



The Associations of Intergroup Interactions and School Racial Socialization with Academic Motivation

Christy M. Byrd

To cite this article: Christy M. Byrd (2015) The Associations of Intergroup Interactions and School Racial Socialization with Academic Motivation, The Journal of Educational Research, 108:1, 10-21, DOI: [10.1080/00220671.2013.831803](https://doi.org/10.1080/00220671.2013.831803)

To link to this article: <https://doi.org/10.1080/00220671.2013.831803>



Published online: 28 May 2014.



Submit your article to this journal [↗](#)



Article views: 727



View Crossmark data [↗](#)



Citing articles: 20 View citing articles [↗](#)

The Associations of Intergroup Interactions and School Racial Socialization with Academic Motivation

CHRISTY M. BYRD
Michigan State University

ABSTRACT. School racial climate is an important aspect of the school environment that can have significant implications for youths' development. However, existing research is limited by conceptual and methodological concerns that restrict the ability of researchers and educators to identify *what* about and *how* the racial climate is important. The author addresses existing limitations by articulating school racial climate as a multidimensional construct composed of interpersonal interactions and school racial socialization. The sample consists of 99 Black middle and high school students who completed surveys on their perceptions of the school racial climate and their belonging, competence, and intrinsic motivation. The results showed, for example, that perceptions of more positive cross-race interactions were associated with greater belonging, and perceptions of colorblind messages were associated with lower competence. Overall, the study demonstrated the utility of a multidimensional approach to school racial climate and supported existing research on the importance of climate for adolescents' motivation.

Keywords: diversity, intergroup relations, motivation, multicultural education, school racial climate, school racial socialization

Youths' experience of the school environment has tremendous bearing on their motivation and academic success (Brand, Felner, Shim, Seitsinger, & Dumas, 2003; Cohen, McCabe, Michelli, & Pickeral, 2009; Zullig, Koopman, Patton, & Ubbes, 2010). School climate is one construct that attempts to conceptualize the psychological experience of the school environment. School climate refers to the types of interactions, relationships, and common expectations and values within schools (Cohen et al., 2009). The goal of the present article is to describe how the school climate around race and diversity—the school racial climate—is associated with youths' academic motivation. For youth of color, especially, a school's racial climate communicates to youth how much they and their culture are valued, which is then associated with how much youth identify with academics (Booker, 2006). The existing research on discrimination, unfair treatment, and hostile intergroup interactions illustrates their negative associations with

academic outcomes (e.g., Dotterer, McHale, & Crouter, 2009; Fisher, Wallace, & Fenton, 2000; Huynh & Fuligni, 2010; Mattison & Aber, 2007). Nevertheless, our understanding of school racial climate is limited because other aspects of the school environment, such as the curriculum, have been ignored in psychological research. The purpose of the present study was to examine various dimensions of school racial climate and how perceptions of those dimensions are associated with students' motivation through the lens of self-determination theory.

School Racial Climate

The present literature on school racial climate covers a number of areas. Some studies focus specifically on one racial group, seeking to explain their outcomes as a function of specific features of the environment. Often, these features are assumed to be most salient for that particular group. For example, research on African American youth may focus on unfair treatment (e.g., Dotterer et al., 2009) or microaggressions (e.g., Solorzano, Ceja, & Yosso, 2000), while research with Asian American youth may explore their reaction to model minority stereotypes (e.g., Marinari, 2006; Tran & Birman, 2010). Other research seeks to compare racial groups, either exploring mean-level differences in climate (e.g., Hurtado, 1992; Kotori & Malaney, 2003; Mattison & Aber, 2007) or using mean differences in perceptions to explain differences in outcomes (e.g., Chavous, 2005; Green, Adams, & Turner, 1988). A third strand of research seeks to provide descriptive information on the nature of schools, such as how colorblindness is represented in the curriculum and patterns of interactions (e.g., Gusa, 2010; Lewis, 2003) and how teachers engage with multicultural education (e.g., de Waal-Lucas, 2006; Greenman & Kimmel, 1995) or culturally relevant pedagogy (e.g., Howard, 2001; Young, 2010).

Address correspondence to Christy M. Byrd, Department of Teacher Education, Michigan State University, 620 Farm Lane, Room 346, East Lansing, MI 48824, USA. (E-mail: cmbbyrd@msu.edu)

In the present study, I focus on linking perceptions of school racial climate with outcomes.

