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Developmental Dynamics of Students' Perceptions of Classroom Practices, their Identity, and Academic Engagement

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DEVELOPMENTAL DYNAMICS OF STUDENTS' PERCEPTIONS OF CLASSROOM
PRACTICES, THEIR IDENTITY, AND ACADEMIC ENGAGEMENT

A dissertation proposal submitted in partial fulfillment of the requirements for the degree of
Doctor of Philosophy at Virginia Commonwealth University

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Abstract

DEVELOPMENTAL DYNAMICS OF STUDENTS' PERCEPTIONS OF CLASSROOM PRACTICES, THEIR IDENTITY, AND ACADEMIC ENGAGEMENT

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A dissertation in partial fulfillment of the requirements for the degree of Doctor of Philosophy at
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As the student body in the United States continues to become more diverse, it is critically important to understand the factors that influence African American and Latinx students' engagement, including what they bring to the classroom, and their perceptions of what is occurring in the classroom. During early adolescence, youth are making meaning and internalizing the proximal influences their classrooms have on their sense of self and subsequent academic outcomes. Among school variables, teaching quality accounts for some amount of variation in student achievement.

This dissertation project explored whether there were gender differences among 205 middle school students' perceptions of classroom practices. The study also assessed whether differences in boys' and girls' perceptions of classroom practices had different influences on their self-systems (e.g., components of ethnic-racial identity and social efficacy with teacher), and classroom engagement.

Study results suggest that boys and girls rate similar exposure to social-emotional classroom practices from their teachers, however invariance tests demonstrate these practices have different meanings for boys and girls. In addition, results indicate that exposure to social-emotional classroom practices is affirming for components of boys' ethnic-racial identity, such as their racial centrality, public regard, and private regard, which in turn predicted higher classroom engagement.

Whereas for girls, classroom practices only affirmed their private regard which in turn predicted higher classroom engagement. Social efficacy with one's teacher did not mediate the association between classroom practices and classroom engagement as previously hypothesized for neither girls nor boys. This study also found that girls' grade level was an important covariate in the model, which implies there are important developmental considerations in the dynamic relationship between the classroom context and students' self-systems.

Findings from this study suggest some important implications for policy and curricula development around teacher training and teaching practices that enhance academic and social outcomes for students of color. In particular, practices that encourage collaboration and sharing of ideas and knowledge among African and Latinx students are both developmentally, and culturally responsive for students' sense of self and engagement in class.

Developmental Dynamics of Students' Perceptions of Classroom Practices, Their Identity and Academic Engagement

Introduction

Demographic shifts, coupled with persistent disparities in academic achievement opportunities by race/ethnicity and social class, generate pressure on policymakers and educators alike (Jensen, Grajeda, & Haertel, 2018). Achievement differences by social class exist *within* racial and ethnic groups (S. Reardon, 2011; S. F. Reardon & Galindo, 2009), just as racial/ethnic disparities persist *within* social class groups (Galindo, 2013). Processes within governments, schools, classrooms, and homes, and communities interact to explain these gaps (Boykin & Noguera, 2011b; Ladson-Billings, 2006).

Matthews, Banerjee and Lauerman (2014) note that efforts to understand these gaps often utilize comparative, deficit-based approaches that paint African American and Latinx students as not having strong internal values related to learning and achievement, such as recognizing the value of education or importance of academic success, and self-concepts that lend themselves to high achievement. However, research shows otherwise. For example, African American students demonstrate healthy self-esteem and academic self-concepts (Okeke, Howard, Kurtz-Costes, & Rowley, 2009). Further, the focus on achievement gaps has largely been on subject-level grades, grade point averages (GPA), and/or performance on standardized tests (Boykin & Noguera, 2011b). Wade and Noguera (2011) argue that if progress is to be made, researchers should focus on precursors to achievement outcomes, such as student engagement. In school settings, engagement is important because it functions as the behavioral pathway through which a number of important school outcomes are influenced (Yang, 2018; Wellborn, 1991).

As the student body in the United States continues to become more diverse, it is critically important to understand the factors that influence African American and Latinx students' engagement, including what they bring to the classroom, and their perceptions of what is occurring in the classroom. Among school variables, teaching quality accounts for some amount of variation in student achievement (Wade & Noguera, 2011). Youth spend much of their time in classrooms and, on a daily basis, classrooms serve as an important context for many aspects of adolescent development and across multiple domains; including behavioral, emotional, social, and cognitive (Eccles & Roeser, 2011). Within the classroom, teachers provide one of the most proximal influences on adolescent development through their practices and the relationships they establish with students (Pianta & Hamre, 2009); both of which are strongly linked to students' engagement and academic growth (Pianta & Hamre, 2009; Yang, Bear, & May, 2018).

Statement of Study Purpose

The current study seeks to understand how African American and Latinx students' perceptions of classroom practices are associated with their self-system, specifically ethnic-racial identity and social efficacy, and their academic engagement. Few studies consider students' perception of classroom practices, and the role they play in students' identity and levels of academic engagement.

Student Engagement

Student engagement generally refers to the behavioral intensity and emotional quality of a person's active involvement during a task (Reeve, Jang, Carrell, Jeon, & Barch, 2004).

Empirical studies demonstrate that student engagement is related to higher levels of academic participation, achievement, school completion, and effort in learning activities (Boykin & Noguera, 2011a; Janosz, Archambault, Morizot, & Pagani, 2008; Marks, 2000). Conversely, low

student engagement is associated with a variety of negative outcomes; including delinquency, violence, teen pregnancy, substance abuse, and school dropout (Payne, Gottsfredson, & Gottsfredson, 2003; Simons-Morton, 2004).

Further, during early adolescence students demonstrate a decline in engagement (Roeser & Eccles, 1998). This decline in school engagement from elementary to middle school has been attributed to changes/differences in classroom factors, such as student autonomy and emotional support from teachers, both of which are known to support student engagement (Wentzel, 2010). Thus, understanding the factors that underlie student engagement during the middle school years, such as classroom contextual factors, is critical.

Theoretical Framework

The current study is guided by an integrative framework of motivation (Skinner, Kindermann, Connell, & Wellborn, 2009) that explains how characteristics of children's contexts contribute to self-systems and self-perceptions, which to lead to action (e.g., engagement) and ultimately to social, emotional, and academic outcomes (Skinner et al., 2009). Skinner and colleagues (2009) define children's *contexts* as settings comprised of family, peers, teachers, and others with whom children engage socially. The current study will focus on teachers and the classroom environment in which youth engage socially. Within this framework, motivation is defined as a dynamic, developing characteristic that is sensitive to contexts external to the child, such as classroom practices. The integrative framework of motivation also describes aspects of the child's self-conception; including beliefs about and perception of themselves, social cognitions, as well as appraisals. All aspects of the "self" develop as a result of past experiences, and mold children's interpretation of their experiences, as well as play an integral role in motivating children's behaviors. Action refers to engagement versus disaffection; each reflects

an outward signal of motivational state and describes the quality of children’s interactions with their physical and social world. (See Figure 1 below).

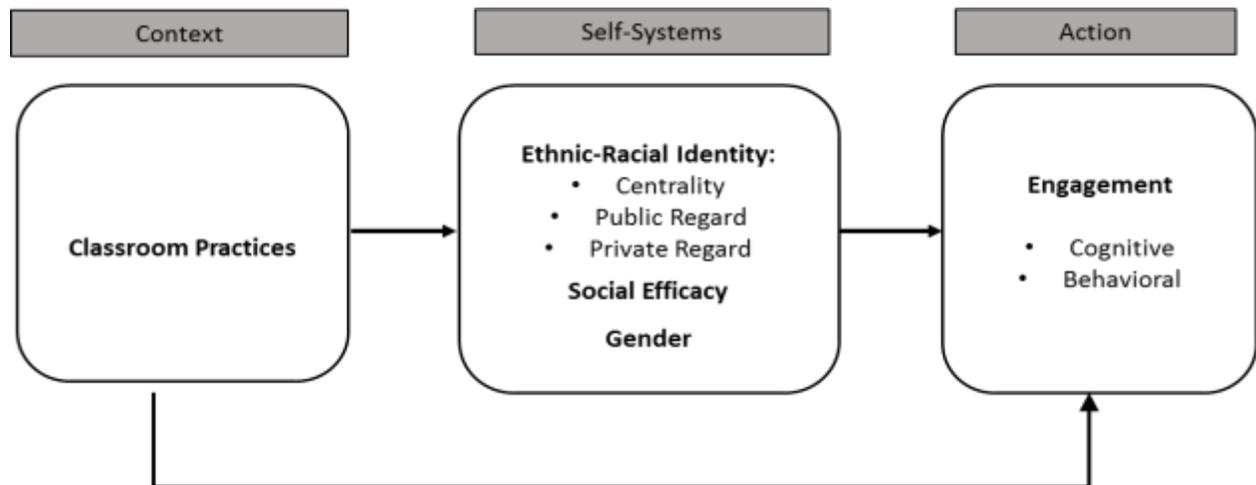


Figure 1: Adapted Integrative Framework of Motivation (Skinner et al., 2018).

