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Collective ethnic-racial identity and health outcomes among African American youth: Examination of promotive and protective effects

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Abstract

Objectives: Racial discrimination is associated with numerous negative health outcomes, including increased risk for depression and anxiety symptoms and substance use. Positive affect towards of one's ethnic or racial group (i.e., ethnic-racial identity affirmation) has been shown to buffer the negative effects of racial discrimination on health outcomes. The extent to which one believes their group is valued by others (i.e., positive collective ethnic-racial identity) has also been proposed to be protective. However, to date a limited body of research has examined the moderating effect of collective ethnic-racial identity on health, and among available studies, findings are mixed.

Methods: 612 African American youth (58.2% female, mean grade = 8) completed measures on experiences of discrimination, mood symptoms, substance use, ethnic-racial identity affirmation, and collective ethnic-racial identity (assessed using the collective self-esteem scale).

Results: Controlling for demographic variables and affirmation, a significant main effect was found for collective ethnic-racial identity, such that believing that others viewed your group positively was associated with better health outcomes among African American youth. However, collective ethnic-racial identity was not found to buffer the effects of discrimination on health outcomes.

Conclusions: These findings highlight the importance of examining collective ethnic-racial identity and the promotive effect it can have on health outcomes for African Americans. More research is needed to better understand if there are health outcomes in which collective ethnic-racial identity may also mitigate risk as a consequence of racial discrimination.

Keywords

African Americans; racial discrimination; mood; substance use; collective ethnic-racial identity

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Racial discrimination is unfortunately a common experience for African American youth, with up to 90 percent of youth reporting some experience with discrimination within the past year (Gibbons et al., 2012; Grollman, 2012; Lanier, Sommers, Fletcher, Sutton, & Roberts, 2017). Moreover, frequent experiences with discrimination is associated with numerous behavioral and health outcomes, including declines in academic performance, and greater risk for depressive symptoms, anxiety symptoms, and substance use (Gaylord-Harden & Cunningham, 2009; Gibbons et al., 2010; Gibbons et al., 2012; Pascoe & Richman, 2009; Williams & Mohammed, 2009). Given these outcomes, a plethora of research has been conducted examining factors that may mitigate the effects of racial discrimination among African American youth. At the environmental or contextual level, participation in traditional activities, spirituality, and religious support seeking have been shown to significantly attenuate the adverse effects of discrimination on depressive symptoms and psychological distress (Ellison, DeAngelis, & Güven, M, 2017; Hope, Assari, Cole-Lewis, & Caldwell, 2017). Additional studies examining interpersonal factors have also shown that racial socialization (i.e., explicit discussion about racism typically provided by parents or caregivers), involved parenting, parental support, and affiliation with prosocial peers also attenuate the effect of racial discrimination on health and substance use outcomes (Gibbons, Etcheverry, Stock, Gerrard, Weng, Kiviniemi, & O'hara, 2010; Gibbons et al., 2012; Neblett, Chavous, Nguyen, & Sellers, 2009; Neblett, Terzian, & Harriott, 2010).

At the individual level, a growing body of literature has been conducted examining both the protective and promotive effect of ethnic-racial identity on health outcomes for African American youth. Among the dimensions of ethnic-racial identity, one of the most commonly assessed dimensions is affirmation (also referred as commitment, pride, private regard, or group esteem), which is defined as the positive evaluation of and affect towards one's ethnicity or race (Rivas-Drake et al., 2014a; Rivas-Drake et al., 2014b; Umaña-Taylor et al., 2014). Affirmation has been associated with positive psychosocial and behavioral outcomes for African American youth, including better well-being, self-esteem, social functioning, academic achievement and attitudes, and fewer externalizing behaviors, internalizing problems, and depressive symptoms (Miller-Cotto & Byrnes, 2016; Rivas-Drake et al., 2014a, Rivas-Drake et al., 2014b). Moreover, high affirmation significantly reduces the impact of discrimination on these health outcomes among African Americans (Bynum, Best, Barnes, & Burton, 2008; Pascoe & Richman, 2009; Wong, Eccles, & Sameroff, 2003). For example, Williams, Aiyer, Durkee, and Tolan (2014) found among their sample of predominately African American male youth that the negative effect of racial discrimination on delinquency (e.g., stealing, truancy) and criminal offending was not found among youth with high affirmation; yet racial discrimination was associated with greater delinquency and offending among youth with low affirmation.