Limitations in existing research. The present literature exploring the relationships between school racial climate and academic outcomes has several limitations. First, most studies of school racial climate focus on intergroup relations—how well students of different races get along and whether students of different races are treated fairly. How the school curriculum and diversity programming are associated with outcomes is rarely considered, except in the literature on higher education (e.g., Gurin, Dey, Hurtado, & Gurin, 2002). The education literature, rather than the psychological literature, is the best source of research on diversity in the curriculum. Yet despite the wealth of research on multicultural education (e.g., Bennett, 2001), little work in multicultural education considers students' perceptions of the curriculum or links students' perceptions to their academic outcomes.

Studies that do consider perceptions of the curriculum, even in the higher education literature, tend to combine survey items about the curriculum with items about intergroup relations into single scales (e.g., Brand et al., 2003; Chang & Le, 2010; Simmons, Wittig, & Grant, 2010). Thus, a second limitation is that few studies of school racial climate conceptually or methodologically distinguish between different dimensions of school racial climate. Here I show how school racial climate consists of two domains and a number of distinct dimensions, each of which can affect academic outcomes in varying ways. By considering school racial climate to be either limited to intergroup relations or a catch-all construct that includes anything related to race, researchers have handicapped their ability to describe what specifically about school racial climate is important for youths' success.

A third limitation is that existing studies tend to conflate discrimination and negative intergroup interactions. Discrimination refers to individual perceptions of being treated unfairly due to one's race (Kessler, Mickelson, & Williams, 1999). While discrimination is an impactful experience, perceptions of discrimination are not necessarily aligned with perceptions of negative interracial interactions in the school context. In other words, students who are discriminated against will not necessarily see their treatment as indicative of the broader school culture. Nevertheless, many researchers report on individual experiences with discrimination as indicators of the school racial climate (e.g., Dotterer et al., 2009; Hurtado & Carter, 1997; Kotori & Malaney, 2003; Mattison & Aber, 2007; Pewewardy & Frey, 2002), sometimes in combination with perceptions of the school as a whole. For example, Hurtado and Carter (1997) examined how college selectivity and perceptions of racial tension predicted perceptions of belonging in college students. Racial tension was composed of a latent factor with experiences with

discrimination and perceptions of racial conflict on campus. Such measures do not clearly distinguish between the experience of the individual and the individual's experience of the setting. Previous work has found that individual experiences with racial discrimination are not predictive of individual outcomes when the model also includes perceptions of the overall racial climate (Byrd & Chavous, 2011), which suggests unique contributions to be found when individuals focus on the organization rather than themselves.

A fourth limitation is that, because most racial climate research focuses on intergroup relations, most studies include samples from schools that are predominantly White or highly racially mixed. This is a limitation because intergroup interactions are also salient in contexts that are predominantly non-White. The majority of teachers in U.S. schools are White (National Center for Education Statistics, 2009); thus, minority youth will still engage in intergroup interactions daily even when their peers are mostly their same race. Also, youth in the United States are very likely to attend segregated K–12 schools (Orfield, 2009); therefore, studying these predominantly one-race contexts is important for understanding the experiences of most youth.

When considering the school curriculum around race and diversity, as the present study does, including majority-minority schools is even more important. First, schools that are predominantly one race may have a special mission and values to pass on to their students, as many historically Black colleges and universities, for example, do. Second, U.S. mainstream values and attitudes may be just as present in majority-minority schools as they are in predominantly White schools. That is, negative stereotypes about Blacks may be just as pervasive in a school with all Black students and all Black teachers as a school that is majority White. Of course, majority-minority schools can vary widely with respect to racial representation, and questions of immigration and socioeconomic status mean that the context can be very complex in terms of racial dynamics. Therefore, it is important to understand the nature of race in these settings as well as predominantly White settings to better inform research, policy, and practice.

Finally, little racial climate research provides clear and explicit descriptions of the processes through which the racial environment of a school impacts student outcomes. In the present study I addressed each of these limitations by outlining multiple dimensions of school racial climate that address aspects of intergroup relations and school curricula and that includes a sample in a predominantly Black setting. Furthermore, the present study will use self-determination theory (Ryan & Deci, 2009) to explain how school racial climate is associated with motivation and achievement.