In the current study, each component of the integrative framework of motivation leading up to academic outcomes is examined: CONTEXT (classroom practices) —> SELF (social efficacy with teachers and ethnic-racial identity) —> ACTION (classroom engagement). This study uniquely contributes to the existing literature by: 1) considering the students’ perceptions of classroom practices, 2) conceptualizing ethnic-racial identity as a component of the self-system and one that is unique to students of color, and 3) considers the oft-neglected intermediary variable—school engagement, as the study outcome. Each of these is explored further below.

CONTEXT: Classroom Processes and Practices. Existing research recognizes that teachers’ instruction plays a central role in maximizing students’ motivation and engagement (Skinner et al., 2009). The premise of the social emotional learning (SEL) movement is that social processes, including high quality student-teacher interactions and effective teaching practices that enable academic engagement and achievement outcomes (Weissberg, Durlak,

Domitrovich, & Gullotta, 2015). Generally, classroom practices that support student autonomy are critical for fostering intrinsic motivation to learn across the lifespan (National Academies of Sciences, Engineering, 2018). In addition, SEL practices in classrooms are related to improved attachment and attitudes toward school (Durlak, 2011). The current study focuses on social-emotional-promotive practices that consider how often students are exposed to classroom practices that facilitate their autonomy and collaboration skills with peers. As a behavioral setting, classrooms consist of interactions between and among students and their teachers (Hamre & Pianta, 2010). The observational measure, Classroom Assessment Scoring Systems, suggests the quality of teacher-student interactions can be broken down into three domains: emotional, organization, and instructional (Pianta & Hamre, 2009).

Emotional support refers to the teacher's connection to and responsiveness toward students. Positive emotional support can include behaviors such as incorporating students' point of view into learning activities. When teachers provide positive emotional support, adolescents report being more motivated to learn and more engaged (Wentzel, 2010). Sadly, comparative studies examining adolescents' perception of teacher emotional support from elementary to middle school note declines in the average level of perceived teacher emotional support (Midgley, Feldlaufer, & Eccles, 1989) and associated declines in cognitive and behavioral engagement over time (Yang et al., 2018). Classroom organization refers to the teacher's tendency to use proactive rather than reactive supports to foster classroom routines and guide student behavior. Teachers with positive classroom instruction often make clear learning objectives or engage students in a variety of modalities for learning. Lastly, instructional support refers to the presence of feedback loops in teacher-student communication, such that teachers find opportunities to engage students in higher order thinking.

Studies that examine teacher practices often utilize observations and teacher self-reports of teaching practice and seldom consider students' perceptions of teaching practices and the impact of these perceptions on student engagement and academic outcomes (Hargreaves, 2000). Yang's recent (2018) analysis of statewide data from Delaware which included 25,896 students' perceptions of teacher practices related to social-emotional competencies and their self-reported behavioral and cognitive engagement, indicates mean differences between middle and high school students in behavioral and cognitive engagement based on their perceptions of teaching practices. More specifically, positive associations between teacher-student relationship quality and cognitive-behavioral engagement was significantly stronger for middle and high schoolers than it was for students in elementary school. This study also noted significant effects for gender and race, although these effects were not further explored.

Researchers that consider minority students perceptions of classroom social processes often utilize qualitative methods to examine students' perceptions of culturally-relevant teaching or teacher caring (Feinauer & Cutri, 2012; Howard, 2001; Tosolt, 2010). This work considers student perspectives as a means of understanding ethnic-racial minority students' perceptions of classroom social processes. Findings indicate that students' frequently share that "caring" and "orderly" teachers were important to their experiences in the classroom (Howard, 2001; Morris & Morris, 2002). Some qualitative studies have examined gender and racial differences in the types of behaviors they value from teachers. For example, Tosolt (2010) interviewed fifty students from diverse backgrounds and found that girls were more likely than boys to identify academic behaviors (e.g., "make sure I understand the instructions") as caring, while boys valued interpersonal caring behaviors (e.g., complimenting, offering protection, hugs). In addition, African American students reported a preference for academic behaviors from their teachers,

such as providing feedback on academic performance and urging students to continue working hard (Tosolt, 2010). However, previous studies also note that boys and African American students often do not experience the same level of closeness or high expectations from their teachers than their female and European American counterparts—yet both of these are critical for student success (Hughes, Cavell, & Willson, 2001; McKown & Weinstein, 2002). Lastly, studies that examine Latinx students' perceptions of classroom social processes often ask students about practices they identify as culturally responsive such as whether the teacher is from the same community, but these studies have not addressed the perceptions of or benefits of specific teaching practices (Irizarry, 2007). Most teachers in the United States tend to be Caucasian females from middle-class backgrounds (Taie & Goldring, 2018), and it is important to understand how mismatches between students and teachers in the classroom impact self-concept and subsequent behavioral, social, and academic outcomes.

The current study will consider student perceptions of teaching practices and also consider both gender- and race-related differences in students' perceptions of teacher practices as the particular practices being examined could confer different meanings and importance for students based on their demographic characteristics.

Developing a sense of SELF in the Classroom. During early adolescence youth are making meaning and internalizing the proximal influences their classrooms have on their sense of self and subsequent academic outcomes. Students need confidence to interact effectively with others in order to realize their goals. This confidence, or social efficacy, is related to beliefs about school and academics (Patrick, Anderman, & Ryan, 2002). In classrooms where teachers report they attend to students' social as well as academic needs, students reported more help seeking—which is an indicator of engagement (Ryan & Patrick, 2001). Moreover, social efficacy

relating to the teacher is strongly associated with adolescents' beliefs that they can negotiate the necessary social norms and interactions with authority figures (Patrick, Hicks, & Ryan, 1997).

Students' sense of social efficacy with teachers develops in the context of the relationship they have with their teachers. Quality student-teacher relationships are characterized by support and closeness, and are positively related to socio-emotional and cognitive development early in development (Serpell & Mashburn, 2012), but also well into adolescence (Eccles & Roeser, 2011). Another important developmental consideration is that there are both race and gender differences in student-teacher relationship quality, such that girls and Caucasian students receive higher levels of support and teachers' report higher levels of closeness with them (Hughes et al., 2001). In contrast, teachers report more conflict with boys and African American students (Birch & Ladd, 1997; Hughes et al., 2001; Saft & Pianta, 2001). Further, African American boys report declines—from seventh to eighth grade—in their social efficacy with teachers, and the lowest level of efficacy compared to other subgroups of students (Patrick et al., 2002).

Research shows that when students perceive their teacher as emotionally supportive and as promoting interaction, they feel more efficacious in their ability to interact positively with their teacher (Ryan & Patrick, 2001). Conversely, students with conflictual relationships with their teachers demonstrate poorer academic performance, more negative attitudes towards school, less school involvement, and experience disparate levels of school discipline (Barbarin, Chinn, & Wright, 2014; Birch & Ladd, 1997). Midgley, Feldlaufer & Eccles (1989) found that students' perception of support from their teachers was associated with students' sense of efficacy as learners and with their academic engagement and achievement.

Ethnic-Racial Identity as a component of the self-system. Broadly defined, ethnic-racial identity refers to a multidimensional, psychological construct that reflects the beliefs and attitudes that individuals have about their ethnic-racial group membership, as well as the

processes by which these beliefs and attitudes develop over time (Umana-Taylor et al., 2014b). It is important to note that there is substantial variation in terminology and its use within the ethnic-racial identity literature. *Racial identity* and *ethnic identity* are often used interchangeably to refer to related but distinct phenomena (Williams, Tolan, Durkee, Francois, & Anderson, 2012). There is little consensus on how similar these terms are or in the presumed relationship between them (Yip, Douglass, & Sellers, 2014). Umana and colleagues (2014a, p. 23) note that “racial identity is used, for example, when the groups being investigated are considered racial (e.g., Black) and ethnic identity when the group is considered ethnic (e.g., Latinxs), or, if the measure used is labeled as racial or ethnic. Similar to prior work, the term “*ethnic-racial identity*” will be globally adopted in the current study. However, terms used by the original authors of literature reviewed will be used when discussing specific studies.

The ethnic-racial identity construct is developmentally-grounded and understood as shaped by the social-environmental contexts within which individuals’ identities are developing. While in middle childhood ethnic-racial identity formation largely involves children developing the ability to identify and categorize themselves and others according to ethnic and racial labels (Quintana, 1998). Adolescence involves more complex processing of one’s sense of self as it is marked as a transition period in which youth are transitioning into independent and responsible adults. As adolescents increase in their social-cognitive maturity and their ability to understand how race-ethnicity impacts life chances and social experiences, ethnic-racial identity processes involve exploring one’s race-ethnicity and internalizing values from one’s ethnic and racial groups (Quintana, 1998). In addition, as race-ethnicity becomes more salient to youth they also begin to incorporate these experiences into their self-concept.

For the current study, Sellers' Multidimensional Model of Racial Identity (MMRI; Sellers, Smith, Rowley, & Chavous, 1998) was used. Sellers et al. (1998) proposed four dimensions of racial identity. Racial *salience* and *centrality* refers to the extent to which a person considers their race to be an important aspect of their self-concept, while racial *regard* and *ideology* refers to the individuals' perceptions of what it means to be a member of their ethnic-racial group. Because minorities have varying experiences, some individuals place little significance on race in defining who they are, while others may see their racial membership as the defining characteristic of their self-concept. MMRI is not a stage-based model and enables researchers to examine variability of ethnic-racial identity amongst peers in the same context and its varying impacts on outcomes (Miller-Cotto & Byrnes, 2016; Sellers et al., 1998).