However, one limitation of these studies is the exclusion of collective ethnic-racial identity, a component of ethnic-racial identity that refers to the extent to which an individual believes their group is valued by others. Collective ethnic-racial identity has been measured mainly by the public regard subscale from the Multidimensional Inventory of Black Identity (MIBI; Sellers, Rowley, Chavous, Shelton, & Smith, 1997) and the public collective self-esteem subscale from the Collective Self-Esteem Scale - Race measure (CSES-R; Crocker, Luhtanen, Blaine, & Broadnax, 1994). In line with theories of appraisal (Cooley, 1922;

Cross, 1991), it is posited that believing that others have a positive view of your ethnic or racial group is promotive, increasing both psychological well-being and behavioral health outcomes, and can also be a protective factor against the negative effect of stressors, such as racial discrimination. However, to date, empirical evidence of the promotive and protective effect of collective ethnic-racial identity on health outcomes for African American youth is dearth, with mixed findings particularly in regard to the protective effect of collective ethnic-racial identity.

In line with theory, there is a body of research that found support for a promotive effect of high public regard (i.e., believing other view your race positively) on academic for African American youth (Chavous et al., 2003) and psychological distress among African American youth and adults (Yip, Seaton, & Sellers, 2006). Additional support was found by a meta-analysis by Lee and Ahn (2013), which synthesized results of 27 studies and found a significant negative correlation between high public regard and psychological distress. Collective ethnic-racial identity as measured by the public collective self-esteem scale has also been shown to be associated with positive outcomes, including greater spiritual-centered Africultural coping styles (Constantine, Donnelly, & Myers, 2002) and more positive academic attitudes (Tang et al., 2016) among African Americans. In regard to protective effects, Barrie et al. (2016) also found that positive collective self-esteem buffered the negative effect of stereotype threats on perceived stress among African American adolescent girls.

However, there is a second body of research that contradicts these findings, suggesting that high collective ethnic-racial identity is a risk factor for health outcomes among African American youth. Specifically, studies utilizing the public regard scale have found that collective ethnic-racial identity is associated with increased risk for depressive symptoms and psychological distress among African American adolescents and young adults (Hurd, Sellers, Cogburn, Butler-Barnes, & Zimmerman, 2013; Ho & Sidanius, 2010). Fuller-Rowell et al. (2012) also found that public regard moderated the association between discrimination and substance use such that the negative relationship between discrimination and substance use was weaker for African American youth who reported low levels of public regard (i.e., believing other groups held more negative attitudes towards African Americans). Similarly, Sellers, Copeland-Linder, Martin, & Lewis (2006) found that the negative effect of racial discrimination on depressive symptoms, perceived stress, and psychological well-being was weaker for African American youth with low public regard compared to those with high public regard. Researchers have posited that for African American youth with high collective ethnic-racial identity, experiences of discrimination are inconsistent with their positive worldview of how others view their race, and this inconsistency results in greater distress (e.g. Sellers & Shelton, 2003), which in turn increases risk for negative health outcomes (e.g., Seller et al., 2006; Jones, Lee, Gaskin, & Neblett, 2014). Yet, there is also a third body of research, utilizing the public regard subscale, that have observed non-significant effects on both the direct (Byrd & Chavous, 2011) and moderating effect (Byrd & Chavous, 2011; Seaton, Upton, Gilbert, & Volpe, 2014) of collective ethnic-racial identity on health and behavioral outcomes among African American youth.

