After-School Connectedness, Racial–Ethnic Identity, Affirmation, and Problem Behaviors

Danielle A. Augustine

University of Georgia
danielle.augustine@uga.edu

Emilie P. Smith

Michigan State University
emsmith@msu.edu

Dawn P. Witherspoon

The Pennsylvania State University
dpw14@psu.edu

Abstract

After-school programs are potential contexts that may promote positive youth development (PYD) and reduce problem behaviors among African American children. One way after-school programs may be associated with reduced problem behaviors is by fostering an affirming sense of identity. Prior research on racial–ethnic identity among African American children and adolescents has shown that a positive and affirming sense of identity is related to less maladaptive coping, yet little is known about how after-school programs may foster an affirming sense of identity and lead to reduced problem behaviors. The current study adds to this discourse by investigating how children's connection to staff and peers in after-school settings is associated with racial–ethnic identity (as measured by racial–ethnic affirmation) and reduced problem behaviors. Participants were 186 African American children ages 7–11 (M = 8.44; SD = 1.10) who completed surveys in the LEGACY Together Afterschool research project. Data were collected at 55 community-based after-school programs. Results indicated that positive racial–ethnic affirmation mediated the association between after-school connectedness and problem behaviors, such that child-report of connectedness—that is feeling safe and happy in the after-school programs—was directly related to positive racial–ethnic identity and indirectly to reduced problem behaviors. These findings underscore the importance of supportive after-school programs that encourage meaningful interactions among staff and children that are nurturing and affirming to children's identities.

Key words: after-school connectedness, racial–ethnic affirmation, racial–ethnic identity, problem behaviors, African American children

The Importance of Afterschool Connectedness for African American Children

After-school programs provide 1.5 million African American children and adolescents with safe, supportive environments during out-of-school hours (Afterschool Alliance, 2021; Woodland, 2016). Studies suggest that relationships with caring and supportive staff in quality, organized, well-attended after-school programs may lead to fewer problem behaviors, less substance use risk, and higher levels of academic achievement (Eccles & Gootman, 2002; Fredericks & Simpkins, 2012; Gabalda et al., 2010; E. Smith et al., 2018; Vandell, Lee, et al., 2020; Vandell, Simpkins, et al., 2020). Based upon premises of social bonding theory, when children feel close to others, such as parents, teachers, and even after-school staff, they are more likely to espouse the positive values for goal attainment held by the caring adults in their lives (Hirschi, 2004). Additionally, settings-theory and systems frameworks posit that after-school settings provide youth with opportunities for meaningful relationships that support socioemotional and identity development (Tseng & Seidman, 2007). This empirical and theoretical evidence suggests that supportive relationships in after-school settings may foster identity development and prevent problem behaviors.

Conceptualizing the Role of After-School Programs in Racial–Ethnic Identity

 The Phenomenological Variant of Ecological Systems Theory (PVEST) provides some explanation for how after-school programs may nurture a positive sense of racial–ethnic identity and reduce maladaptive coping behaviors (Spencer et al., 2002; Spencer et al., 1997). PVEST describes that high-risk environments for minoritized children in the United States may affect their self-perception, leading to resiliency or psychopathology. The degree to which these risks impact a child depends on the social supports (e.g., connection to others) they experience within and across contexts (e.g., after-school programs). The nature of these supports from adults and peers can help inform a more positive sense of self, which is related to adaptive coping strategies (Spencer et al., 2002; Spencer et al., 1997). The current study applies PVEST to after-school settings by investigating how African American children's perception of after-school connectedness to adults and peers is associated with a more positive affirmation of their racial–ethnic identity and related to reduced problem behaviors. Drawing upon relational developmental systems, connectedness is one of the several dimensions of positive youth development in which synergistic coactions help us to understand interactions between youth and their key developmental settings (Lerner et al., 2021).

The Salience of After-School Connectedness

After-school connectedness describes how attached youth feel to staff and peers in after-school settings (Resnick et al., 1997). Support and connectedness between staff and children are critical for development (Eccles & Gootman, 2002; Kataoka & Vandell, 2013; Lerner et al., 2005; Miller, 2005). Warm, welcoming environments where staff smile often, maintain eye contact, and use respectful language may help foster feelings of belonging and connectedness in children (Akiva et al., 2013). For African American children, after-school programs may help connect youth with supportive adults and peers, which has been documented to be important (Bulanda & McCrea, 2013; Woodland, 2016). These relationships helped youth process traumatic experiences and life choices as well as develop their ability to care for others (Bulanda & McCrea, 2013). These findings are a poignant portrayal of the healing and restorative potential of after-school settings. It is possible that relationships in after-school settings may also foster the development of positive racial–ethnic identity via relationships with caring and affirming staff and peers. Scholars doing work in after-school contexts call for the application of a social justice framework, relevant to African American youth, that explores the roles of race, ethnicity, culture, and social justice (Barbarin et al., 2019; Brittian Loyd & Williams, 2017; Lerner et al., 2021; E. Smith et al., 2019; Williams & Deutch, 2016). This work suggests that we need to be attentive to the ways in which after-school contexts might be associated with cultural, racial, and ethnic aspects of child development; in this study, we are particularly interested in children's racial–ethnic identity.

Research on After-School Context, Racial–Ethnic Identity, and Affirmation

Investigating the association between after-school settings and children's positive racial–ethnic affirmation is critical because children's perceptions of their race and/or ethnicity has been linked to various aspects of behavioral and cognitive functioning (Neblett et al., 2012; Rivas-Drake, Seaton, et al., 2014; Yu et al., 2021). *Racial–ethnic affirmation* refers to children's affection, respect, and pride for their racial–ethnic group (Rivas-Drake, Syed, et al., 2014). The after-school context has been recognized as a context that might foster a positive sense of race and ethnicity among young people (Brittian-Loyd & Williams, 2017). Research with African American girls ages 10–14 in community programs posited that youth with more positive "ethnic identities" would find drug use incongruent with their sense of belonging to their people; a sense of identity was related to less endorsement and intention to use drugs in the future (Corneille & Belgrave, 2007). Research on identity and actual behavioral outcomes among African American children in after-school would further this important line of work.