Dynamic CONTEXT-SELF Interactions. Prior studies that examine social influences in school settings often focus on perceived discrimination from teachers and peers, and the ways in which ethnic-racial identity moderates negative associations between perceived discrimination and academic outcomes (Chavous et al., 2003; Thomas, Caldwell, Faison, & Jackson, 2009). Prior studies that examined perceived discrimination tap into constructs that likely affect the quality of student-teacher interactions. Perceiving that a teacher is treating you more harshly likely creates a conflicted relationship between you and your teacher. Yet, there are relatively few studies that directly examine the association between classroom practices and ethnic-racial identity. In one of the few studies that did, Rivas-Drake and colleagues (2018) demonstrate concurrent and longitudinal associations among classroom processes that include student voice and choice in classroom, discipline, and homeroom practices, and students' ethnic-racial identity. The authors highlighted that for African American and Latinx middle school students, those exposed to more classroom practices that promoted autonomy, prosocial behavior routines, and collaboration exhibited more exploration and meaning-making of their ethnic-racial identity (e.g., ethnic-racial resolution) (Rivas-Drake et al.,

2018). Moreover, prior studies that examine social-emotional learning note short-term outcomes related to students' sense of self.

The current study considers associations between classroom practices and components of ethnic-racial identity—specifically centrality and regard. During adolescence, minority youth not only demonstrate an understanding of societal views about their ethnic-racial group (e.g., public regard), but it is also associated with their school attachment (Chavous et al., 2003). Youth's public regard beliefs derive in part from their proximal experiences in school and community, their academic attitudes and engagement in school may therefore relate to how they perceive their teachers, peers, and other aspects of their social system. Racial centrality in adolescence enables more awareness and understanding of personal and structural barriers to achievement within schools and in society on the basis of race. As youth make meaning of proximal interactions in the classroom, classroom practices can play a critical role in youth's ethnic-racial identity development and the social relationship they have with their teacher.

Although it is commonly believed that having a strong racial identity is positively related to academic achievement, results in the literature are conflicting and the mechanisms through which ethnic-racial identity affects academic achievement are not well understood. For example, there are multiple studies that have previously demonstrated positive (Smith, Levine, Smith, Dumas, & Prinz, 2009; Yasui, Dorham, & Dishion, 2004), negative (Worrell, 2007), and even inconclusive (Cokley & Chapman, 2008) relations among ethnic-racial identity and academic achievement. A recent meta-analysis by Miller-Cotto and Byrnes (2016) suggests the link between identity and achievement outcomes may be indirect through variables such as engagement or motivation. There is some research support for this idea. For example, work by Byrd and Chavous (2009) shows a positive association between racial centrality (importance) and cognitive engagement among African American adolescents. Similarly, Chavous and

colleagues (Chavous et al., 2003) also found positive associations between ethnic-racial centrality and school beliefs such as school relevance and efficacy, in a sample of twelfth-grade African American students. Such research suggests it is important to consider possible pathways through which different dimensions of ethnic-racial identity influence academic engagement and outcomes.

Gender Considerations. It has been established that ethnicity and race are an important component of and influence on adolescent development, and some research suggests that gender influences these processes. Previous studies have found little support for gender differences in the degree of endorsement across components of ethnic-racial identity (e.g., centrality, private, and public regard) (Rowley, Chavous, & Cooke, 2003). However, there is literature that suggests gender influences the processes through which racial identity is related to adolescent outcomes (Caldwell, Kohn-Wood, Schmeelk-Cone, Chavous, & Zimmerman, 2004; Chavous, Rivas-Drake, Smalls, Griffin, & Cogburn, 2008). For example, Chavous and colleagues (2008) examined relationships among racial identity, school-based racial discrimination experiences (e.g., teachers and peers), and academic engagement among 410 African American adolescent boys and girls. Boys and girls in this study were not found to have statistically significant mean differences in their endorsement of feeling that their race was important to them (e.g., racial centrality), yet racial centrality for boys served as a protective function in relation to their GPA and school importance. More specifically, boys that endorsed race as more central to their identity were at less risk than those for whom race was less central for the negative impact of classroom discrimination (i.e., perceiving discrimination specifically from teachers) on GPA and perceived importance of school. In contrast, racial centrality did not directly influence girls' outcomes. Findings such as these highlight the need to further examine the experiences and perceptions of

boys and girls in the classroom context, as well as the ways these experiences and racial identity influence different aspects of their academic outcomes.

While boys and girls may not differ in their ethnic-racial identity, as children from marginalized groups they are often socialized differently by their parents in regards to their cultural heritage, how to respond to potential racial hostility, or whether they are empowered or confused by their experiences in American society (Stevenson, Cameron, Herrero-Taylor, & Davis, 2002). Girls often receive messages that focus on dimensions of racial centrality and cultural knowledge, whereas boys are more likely to receive messages of racial barriers and coping with racism (Dunbar, Leerkes, Coard, Supple, & Calkins, 2017). It is expected in the current study that boys and girls will be attuned to classroom practices differently, and the buffering effects of ethnic-racial identity and racial socialization may also differ by gender. Further, prior work has also established that teachers relate differently to boys and girls in the classroom, that the associations between ethnic-racial identity and students' perceptions of teacher behaviors (e.g., discrimination) differ by gender, and the ways in which these are related to academic outcomes are also contingent on the student's gender. As such, the current study will consider gender differences and fill a gap in the literature by considering ways in which students' perceptions of classroom practices relate to variability in components of ethnic-racial identity. Findings from the current study may have important implications for policy regarding teacher training and practices that promote academic and social outcomes for students of color.

Current Study

This study explores classroom practices, components of ethnic-racial identity, social efficacy with teachers, and classroom engagement during early adolescence among African American and Latinx youth. The current study seeks to answer two main research questions:

1. Are there differences in boys' and girls' perceptions of teachers' classroom practices?
2. Are there gender differences in the associations among perceived teacher practices, student self-systems, and classroom engagement?

Study Hypotheses

Hypothesis 1: Girls and boys differ in their perceptions of teacher practices.

Hypothesis 2: Student self-systems (e.g. ethnic-racial identity and social efficacy with teachers) and teacher practices will be positively associated with engagement. We also hypothesize self-systems and teacher practices will have stronger relationships with engagement for boys than for girls.

Hypothesis 3: Teacher practices will mediate the association between self-system variables (e.g., ethnic-racial identity and social efficacy with teachers) and engagement. The proposed mediation model will be stronger for boys than for girls.

Method

Participants

This study used a secondary dataset derived from a large longitudinal study of social, emotional, and academic development in middle school youth at four public schools in the Midwest. Participants in the cross-sectional portion of the study were 64.7% Black (n= 145) and Latinx (n= 70). Fifty percent of the sample was male, and 32.1% of students were in sixth grade, 33.5% were in seventh grade, and 34.4% were in eighth grade. Schools were located in suburban communities and ranged in diversity. The majority of teaching staff (roughly 80%) at each school was White and female. Student reports on teachers were distributed among 68 teachers across the cross-sectional subsample.

Measures

Ethnic-Racial Identity. Participants completed the Multidimensional Inventory of Black Identity-Teen assessment (MIBI-t Scottham, Sellers, & Nguyễn, 2008), which is a developmentally-appropriate measure of racial identity for adolescents. Students responded to nine items on a five-point Likert scale ranging from 1 (*strongly disagree*) to 5 (*strongly agree*). This inventory was adapted to ensure children of other ethnicities (e.g., Latinx, Caucasian, Asian American, etc.) could appropriately respond. For example, the researchers replaced “African Americans” with the term “my ethnic group”. Participants’ scores represent an average across three items to create a composite score for each of three subscales. The *Centrality* subscale assesses the extent to which race is an important part of a person’s identity ($\alpha=.75$). A higher score on the centrality scale indicates the person views their race as more central to their self-concept. The *Private Regard* subscale assesses the extent to which a person feels positively toward other members of their ethnic group, and their position as a member of their ethnic group ($\alpha=.89$). The *Public Regard* subscale measures the extent to which the individual feels that members of other groups feel positively or negatively toward their ethnic group ($\alpha=.77$). Higher scores on the Regard subscale indicate more positive feelings towards individuals of one’s ethnic group.

Classroom Practices. Students were asked to indicate how often they engaged in a particular activity with their teacher during the school year related to classroom practices (4 items; e.g., “participate in class discussion”, “ask other students when you need help with your work”, “share what I am learning with other students”, and “apply what you do in class to the real world”). Items were scored on a 5-point scale ranging from 1 (*never*) to 5 (*all of the time*). A mean score was computed for each subscale with higher scores indicating students’ perceive more frequent use of social emotional promotive teaching practices ($\alpha=.73$).