In sum, although there are some mixed findings as to whether collective ethnic-racial identity is promotive for African American youth, there is evidence, particularly based on the meta-analysis by Lee and Ahn (2013), to suggest that higher collective ethnic-racial identity is associated with better health outcomes. However, findings are less consistent regarding the promotive or buffering effect of collective ethnic-racial identity on health outcome as a consequence of racial discrimination among African American youth. Understanding both the direct and moderating effect of collective ethnic-racial identity can help determine the best ways to discuss race relations and global views of African Americans to youth and determine the best strategies to reduce risk for negative health outcomes. Moreover, given that the majority of research in this area is based on utilization of the public regard subscale from the MIBI to measure collective ethnic-racial identity, additional research is needed to confirm whether findings are consistent when utilizing the collective self-esteem subscale from the CSES-R to measure collective ethnic-racial identity.

Current Study

The current study aims to add to the literature base on the effect of collective ethnic-racial identity on health outcomes for African American youth. Moreover, we will examine this effect controlling for affirmation in order to understand the unique effect of collective ethnic-racial identity that is not explained by other promotive factors. For the current study we used the public collective self-esteem subscale from the CSES-R to measure collective ethnic-racial identity. We hypothesize that after controlling for demographic variables and affirmation, collective ethnic-racial identity would have a promotive effect on each health outcomes such that higher collective ethnic-racial identity would be uniquely associated with better health outcomes (i.e., lower depressive symptoms, anxiety symptoms, and substance use). Given mixed findings on the protective effect of collective ethnic-racial identity on health outcomes as a consequence of racial discrimination, with previous studies documenting either a protective, risk, or null effect, no a priori hypotheses were made.

Method

Procedure and Participants

Our study involves participants drawn from the first year of a 5-year study (2005–2009) examining school and health behavior outcomes among students between fourth and twelfth grade. Participants were sampled from 159 schools (21 school districts) in a large Midwestern county. Informed consent forms were sent home to parents of potential participants and were asked to return signed forms back to the school if they wished to provide consent. This consent procedure occurred each year, as the parent study was not designed to be longitudinal, but rather an annual assessment of health behaviors among school-aged youth. For the current study, the first wave of data collection was utilized to examine the study hypotheses. A total of 612 African American participants provided data on the variables of interest. A majority of the participants were female (n = 361, 58.4%) and were in 8th grade (range 5–11).

Measures

Demographic and background measure.—Participants were asked to indicate their sex, grade, and ethnic and racial background (i.e., African American, American Indian, Asian, Hispanic, Multiracial, White, and Other). Only participants who self-identified as African American were included in the current study.

Racial Discrimination.—A single item was used to assess racial discrimination among youth. Participants were asked the following prompt: "In the past year, how often did a kid at my school tease me about my race/ethnicity or the color of my skin?" Participants responded on a 4-point Likert scale, with 1 (*never*), 2 (*not much*), 3 (*sometimes*), and 4 (*a lot*). This item is similar to those used in previous studies to assess experiences of racial discrimination (Durkin et al., 2011; Fisher et al., 2015).

Ethnic Identity Affirmation.—The Multi-group Ethnic Identity Measure-Revised (MEIM-R; Roberts et al., 1999) is a 12-item measure designed to measure two components of ethnic identity: exploration and (5 items) commitment (7 items), with items rated on a 4-point Likert scale ranging from 1 (*strongly disagree*) to 4 (*strongly agree*). The commitment subscale was utilized for the current study and closely aligns with the affirmation subscale from the original MEIM (Phinney, 1992). Sample items included on the commitment scale are "I feel good about my cultural or ethnic background," "I have a lot of pride in my ethnic group," and "I feel a strong attachment towards my own ethnic group." Higher scores on the scale are indicative of greater commitment or affirmation of youth's ethnic-racial group. The subscale had high internal consistency ($\alpha = 0.89$), similar to other studies among African American youth (Else-Quest & Morse, 2015; Halgunseth, Jensen, Sakuma, & McHale, 2016).