It should be noted that we use the phrase "racial–ethnic" in our study. Whereas both are used interchangeably, they are distinct but related concepts. Race is a complex concept, originally intended to reflect shared physiological characteristics, but given large within-group variability, it is really used as a social construct to classify and oppress minoritized groups (Hughes et al., 2006). Ethnicity refers to people who share common language, nationality, culture, values, or practices (Umaña-Taylor et al., 2014). African Americans share both a sense of perceived physiology along with practices, values, and beliefs used to bolster the formation of healthy identity and coping in their children, congruent with the concept of culture and ethnicity (Anderson & Stevenson, 2019; Hughes et al., 2006). Racial–ethnic identity recognizes that a sense of belonging to a group of people may be based on race (i.e., perceived shared physiology) as well as one's ethnicity (i.e., "common values, beliefs, and practices"; C. Smith et al., 2009: p. 146). Congruent with the recommendation of Umaña-Taylor and colleagues (2014) to not make nominal distinctions between racial and ethnic identity, we chose to use the term racial–ethnic identity.

Linking After-School Connectedness and Problem Behaviors

Positive relationships with staff in supportive, appropriately structured after-school settings are associated with reduced externalizing behaviors in children (Durlak et al., 2010; E. P. Smith et al., 2018; Wade & Rochlen, 2013). Minoritized youth who develop supportive relationships with staff and peers in high quality after-school programs report reduced behavior problems as well as low usage of marijuana, alcohol, and drugs (Kremer et al., 2015; E. Smith et al., 2013; Tebes et al., 2007; Vandell et al., 2007; Walters, 2020). Although these benefits may be found in all after-school programs, they often occur in quality programs where children form relationships with adults and peers (Durlak & Weissberg, 2007; Simpkins, 2015).

The Roles of Age and Gender in Connectedness and Behavior

Feelings of connectedness, perceptions of race and/or ethnicity, and problem behaviors may vary with age and gender (Allen et al., 2018; Chen & Jacobson, 2012; Hughes et al., 2009). Children's perceptions of their race and/or ethnicity develops across childhood and adolescence (Cama & Sehgal, 2020; Phal & Way, 2006; Quintana, 2008). As youth get older, they continue exploring and developing an understanding of their racial–ethnic group and the social meaning attached to it; some youth may develop a sense of pride and affirmation in their group, often as a result of socialization from their parents, teachers, and community (Hughes et al., 2006; Quintana, 2007; Umaña-Taylor & Hill, 2020). These findings suggest that samples with older elementary children may report more racial–ethnic affirmation than samples with younger elementary children. Age has also been associated with an increased risk for problem behaviors

(Balocchini et al., 2013; Gray & Squeglia, 2018), which suggests that older youth may engage in more problem behaviors than younger youth.

Regarding gender, some girls demonstrate low initial levels of racial–ethnic identity but exhibit higher levels of growth in early elementary school, perhaps due to how adults socialize children (C. Smith et al., 2009; Thomas & Speight, 1999). Fathers have been documented to socialize sons to their race, whereas mothers have been documented to socialize their ethnicity (Caughy et al., 2011; McHale et al., 2006). Parents have also reported giving boys messages on preparation of bias because of societal stereotypes that result in Black boys being perceived as more threatening and providing cultural socialization messages to girls (Bentley-Edwards, et al., 2016; Gaylord-Harden, et al., 2018; Johnson, 2022; Smith-Bynum et al., 2016). Girls have reported feeling more connected to schools than boys (Niehaus et al., 2012); it is possible that girls may also report higher levels of after-school connectedness than boys. Comparably, boys are more likely to exhibit externalizing behaviors and use drugs than girls (Kloos et al., 2009; McIntosh et al., 2012). These findings suggest that there may be gender differences regarding after-school connectedness, racial–ethnic affirmation, and problem behaviors.

Summary and Rationale for the Current Study

In summary, after-school programs may be a preventive factor for poor outcomes in African American children (Gabalda et al., 2010; Woodland, 2016), yet little is known about the reasons for this effect among African American elementary-aged children. We propose that this effect may be due to two promotive processes: children's perceptions of after-school connectedness and racial–ethnic affirmation. Knowing how contexts such as after-school programs nurture racial–ethnic affirmation is important because it can help practitioners develop interventions that may prevent problem behaviors in African American youth, potentially leading to more positive, adaptive outcomes in life. This study meets this need by testing the following hypothesis: Children's after-school connectedness is indirectly related to reduced problem behaviors through increased racial–ethnic affirmation. Figure 1 presents the conceptual model used to test this hypothesis.