Social Efficacy with Teacher. Students' perceptions of their efficacy to form positive relationships with their teacher were assessed with four items (e.g., "I find it easy to just go and talk to my teacher" or "I can explain my point of view to my teacher"). Students responded to all of the items from the *Social Efficacy with Teachers* subscale that were scored using a 5-point Likert scale ranging from 1 (*strongly disagree*) to 5 (*strongly agree*) (Patrick et al., 1997). A mean score is computed for an overall social efficacy score, with a higher score indicating students' feel more efficacious in their interactions with their teachers ($\alpha=.82$).

Classroom Engagement. Students' completed the *School Engagement Scale* (Fredericks, Blumenfeld, Friedel, & Paris, 2005), which is a measure of cognitive, emotional, and behavioral classroom engagement. Behavioral engagement measures students' general "on-task behavior", such as "When I am in class I just act as if I am working". Cognitive engagement assesses students use of self-regulated and strategic approaches to learning such as, "When I read a book, I ask myself questions to make sure I understand what it is about". Students responded to 12 items about their engagement in school on a five-point Likert scale ranging from 1 "never" to 5 "all of the time" (α ranged from .75-.85).

Procedures

Data were collected for a longitudinal study as part of the schools' efforts to support academic, social, and emotional development among their students through the implementation of a social and emotional learning (SEL) approach. Time 1 (T1) data were collected during the spring of 2014, Time 2 (T2) data were collected six months later during the fall of 2014, Time 3 (T3) data were collected six months later during the spring of 2015, and Time 4 (T4) were collected a year later during the spring of 2016. All students present during data collection periods were provided a survey; missing data reflects either refusal to complete the survey

(which was voluntary) or being absent on the day of data collection. During students' homeroom period, students self-administered the study survey and staff assured them that their responses would be confidential. An external consultant who was not affiliated with the schools nor the research team, de-identified all completed surveys.

Data Analytic Approach

Prior to running the main analyses, data was cleaned and examined for missing data, distribution issues, and outliers. Scatterplots were generated to assess skewness, kurtosis, and linearity observed in the data. There were no skewness or kurtosis observed in the dataset, in addition normal linearity was observed in the dataset.

Testing for measurement invariance by gender

In order to test whether classroom practices had the same underlying structure across gender, the current study used a procedure recommended by Byrne (2004) to test for structural invariance in models across groups. For each group comparison, the current study tested three increasingly restrictive structural equation models that compared the fit of the data across gender. The order of invariance started with configural invariance, allowing item loadings and covariance to differ significantly across groups. This model was considered the baseline model since it was the least restrictive. Baseline parameters were estimated using data from both subgroups and thus, yield the best fit of the data. The second fit of this model was constrained against any significant group differences in item factor loadings. The fit of this model was compared to the baseline model to determine whether any of the items loaded differently onto the factors across the groups. The fit of the second model was then compared to the baseline model in order to determine whether item loadings were invariant across the two groups (Byrne, 2004). The third model constrained both the item loadings and item intercepts between factors to

be equal across groups. The fit of this model was compared to the fit of the baseline model to determine whether or not both the item loadings and item intercepts are equal across groups. Traditionally, differences in the Chi Square statistics for two models have been used to determine differences in model fit, however recent studies note limitations with Chi Square for larger samples (Cheung & Rensvold, 2002; Mantzicopoulos, French, & Maller, 2004). Cheung and Rensvold (2002) have called for comparing model differences in the comparative fit index (CFI) as a way of testing model differences in fit. They argue that the difference in CFI values between the baseline model and comparison model should not exceed .01 for the two models to be considered invariant.

The analyses were conducted using the R Package lavaan (R Development Core Team, 2012). R was chosen, in part, because it is able to implement maximum likelihood estimates. The amount of missing data was less than 17% and the data were missing completely at random evidenced by non-significant results derived from the generalized least squares combined test of homogeneity of means and covariance matrices representing complete and incomplete data, $\chi^2(55)=34.96, p=.984$ (Little, Jorgensen, Lang, & Moore, 2014). The current study dealt with the missing data through maximum likelihood estimation, such that all participants with available data were included in the analyses (Bollen & Curran, 2006).

The following criteria was used to assess goodness of fit for the models based on their status as the most commonly used indices (Kenny, 2014): ratio of chi-square to the degrees of less than 2.0; traditional fit indices, including the comparative fit index (CFI) and Tucker-Lewis index (TLI); higher than .90 would indicate adequate fit (Byrne, 1994; Hu & Bentler, 1999); and a root mean square error of approximation (RMSEA) of .08 or less (Tabachnick & Fidell, 2001).

Structural Equation Model

Structural equation models were developed to validate a hypothesized pattern of relations among variables leading from classroom practices through components of students' ethnic-racial identity and social efficacy with teachers to classroom engagement (See Figure 2). Grade level was included in the hypothesized structural equation model as a covariate for girls. Descriptive analyses demonstrated grade level mean differences on girls self-reported public regard, private regard, social efficacy with teachers, cognitive and behavioral engagement. In addition, the current study tested structural equation models separately for boys and girls because of measurement non-invariance related to classroom practices. Models for both boys and girls included correlated errors between ethnic-racial identity and social efficacy with because these mediating variables were related to each other. A latent factor of classroom engagement was created using components of behavioral and cognitive engagement. Lastly, it is important to note a latent factor cannot be created for ethnic-racial identity because components of ethnic-racial identity are meant to be examined individually to account for variability among components (Sellers et al., 1998). Thus, three separate models were run to include different components of ethnic-racial identity in each model for both boys and girls. In addition, goodness of fit was assessed for boys and girls separately using CFI, TLI, and RMSEA. Lastly, bootstrapping method procedures were used to test whether indirect effects were statistically significant in each model because it relatively provides more accurate type 1 error rates and has greater power in detecting indirect effects (Shrout & Bolger, 2002). The bootstrapping method produced 95% bias-corrected confidence intervals of estimates of the indirect effect from 2,000 resamples of the data. With this procedure, when the 95% confidence interval (CI) around this parameter does not include zero, the null hypothesis is rejected.

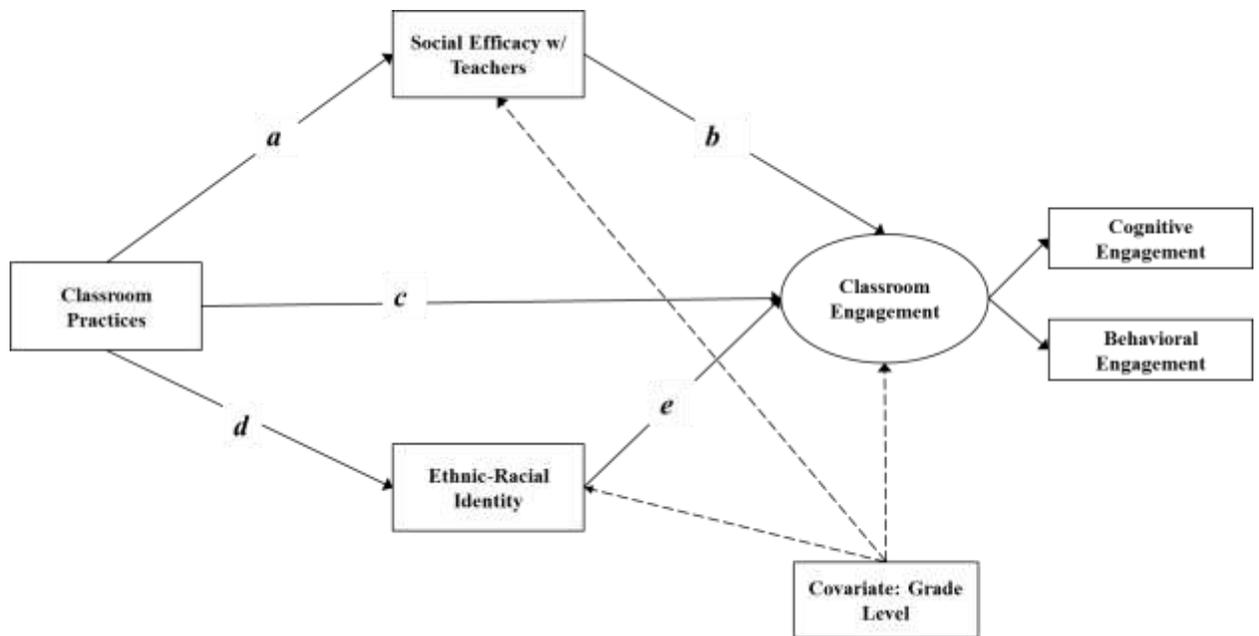


Figure 2. Analytical model of hypothesized structural equation model. Amount of explained variance is reported in the analyses. Error related to social efficacy with teachers and ethnic-racial identity was correlated but not included in the figure for simplicity.

Results

Descriptive Data Analyses

Descriptive analyses were conducted to examine differences between girls and boys on components of ethnic-racial identity, classroom practices, social efficacy with teachers, and school engagement. Table 1 shows mean and standard deviations of all study variables. Independent samples t-tests did not show statistically significant gender differences across study variables. Analysis of variance (ANOVA) was performed to test for differences on the study variables based on class, grade level, and school differences. Analysis of variance tests showed grade level differences related to girls' public regard, private regard, social efficacy with their teacher, behavioral and cognitive engagement. Compared to sixth and seventh grade girls, eighth grade girls in the sample reported less regard toward their ethnic-racial group, less efficacy asking their teachers for help, and less engagement in class. Grade level differences were not

observed for boys in the sample. Grade level was used as a covariate for girls when appropriate for models that map patterns of associations. Mean differences were not found for class nor school level. In addition, a multivariate analysis of variance (MANOVA) was performed to test for gender, race, and gender by race interactions across all the study variables. Statistically significant mean differences were not found when testing for gender, race, and gender by race interactions across any of the study variables.