Collective Ethnic-Racial Identity.—The Collective Self Esteem Scale - Race (CSES-R; Crocker, Luhtanen, Blaine, & Broadnax, 1994) is a 16-item measure used to asses an individual's degree of ethnic-racial identity. The CSES-R has four subscales (identity, membership, private, and public), that have 4-items each. However, within the current study, only the public collective self-esteem subscale was administered, which assesses the extent to which one believes their group is valued by others. Participants responded to the four items of the public collective self-esteem subscale on a 4-point Likert scale, ranging from 1 (*strongly disagree*) to 4 (*strongly agree*). Sample items include on the scale are "Overall, my racial/ethnic group is considered good by others" and "In general, other people respect my race/ethnicity." Higher scores were indicative of more positive views of one's race by others. Reliability for the scale within the current study was low ($\alpha = 0.60$), although similar to the Cronbach's alpha observed in a similar study examining the public collective self-esteem scale among an adolescent African American sample (e.g. Constantine, Donnelly, & Myers, 2002).

Depressive Symptoms.—The Center for Epidemiologic Studies Depression Scale (CES-D; Radloff, 1977) is a 13-item self-report measure frequently used to assess depressive symptomatology with children, adolescents, and adults. The CES-D assesses depressive behaviors and feelings experienced in the past week. For this study, the time frame was

extended to the last year. Responses were rated on a 4-point scale ranging from 1 (*Not at all*) to 4 *(A lot*). The CES-D has been shown to have high internal consistency among African American youth (Lindsey, Joe, & Nebblitt, 2010; Turner, Latkin, Sonenstein, & Tandon, 2011). For the current study, the scale also showed high internal consistency (α = 0.87).

Anxiety Symptoms.—The anxiety scale was adapted from the State-Trait Anxiety Inventory for Children (STAIC; Spielberger, 1973). The STAIC is a 10-item measure developed to examine anxiety in elementary school children (ages 9–12). For the current study, the stem "During the past year, how often did the following things happen?" was added to the measure, with response choices ranging 1 to 4, where 1 (*not at all*), 2 (*a little*), 3 (*some*), and 4 (*a lot*). The STAIC has been shown to have high internal consistency among African American youth (α = 0.86, Wasserberg, 2014), with a similar internal consistency found for the current study (α = 0.91).

Substance use.—The substance use measure was adapted from items included in various national studies conducted among youth (e.g., Monitoring the Future, YRBSS). Participants were asked to indicate how many days in the past 30 days had they engaged in the following 6 behaviors: "smoke cigarettes," "use smokeless tobacco," "had at least one drink of alcohol," "used marijuana," "used inhalants," and "used other drugs." Responses choices were provided on a 7-point Likert scale, with 1 (*0-days*), 2 (*1 or 2 days*), 3 (*3–5 days*), 4 (*6–9 days*), 5 (*10–19 days*), 6 (*20–29 days*) and 7 (*everyday*). For the current study, the frequency measure was based on the composite score of the six substance use items. There was high internal consistency with coefficient alphas of 0.84.

Data Analyses

All analyses were performed using SPSS 24.0. To examine the study hypotheses of a promotive and protective effect of collective ethnic-racial identity, a hierarchical regression analysis was performed in the following steps: step 1: sex and grade, step 2: racial discrimination, step 3: affirmation, step 4: collective ethnic-racial identity and step 5: interactive term of the mean centered values for racial discrimination and collective ethnic-racial identity. Three models were run for each health outcome (i.e., depressive symptoms, anxiety symptoms, and substance use). Significant interactive effects were probed using the PROCESS macro Model 1 (simple moderation, specified by Preacher, Rucker, & Hayes, 2007), with all previously used covariates included in the analysis. The specified health outcome was indicated as the dependent variable, racial discrimination indicated as the independent variable, and collective ethnic-racial identity indicated as the moderator.