Figure 1. Conceptual Model
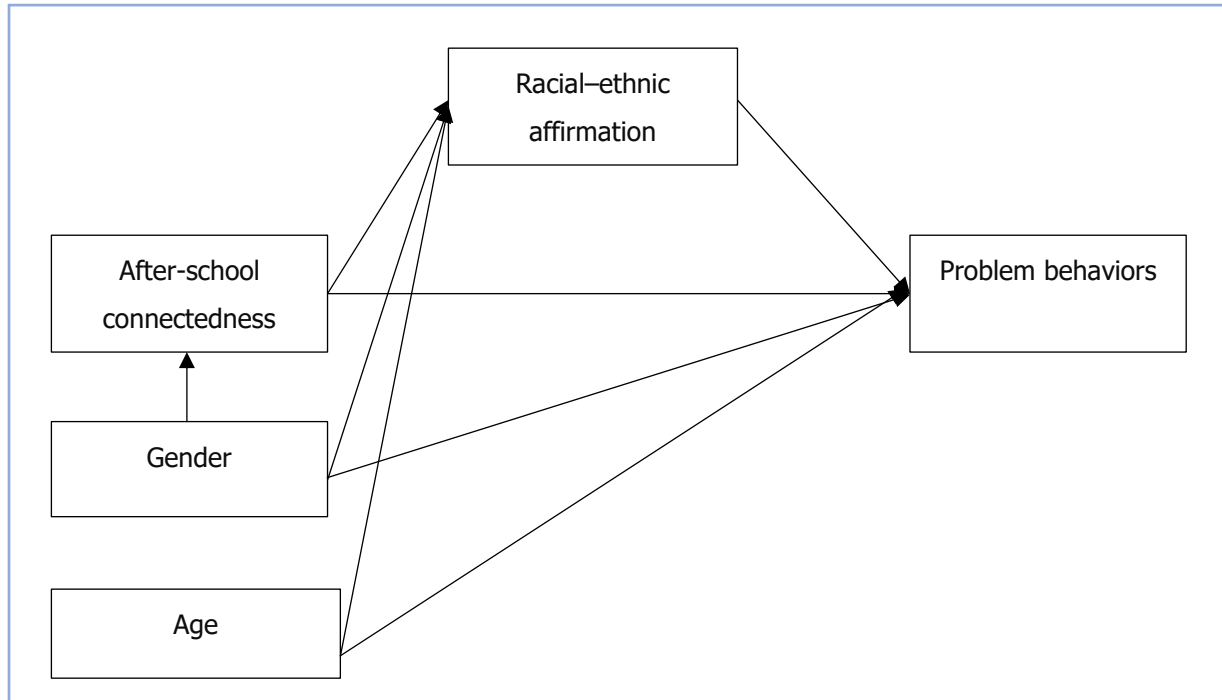
Methods

Participants

The sample consisted of 186 African American children who completed surveys in the LEGACY Together Afterschool research project. The current sample includes children who self-reported their race as African/Black, which comprised approximately 23% of the total sample of 800 students. Latino children comprised 6% of the sample and multi-racial–ethnic children comprised 16% of the sample. These sample sizes were insufficient for optimal individual analyses and were not included. White children comprised 48% of the overall sample; however, they were not included here given variations in the significance of racial–ethnic affirmation and our aim to understand these complex processes within the contexts of children's own experiences and not in comparison to others (Phinney & Landin, 1998; Rivas-Drake, Seaton, et al., 2014).

Of the 186 African American children, 50.5% were boys and 49.5% were girls. The ages of these children ranged from 7 to 11 years ($M = 8.43$; $SD = 1.10$). These children attended one of 55 community-based after-school programs located in Central Pennsylvania; 51 programs provided program demographic data and four did not. Of those that provided demographics, 16 programs were located in urban neighborhoods; 35 were located in suburban neighborhoods. The number of children attending these after-school programs ranged from 11 to 68 ($M =$

26.92; SD = 12.61). The percent of children receiving free or reduced-price lunch at schools ranged from 10% to 100% (M = 51.64; SD = 30.89).

Procedures

The goal of this study was to center the ways in which the child's experience of connectedness in after-school settings is indirectly related to reduced problem behaviors through racial–ethnic affirmation. Consent forms were sent home to the parents of children participating in the after-school programs. Opt-out procedures were used so that parents could refuse participation at any time. Children assented before participation. Surveys were administered in a group format to children via small electronic personal digital devices (PDA) that were created to be "child-friendly." Children could listen to a programmed voice who read aloud the questions at their respective reading level, or the child could read the questions themselves, assisted by staff if necessary. Throughout the survey, jokes, cartoon characters, and animals were occasionally used to encourage and praise the children for persisting and finishing the survey. It took students 45 to 60 minutes to complete the survey. In appreciation of their participation, children were given small incentives, such as string bags or water bottles.

Measures

Covariates

Children self-reported their gender and age which are used as covariates in the analyses.

After-School Connectedness

After-school connectedness was assessed using the 8-item *afterschool connectedness scale* (ACS; E. Smith et al., 2013). The measure is based on Resnick et al.'s (1997) school connectedness scale and assesses how safe, happy, and connected children felt to staff and other children in after-school programs. Items were rated on a 3-point Likert scale, ranging from 1 (*not true*) to 3 (*very true*). A sample item is: "I feel close to people at my after-school program." Scores were averaged, with higher scores indicative of a higher degree of after-school connectedness. The after-school connectedness scale showed good internal consistency reliability (α = .79).

Racial–Ethnic Identity and Affirmation

The measure of racial–ethnic affirmation was adapted from Phinney's (1992) Multigroup Measure of Ethnic Identity and a measure of racial–ethnic identity developed by E. Smith and colleagues (2003), the parent-child-teacher racial-ethnic identity socialization measure (PRISM).

It consisted of eight items that explored racial–ethnic pride, perceptions of racial barriers, and racial trust/mistrust in children between the ages of 7 and 11. The revised version of PRISM was reduced to three items to make it more internally consistent and developmentally appropriate for children. A sample item from the revised PRISM that measures racial–ethnic identity is: "You have a lot of pride in people who are the same color as you, and pride in their achievements." Items were rated on a 3-point Likert scale, ranging from 1 (*not true*) to 3 (*very true*). In the current study, scores were averaged, with higher scores reflecting a higher level of racial–ethnic identity. The scale showed good internal consistency reliability (α = .73).

Problem Behaviors

Problem behaviors were assessed using a developmentally sensitive measure used by Loeber and colleagues in a longitudinal study of children's vandalism, and use of cigarettes, marijuana, and alcohol (Russo et al., 1993). This scale was developmentally sensitive because children were first asked about where to find common items such as apples before being asked about risky behaviors in increasing severity. For example, children were asked where they could find an apple and if they had eaten one before being asked if they knew where to find cigarettes and if they had smoked cigarettes. For each item in the scale, responses were coded as 0 (*No*) and 1 (*Yes*). In the current study, scores were summed to create the Problem Behaviors Scale. Scores ranged from 0 to 1, with higher scores reflecting a higher level of problem behaviors. The items for the problem behavior scale showed acceptable internal consistency reliability (α = .73).

Data Analyses

Analyses consisted of two steps. First, the means, standard deviations, bivariate correlations, and cross tabulations were calculated for the observed variables using IBM SPSS Statistics 27. Second, the study hypothesis was tested using Mplus (Muthén & Muthén, 1988-2017). A mediation model was estimated with bias-corrected 95% confidence intervals obtained from 1,000 bootstrap resamples (Brown, 2015). Gender and age were added as covariates. Missing data for the study variables ranged from 0% for gender to 12.9% for problem behaviors. Little's (1988) test of missing completely at random was used to determine how to handle missing data. The results of this test were not significant, $\chi^2(30) = 32.39$, p = .35, so data were assumed to be missing completely at random and full information maximum likelihood (FIML) was used to estimate missing data. Fit was considered good if the value of chi-square was not significant; root mean square error of approximation (RMSEA) and standardized root mean square residual (SRMR) were less than .08; and comparative fit indices (CFI) and Tucker Lewis Index (TLI) were greater than .90 (Kline, 2016).

Results

Descriptive Statistics, Crosstabulations, and Bivariate Correlations

Descriptive statistics and bivariate correlations of after-school connectedness, racial–ethnic affirmation, and problem behaviors are depicted in Table 1. Children's mean scores for after-school connectedness was 2.42 (SD = 0.49) and racial–ethnic affirmation was 2.70 (SD = 0.52) indicating a strong level of after-school connectedness and racial–ethnic affirmation. Children's mean score for problem behaviors was 0.14 (SD = 0.26), indicating 14% of these elementary school-age children reported involvement in one of the items in the scale. As depicted in Table 2, of the children reporting problem behaviors (n = 59), approximately 28% were age 7, 32% were age 8, 22% were age 9, 14.% were age 10, and 3% were age 11, indicating that older children report fewer problem behaviors than younger children. Bivariate correlations, illustrated in Table 1, demonstrated that children who reported a high level of after-school connectedness reported involvement in less, risky behaviors (r = -.33, p < .01). A positive sense of race/ethnicity was also negatively associated with risky behavior (r = -.55, p < .01) suggesting that as racial–ethnic affirmation increased, risky behavior decreased.

