a critical race discourse analysis of a conflict over the proposed closure of a black high school. *Race Ethn Educ*. 2015;18(6):739–763. doi :10.1080/13613324.2013.792798
44. Voices for Racial Justice. Our Mnisota: A shared vision for freedom, justice, & equity in our state. 2017. Accessed November 23, 2020. <https://voicesforracialjustice.org/tools-for-action/>
45. City of Minneapolis. Minneapolis 2040-The city’s comprehensive plan. 2018. Accessed November 30, 2020. <https://minneapolis2040.com/>

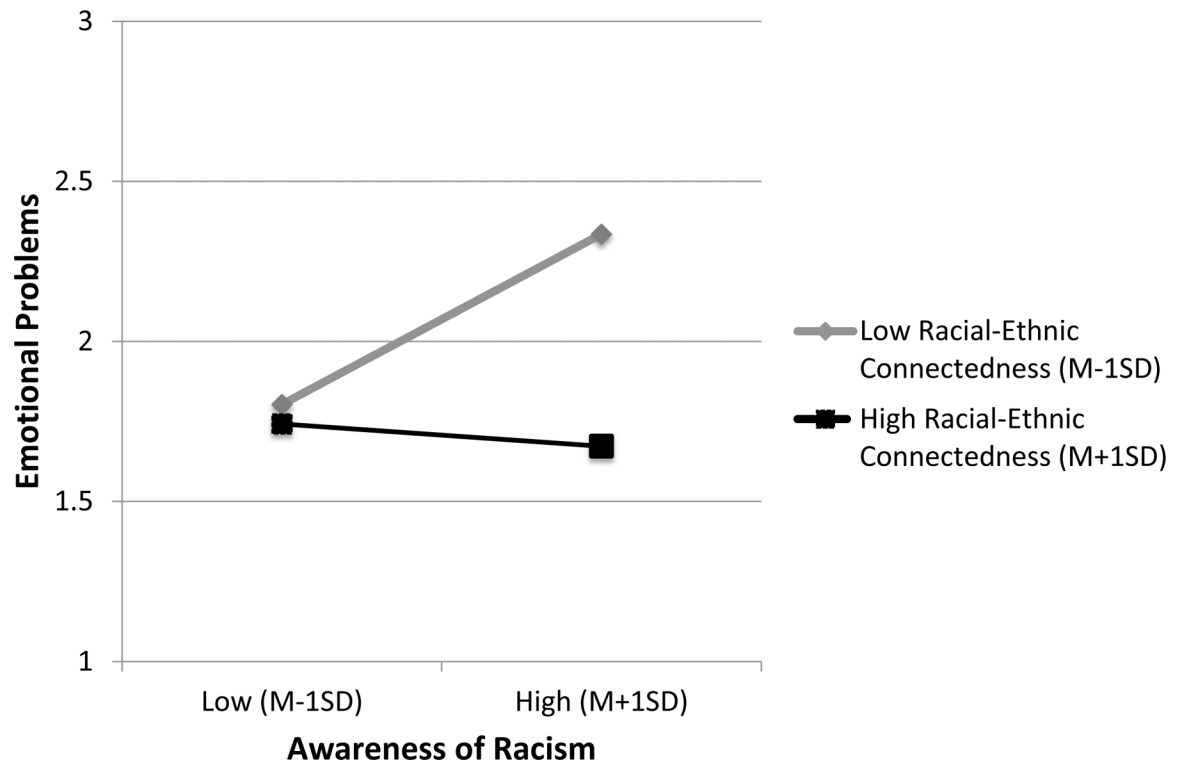


Figure 1. Emotional Problems by Awareness of Racism and Racial-Ethnic Connectedness