Dimensions of school racial climate. School racial climate includes two broad domains: interpersonal interactions and school racial socialization. The framework is summarized in

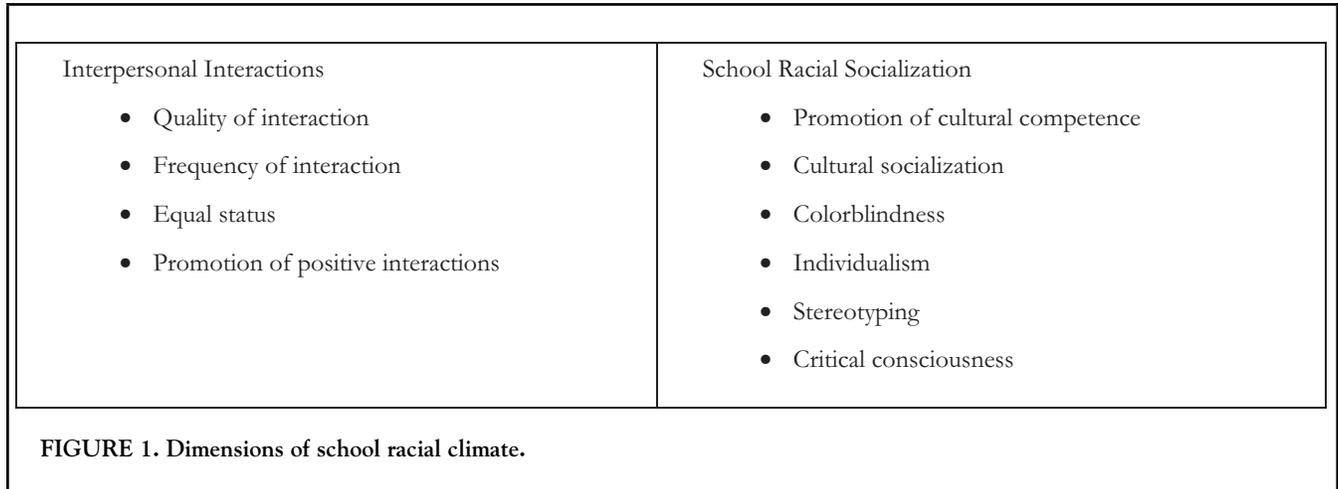


Figure 1. The interpersonal interactions domain includes perceptions of intergroup interactions and norms associated with intergroup relations in the school setting (Allport, 1954; Chavous, 2005; Green et al., 1988). The first is quality of interaction, which describes the nature of cross-race interactions, whether positive or negative. Second, frequency of interaction considers how often individuals of different races have contact. Equal status refers to perceptions that students of different races are treated fairly and given similar opportunities to participate in activities and leadership roles. Finally, support for positive interactions refers to norms and messages encouraging youth to interact across racial groups.

The second domain, school racial socialization, includes messages and practices that promote racial ideologies in school. Racial ideologies can range from colorblindness to various forms of multiculturalism. Colorblindness is an ideology that denies the relevance of race in society (Gallagher, 2003) while multiculturalism embraces group difference (Plaut, 2010). Some forms of multiculturalism merely recognize group difference while more critical forms acknowledge power and oppression and seek societal transformation (McLaren, 1995). Because little research has examined students' perceptions of various forms of school racial socialization, some dimensions in the framework in the present study are based on Hughes and colleagues' (2006) typology of parental racial socialization (Aldana & Byrd, 2013).

The first two dimensions consider students' perceptions of school efforts to promote learning about group identity and culture. Promotion of cultural competence includes opportunities to learn about the culture of different nations and racial and ethnic groups. Cultural socialization, on the other hand, includes encouragement and opportunities for students to learn about their own culture and develop a positive group identity. Afrocentrism and other ideologies focused on a particular ethnic or cultural group are included in this category. Notably, the same activities can have different meanings for students of different backgrounds. For example, a Black History Month celebration would serve as

promotion of cultural competence for White students but cultural socialization for Black students.