Table 1. Descriptive Statistics and Bivariate Correlations

	N	*M (SD)*	1	2	3	4	5
After-school connectedness	173	2.42 (0.49)	1.00				
Racial–ethnic affirmation	168	2.70 (0.52)	0.34**	1.00			
Problem behaviors	162	0.14 (0.24)	-0.33**	-0.55**	1.00		
Gender	186	1.49 (0.50)	-0.02	-0.04	-0.15	1.00	
Age	183	8.44 (1.10)	-0.02	0.15	-0.03	-0.20**	1.00

Note. Gender is coded as 1 (Boy) and 2 (Girl).
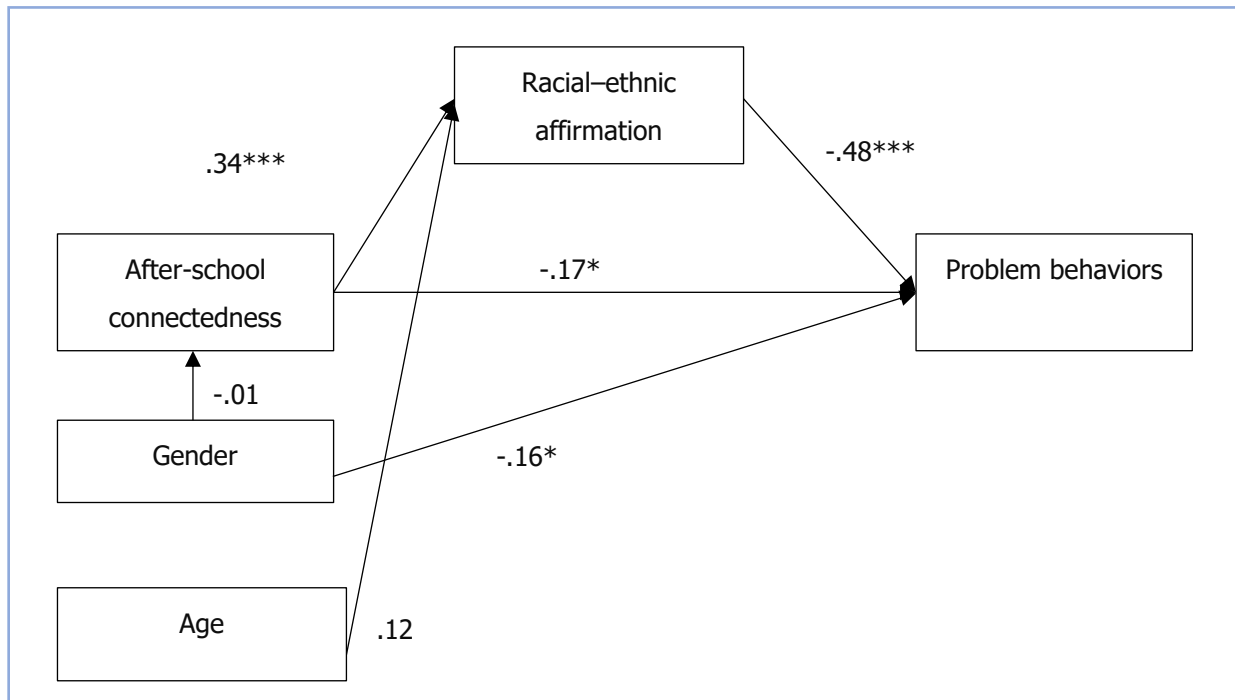
* p < .05 (two-tailed). ** p < .01 (two-tailed).

Table 2. Crosstabulations of Problem Behaviors by Age

	Age of Child					
	7	8	9	10	11	Total
No problem behaviors	23	28	32	16	2	101
Problem behaviors	17	19	13	8	2	59
Total	40	47	45	24	4	160

Full Mediation Model

The full mediation model in Figure 2 tested the hypothesis that after-school connectedness would be indirectly related to problem behaviors through racial–ethnic affirmation. After adjusting for age and gender, the model demonstrated good fit to the data: χ^2 (3) = 4.01, p =.26, RMSEA = 0.04, SRMR = 0.03, CFI = .99, TLI = .96. After-school connectedness was positively associated with racial–ethnic affirmation, indicating that a sense of connectedness in after-school settings was related to a stronger sense of racial–ethnic affirmation. Racial–ethnic affirmation was negatively associated with problem behavior, indicating that a more affirming sense of identity was related to less risky behavior. When examining the relationship between connectedness and problem behavior, the association was small and negative, β = -0.17, p = .04, suggesting that as after-school connectedness increased, risky behavior decreased. The indirect effect of after-school connectedness on problem behaviors through racial–ethnic affirmation was similar, β = -0.16, p = .005, indicating that children who felt more connected to their after-school programs reported high levels of pride and reduced problem behaviors. Of the covariates, only gender had a statistically significant, inverse relationship with problem behaviors, β = -0.34, p = 0.005, indicating that girls reported fewer problem behaviors.

Figure 2. Full Mediation Model

Note. Standardized pathways are depicted.

* p < .05 (two-tailed). ** p < .01 (two-tailed). *** p < .001 (two-tailed).

Discussion

After-school programs in which children feel safe, happy, and connected to staff and other children may act as a protective factor against poor outcomes in African American children (Gabalda et al., 2010; Woodland, 2016). The current study proposed this promotive association may be due to children's perceptions of supportive contexts that include relationships with adults and peers, which may enhance children's feelings of happiness, safety, and pride in who they are as part of a racial–ethnic group. Analysis revealed that after-school connectedness was indirectly related to problem behaviors through racial–ethnic affirmation. This finding is consistent with PVEST. PVEST theorizes that the social supports children experience (e.g., after-school connectedness) inform their self-appraisals and identity (racial–ethnic affirmation), influencing whether or not they engage in adaptive or maladaptive coping strategies (e.g., problem behaviors; Spencer et al., 2002; Spencer et al., 1997). The current study applied PVEST to after-school settings and found that children who report feeling connected to staff and children in after-school programs also report strong racial–ethnic identity and less engagement in problem behaviors. The current findings also support previous research that found an association between racial–ethnic identity and problem behaviors (Benner et al., 2018; Marcelo & Yates, 2019; Riggs et al., 2010; Wills et al., 2007; Zapolski et al., 2017) and connectedness and problem behaviors (E. Smith et al., 2013).

