Black American Adolescent’s Efficacy in the Face of Racial Discrimination

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Abstract

The pervasiveness of racism in the U.S. and its negative impact on key development outcomes has led researchers to uncover mediators, of which this article argues efficacy should be considered. Self-efficacy, one’s belief in their capability to accomplish a task or goal, can be measured in multiple domains of functioning and contexts to predict behavior. The current study examines possible specificity in the relation between discrimination (general discrimination [GD] and school discrimination [SD]) and efficacy (academic efficacy [AE] and efficacy to combat discrimination [ECD]), whether resilience modifies these associations, and if these processes differ by gender. 879 Black youth (47% female; mean age = 12, SD = 0.58) were included in the analyses. Findings suggest that school discrimination experiences perceived resilience impact domains of efficacy differently. Resilience positively impacted AE, but no significant moderation effects were found.

Black American Adolescent’s Efficacy in the Face of Discrimination

Black American Youth’s Efficacy in the Face of Discrimination

Race related stressors (e.g., racial discrimination) are life-long stressors threatening the well-being of Black Americans, including youth’s self-beliefs and educational outcomes. Race related stress is a result of cognitively and emotionally taxing race-related incidences (Harrell, 2000). The impacts of these experiences vary by context and by individual characteristics. The school context is important when studying racial effects on self-processes in adolescents as this is where they spend a significant portion of their time.

Extant literature supports the Phenomenological Variant Ecological Systems Theory (PVEST; Spencer et al., 1997) and upholds that one’s race can be risk factor for stress, and thereby negative health and behavioral outcomes. A step on the pathway to health and behavioral outcomes is an individual’s self-concept, which is
influenced by their perceived risk and stress (e.g., race) along with their perceived resilience (e.g., problem-solving skills). Spencer (2006) emphasizes the importance of exploring protective factors, such as resilience, alongside risk factors when trying to illuminate a holistic understanding of cultural resilience. Though racial discrimination has been negatively linked to various developmental outcomes, resilience strategies that promote strong self-systems (e.g., a strong racial identity or sense of efficacy) have been found to have a stronger link to outcomes than the stressor (Butler-Barnes et al., 2013; Ellis, 2018). These findings support the application of a strength-based approach.

Experiences of discrimination, on a macro-level and in important learning contexts, may affect youth’s self-concept. Self-efficacy, one’s beliefs about their abilities, predicts future thoughts, feelings, and behaviors in adolescents (Bandura, 1977) and may mediate various stressors’ impacts on youth well-being (Dupéré, Leventhal, & Vitaro, 2012; Harrell, 2000). Yet, the impact of cultural stressors (e.g., discrimination) on efficacy is not clear in extant literature. Further, this relation may vary based on one’s perceived resilience and gender. Being able to adaptively cope is a critical cultural adaptation taught to Black American youth, often informing problem solving skills for race-related stressful events (Leath et al., 2019; Spencer et al., 1997). This paper operationalizes resilience as youth’s perceived problem-solving abilities, an aspect of adaptive coping. Black youth’s gender exposes them to different cultural realities and risk factors; thus, researchers have found variations by gender in the effectiveness of different coping resources (Butler-Barnes et al., 2003; Chavous et al., 2008). As the nation continues to work towards racial equity, studying the protective factors of life-long stressors such as racial discrimination for Black American adolescents may inform interventions promoting the positive development and formation of their identities, an important part of this developmental period. There is limited literature on the adverse experience of racial discrimination’s explicit relationship with the protective factor of efficacy in Black American youth (Schwarzer & Warner, 2013). Also, many studies focus on general efficacy or one specific domain but looking at multiple domains provides more context to effects of interest. This gap in the literature was a catalyst for the current study.

The current study aims to examine how racial discrimination generally as well as in the context of school is associated with different domains of efficacy (i.e., to combat discrimination and academic) to provide direction for future research and interventions promoting positive identity development in Black American youth. This project asks the following questions: How does perceived discrimination (i.e., general and in school) in 7th grade associate with Black adolescent’s efficacy (i.e., to combat discrimination and academic) in 8th grade? Does adolescent perceived resilience moderate the relationship? Do any of these relationships vary by gender? Hypotheses include that, across genders, experiencing school discrimination and higher levels of general perceived discrimination combined with lower levels of perceived resilience will be associated with lower levels of efficacy in Black adolescents (Figure 1). With school discrimination, it is hypothesized that perceptions of a hostile environment will lead to poorer efficacy to combat discrimination (Sánchez et al., 2017). Accounting for perceived racial discrimination, higher levels of perceived resilience are hypothesized to lead to higher levels of efficacy. Support of this hypothesis would coincide with extant literature that a general confidence in one’s ability to handle adverse situations positively impacts specified domains of efficacy (e.g., academic efficacy) (Hamill, 2003). Examining gender differences in adolescence, Black boys have been found to be more susceptible to negative adjustment due to peer and teacher discrimination than Black girls, who have been found to be primarily affected by peer discrimination (Allen et al., 2022). School discrimination is hypothesized to have a stronger association with efficacy for Black boys, making resiliency a more effective and critical moderator for Black boys. The exploration of these questions may provide a better understanding of the development of self-systems in Black American youth.