Table 1.
Sample Characteristics

	Girls (n=106)	Boys (n=102)
African American	71	68
Latinx	35	34
	M, (SD)	M, (SD)
Ethnic-Racial Identity:		
Centrality	3.74 (.74)	3.66 (.92)
Public Regard	3.39 (.81)	3.57 (.90)
Private Regard	4.26 (.65)	4.12 (.87)
Social Efficacy w/ Teacher	3.83 (.91)	3.64 (.99)
Classroom Practices	3.40 (.83)	3.26 (.88)
Cognitive Engagement	3.66 (.67)	3.56 (.74)
Behavioral Engagement	4.15 (.59)	4.07 (.58)

Note: There were no statistically significant differences between girls and boys on any of the study variables.

Correlations were run to assess associations among study variables with the total sample and within gender groups, tested at an alpha of $p < .05$. Correlation analysis revealed positive associations among study variables and school engagement for the sample as a whole (see Table 2). In particular, components of ethnic-racial identity, social efficacy with teachers, and classroom practices had moderately positive associations with student self-reported classroom engagement. Classroom practices was also positively associated with components of ethnic-racial identity and social efficacy with teachers. More specifically, students that reported more

exposure to SEL promotive classroom practices ascribed more importance to being a member of their ethnic-racial group, more regard toward their ethnic-racial group, and reported feeling more efficacious to seek help from teachers.

Table 2.

Summary of the Intercorrelations for Scores on Ethnic-Racial Identity, Social Efficacy, Classroom Practices and Engagement

	1	2	3	4	5	6	7
1. Classroom Practices	-						
2. Racial Centrality	.412**	-					
3. Private Regard	.380**	.732**	-				
4. Public Regard	.224**	.573**	.520**	-			
5. Social Efficacy w/ Teacher	.406**	.249**	.330**	0.121	-		
6. Cognitive Engagement	.488**	.487**	.538**	.391**	.353**	-	
7. Behavioral Engagement	.324**	.266**	.352**	.311**	.328**	.667**	-

Note: ** $p < .01$

Correlational analyses were run separately for each gender (see Table 3). Gender differences were evident in the associations among study variables. Specifically, boys had a moderate positive association between classroom practices and public regard, but no statistically significant association between classroom practices and public regard were evident for girls. In addition, for girls there was a stronger association between social efficacy with their teacher and classroom practices compared to boys. Lastly, for boys there were more associations among racial centrality, public and private regard on cognitive engagement than there were for girls in the study sample.

Table 3.

Summary of the Intercorrelations for Scores on Ethnic-Racial Identity, Social Efficacy, Classroom Practices and Engagement as a Function of Gender

	1	2	3	4	5	6	7
1. Classroom Practices	-	.420**	.376**	.360**	.255*	.488**	.323**
2. Racial Centrality	.394**	-	.773**	.692**	.254*	.573**	.248*
3. Private Regard	.370**	.669**	-	.635**	.402**	.582**	.331**
4. Public Regard	0.094	.442**	.407**	-	0.186	.473**	.333**
5. Social Efficacy w/ Teacher	.546**	.235*	.216*	0.082	-	.267*	.268*
6. Cognitive Engagement	.477**	.371**	.468**	.328**	.433**	-	.615**
7. Behavioral Engagement	.317**	.283**	.370**	.318**	.374**	.719**	-

Note. Intercorrelations for boys are presented above the diagonal, and intercorrelations for girls are presented below the diagonal.*p<.05, **p<.01

Main Data Analyses

RQ1. Are there differences on boys and girls perceptions of teachers' classroom practices?

With regard to gender, the baseline model (no constraints) yielded an adequate fit to the data (see Table 4). Model 2 (constraining loadings) when compared to the baseline model indicated that the underlying structure of classroom practices was variant across gender with respect to the way in which the items loaded onto classroom practices, the difference in CFI values between models 1 and 2 exceeded .01. More specifically, the difference in CFI between model 1 and 2 factor loadings suggested classroom practices load differently for boys and girls. Thus, model invariance is not as strong for gender and informed the remaining analyses to analyze patterns of associations among study variables separately for boys and girls.

Table 4.

Goodness-of-Fit Indicators of Models for Classroom Practices Overall Fit and Tests of Invariance (n=205)

Model	χ^2	df	χ^2 diff	CFI	TLI	RMSEA
Full Sample	2.23	2		0.999	0.996	0.023
Gender						
Model 1	3.36	4		1.00	1.00	0.00
Model 2	12.25	7	8.39**	0.969	0.946	0.086

Model 3	15.30	10	3.049	0.967	0.960	0.074
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**p<.01, *p<.05

RQ2. Are there gender differences in the associations among perceived teacher practices, student self-systems, and engagement?

First, a structural equation model was tested for boys and girls separately to test the pattern of relationships among variables leading from classroom practices through public regard and social efficacy with teachers to classroom engagement. The structural equation model was a good fit for girls (CFI=1.00, TLI=1.02, RMSEA=.00). Social efficacy with one’s teacher and public regard did not mediate the association between girls’ exposure to SEL promotive practices and their classroom engagement (See Figure 3). However, some direct associations were statistically significant in the model. Grade level as a covariate for girls negatively predicted public regard ($b=-.33, p<.01$), social efficacy with teachers ($b=-.20, p<.05$), and classroom engagement ($b=-.18, p<.05$). More specifically, public regard, social efficacy with teacher, and engagement declined for girls from 6th to 8th grade. Further, classroom practices positively predicted girls’ social efficacy with their teachers ($b=.57, p<.01$), but did not relate to public regard ($b=.07, p>.05$). In particular, more exposure to SEL promotive practices was related to girls’ feeling more confident they could effectively communicate with their teacher. Girls’ social efficacy with their teachers did not predict their classroom engagement ($b=.14, p>.05$), however, public regard ($b=.18, p<.05$) and classroom practices ($b=.25, p<.01$) positively predicted classroom engagement. More specifically, more exposure to SEL promotive practices and perceiving that others think positively of one’s ethnic-racial group predicted more self-reported engagement for girls. Altogether, the model accounted for 44% of variance in girls’ classroom engagement.

Meanwhile, for boys the overall model leading from classroom practices through *public regard* and social efficacy with teachers to classroom engagement was also a good fit (CFI=1.00, TLI=1.04, RMSEA=.00). Classroom practices positively related to both social efficacy with teachers ($b=.08$, $p<.05$) and public regard ($b=.35$, $p<.01$) for boys. More specifically, boys that perceived their teachers provided more SEL promotive practices felt more confident they could effectively communicate with their teacher and perceived that other's think more positively of their ethnic-racial group. In addition, classroom practices ($b=.25$, $p<.01$) and public regard ($b=.28$, $p<.01$) positively predicted classroom engagement, while social efficacy with teachers was not a statistically significant predictor of classroom engagement for boys. More specifically, more exposure to SEL promotive practices and perceiving that others think positively one's ethnic-racial group both predicted more self-reported engagement in boys. More importantly, boys' public regard mediated the associations among classroom practices and classroom engagement ($d^*e = .095$, CI: .014, .202). Specifically, SEL promotive practices predicted greater feelings that others think positively of boys' ethnic-racial group, which in turn, led to greater classroom engagement. Altogether, the model accounted for 37% of variance in boys' classroom engagement.

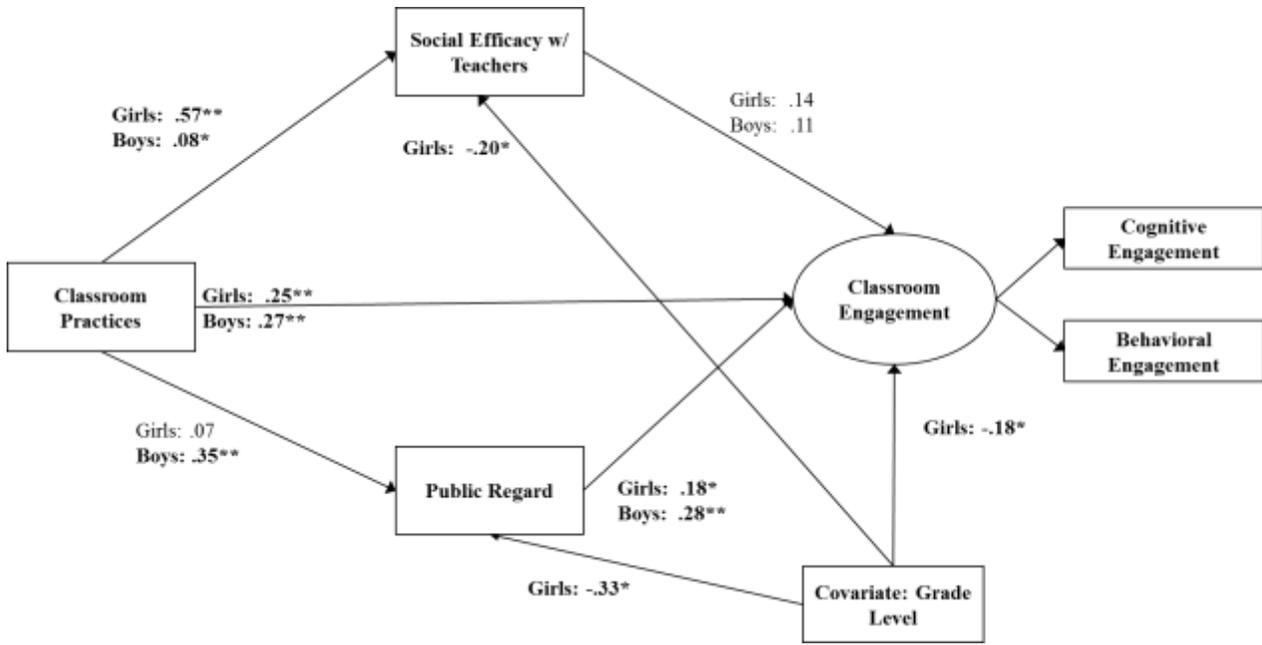


Figure 3. Structural equation model examining link among variables. Values reflect standardized path coefficients. *p<.05, **p<.01