Limitations and Future Directions

The current study has several strengths and limitations. First, the current study uses self-report data collected from children about their after-school connectedness, identity, and behavior. Although this approach is a strength because it centers the child's experience in the after-school setting, other research on after-school settings, including from the LEGACY Together Project, has used children, staff, directors, and observational data to examine the relationships between program and neighborhood characteristics, children's identity, and socioemotional development (Belgrave et al., 2004; Kuperminc, 2019; E. Smith et al., 2018; Tebes et al., 2007; Witherspoon et al., 2016). Preliminary analyses for the current study explored program demographic and neighborhood characteristics, but with only one program per census tract, the amount of variability due to higher-level factors was negligible in this study (ICC ranging from .04 to .07). Having perspectives from multiple after-school program stakeholders helps to understand the totality of the experience and processes; however, given the promotive factors investigated (connectedness and racial–ethnic affirmation), individual youth voice is also necessary and informative.

Also, while researchers have called for next steps in this line of work (e.g., taking into account the cultural ecologies of programs) this work is still underway (Riggs et al., 2010; Simpkins et al., 2017). Programs using culturally responsive practices that incorporate ethnic socialization, awareness of and support for cultural values, beliefs, and histories can help staff nurture children's connection to their race and/or ethnicity (Riggs et al., 2010; Simpkins et al., 2017). Though this would be best measured by attending to cultural aspects of the program, a first step is to at least begin to attend to whether other dimensions help facilitate a healthy perspective of one's ethnicity or race. Advances are needed in after-school programs similar to assessments of school climate that not only attend to discrimination, but also the socializing elements regarding race and ethnicity (Byrd, 2017; Sladek et al., 2021).

Second, the current study uses a cross-sectional design, which collects and analyzes data at one time point (Wang & Cheng, 2020). Thus, the current study was unable to investigate temporal relationships between after-school connectedness, racial–ethnic affirmation, and problem behaviors. Due to this, the current findings are correlational and not causal (Wang & Cheng, 2020). Future studies should use longitudinal designs and experimental designs to study how after-school connectedness, racial–ethnic affirmation, and problem behaviors change over time in order to establish causality (Haslam & McGarty, 2004).

Implications for Practitioners

The finding that after-school connectedness was indirectly related to reduced problem behaviors through racial–ethnic affirmation has several implications for practitioners in after-school settings. This finding is important given that there is a push for more antiracist, culturally sensitive programming. To help all children feel safe, happy, and connected is a huge step in the direction of being culturally sensitive and responsive. These bonds may help children feel valued and supported, thus increasing confidence in their self-worth (Opara et al., 2020). Not only might these relationships help children feel more positively about their race and ethnicity, but research shows that more positive racial–ethnic affirmation is important to children choosing adaptive instead of maladaptive coping strategies. To help reduce problem behaviors, after-school program staff must work to encourage positive and supportive relationships between staff and all participating children. There are some after-school programs that seek to support female and minoritized youth in healthy identity and socioemotional development, incorporating cultural heritage values, practices, and celebrations, and creating team-building, civic, and service-learning activities in which children and staff have meaningful interactions (Brittian Loyd & Williams, 2017). Culturally responsiveness training can help staff whose race or ethnicity is different from the children they work with learn how to engage in positive,

meaningful conversations about race and ethnicity with the children (Simpkins et al., 2017). These conversations may increase children's racial–ethnic affect and socioemotional development.

References

Afterschool Alliance. (2021). *America after 3pm for Black families and communities*. http://afterschoolalliance.org/documents/AA3PM-2020/AA3PM-Black-Communities-2020-Fact-Sheet.pdf

Akiva, T., Cortina, K. S., Eccles, J. S., & Smith, C. (2013). Youth belonging and cognitive engagement in organized activities: A large-scale field study. *Journal of Applied Developmental Psychology, 34*, 208–218. https://doi.org/10.1016/j.appdev.2013.05.011

Allen, K., Kern, M. L., Vella-Brodrick, D., Hattie, J., & Waters, L. (2018). What schools need to know about fostering school belonging: A meta-analysis. *Educational Psychology Review*, *30*(1), 1–34. https://doi.org/10.1007/s10648-016-9389-8

Anderson, R. E., & Stevenson, H. C. (2019). RECASTing racial stress and trauma: Theorizing the healing potential of racial socialization in families. *American Psychologist, 74*(1), 63–75. https://doi.org/10.1037/amp0000392

Balocchini, E., Chiamenti, G., & Lamborghini, A. (2013). Adolescents: Which risk for their life and health?. *Journal of Preventive Medicine and Hygiene, 54*(4), 191–194.

Barbarin, O. A., Tolan, P. H., Gaylord-Harden , N., & Murry, V. (2019): Promoting social justice for African-American boys and young men through research and intervention: A challenge for developmental science. *Applied Developmental Science, 24*(3). https://doi.org/10.1080/10888691.2019.1702880

Belgrave, F. Z., Reed, M. C., Plybon, L. E., Butler, D. S., Allison, K. W., & Davis, T. (2004). An evaluation of Sisters of Nia: A cultural program for African American girls. *Journal of Black Psychology*, *30*(3), 329–343. https://doi.org/10.1177/0095798404266063

Benner, A. D., Wang, Y., Shen, Y., Boyle, A. E., Polk, R., & Cheng, Y.-P. (2018). Racial/ethnic discrimination and well-being during adolescence: A meta-analytic review. *American Psychologist, 73*(7), 855-883. https://doi.org/10.1037/amp0000204

Bentley-Edwards, K. L., & Stevenson, H. C. (2016). The multidimensionality of racial/ethnic socialization: Scale construction for the cultural and racial experiences of socialization (CARES). *Journal of Child and Family Studies*, *25*(1), 96–108. https://doi.org/10.1007/s10826-015-0214-7

Brittian Loyd, A. B., & Williams, B. V. (2017). The potential for youth programs to promote African American youth's development of ethnic and racial identity. *Child Development Perspectives*, *11*(1), 29–38. https://doi.org/10.1111/cdep.12204

Brown, T. A. (2015). *Confirmatory factor analysis for applied research* (2nd ed.). The Guildford Press.