Results

Means and standard deviations for the measures of interest, as well as initial bivariate and spearman correlations between all study variables are shown in Table 1. Correlation analysis revealed that sex and grade were significantly correlated with most variables of interest, which was also confirmed by one-way ANOVA. Thus, sex and grade were included as covariates in subsequent analyses. Affirmation were also positively correlated with all of the outcome variables. Regarding the variables of interest, past year discrimination was

positively associated with all health outcomes, whereas collective ethnic-racial identity was negatively associated with all health outcomes.

Direct and moderating role of collective ethnic-racial identity on health outcomes

Depressive Symptomatology.—After controlling for the effect of sex and grade, racial discrimination was found to have a significant effect on depressive symptoms ($\beta = .22$, $p < .001$). In step three, affirmation significantly predicted lower depressive symptoms ($\beta = -.11$, $p = .004$). In step four, collective ethnic-racial identity was found to have a significant negative effect in the prediction of depressive symptoms above the effect of the other factors ($\beta = -.17$, $p < .001$). In step five, an interactive effect between racial discrimination and collective ethnic-racial identity was non-significant ($\beta = .03$, $p = .446$).

Anxiety Symptoms.—After controlling for the effect of sex and grade, racial discrimination was found to have a significant effect on anxiety symptoms ($\beta = .20$, $p < .001$). In step three, affirmation was significantly predictive of higher anxiety symptoms ($\beta = .09$, $p = .021$). In step four, collective ethnic-racial identity was found to have a significant effect in the prediction of anxiety symptoms above the effect of the other factors ($\beta = -.14$, $p = .001$). In step five, an interactive effect between racial discrimination and collective ethnic-racial identity was non-significant ($\beta = .02$, $p = .545$).

Substance Use.—After controlling for the effect of sex and grade, racial discrimination was found to have a significant effect on substance use ($\beta = .15$, $p < .001$). In step three, affirmation significantly predicted lower substance use ($\beta = -.19$, $p < .001$). In step four, collective ethnic-racial identity was found to have a non-significant effect in the prediction of substance use above the effect of the other factors ($\beta = -.05$, $p = .229$). In step five, the interactive effect between perceived discrimination and collective ethnic-racial identity on substance use was also non-significant ($\beta = -.02$, $p = .650$). See Tables 2–4 for detailed results of the hierarchical linear regression analyses.

Discussion

Racial discrimination is a chronic stressor that impacts the lives of African American youth, and has been consistently found to elevate risk for negative mental, behavioral, and physical health outcomes including declines in academic performance, and greater risk for higher psychological distress and substance use (e.g., Williams & Mohammed, 2009). The current study aimed to examine both the promotive and protective effect of collective ethnic-racial identity on health outcomes among a sample of African American youth. Utilizing the public collective self-esteem subscale from the CSES-R to assess collective ethnic-racial identity, we found after controlling for demographic variables and ethnic-racial identity affirmation, a significant promotive effect of collective ethnic-racial identity on depressive and anxiety symptoms. However, when examining the moderating effect of collective ethnic-racial identity on each health outcome, a non-significant effect was observed.

These findings have important clinical and research implications. First, findings suggest that for African American youth, believing that society holds a positive view towards their racial group is promotive, as it is associated with better psychological outcomes. Thus, this finding