Methods
Sample

A secondary data analysis of the MADICS (Maryland Adolescent Development in Context Study, 1991-2012) dataset was performed to explore the research questions. MADICS is a longitudinal study of 1,482 (61% African American) socioeconomically diverse families (family income ranging from $5,000 to more than $75,000; see Eccles, 1997). Two waves of data were used (i.e., Wave 1/7th grade and Wave 3/8th grade), which
included repeated adolescent-reported measures of similar constructs. Across Waves 1 and 3, 13 youth were excluded due to completely missing data. The final analytic sample of Black adolescents (M = 12.30 years old, SD = .58) included 935 participants (47% female) from families with an average income (parent-reported) of $45,000 - $50,000.

**Measures**

The discrimination measures were created by MADICS. Efficacy measures were created by Bandura, Cook, and Eccles for the MacArthur Network on Successful Adolescent Development and adapted for MADICS (Eccles et al., 1993; MacArthur Foundation). A conceptual model of the tested relationship can be found in Figure 1. Descriptive statistics of the measures are displayed in Table 1. Missing data is discussed.

**General Perceived Discrimination**

General perceived discrimination was measured during 7th grade (Wave 1). Youth responded to one item, “Over your lifetime, how often have you been treated differently from other people because you are Black?”, using a scale of 1 (never) to 5 (very often). Most youth perceived lower levels of racial discrimination (Mean = 1.82, SD = 1.14).

**Discrimination in School**

Discrimination in school was measured at 7th grade (Wave 1) dichotomously (0 = no, 1 = yes) with one item, “Have you been treated differently at school because you are Black?”. 84.4% of the sample did not experience school discrimination.

**Resilience**

Resilience, measured during 8th grade, included four questions that youth responded to on a scale from 1 (almost never) to 5 (almost always) to assess problem solving and adolescents’ ability to move forward despite challenges. A sample item is, “How often are you very good at figuring out problems and planning how to solve them?”. The measure demonstrated good reliability (α = .73). On average, youth felt good about their problem-solving abilities. (Mean = 3.56, SD = 0.79).

**Efficacy to Combat Discrimination**

The outcome measure, efficacy to combat discrimination, was measured in 8th grade (Wave 3) to assess youth’s perception of their ability to deal with discrimination across contexts. Youth responded to a three-item scale asking, on a scale from 1 (strongly agree) to 4 (strongly disagree), how much they agree that, “there is little you can do to avoid racial discrimination at school”, “there is little you can do to avoid racial discrimination by your peers”, and “there is little you can do to avoid racial discrimination at the job you will have in the future”. This phrasing follows the guidelines for best measuring efficacy set forth by Bandura (1977). Each item was reverse coded so that 1 = strongly agree and 4 = strongly disagree. The mean score was 2.85 (sd = 0.75, α = .78).

**Academic Efficacy**

The outcome measure, academic efficacy, was measured in 8th grade (Wave 3). The participants answered the questions, “How well do you expect to do next year in math?” and “How well do you expect to do next year in other subjects?” on a scale from 1 (“much worse than other kids”) to 7 (“much better than other kids”). Youth generally reported higher levels of academic efficacy (Mean = 5.49, SD = 1.20). This measure demonstrated good reliability (α = .82).

**Analysis Plan**

For the preliminary analyses, correlation coefficients were examined for initial understanding of the strength and direction of the relationships between the continuous variables (general perceived discrimination, perceived resilience, academic efficacy). Chi-squared tests were then run to test associations between the
categorical variables (gender, discrimination in school, efficacy to combat discrimination). Independent sample t-tests were used to compare the means of the continuous variables by gender and experience of school discrimination.