Bulanda, J. J., & McCrea, K. T. (2013). The promise of an accumulation of care: Disadvantaged African-American youths' perspectives about what makes an after school program meaningful. *Child and Adolescent Social Work Journal*, *30*(2), 95–118. https://doi.org/10.1007/s10560-012-0281-1

Byrd, C. M. (2017). The complexity of school racial climate: Reliability and validity of a new measure for secondary students. *British Journal of Educational Psychology*, *87*(4), 700–721. https://doi.org/10.1111/bjep.12179

Cama, S., & Sehgal, P. (2020). Racial and ethnic considerations across child and adolescent development. *Academic Psychiatry*, 1–4. https://doi.org/10.1007/s40596-020-01354-2

Caughy, M. O. B., Nettles, S. M., & Lima, J. (2011). Profiles of racial socialization among African American parents: Correlates, context, and outcome. *Journal of Child and Family Studies*, *20*(4), 491–502. https://doi.org/10.1007/s10826-010-9416-1

Chen, P., & Jacobson, K. C. (2012). Developmental trajectories of substance use from early adolescence to young adulthood: Gender and racial/ethnic differences. *Journal of adolescent health*, *50*(2), 154–163. https://doi.org/10.1016/j.jadohealth.2011.05.013

Corneille, M. A., & Belgrave, F. Z. (2007). Ethnic identity, neighborhood risk, and adolscent drug and sex attitudes and refusal efficacy: The urban African American girls' experience. *Journal of Drug Education, 37*, 177–190. https://doi.org/10.2190/UJ17-34J7-U306-2822

Durlak, J., & Weissberg, R. (2007). The impact of after-school programs that promote personal and social skills. *Collaborative for Academic, Social, and Emotional Learning.*

Durlak, J. A., Weissberg, R. P., & Pachan, M. (2010). A meta-analysis of after-school programs that seek to promote personal and social skills in children and adolescents. *American Journal of Community Psychology, 45*, 294–309. https://doi.org/10.1007/s10464-010-9300-6

Eccles, J. S., & Gootman, J. A. (2002). *Community programs to promote youth development*. National Academy Press.

Fredricks, J. A., & Simpkins, S. D. (2012). Promoting positive youth development through organized after-school activities: Taking a closer look at participation of ethnic minority youth. *Child Development Perspectives*, *6*(3), 280–287.

Gabalda, M. K., Thompson, M. P., & Kaslow, N. J. (2010). Risk and protective factors for psychological adjustment among low-income, African American children. *Journal of Family Issues*, *31*(4), 423–444. https://doi.org/10.1177/0192513X09348488

Gaylord-Harden, N. K., Barbarin, O., Tolan, P. H., & Murry, V. M. (2018). Understanding development of African American boys and young men: Moving from risks to positive youth development. *American Psychologist, 73*(6), 753–767. https://doi.org/10.1037/amp0000300

Gray, K. M., & Squeglia, L. M. (2018). Research Review: What have we learned about adolescent substance use?. *Journal of Child Psychology and Psychiatry*, *59*(6), 618–627.

Haslam, S. A., & McGarty, C. (2004). Experimental design and causality in social psychological research. In C. Sansone, C. C. Morf, & A. T. Panter (Eds.), *The SAGE handbook of methods in social psychology* (pp. 237–264). SAGE Publications.

Hirschi, T. (2004). Self-control and crime. In Vohs, K. D., & Baumeister, R. F. (Eds.). *Handbook of self-regulation: Research, theory, and applications*. Guilford Publications. 537–552.

Hughes, D., Rodriguez, J., Smith, E. P., Johnson, D. J., Stevenson, H. C., & Spicer, P. (2006). Parents' racial-ethnic socialization practices: A review of research and directions for future study. *Developmental Psychology, 42*(5), 747–770. https://doi.org/10.1037/0012-1649.42.5.757

Hughes, D., Hagelskamp, C., Way, N., & Foust, M. D. (2009). The role of mothers' and adolescents' perceptions of ethnic-racial socialization in shaping ethnic-racial identity among early adolescent boys and girls. *Journal of Youth and Adolescence*, *38*(5), 605–626. https://doi.org/10.1007/s10964-009-9399-7

Johnson, D. J. (2022). Critical themes in parental socialization: The state of racial-ethnic and gender socialization. *Research in Human Development*, *19*(1-2), 5–12. https://doi.org/10.1080/15427609.2022.2106757

Kataoka, S., & Vandell, D. L. (2013). Quality of afterschool activities and relative change in adolescent functioning over two years. *Applied Developmental Science, 17*(3), 123–134. https://doi.org/10.1080/10888691.2013.804375

Kline, R. B. (2016). *Principles and practice of structural equation modeling* (4th ed.). The Guildford Press.

Kloos, A., Weller, R. A., Chan, R., & Weller, E. B. (2009). Gender differences in adolescent substance abuse. *Current Psychiatry Reports, 11*(2), 120–126.

Kremer, K. P., Maynard, B. R., Polanin, J. R., Vaughn, M. G., & Sarteschi, C. M. (2015). Effects of after-school programs with at-risk youth on attendance and externalizing behaviors: A systematic review and meta-analysis. *Journal of Youth and Adolescence*, *44*(3), 616–636. https://doi.org/10.1007/s10964-014-0226-4

Kuperminc, G. P., Seitz, S., Josephn H., Khatib, N., Wilson, C., Collins, K., & Guessous, O. (2019). Enhancing program quality in a national sample of after-school settings: The role of youth-staff interactions and staff/organizational functioning. *American Journal of Community Psychology, 63*, 391–404. https://doi.org/10.1002/acjp.12329

Lerner, R. M., Lerner, J. V., Almerigi, J. B., Theokas, C., Phelps, E., Gestsdottir, S., Naudeau, S., Jelicic, H., Alberts, A., Ma, L., Smith, L. M., Bobek, D. L., Richman-Raphael, D., Simpson, I., Christiansen, E. D., & von Eye, A. (2005). Positive youth development, participation in community youth development programs, and community contributions of fifth-grade adolescents: Findings from the first wave of the 4-H study of positive youth development. *Journal of Early Adolescence, 25*(1), 17–71. https://doi.org/10.1177/0272431604272461

Lerner, R. M., Lerner, J. V., Murry, V. M., Smith, E. P., Bowers, E. P., Geldhof, G. J., & Buckingham, M. H. (2021). Positive youth development in 2020: Theory, research, programs, and the promotion of social justice. *Journal of Research on Adolescence, 31*(4), 1114–1134. https://doi.org/10.1111/jora.12609

Little, R. J. A. (1988). A test of missing completely at random for multivariate data with missing values. *Journal of the American Statistical Association, 83*(404), 1198–1202.