The second group of dimensions is in contrast to the first because they represent perceptions of efforts to downplay group difference. Colorblindness messages promote ignoring group difference in favor of a message that we are all the same. Individualism messages are a second type of message that may not completely ignore group difference but still privileges individual traits over group identity. Such messages acknowledge some barriers based on group identity; however, the overall message is that everyone can succeed if they work hard. Finally, even or especially when schools do not acknowledge race and culture, certain messages may promote limited representations of what it means to be a member of a particular group. I refer to this as *stereotyping*. Stereotyping can even be a product of multicultural education when school practices essentialize cultural practices without addressing within-group heterogeneity or structural inequities (Plaut, 2010). In the present framework, stereotyping is not a cognitive process (e.g., Dovidio, Brigham, Johnson, & Gaertner, 1996); rather, it refers to perceptions of stereotypes and prejudices in the curriculum and teacher and peer attitudes.

Finally, the last dimension in the framework is critical consciousness, which refers to messages and practices that encourage youth to recognize inequality and oppression in society. Critical consciousness practices are rarely included in the traditional school curriculum (Aldana & Byrd, 2013), and are more common in programs such as intergroup dialogues (e.g., Dessel, Rogge, & Garlington, 2006) and other interventions aimed at prejudice reduction.

The Relationships Between Dimensions of School Racial Climate and Motivation

Few studies of school racial climate seek to describe the mechanism through which climate impacts outcomes. The present study uses self-determination theory to explain how

school racial climate is associated with motivation. Self-determination theory (Ryan & Deci, 2009) describes how motivation can range from being completely internal and self-driven (intrinsic) to being controlled by external forces (extrinsic). The theory suggests that individuals who are more self-determined (i.e., internally regulated) within a domain experience more adaptive outcomes over time. Individuals are more likely to be intrinsically motivated when their environments satisfy their basic psychological needs of autonomy, belonging, and competence. Applied to the school context, students experience the best outcomes, including academic achievement, when they are genuinely interested in and enjoy the school experience, which is more likely to occur when their basic needs, including competence, are met (Deci, Vallerand, Pelletier, & Ryan, 1991; Gottfried, Marcoulides, Gottfried, Oliver, & Guerin, 2007; Nishimura, Kawamura, & Sakurai, 2011). In the subsequent sections, I explain how different domains of school racial climate might be associated with belonging and competence. No known studies of school racial climate link climate and autonomy; therefore, the present study will focus on the other two needs.

School racial climate and belonging. Interpersonal interactions around race can help meet youths' basic need for belonging by supporting positive relationships across race, both with teachers and other students. Research has long emphasized the role of belonging in school engagement and achievement as well as connected general school climate to feelings of belonging (Booker, 2006; Goodenow, 1993; Osterman, 2000). In terms of school racial climate, the degree to which racial interactions are positive will influence how connected students are to different- and same-race others in the setting. Therefore, a positive quality of interaction should be associated with higher feelings of belonging because of greater potential for positive relationships.

Equal status can also play a role in positive relationships. Status differences that exist within schools, for example, between the popular kids and the unpopular nerds, prevent students who are identified with the popular group from forming friendships with those identified as nerds. Therefore, instead of being able to have positive relationships with everyone in the school, students limit their friendships to in-group members (Osterman, 2000). Status differences can also exist by race; thus, when different racial groups are perceived as having equal status, youth should also perceive more positive relationships and have a higher sense of belonging. More intergroup contact and equal status can also reduce bias against other groups, which can prompt students to be more open to friendships across race (Pettigrew, 2008). Similarly, norms encouraging positive intergroup interactions should promote greater feelings of belonging by promoting positive relationships.

In terms of frequency of intergroup interaction, the work of Hurtado, Milem, Clayton-Pedersen, and Allen (1998)

would suggest that the frequency of interactions could be positively or negatively related to students' feelings of belonging, depending on the overall quality of interactions at the school. That is, more frequent interactions would promote positive relationships and connectedness to others if those interactions are supportive (rather than tense). Therefore, frequency of interaction is unlikely to be directly associated with feelings of belonging.

Excluding studies of discrimination, little research has actually investigated the relationship between interpersonal interactions and belonging at school. Chavous (2005) found that perceptions of equal status among racial groups and perceived administrative support for positive interactions were positively related to school belonging. In a sample of African American high school students, other work by Chavous found that perceptions of greater tension between staff and students of different races was associated with lower feelings of support and acceptance from teachers (Byrd & Chavous, 2011). Studies of discrimination show that perceptions of poor treatment based on race are associated with students of any race feeling less connected to peers and teachers (Hurtado & Carter, 1997; Hurtado & Ponjuan, 2005; Johnson et al., 2007); therefore, perceptions of negative intergroup interactions in the overall school environment should also be negatively associated with feelings of belonging.