adds support to the small, but growing, body of literature on the benefit of collective ethnic-racial identity on a number of outcomes, including elevations in academic outcomes (Tang et al., 2016) and lower psychological distress and depression (Settles, Navarrete, Pagano, Abdou, & Sidanius, 2010) among African American youth. Yet, most contemporary models of racial socialization, in which youth are socialized about ethnic-racial identity, racial discrimination and tools to manage race relations tend to focus more on society's negative views of African Americans rather than positive views (Hughes et al., 2006; Priest, Walton, White, Kowal, Baker, & Paradies, 2014), which associated with lower collective ethnic-racial identity (Rivas-Drake, Hughes, & Way, 2009; Stevenson & Arrington, 2009; Tang et al., 2016). Studies have also documented that higher consumption of Black information via media outlets, such as listening to Black radio, watching Black TV shows or movies, or reading Black newspapers, magazines, or literature, decreases collective ethnic-racial identity (Sullivan & Platenburg, 2017), prompting African Americans to believe other groups have more negative perceptions of their racial group. It is also the case that through personal experiences with racial discrimination, African American youth are directly confronted with the negative stereotypes and biases that other groups associate with African Americans, which further decreases collective ethnic-racial identity (Rivas-Drake et al., 2009). Thus, there are a number of ways in which positive collective ethnic-racial identity is weakened for African American youth.

However, there is evidence to suggest at least two means by which collective ethnic-racial identity can be strengthened. First, several researchers have highlighted the promotive effect positive interracial interactions can have on improvements in collective ethnic-racial identity (Hughes, Way, & Rivas-Drake, 2011; Settles et al., 2010; Sullivan & Platenburg, 2017), as it provides personal experiences that contradict the belief that other races dislike or devalue African Americans. Second, it has also been proposed that teaching African Americans cognitive techniques to reframed their beliefs about society's views of their race, such as noting the election of President Barack Obama as a historical shift in society on who can be president of the United States, can also improve collective ethnic-racial identity (Settles et al., 2010). By developing a positive collective ethnic-racial identity, evidence suggests that this can in turn not only increase African American youth's self-esteem (Settles et al., 2010) but also potentially reduce perceptions of racial discrimination (Sellers, Caldwell, Schmeelk-Cone, & Zimmerman, 2003; Yap, Settles, & Pratt-Hyatt, 2011), and subsequently decrease risk for negative behavioral and health outcomes. Thus, more research is needed to understand the most effective techniques to help promote and improve positive views of African Americans within U.S. society, as well as African Americans perception on how other's view their race.

Our findings also suggest that although collective ethnic-racial identity was promotive, it did not buffer risk for negative outcomes as a consequence of experiencing racial discrimination. This finding is in contradiction to those by Fuller-Rowell et al. (2012) and Sellers et al. (2006), who found that low public regard (a subscale similar to pubic collective self-esteem) was promotive while high levels of public regard increased risk for substance use and health outcomes. It is plausible that the contradictory findings may be due to the current study's focus on race-based discrimination by peer actors within school settings, as Fuller et al. (2012) focused on racial discrimination by teachers and Sellers et al. (2006) examined non-

specific racial discrimination in which the type of actor was not specified. These mixed findings suggest that the impact of collective ethnic-racial identity may differ based on how racial discrimination is assessed.

Additionally, the current study included the affirmation dimension of ethnic-racial identity as a covariate in the model, which other studies often exclude. It has been suggested that when multiple aspects of racial identity are taken into account, collective ethnic-racial identity may be less impactful in comparison to those aspects of identity that focus on personal appraisal of one's race and attachment to that race. Specifically, Chavous and colleagues (2003) and Seaton (2009) examined racial identity profiles among a large sample of African American youth based on the extent to which youth believed society valued African Americans (i.e., public regard), they valued being African American (i.e., private regard), and felt race was a central component to their identity (i.e., race centrality). Both studies found that a majority of the youth fell into the *idealized* group, which was characterized by high race centrality, high private regard, and high public regard. This group was closely followed by youth who fell into the *buffering/defensive* group, which was characterized by high race centrality and high private regard, but low pubic regard. The least common was the *alienated* group, characterized by low public regard, private regard, and centrality. Positive behavioral outcomes were more likely among the idealized and buffering/defensive groups than the alienated group (Chavous, Bernat, Schmeelk-Cone, Caldwell, Kohn-Wood, & Zimmerman 2003). Moreover, Seaton (2009) found that racism was only found to increase depressive symptoms for the alienated group, with no differences found for either the idealized or buffering/defensive groups.