Marcelo, A. K., & Yates, T. M. (2019). Young children's ethnic-racial identity moderates the impact of early discrimination experiences on child behavior problems. *Cultural Diversity & Ethnic Minority Psychology, 25*(2), 253–265. https://doi.org/10.1037/cdp0000220

McHale, S. M., Crouter, A. C., Kim, J.-Y., Burton, K. D., Dotterer, A. M., & Swanson, D. P. (2006). Mothers' and fathers' racial socialization in African American families: Implications for youth. *Child Development, 77*(5), 1387–1402. https://doi.org/10.1111/j.1467-8624.2006.00942.x

McIntosh, K., Reinke, W. M., Kelm, J. L., & Sadler, C. A. (2012). Gender differencs in reading skill and problem behavior in elementary school. *Journal of Positive Behavior Interventions, 15*(1), 51–60. https://doi.org/10.1177/1098300712459080

Miller, B. M. (2005). Pathways to success for youth: What counts in after-school. https://www.wcwonline.org/vmfiles/MARSReport.pdf

Muthén, L. K., & Muthén, B. O. (1988–2017). *Mplus user's guide* (8th ed.). Muthen & Muthen.

Neblett Jr, E. W., Rivas-Drake, D., & Umaña-Taylor, A. J. (2012). The promise of racial and ethnic protective factors in promoting ethnic minority youth development. *Child development perspectives*, 6(3), 295–303. https://doi.org/10.1111/j.1750-8606.2012.00239.x

Niehaus, K., Rudasill, K. M., & Rakes, C. R. (2012). A longitudinal study of school connectedness and academic outcomes across sixth grade. *Journal of School Psychology, 50*, 443–460. https://doi.org/10.1016/j.jsp.2012.03.002

Opara, I., Rodas, E. I. R., Garcia-Reid, P., & Reid, R. J. (2020). Ethnic identity, empowerment, social support and sexual risk behaviors among Black adolescent girls: Examining drug use as a mediator. *Child and Adolescent Social Work Journal*, 1–16. https://doi.org/10.1007/s10560-020-00706-z

Phal, K., & Way, N. (2006). Longitudinal trajectories of ethnic identity among urban Black and Latino adolescents. *Child Development, 77*(5), 1403–1415.

Phinney, J. S. (1992). The Multigroup Ethnic Identity Measure: A new scale for use with diverse groups. *Journal of Adolescent Research, 7*(2), 156–176.

Phinney, J. S., & Landin, J. (1998). Research paradigms for studying ethnic minority families within and across groups. In V.C. McLoyd & L. Steinberg, *Studying minority adolescents* (pp. 99–120). Psychology Press.

Quintana, S. M. (2007). Racial and ethnic identity: Developmental perspectives and research. *Journal of Counseling Psychology, 54*(3), 259–270. https://doi.org/10.1037/0022-0167.54.3.259

Quintana, S. M. (2008). Racial perspective taking ability: Developmental, theoretical, and empirical trends. In S. M. Quintana & C. McKnown (Eds.), *Handbook of race, racism, and the developing child* (pp. 16–36). John Wiley & Sons.

Resnick, M. D., Bearman, P. S., Blum, R. W., Bauman, K. E., Harris, K. M., Jones, J., et al. (1997). Protecting adolescents from harm: Findings from the national longitudinal study on adolescent health. *Journal of American Medical Association, 278*(10), 823–832. https://doi.org/10.1001/jama.278.10.823

Riggs, N. R., Bohnert, A. M., Guzman, M. D., & Davidson, D. (2010). Examining the potential of community-based after-school programs for Latino youth. *American Journal of Community Psychology, 45*, 417–429. https://doi.org/10.1007/s10464-010-9313-1

Rivas-Drake, D., Seaton, E. K., Markstrom, C. A., Quintana, S. M., Syed, M., Lee, R. M., Schwartz, S. J., Umaña-Taylor, A. J., French, S., Yip, T., & Ethnic and Racial Identity in the 21st Century Study Group. (2014). Ethnic and racial identity in adolescence: Implications for psychosocial, academic, and health outcomes. *Child Development, 85*(1), 40–47. https://doi.org/10.1111/cdev.12200

Rivas-Drake, D., Syed, M., Umaña-Taylor, A. J., Markstrom, C., French, S., Schwartz, S. J., Lee, R., & Ethnic and Racial Identity in the 21st Century Study Group. (2014). Feeling good, happy, and proud: A meta-analysis of positive racial effect and adjustment. *Child Development, 85*(1), 77–102. https://doi.org/10.1111/cdev.12175

Russo, J. F., Stokes, G. S., Lahey, B. B., Christ, J., McBurnett, K., Loeber, R., Stouthamer-Loeber, M., & Green, S. M. (1993). A sensation seeking scale for children: Further refinement and psychometric development. *Journal of Psychopathology and Behavioral Assessment, 15*(2), 145–157.

Simpkins, S. D. (2015). When and how does participating in an organized after-school activity matter? *Applied Developmental Science, 19*(3), 121–126. https://doi.org/10.1080/10888691.2015.1056344

Simpkins, S. D., Riggs, N. R., Ngo, B., Ettekal, A. V., & Okamoto, D. (2017). Designing culturally responsive organized after-school activities. *Journal of Adolescent Research, 32*(1), 11–36. https://doi.org/10.1177/0743558416666169

Sladek, M.R., Umaña-Taylor, A.J., Wantchekon, K.A., McDermott, E. R., & Updegraff, K. A. (2021). Contextual moderators of a school-based ethnic-racial identity intervention: The roles of family ethnic socialization and ethnic-racial background. *Prevention Science,* 22**,** 378–385. https://doi.org/10.1007/s11121-020-01166-8

Smith, C. O., Levine, D. W., Smith, E. P., Dumas, J., & Prinz, R. J. (2009). A developmental perspective of the relationship of racial-ethnic identity to self-construct, achievement, and behavior in African

American children. *Cultural Diversity & Ethnic Minority Psychology, 15*(2), 145–157.
https://doi.org/10.1037/a0015538

Smith, E. P., Atkins, J., & Connell, C. M. (2003). Family, school, and community factors and relationships to racial–ethnic attitudes and academic achievement. *American Journal of Community Psychology*, *32*(1–2), 159–173. https://doi.org/10.1023/A:1025663311100