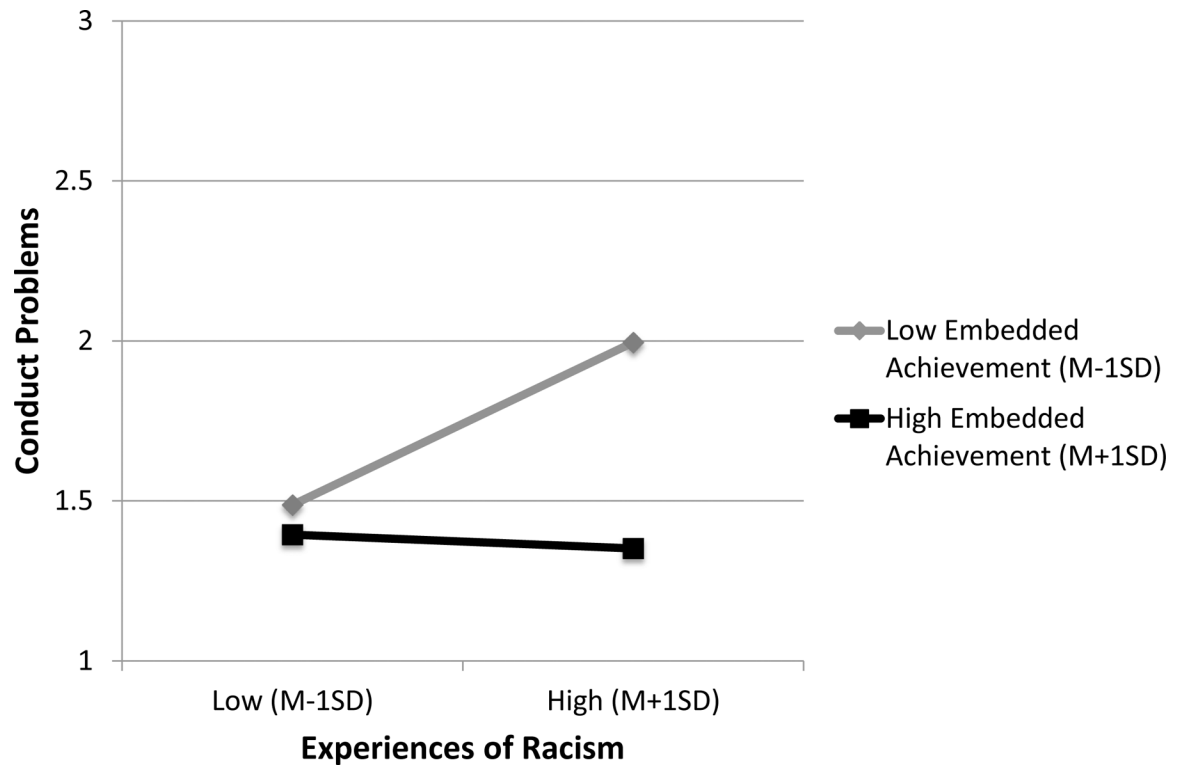


Figure 2.
Conduct Problems by Experiences of Racism and Perceptions of Embedded Achievement

Table 1.

Distributions of and Correlations between Study Variables^a

	M	SD	Study variables					
			1	2	3	4	5	6
Race-related stressors								
1. Awareness of racism	2.04	0.47	-					
2. Experiences of racism	1.51	0.65	.40***	-				
Race-related resources for resilience								
3. Racial-ethnic connectedness	2.73	0.40	.18	.07	-			
4. Embedded achievement	2.70	0.40	.23*	.15	.50***	-		
Emotional and behavioral health								
5. Emotional problems	1.76	0.51	.13	.12	-.25*	-.25*	-	
6. Conduct problems	1.52	0.38	.08	.16	-.31**	-.33**	.29*	-
7. Academic investment	2.60	0.24	-.01	.02	.23 [†]	.56***	-.15	-.51***

Note:

^aCorrelations are adjusted for age and gender.

[†] p<.10;

* p<.05;

** p<.01;

*** p<.001.

Table 2.

Regression of Study Outcomes on Race-Related Stressors and Resources for Resilience.

	Emotional problems		Conduct problems		Academic investment	
	<i>B</i>	95% CI	<i>B</i>	95% CI	<i>B</i>	95% CI
Main effects of race-related stressors and resources for resilience^a						
Entered individually						
Awareness of Racism	0.14	-0.11, 0.39	0.07	-0.13, 0.26	-0.01	-0.13, 0.12
Experiences of Racism	0.10	-0.09, 0.28	0.10	-0.05, 0.24	0.01	-0.09, 0.10
Racial-ethnic connectedness	-0.31*	-0.60, -0.03	-0.30**	-0.51, -0.08	0.14****	-0.00, 0.28
Embedded achievement	-0.31*	-0.60, -0.03	-0.32**	-0.53, -0.10	0.35***	0.23, 0.47
Entered simultaneously						
Awareness of racism	0.19	-0.08, 0.46	0.09	-0.11, 0.29	-0.08	-0.19, 0.04
Experiences of racism	0.08	-0.12, 0.27	0.11	-0.04, 0.25	-0.01	-0.09, 0.08
Racial-ethnic connectedness	-0.22	-0.55, 0.10	-0.19	-0.43, 0.05	-0.04	-0.17, 0.10
Embedded achievement	-0.27	-0.60, 0.06	-0.27*	-0.52, -0.03	0.39***	0.24, 0.53
Interaction effects between race-related stressors and resources for resilience^{a,b}						
Awareness of racism x racial-ethnic connectedness	-0.80*	-1.46, -0.14	-0.15	-0.67, 0.38	-0.15	-0.50, 0.20
Awareness of racism x embedded achievement	-0.59****	-1.18, 0.00	-0.26	-0.72, 0.20	0.08	-0.17, 0.34
Experiences of racism x racial-ethnic connectedness	-0.49*	-0.96, -0.02	-0.22	-0.58, 0.14	0.06	-0.18, 0.30
Experiences of racism x embedded achievement	-0.55****	-1.10, -0.01	-0.53*	-0.94, -0.13	0.11	-0.13, 0.36

Note:

^a All analyses are adjusted for age and gender.

^b Analyses include main effects of variables in the interaction term. A single interaction is tested per regression analysis.

* p<.05;

** p<.01;

*** p<.001;

**** p<.10.