These findings alongside the current study's findings suggest that collective ethnic-racial identity can have a protective effect on health outcomes for African American youth when examined in isolation. However, when determining how best to protect youth against negative effect of discrimination, collective ethnic-racial identity may play a less central role compared to youth's positive attachment to their race, particularly for psychological health outcomes (Harris-Britt et al., 2007; McGill, Hughes, Alicea, & Way, 2012). It is also plausible that the same is true for behavioral outcomes, such as substance use; however, to date no such study has examined racial identity profiles on substance use outcomes as a consequence of discrimination. Given that racial discrimination is commonly experienced among African American youth (Gibbons et al., 2012; Grollman, 2012; Lanier et al., 2017) and substance use becomes more prevalent during adolescence (Derefinko et al., 2016; Nelson, Van Ryzin, & Dishion, 2015), gaining a better understanding as to factors that can attenuate risk, including collective ethnic-racial identity and its interactions with other aspects of racial identity, is critical.

Although these findings on the unique and interactive effect of collective ethnic-racial identity on health outcomes is novel, there are limitations of the study, primarily in regard to the measurement of collective ethnic-racial identity and racial discrimination. As discussed in the measurement section, the Cronbach alpha for the public collective self-esteem scale was low (alpha = .60), though consistent with others utilizing the measure among African American youth (Constantine et al., 2002). We ran a post-hoc analysis using a two-item measure, similar to that used by Chavous et al. (2003), which produced a reliability

coefficient of 0.74. With the modified public collective self-esteem scale, a significant moderating effect was observed for substance use ($\beta = -.14$, $p = .001$), with higher collective ethnic-racial identity reducing risk for substance use as a consequence of experiencing discrimination among African American youth. Thus, further work is needed on confirming the reliability, as well as the validity of the collective ethnic-racial identity, particularly among African American adolescents (Casey-Cannon et al., 2011; Utsey & Constantine, 2006). Related to measurement, although the MIBI public regard and the CSES-R public collective self-esteem are highly correlated ($r = .91$, $p < .001$; Casey-Cannon, Coleman, Knudtson, & Valazquez, 2011), with three of the four items from the public collective self-esteem subscale overlapping with the public regard subscale of the MIBI, some inconsistencies in findings on the promotive and protective effect of collective ethnic-racial identity may be due to measurement differences. The MIBI was not included as measure in the current study, as youth of all ethnic backgrounds were included. Thus, future studies should examine the promotive and protective effect of collective ethnic-racial identity, controlling for other forms of identity, utilizing both subscales.

Secondly, racial discrimination was assessed using a single-item measure. Although as noted in the measurement section, the use of a one-item racial discrimination measure is not uncommon (e.g., Durkin et al., 2011; Fisher et al., 2015), the item is limited as it only assesses racial discrimination experienced by one's school peers. Douglass et al. (2016) documented that peer-based discrimination is particularly impactful on health outcomes during adolescence, given the heightened role of social feedback during this developmental period. However, racial discrimination occurs in multiple contexts within and outside the school setting, and by multiple actors other than peers (e.g., school administration, teachers, police, neighbors, strangers, etc.). There is also evidence that single item measures of racial discrimination are less reliable than multi-item measures (Krieger, Smith, Naishadham, Hartman, & Bardeau, 2005). It is plausible that with the use of a more comprehensive multi-faceted assessment of racial discrimination, the moderating effect of collective ethnic-racial identity may have been observed, and that the lack of an effect was due to the usage of a single item measure of only peer-based discrimination. Future studies are needed to examine the potential moderating role of collective ethnic-racial identity on the effect of racial discrimination more broadly on health outcomes among African American youth.