Smith, E. P., Osgood, D. W., Caldwell, C. H., Hynes, K., & Perkins, D. F. (2013). Measuring collective efficacy among children in community-based afterschool programs: Exploring pathways toward prevention and positive youth development. *American Journal of Community Psychology, 52*, 27–40. https://doi.org/10.1007/s10464-013-9574-6

Smith, E. P., Osgood, D. W., Oh, Y., and Caldwell, L., (2018). Promoting afterschool quality and positive youth development: Cluster randomized trial of the pax good behavior game. *Prevention Science*, *19* (2), pp 159–173, https://doi.org/10.1007/s11121-017-0820-2

Smith, E. P., Witherspoon, D. P., Bhargava, S., & Bermudez, J. M. (2019). Cultural values and behavior among African American and European American children. *Journal of child and family studies*, *28*(5), 1236–1249. https://doi.org/10.1007/s10826-019-01367-y

Smith-Bynum, M. A., Anderson, R. E., Davis, B. L., Franco, M. G., & English, D. (2016). Observed racial socialization and maternal positive emotions in African American mother–adolescent discussions about racial discrimination. *Child Development, 87*(6), 1926–1939. https://doi.org/10.1111/cdev.12562

Spencer, M. B., Dupree, D., & Hartmann, T. (1997). A phenomenological variant of ecological systems theory (PVEST): A self-organization perspective in context. *Development and Psychopathology*, *9*(4), 817–833.

Spencer, M. B., Harpalani, V., & Dell'Angelo, T. (2002). Structural racism and community health: A theory-driven model for identity intervention. In W. R. Allen, M. B. Spencer, & C. O'Connor (Eds.), *African American education: Race, community, inequality, and achievement to a tribute to Edgar G. Epps* (pp. 259–282). Emerald Group Publishing Limited.

Tebes, J. K., Feinn, R., Vanderploeg, J. J., Chinman. M.J., Shepard, J., Brabham, T., Genovese, M., & Connell, C. (2007). Impact of a positive youth development program in urban after-school settings on the prevention of adolescent substance use. *Journal of Adolescent Health, 41*, 239–247. https://doi.org/10.1016/j.jadohealth.2007.02.016

Thomas, A. J., & Speight, S. L. (1999). Racial identity and racial socialization attitudes of African American parents. *Journal of Black psychology*, *25*(2), 152–170. https://doi.org/10.1177/0095798499025002002

Tseng, V., & Seidman, E. (2007). A systems framework for understanding social settings. *American Journal of Community Psychology, 39*(3), 217–228.

Umaña-Taylor, A. J., Quintana, S. M., Lee, R. M., Cross, W. E., Rivas-Drake, D., Schwartz, S. J., Syed, S., Yip, T., Seaton, E., & Ethnic and Racial Identity in the 21st Century Study Group. (2014). Ethnic and racial identity during adolescence and into young adulthood: An integrated conceptualization. *Child Development, 85*(1), 21–39. https://doi.org/10.1111/cdev.12196

Umaña-Taylor, A. J., & Hill, N. E. (2020). Ethnic-racial socialization the family: A decade's advance on precursors and outcomes. *Journal of Marriage & Family, 82*, 244–271. https://doi.org/https://doi.org/10.1111/jomf.12622

Vandell, D. L., Lee, K. T., Whitaker, A. A., & Pierce, K. M. (2020). Cumulative and differential effects of early child care and middle childhood out-of-school time on adolescent functioning. *Child Development*, *91*(1), 129–144. https://doi.org/10.1111/cdev.13136

Vandell, D. L., Simpkins, S. D., Pierce, K. M., Brown, B. B., Bolt, D., & Reisner, E. (2020). Afterschool programs, extracurricular activities, and unsupervised time: Are patterns of participation linked to children's academic and social well-being?. *Applied Developmental Science,* 1–17. https://doi.org/10.1080/10888691.2020.1843460

Vandell, D. L., Reisner, E. R., & Pierce, K. M. (2007). *Outcomes linked to high-quality afterschool programs: Longitudinal findings from the study of promsing afterschool programs*. https://files.eric.ed.gov/fulltext/ED499113.pdf

Wade, J. C., & Rochlen, A. B. (2013). Introduction: Masculinity, identity, and the health and well-being of African American youth. *Psychology of Men & Masculinity, 14*(1), 1–6. https://doi.org/10.1037/a0029612

Wang, Z., & Cheng, Z. (2020). Cross-sectional studies: Strengths, weaknesses, and recommendations. *Chest, 158*(1), S65–S71. https://doi.org/10.1016/j.chest.2020.03.012

Walters, G. D. (2020). Prosocial peers as risk, protective, and promotive factors for the prevention of delinquency and drug use. *Journal of Youth & Adolescence, 49*, 618–630. https://doi.org/10.1007/s10964-019-01058-3

Williams, J. L., & Deutsch, N. L. (2016). Beyond between-group differences: Considering race, ethnicity, and culture in research on positive youth development programs. *Applied Developmental Science, 20*(3), 203–213. https://doi.org/10.1080/10888691.2015.1113880

Wills, T. A., Murry, C. M., Brody, G. H., Gibbons, F. X., Gerrad, M., Walker, C., & Ainette, M. G. (2007). Ethnic pride and self-control related to protective and risk factors: Test of the theorectical model for the Strong African American families program. *Health Psychology, 26*(1), 50–59. https://doi.org/10.1037/0278-6133.26.1.50

Witherspoon, D. P., Daniels, L. L., Mason, A. E., & Smith, E. P. (2016). Racial-ethnic identity in context: Examining mediation of neighborhood factors on children's academic adjustment. *American Journal of Community Psychology, 57*(1-2), 87-101. https://doi.org/10.1002/ajcp.12019

Woodland, M. H. (2016). After-school programs: A resource for young Black males and other urban youth. *Urban Education, 51*(7), 770–796. https://doi.org/10.1177/0042085914549361

Yu, D., Smith, E. P., & Oshri, A. (2021). Exploring racial-ethnic pride and perceived barriers in positive youth development: A latent profile analysis. *Applied Developmental Science*, *25*(4), 332–350. https://doi.org/10.1080/10888691.2019.1640607

Zapolski, T. C., Fisher, S., Banks, D. E., Hensel, D. J., & Barnes-Najor, J. (2017). Examining the protective effect of ethnic identity on drug attitudes and use among a diverse youth population. *Journal of Youth & Adolescence, 46*, 1702–1715. https://doi.org/10.1007/s10964-016-0605-0