Next, a structural equation model was constructed to test the pattern of relations among variables leading from classroom practices through *private regard* and social efficacy with teachers to classroom engagement. The overall model was a good fit for girls (CFI=1.00, TLI=1.02, RMSEA=.00). Again as a covariate, for girls grade level was a statistically significant predictor of social efficacy with teachers (b= -.20, p<.05) and classroom engagement (b= -.20, p<.05). Classroom practices positively predicted both social efficacy with teachers (b=.57, p<.05) and private regard (b=.29, p<.01). Specifically, girls that were exposed to more SEL promotive practices expressed more confidence in their ability to interact effectively with their teacher and greater positive regard toward member of their ethnic-racial group. In addition, private regard (b=.29, p<.01) and classroom practices (b=.18, p<.05) both positively predicted classroom engagement, while social efficacy with teachers was not a statistically significant predictor of classroom engagement (See Figure 4). Specifically, more private regard and more exposure to SEL promotive practices both positively predicted greater classroom engagement. In

addition, girls' private regard mediated the association between classroom practices and classroom engagement ($d^*e = .083$, CI: .008, .173). More specifically, girls' exposure to SEL promotive practices predicted more positive feelings towards members of one's ethnic-racial group, which in turn, led to greater classroom engagement. Altogether, the model accounted for 48% of variance in girls' classroom engagement.

Similarly, for boys the overall model leading from classroom practices through *private regard* and social efficacy with teachers to classroom engagement was a good fit (CFI=1.00, TLI=1.03, RMSEA=.00). Classroom engagement positively predicted both social efficacy with teachers ($b=.28$, $p<.01$) and private regard ($b=.34$, $p<.01$). Specifically, exposure to more SEL promotive practices in the classroom predicted greater positive feelings toward members of one's ethnic-racial group and more confidence to effectively interact with one's teacher for boys. In addition, private regard ($b=.39$, $p<.01$) and classroom practices ($b=.26$, $p<.01$) positively predicted classroom engagement, while social efficacy with teachers was not a statistically significant predictor of classroom engagement for boys. Specifically, greater positive feelings toward members of their ethnic-racial group and more SEL promotive practices both predicted greater classroom engagement for boys. Similar to girls, private regard mediated the association between classroom practices and classroom engagement for boys ($d^*e = .135$, CI: .027, .294). More specifically, boys' exposure to SEL promotive practices predicted greater positive feelings towards members of one's ethnic-racial group, which in turn, led to greater classroom engagement. Altogether, the model accounted for 17% of variance in boys' classroom engagement, which is less variance explained compared to girls.

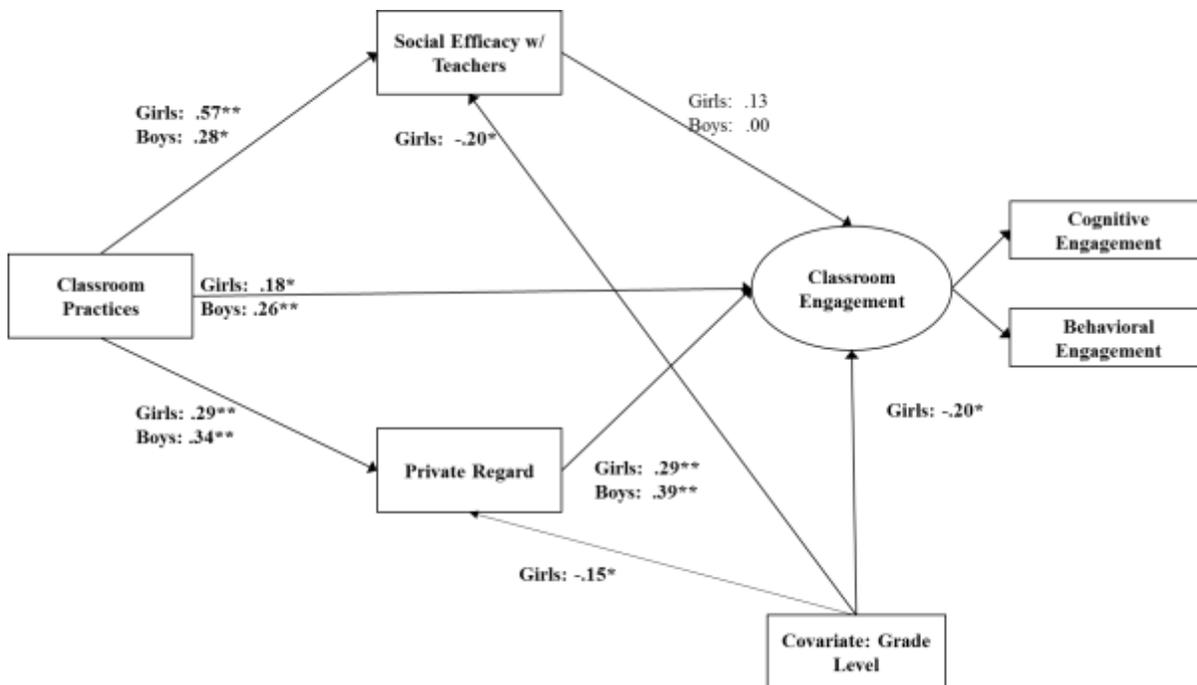


Figure 4. Structural equation model examining link among variables. Values reflect standardized path coefficients. * $p < .05$, ** $p < .01$

Lastly, a structural equation model was performed to test the pattern of relations among variables leading from classroom practices through *racial centrality* and social efficacy with teachers to classroom engagement. The overall model was a good fit for girls (CFI=.99, TLI=.97, RMSEA=.054). Similar to the models testing regard subscales, grade level was a statistically significant negative predictor of girls' social efficacy with their teachers ($b = -.20$, $p < .05$) and classroom engagement ($b = -.23$, $p < .05$). Classroom practices positively predicted social efficacy with teacher ($b = .57$, $p < .01$), racial centrality ($b = .36$, $p < .01$), classroom engagement ($b = .22$, $p < .05$) for girls. More specifically, for girls more exposure to SEL promotive practices predicted greater confidence that they could effectively communicate with their teacher, greater importance ascribed to being a member of their ethnic-racial group, and greater classroom engagement. Neither social efficacy with teachers ($b = .13$, $p > .05$) nor racial centrality ($b = .14$, $p > .05$) were statistically significant predictors of girls' classroom engagement (See Figure 5). The overall model accounted for 41% of variance in girls' classroom engagement.

The overall structural equation model leading from classroom practices through *racial centrality* and social efficacy with teachers to classroom engagement was a good fit for boys (CFI=1.00, TLI=1.01, RMSEA=.00). Classroom practices positively predicted both racial centrality ($b=.41$, $p<.01$) and social efficacy with teachers ($b=.28$, $p<.01$). More specifically, more exposure to SEL promotive practices predicted greater confidence in boys feeling they could effectively communicate with their teacher, greater importance of being a member of their ethnic-racial group. In addition, racial centrality ($b=.36$, $p<.01$), and classroom practices ($b=.22$, $p<.01$) were positive predictors of boys' classroom engagement. Specifically, greater importance placed on being a member of one's ethnic-racial group and more exposure to SEL promotive practices both predicted more classroom engagement for boys. Boys' social efficacy with their teachers ($b=.06$, $p>.05$) was not a statistically significant predictor of boys' classroom engagement. Bootstrapping tests indicated only the pathway leading from classroom practices through racial centrality to boys' classroom engagement was statistically significant ($d^*e=.15$, CI: .029, .30). More specifically, boys' exposure to SEL promotive practices predicted greater importance being ascribed to being a member of their ethnic-racial group, which in turn, led to greater classroom engagement. Altogether, the model accounted for 32% of variance in boys' classroom engagement.