Five-step hierarchical linear regression models were conducted in SPSS for the substantive analyses. The independent variables were entered into the regression equation in the following order: (a) gender and income; (b) discrimination; (c) resilience; (d) discrimination x resilience; (e) discrimination x resilience x gender. Resiliency and general perceived discrimination were centered to reduce multicollinearity and interpret the moderation. Regressions were conducted separately for each efficacy outcome (i.e., efficacy to combat discrimination and academic efficacy) and for each type of discrimination resulting in four regression models. Missing data for each of the variables were imputed and the models were run again using the pooled data. Missing data ranged from 1.7% to 31.8%. Higher rates of missing data were seen at Wave 3, likely due to attrition. Reported results come from the pooled imputed data. The results were consistent between the pooled imputed data and the listwise deletion dataset.

**Results**

**Preliminary Analyses**

Descriptive statistics can be found in Table 1. General discrimination was negatively correlated with both efficacy to combat discrimination ($r(623) = -.207, p < .001$) and academic efficacy ($r(629) = -.081, p = .041$), suggesting that more discrimination lessened feelings of efficacy across contexts. School discrimination was only correlated with efficacy to combat discrimination, $r(618) = -.118, p = .003$. Perceived resilience was positively correlated with both academic efficacy ($r(645) = .148, p < .001$) and efficacy to combat discrimination ($r(638) = .139, p < .001$). No other significant correlations were observed.

T-tests showed that the means for general perceived discrimination ($p = .65$), perceived resilience ($p = .64$), efficacy to combat discrimination ($p = .98$), academic efficacy ($p = .13$), and income ($p = .46$) for the youth did not differ by gender. T-tests also showed the means for perceived resilience ($p = .49$), academic efficacy ($p = .87$), and income ($p = .08$) did not differ by whether the youth experienced discrimination in school. General perceived discrimination and efficacy to combat discrimination varied by whether the youth experienced discrimination in school, $p < .001$ and $p = .003$, respectively. Those who experienced school discrimination reported more general perceived discrimination and less efficacy to combat discrimination. A chi-square test showed gender differences in youth reports of school racial discrimination $\chi^2(1, 851) = .14, p = .708$.

**Substantive Analyses**

**Model 1: General Perceived Discrimination and Efficacy to Combat Discrimination**

In the final model of the linear hierarchical regression, more general perceived discrimination in 7th grade was associated with less efficacy to combat discrimination in 8th grade, $b = -.09, p = .003$. More perceived resilience in 7th grade was not significantly associated with greater efficacy to combat discrimination in 8th grade, $p = .07$. No significant interactions were found. Gender and income were not associated with efficacy to combat discrimination. More information from this model can be found in Table 2.

**Model 2: School Discrimination and Efficacy to Combat Discrimination**

Experiencing school discrimination in 7th grade was also associated with lower efficacy to combat discrimination in 8th grade, $b = -.19, p = .03$. As in Model 1, more perceived resilience in 7th grade was not associated with more efficacy to combat discrimination in 8th grade after accounting for whether the youth experienced school discrimination, $p = .10$. No moderation effect was found. Gender and income were not associated with efficacy to combat discrimination. More information from this model can be found in Table 2.

**Model 3: General Perceived Discrimination and Academic Efficacy**

Model 3 showed that more general perceived discrimination in 7th grade had a negative impact on academic
efficacy in 8th grade, $b = -0.09$, $p = 0.04$. Perceived resilience in 7th grade showed a positive impact on academic efficacy in 8th grade, $b = 0.22$, $p = < 0.001$. Perceived resilience had a notably stronger effect on academic efficacy than general perceived discrimination. The moderation effect was not found to be significant. Gender and income were not associated with academic efficacy. More information from this model can be found in Table 3.

Model 4: School Discrimination and Academic Efficacy

Interestingly, experiencing school discrimination in 7th grade did not impact academic efficacy in 8th grade, $p = 0.61$. Perceived resilience in 7th grade, however, had a strong positive impact on academic efficacy in 8th grade as hypothesized, $b = 0.24$, $p < 0.001$. The moderation effect was not found to be significant. Gender and income were not associated with academic efficacy. More information from this model can be found in Table 3.

Discussion

The findings of this study advance our knowledge on how Black American youth’s self-beliefs are impacted by racial discrimination in different contexts. Higher levels of self-efficacy in adolescents have been found to protect against negative outcomes of life stressors (e.g., racial discrimination), and thus were a focus of this paper (Schwarzer & Warner, 2013). Beliefs about their ability to combat discrimination and perform academically are two important domains of efficacy for Black American adolescents. School being a primary place for youth, it is important to understand the impact of discrimination in this context. In addition, this study shows that adolescents may be impacted by events of racial discrimination in school differently than in general.