Conclusion

In sum, the present study examined the promotive effect of collective ethnic-racial and its protective effect on health outcomes due to experiences of discrimination. The finding of a promotive effect of collective ethnic-racial identity underscores the importance of including this aspect of ethnic-racial identity within risk and resilience models. Moreover, it provides important implications for parents and caregivers on the impact of socializing African American youth to prepare for racial discrimination and biases, but also the positive views of African Americans within society. Lastly, we did not find support for the moderating effect of collective ethnic-racial identity on health outcomes as a consequence of racial discrimination. However, given the small body of research on the topic, variations in the measurement of collective ethnic-racial identity across studies, as well as emerging support

for the utility of ethnic-racial identity profiles to understand risk, more research in this area of study is warranted.

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Table 1

Associations of Study Variables

	Mean [SD]	Grade	RD	Dep	Anx	SU	Aff	CERI
Sex		.03	.02	.23**	.24**	−.01	−.15**	−.02
Grade			.04	.11**	.11**	.10*	.00	−.25**
RD	1.54 [.895]			.23**	.21**	.15**	−.04	−.23**
Dep	26.37 [8.08]			(.87)	.62**	.20**	−.08*	−.24**
Anx	23.70 [8.06]				(.91)	−.06	.12**	−.18**
SU	6.82 [3.15]					(.84)	−.19**	−.12**
Aff	22.54 [4.36]						−(.89)	.15**
CERI	11.34 [2.51]							(.60)

Note. Sex: 0=Male, 1=Female; RD = racial discrimination; Dep = depressive symptoms; Anx = anxiety symptoms; SU = substance use; Aff = affirmation; CERI = collective ethnic-racial identity. Parentheses = reliability coefficients

* $p < .05$,

** $p < .01$ (2-tailed)

Table 2

Hierarchical Regression Analyses Examining the Effects of Racial Discrimination, Affirmation, and Collective Ethnic-Racial Identity on Depressive Symptoms

Variable	Step 1	Step 2	Step 3	Step 4	Step 5
Sex	.23***	.23***	.24***	.24***	.24***
Grade	.11**	.10*	.10*	.06	.06
Racial Discrimination		.22***	.22***	.18***	.19***
Affirmation			−.11**	−.09*	−.08
CERI				−.17***	−.17***
Racial Discrimination x CERI					.03
R^2	.07***	.11***	.13**	.15***	.15

Note: CERI = collective ethnic-racial identity

* $p < .05$,

** $p < .01$,

*** $p < .001$ (2-tailed)

Table 3

Hierarchical Regression Analyses Examining the Effects of Racial Discrimination, Affirmation, and Collective Ethnic-Racial Identity on Anxiety Symptoms

Variable	Step 1	Step 2	Step 3	Step 4	Step 5
Sex	.24***	.24***	.22***	.22***	.22***
Grade	.10*	.09*	.09*	.06	.06
Racial Discrimination		.20***	.21***	.18***	.18***
Affirmation			.09*	.11**	.11**
CERI				−.14**	−.14**
Racial Discrimination x CERI					.02
R^2	.07***	.11***	.12*	.13**	.13

Note: CERI = collective ethnic-racial identity

* $p < .05$,

** $p < .01$,

*** $p < .001$ (2-tailed)

Table 4

Hierarchical Regression Analyses Examining the Effects of Racial Discrimination, Affirmation, and Collective Ethnic-Racial Identity on Substance Use

Variable	Step 1	Step 2	Step 3	Step 4	Step 5
Sex	−.01	−.02	.01	.01	.01
Grade	.06	.05	.05	.04	.04
Racial Discrimination		.15***	.14***	.13**	.13**
Affirmation			−.19***	−.18***	−.18***
CERI				−.05	−.05
Racial Discrimination x CERI					−.02
R^2	.00	.03***	.06***	.06	.06

Note: CERI = collective ethnic-racial identity

* $p < .05$,

** $p < .01$,

*** $p < .001$ (2-tailed)