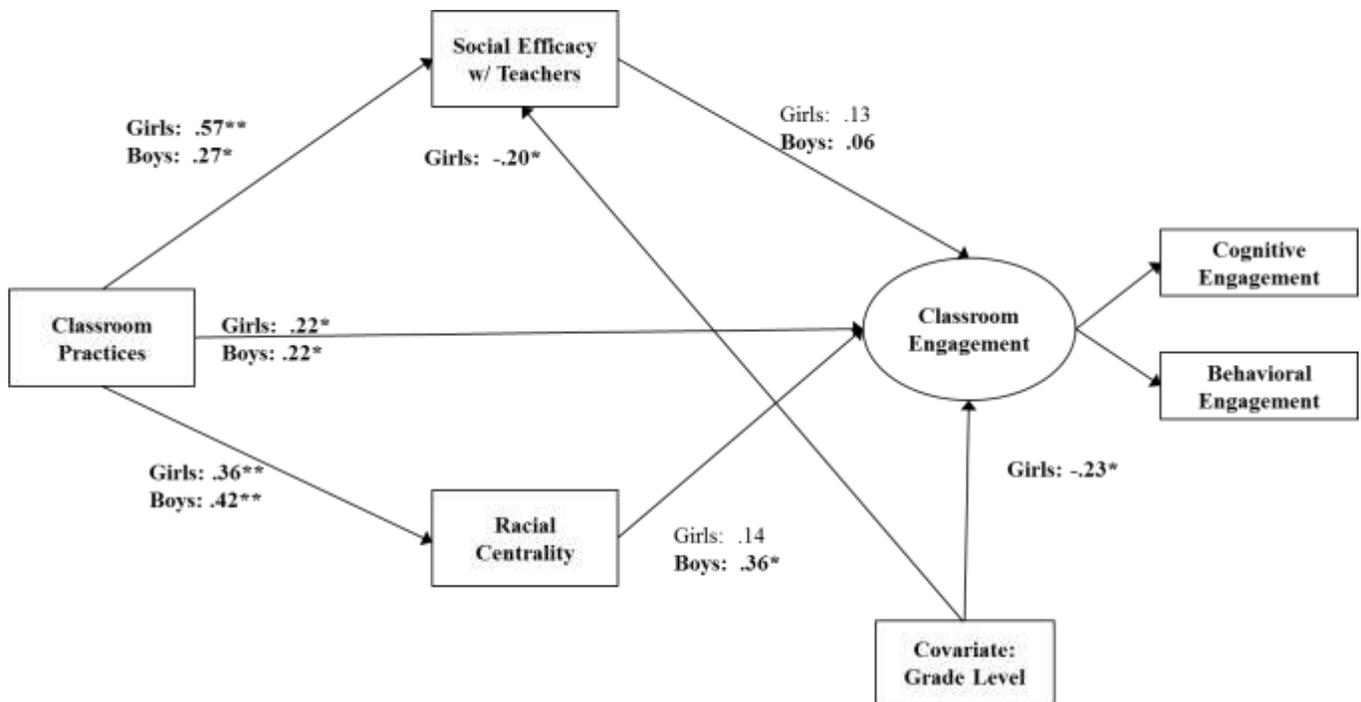


Figure 5. Structural equation model examining link among variables. Values reflect standardized path coefficients. * $p < .05$, ** $p < .01$

Discussion

The current study explored the influence of classroom practices on the different components of ethnic-racial identity, social efficacy with teachers, and classroom engagement during early adolescence among African American and Latinx students. This study adds to the current literature examining minority students' perceptions of classroom practices and how that relates to self-systems in the classroom. Key findings from this study are that boys and girls indicate similar frequency of exposure to SELpromotive classroom practices, yet these classroom practices have different implications for their self-systems, and subsequent classroom engagement.

Classroom Practices and Engagement. Consistent with prior studies, students' perceptions of classroom practices had a positive effect on students' classroom engagement (Yang et al., 2018). Specifically, students that reported more exposure to practices that

encourage them to participate, share, and apply their knowledge were more engaged in the classroom. While Yang and colleagues (2018) found significant effects of gender and race on the associations between teacher-student relationship quality and cognitive-behavioral engagement, they did not further explore those differences. In addition, prior studies that examine ethnic-racial minority students' perceptions of classroom practices and engagement frequently utilize qualitative methods to explore these important associations (Howard, 2001). The current study adds to existing literature by utilizing quantitative methods to consider gender differences in the experiences that ethnic-racial minority youth have in the classroom. The effects of classroom practices were similar for both boys' and girls' classroom engagement, however the estimates of the pathway from classroom practices to classroom engagement supported our hypothesis that the model would be stronger for boys than for girls. The current study assessed SEL promotive practices that are congruent with boys behavioral style in the classroom (Barbarin et al., 2014), which includes collaboration and active group work, so it was hypothesized that these types of practices would not only be more meaningful for boys but also relate positively to their classroom engagement than it would for girls. This finding is important given prior research demonstrates teachers often report more conflict with their African American and male students (Birch & Ladd, 1997; Hughes et al., 2001), these positive practices highlight ways teachers can relate to African American and Latinx boys.

Another important gender difference that emerged was that there were significant mean differences in classroom engagement for girls in sixth-, seventh-, and eighth- grade whereas for boys the mean level of engagement was about the same across grade levels. More specifically, 8th grade girls reported less classroom engagement compared to 6th and 7th grade girls. Despite being in the same grades and around the same chronological age, boys and girls are at different

points in their physical and social development between the ages of 10 and 14. Prior studies note declines in classroom engagement during this developmental period (Roeser & Eccles, 1998), in the current study grade level as a covariate contributed similar effects as classroom practices for girls' classroom engagement, however grade level had a negative effect and classroom practices had a positive effect on girls' classroom engagement.

The effects of grade level on girls' classroom engagement may serve as a proxy for other influences that were not captured in the current study. For example, prior studies demonstrate that during this developmental period there are other self-systems that are changing and this influences the relationships girls have with others in their social environment. More specifically, pubertal onset occurs sooner for African American and Latinx girls compared to their Caucasian peers (Dorn & Biro, 2011). In addition, girls in general experience pubertal changes approximately 18 months earlier than boys (Eccles, 1999). Eccles (1999) highlights that variation in physical maturity complicates the social interactions in classrooms and organized coeducational programs. In addition, it is important to highlight that peer relationships become more salient during early adolescence and function differently for boys and girls. Girls tend to care more about dyadic friendships and adopt connection-oriented goals in peer contexts (Rose & Rudolph, 2006). Positive friendships in adolescence has been demonstrated to promote high achievement amongst peers and class attendance (Witkow & Fuligni, 2010). These developmental processes highlight potential physical and social factors that may relate to grade level influences in girls' classroom engagement, social efficacy with their teacher, and ethnic-racial identity.

Classroom Practices and Self-Systems. While classroom practices were directly associated with classroom engagement for boys and girls, their influence on the two components

of the self-system examined in this study—ethnic-racial identity and self-efficacy with their teacher—were different. Prior studies demonstrate that exposure to SEL practices, such as autonomy, prosocial behavioral routines, and collaboration is associated with greater ethnic-racial identity exploration and resolution during middle school (Rivas-Drake et al., 2018). However, each dimension of ethnic-racial identity may have unique implications for how youth respond to race-related cues and experiences in their social context (Sellers et al., 1997). Therefore, it was important to consider different components of ethnic-racial identity and its association with SEL promotive classroom practices. The current study adds to existing literature by considering the ways in which SEL promotive practices function differently across different dimensions of ethnic-racial identity and the ways in which these associations vary by gender. Barbarin, Chinn, and Wright (2014) suggest teachers can improve their instructional quality by promoting learning through collaborative assignments, emphasizing discussions, and problem-solving activities. These instructional suggestions are consistent with boys’ behavioral style in the classroom and can promote academic engagement (Barbarin et al., 2014). The current study found evidence to suggest African American and Latinx boys’ exposure to these types of classroom practices was related to more positive regard for their ethnic-racial group (e.g., public and private regard) and to the importance they ascribed to being a member their ethnic-racial group (e.g., racial centrality).

For girls, classroom practices were only associated with one component of ethnic-racial identity—private regard or how positively they view members of their ethnic-racial group. More frequent exposure to SEL promotive practices predicted girls feeling more positive regard toward members of their ethnic-racial group. There is relatively little research that looks at how private regard functions differently for boys and girls. Findings from prior studies that have examined

gender differences in private regard diverge from the findings from the current study. For example, Smalls and Cooper (2012) examined associations among private regard, behavioral engagement, and grades for African American middle school students and found no significant associations for girls in sixth through eighth grade. It is important to note, however, that the current study included both African American and Latinx girls. There was little to no literature related to Latinx girls' private regard and engagement and therefore difficult to further unpack the current study findings.

Lastly, classroom practices were positively related to social efficacy with one's teacher for both boys and girls. Previous research has demonstrated that teacher support—students believing teachers value and establish personal relationships with them—is related to increased efficacy relating to the teacher (e.g., social efficacy with teacher) (Ryan and Patrick, 2001). The current study examines a subset of classroom practices related to SEL promotive practices that predict increased efficacy relating to the teacher. Although, previous research has found declines in social efficacy with one's teacher among Black males from seventh to eighth grade (Patrick et al., 2002), the current study noted no differences across grades for boys. Furthermore, the finding of mean differences in girls' social efficacy with their teacher in the current sample of African American and Latinx eighth grade girls compared to their sixth and seventh grade peers was unexpected. As stated previously, a number of external factors, such as pubertal timing, peer relationships, and temperament that may relate to differences in girls' social efficacy with their teachers warrants further investigation.