As expected, general perceived discrimination experienced in 7th grade negatively impacted both measures of efficacy in 8th grade. A stronger correlation was seen with efficacy to combat discrimination than with academic efficacy. School discrimination had a slightly different relationship with the measures of efficacy. While found to negatively impact youth’s efficacy to combat discrimination, experiencing school discrimination in 7th grade did not significantly impact academic efficacy in 8th grade. This finding partially supports our hypothesis while going against other scholar’s findings of school discrimination lowering academic efficacy in a predominately white and Latinx sample of high schoolers (Fernandez & Benner, 2022). It could be that parents are accounting for discrimination’s negative impact in their messaging to their children; future research may consider ethnic racial socialization as a protective factor in this relationship and possible differences across contexts (Banerjee, Byrd, & Rowley, 2018).

Perceived resilience in 7th grade did positively impact 8th grade academic efficacy, but it did not moderate the impact from discrimination. Considering perceived resilience’s strong relationship with academic efficacy, Black American adolescents seem to be successful in employing their general problem-solving skills in the school context. Post-hoc analyses showed academic efficacy had a stronger correlation with perceived resilience in boys than in girls. This finding supports our belief that schools are a particularly hostile environment for Black boys, thus making problem-solving skills especially effective (Leath et al., 2019). Overall, the findings implicate problem-solving abilities are influential on Black adolescent’s academic efficacy more so than their efficacy to combat discrimination. It may be that efficacy to combat discrimination is influenced by more racially specific coping mechanisms such as those promoted by ethnic-racial socialization.

The results suggest perceived resilience is a significant predictor of academic efficacy in Black American adolescents. While the findings do not fully support our hypotheses, they are aligned with extant work emphasizing resilience strategies and related constructs such as adaptive coping as promotive factors of adolescents’ behavior and adjustment (Butler-Barnes et al., 2013; McDermott, Umana-Taylor, & Martinez-Fuentes, 2018). Future work may test a measure of racial-specific resilience as a moderator of racial discrimination’s impact on efficacy. Constructs correlated with resilience (e.g., hope; Schmid, Phelps, & Lerner, 2011) in Black Americans should also be explored in the proposed developmental process to promote well-being among Black American youth.
The use of the secondary data limited the range and type of items in the measures. For example, more comprehensive methods have been suggested to measure discrimination (Morris, Janssen, & Seaton). This study is also limited by the age of the dataset. One notable change since the 1990s and early 2000s is the prevalence of Smartphones amongst adolescents. Media sources (e.g., social media) have been found to be a significant source of racial socialization for adolescents, thus may be accounting for variance in adolescent’s perceived discrimination and its impact (Thomas et al., 2023; Watford et al., 2021). The focus on racially motivated police brutality and others forms of systemic racism in media makes racial conflicts easily accessible to adolescents. Examining vicarious discrimination through media’s relationship with efficacy in Black American youth would provide more timely findings.

Conclusion

This project was done to contribute to the growing scholarship to further elucidate the developmental experience of Black American adolescents. Adolescence is characterized by increased social influence and identity development, thus how experiences of discrimination are impacting self-beliefs are particularly important during this time. Our findings provide insight into contextually specific differences in discrimination’s impact on domains of Black adolescent’s efficacy. Future research may consider exploring perceived efficacy as a protective mediator of discriminations effect on aspects of Black American youth’s identity. This work would help inform interventions promoting positive identity development. The findings of this study suggest problem-solving skills be a focus for school-based interventions, as it was most predictive of academic efficacy, even more so than discrimination for Black adolescents.

References


Table 1
Descriptive Statistics and Correlations for Current Study Variables

<table>
<thead>
<tr>
<th>Variable</th>
<th>n</th>
<th>M</th>
<th>SD</th>
<th>General Disc.</th>
<th>School Disc.</th>
<th>Perceived Resiliency</th>
</tr>
</thead>
<tbody>
<tr>
<td>General Discrimination</td>
<td>900</td>
<td>1.824</td>
<td>1.141</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>School Discrimination</td>
<td>895</td>
<td>0.156</td>
<td>0.363</td>
<td>-</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Perceived Resilience</td>
<td>919</td>
<td>3.557</td>
<td>0.792</td>
<td>-0.023</td>
<td>0.023</td>
<td>1</td>
</tr>
<tr>
<td>Efficacy to Combat Discrimination</td>
<td>638</td>
<td>2.852</td>
<td>0.752</td>
<td>-0.207 **</td>
<td>-0.118 **</td>
<td>0.139 **</td>
</tr>
<tr>
<td>Academic Efficacy</td>
<td>645</td>
<td>5.492</td>
<td>1.197</td>
<td>-0.081 *</td>
<td>-0.007</td>
<td>0.148 **</td>
</tr>
<tr>
<td>Income</td>
<td>1389</td>
<td>10.027</td>
<td>4.228</td>
<td>0.044</td>
<td>-0.062</td>
<td>0.024</td>
</tr>
<tr>
<td>Gender</td>
<td>879</td>
<td>0.534</td>
<td>0.499</td>
<td>0.016</td>
<td>0.013</td>
<td>0.016</td>
</tr>
</tbody>
</table>