Mediating Effects of Self-Systems on Classroom Engagement

Perhaps the most important finding in the current study is the mediating effects of students' self-systems in the relationship between classroom practices and students' classroom

engagement. Findings indicate that exposure to SEL promotive practices affirms boys' ethnic-racial identity and promotes more classroom engagement. This is consistent with prior studies that showed that ethnic-racial identity can serve as a protective factor for boys (Chavous et al., 2008; Thomas et al., 2009). In contrast, exposure to SEL promotive practices appears to affirm girls' private regard—positive regard toward member of their ethnic-racial group—which then promoted more classroom engagement. Despite the effects of grade level differences among girls this pathway was statistically significant. Few studies have directly examined the ways in which private regard differs among boys and girls. It is likely that SEL promotive practices that encourage collaboration and autonomy affirm girls' regard toward members of their ethnic-racial group. The associations among SEL promotive practices and ethnic-racial identity highlight emerging literature that seeks to examine cultural dimensions of classrooms (Jensen et al., 2018). Jensen and colleagues (2018) suggest *content personalization* can help students' connect out-of-school experience and knowledge with learning objectives. Specifically, teachers can orchestrate interactions that resonate with students' everyday encounters to deepen their understanding and appreciation of academic content. The current study findings reinforce the need to consider cultural dimensions within classrooms.

Based on the integrative framework of motivation (Skinner et al., 2018), it was expected that social efficacy with one's teacher would mediate the associations between SEL promotive practices and classroom engagement. This hypothesis was not confirmed for either boys or girls. An important caveat—social efficacy with one's teacher is typically examined as an outcome variable, in the current study the measure was used as a predictor of classroom engagement. While correlation analyses for both boys and girls revealed moderate associations between social efficacy with one's teacher and classroom engagement, ethnic-racial identity and grade level

accounted for more variance in boys' and girls' classroom engagement, respectively. Patrick, Ryan, and Kaplan (2007) noted similar effects when testing a model that included perceived teacher support, social efficacy with peers, and student motivation. Social efficacy with teachers was removed from their final model because it was attenuating coefficients in their model. They surmised that students' perceptions of their teacher as providing emotional support was intertwined with their sense of efficacy in relating to their teacher, and together share variance in students' academic engagement. Noteworthy, descriptive analyses in the current study revealed social efficacy with teachers was more related to classroom practices and engagement for girls than was the case for boys. However, grade level differences played a larger role in the model for girls, and ethnic-racial identity accounted for more variance in classroom engagement for boys. More needs to be understood about the role of social efficacy with one's teacher as it relates to student engagement.

Noted Limitations

The current study is not without limitations. A key limitation is that the current study relied only on student self-report data of classroom practices. It is important to consider how attuned students are to specific teacher practices, that would otherwise be noted by the teacher or an observer. More importantly, while students responded to the frequency with which teachers' promoted social emotional learning practices in the classroom, this measure does not reflect whether students' prefer these instructional practices. Lastly, the current study relied on data collected from schools in the Midwest, which limits the generalizability of the current study findings to other student populations from different school settings and with teachers that have a different set of demographic characteristics.

Study Implications and Future Directions

There are a number of study strengths and important implications that can be drawn from the current study. The current study provides important considerations for practices related to social-emotional learning that affirm students' ethnic-racial identity, promote efficacy to ask for help, and positively impact classroom engagement. Further, it suggests that African American and Latinx boys and girls have varying experiences in the classroom. While boys and girls report similar exposure to SEL promotive practices, youth are internalizing these practices differently.

The current study's findings can inform teacher practices and practices related to cultural diversity in the classroom. Educators and researchers frequently advocate for “culturally responsive teaching” (CRT)—i.e., curricula and instruction that integrate students' cultural identities, practices, and developmental assets (Ladson-Billings, 1995). Most studies of CRT rely on interpretive designs and qualitative methods, which constrain inferences that can be made to settings outside of studied samples (Gallimore, 2016). In addition, CRT studies emphasize the *content* of classroom interactions (e.g., discussing discriminate in society) with less attention to *form* (e.g., social organization of the classroom) (Jenson, 2018). The current study adds to our understanding of developmentally-appropriate practices that are affirming for minority youth. While these practices can be utilized at the level of individual teachers, teachers often have little control over curricula, and school and district-wide educational policies have a big impact on teacher practice. It is important that future work consider external factors that influence the classroom environment and how these relate to teachers' success in fostering positive experiences and the achievement outcomes of ethnic-minority youth. Shifts in policy to specifically train and support use of practices that draw on ethnic-racial minority students' cultural strengths are critical to encourage their participation and affirm their sense of self in the classroom.

Future studies should also consider the role of race and gender when considering girls' private regard and classroom engagement. The current study highlights that private regard mediates the associations between classroom practices and classroom engagement. Furthermore, future studies that examine classroom practices and student self-systems need to consider developmental factors that are relevant to minority youth in early adolescence, such as puberty, temperament, and peer relationships.

Conclusion

This study attempts to bridge an important gap between the study of teacher practices, students' ethnic-racial identity, social efficacy with their teacher, and classroom engagement. In doing so, the current study highlights the varied effects of teachers' SEL promotive practices on components of students' ethnic-racial identity and classroom engagement had positive outcomes, particularly for boys. Meanwhile for girls, only private regard mediated the association among classroom practices and classroom engagement. It is important to further examine variables that relate to grade level differences in African American and Latinx girls' social efficacy with their teacher, components of ethnic-racial identity, and classroom engagement. The present study highlights the versatility of the Multidimensional Model of Racial Identity and classroom practices that support ethnic-racial minority youth. More specifically, collaborative and autonomy driven practices demonstrate they can be developmentally- and culturally- appropriate for ethnic-racial minority youth.

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Multidimensional Inventory of Black Identity-Teen Version

Likert Response Scale is as follows: (1) Really Disagree; (2) Kind of Disagree; (3) Neutral; (4) Kind of Agree; (5) Really Agree

Centrality:

1. I feel close to other people of my ethnic group.
2. I have a strong sense of belonging to people from my ethnic group.
3. If I were to describe myself to someone, one of the first things I would tell them is my ethnicity.

Private Regard:

1. I am happy that I am my ethnicity.
2. I feel good about people from my ethnic group.
3. I am proud to be a part of my ethnic group.

Public Regard:

1. Most people think that people of my ethnic group are as smart as people of other ethnic groups.
2. People think that people of my ethnicity are as good as people from other ethnicities.
3. People of other ethnicities think that people from my ethnic group have made important contributions.

Scottham, K. M., Sellers, R. M., & Nguyễn, H. X. (2008). A measure of racial identity in African American adolescents: the development of the Multidimensional Inventory of Black Identity--Teen. *Cultural Diversity & Ethnic Minority Psychology, 14*(4), 297–306.
<https://doi.org/10.1037/1099-9809.14.4.297>

Social Efficacy with Teacher

Likert Response Scale is as follows: (1) Strongly Disagree; (2) Disagree; (3) Neutral; (4) Agree; (5) Strongly Agree

1. I can explain my point of view to my teacher.
2. I find it hard to get along with my teacher.*
3. If my teacher gets upset with me I can usually work it out with him/her
4. I find it easy to just go and talk to my teacher.

Patrick, H., Hicks, L., & Ryan, A. M. (1997). Relations of perceived social efficacy and social goal pursuit to self-efficacy for academic work. *Journal of Early Adolescence*, 17(2), 109–128.

Classroom Practices

Likert Response Scale is as follows: (1) Never; (2) Once; (3) A few times; (4) Many times; (5) All of the time

In this class how often do you:

1. Participate in class discussion.
2. Ask other students when you need help with your work.
3. Share what I am learning with other students.
4. Apply what you do in class to the real world.

Developed for the evaluation of Developmental Designs by Dr. Rob Jagers (University of Michigan), 2014

Classroom Engagement

Likert Response Scale is as follows: (1) Strongly Disagree; (2) Disagree; (3) Neutral; (4) Agree; (5) Strongly Agree

Cognitive Engagement

1. I study at home even when I don't have a test.
2. I talk to people outside of school about what I am learning in class.
3. I check my homework for mistakes.
4. I pay attention in class.
5. I try to watch TV shows or read more about things we do in class.
6. If I don't understand something I read, I go back over it again.
7. I ask questions when I don't understand something.

Behavioral Engagement

1. I pay attention in class.
2. When I am in class, I just pretend as if I am working.*
3. I follow the rules at school.
4. I disrespect (ignore, talk back to) my teachers.*

Fredricks, J. A., Blumenfeld, P., Friedel, J., & Paris, A. (2005). School engagement. In K. Moore, L. H. Lippman (Eds.), *What do children need to flourish: Conceptualizing and measuring indicators of positive development* (pp. 305-321). New York, NY, US: Springer Science + Business Media. doi:10.1007/0-387-23823-9_19

Vita

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