Notes: ** < 0.01 (two-tailed), * < 0.05 (two-tailed). Disc. = discrimination

Table 2
Results of Hierarchical Multiple Regression Analysis for Efficacy to Combat Racism

<table>
<thead>
<tr>
<th>Predictor</th>
<th>General Discrimination</th>
<th>School Discrimination</th>
</tr>
</thead>
<tbody>
<tr>
<td>B (se)</td>
<td>-0.09** (0.03)</td>
<td>-0.19* (0.09)</td>
</tr>
<tr>
<td>Income</td>
<td>-0.00 (0.01)</td>
<td>-0.00 (0.01)</td>
</tr>
<tr>
<td>Sex (0 – male, 1 – female)</td>
<td>-0.03 (0.08)</td>
<td>-0.04 (0.07)</td>
</tr>
<tr>
<td>General Perceived Discrimination</td>
<td>-0.09** (0.03)</td>
<td>-</td>
</tr>
<tr>
<td>Discrimination in School (0 – yes, 1 – no)</td>
<td>-</td>
<td>0.01 (0.14)</td>
</tr>
<tr>
<td>Perceived Resilience</td>
<td>0.08 (0.05)</td>
<td>0.08 (0.05)</td>
</tr>
<tr>
<td>General Perceived Discrimination x Perceived Resilience</td>
<td>-0.01 (0.04)</td>
<td>-</td>
</tr>
<tr>
<td>Discrimination in School x Perceived Resilience</td>
<td>-</td>
<td>0.01 (0.14)</td>
</tr>
<tr>
<td>Perceived Resilience</td>
<td>-0.06 (0.06)</td>
<td>-</td>
</tr>
<tr>
<td>Perceived Resilience x Perceived Resilience</td>
<td>-</td>
<td>0.03 (0.18)</td>
</tr>
</tbody>
</table>

Unstandardized beta is reported. * < 0.05, ** < 0.01

Table 3
Results of Hierarchical Multiple Regression Analysis for Academic Efficacy

<table>
<thead>
<tr>
<th>Predictor</th>
<th>General Discrimination</th>
<th>School Discrimination</th>
</tr>
</thead>
<tbody>
<tr>
<td>B (se)</td>
<td>-0.16 (0.10)</td>
<td>-0.17 (0.10)</td>
</tr>
<tr>
<td>Income</td>
<td>-0.01 (0.01)</td>
<td>-0.01 (0.01)</td>
</tr>
<tr>
<td>Gender (0 – male, 1 – female)</td>
<td>-0.09* (0.04)</td>
<td>-</td>
</tr>
<tr>
<td>Discrimination in School (0 – yes, 1 – no)</td>
<td>-</td>
<td>-0.07 (0.14)</td>
</tr>
<tr>
<td>Predictor</td>
<td>General Discrimination</td>
<td>School Discrimination</td>
</tr>
<tr>
<td>------------------------------------------------</td>
<td>------------------------</td>
<td>-----------------------</td>
</tr>
<tr>
<td>Perceived Resilience</td>
<td>0.22** (0.06)</td>
<td>0.24** (0.07)</td>
</tr>
<tr>
<td>General Perceived Discrimination</td>
<td>-0.02 (0.08)</td>
<td>-</td>
</tr>
<tr>
<td>x Perceived Resilience</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Discrimination in School x</td>
<td>-</td>
<td>-0.13 (0.26)</td>
</tr>
<tr>
<td>Perceived Resilience</td>
<td></td>
<td>-</td>
</tr>
<tr>
<td>General Perceived Discrimination</td>
<td>-0.02 (0.11)</td>
<td>-</td>
</tr>
<tr>
<td>x Perceived Resilience x Sex</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Discrimination in School x x Sex</td>
<td>-</td>
<td>-0.02 (0.33)</td>
</tr>
<tr>
<td>Perceived Resilience x Sex</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Unstandardized beta is reported. * < 0.05, ** < 0.01

**Figure 1**

**Conceptual Model**