School racial socialization can also inform how much youth are valued and thus their sense of belonging in the setting. For example, teachers' or peers' negative stereotypes about the academic abilities of Black youth may promote low valuing of Black students because they are not perceived to fit with the behaviors and norms of the school. Similarly, teaching that is not culturally relevant or that excludes Blacks from the curriculum can promote alienation and disengagement (Sampson & Garrison-Wade, 2011). Even positive stereotypes may limit how much youth connect to others because they are not seen as individuals (Teranishi, 2002). Messages about diversity also communicate the value of youth as individuals. For example, schools that embrace racial and cultural difference promote valuing all youth, while schools that attempt to downplay the importance of race may ignore vital parts of youths' identity, particularly for youth of color (e.g., Ladson-Billings, 1995). Therefore, we would expect more multiculturalist messages to promote greater feelings of belonging than colorblindness or stereotyping.

Because so few studies have considered the curriculum in studies of school racial climate, relatively little evidence of a link between school racial socialization and belonging exists. In one study, Black students who reported that teachers and other students held prejudiced views felt less connected to others at school (Dotterer et al., 2009), while in a qualitative study, Black students in predominantly White schools that attempted to acknowledge their culture reported feeling more comfortable (Datnow & Cooper, 2000). In another study, Latino high school students who felt that other

students and teachers respected their culture were more interested in school (Tan, 1999), which could be explained by greater feelings of belonging. Therefore, I expect perceptions of more multiculturalist messages to be associated with greater belonging.

School racial climate and competence. Competence refers to feelings of mastery over the domain, in this case academics and learning. Interpersonal interactions may be connected to youths' feelings of competence through the feedback process. That is, perceptions of unequal status or a negative quality of interaction may provide a source of negative feedback about youths' abilities if youth believe they have less status or are being rejected because they are less capable. Some scholars suggest that structural inequality in schools, with White students dominating academically focused tracks and minority students in vocational tracks, can reinforce beliefs of racial inferiority (Tyson, Darity, & Castellino, 2005). However, there is limited empirical evidence to support this conclusion.

School racial socialization can also provide feedback on youths' ability and competence. Because of negative stereotypes that exist for some minorities, particularly around academics, limited representations can lead youth to internalize stereotypes of lower academic ability and reduce their ability to see themselves as academically successful (Banks, 1993; Brown & Lee, 2005; Crocker & Major, 1989; Steele, 1997). Positive stereotypes may promote feelings of competence for students in certain racial groups (e.g., some Asian groups; Steele, 1997). On the other hand, the stereotype's narrow representation might reduce feelings of competence for those targeted students who feel they do not measure up to the ideal (e.g., Marinari, 2006; Teranishi, 2002). Positive representation in the curriculum and a lack of stereotyping can also impact feelings of competence indirectly by encouraging youth to have a positive connection to their racial group and thus a positive sense of self overall (Ladson-Billings, 1995).

Some research supports links between school racial socialization and perceptions of competence. Dotterer et al. (2009) found a negative correlation between perceptions of teacher/peer prejudice and academic self-esteem for Black youth. Additionally, in a study by Rivas-Drake (2011), perceiving that teachers had a positive view of their racial group was associated with higher ratings of competence for Latino youth. In sum, theory suggests links between school racial climate and satisfaction of basic needs of belonging and competence, but the empirical evidence is scarce.

School racial climate and intrinsic motivation. I expect school racial climate to be positively associated with belonging and competence, which, according to self-determination theory, should in turn be positively associated with intrinsic motivation (e.g., Close & Solberg, 2008). Research with Black adolescents supports links between students' perceptions of fair treatment and a lack of racial tension with in-

trinsic motivation, mediated by feelings of belonging (Byrd & Chavous, 2011).

Research Questions

The primary research question in the present study was, how are perceptions of school racial climate associated with feelings of belonging and competence? The second question was, is school racial climate indirectly associated with intrinsic motivation through feelings of belonging and competence?

I expected indicators of interpersonal interactions, specifically quality of interaction, equal status, and support for positive interactions, would be positively associated with belonging because positive interactions and fair treatment can create more opportunities for cross-race friendships and supportive relationships with teachers. I did not have a specific hypothesis for frequency of interaction. I also expected a curriculum that does not represent youths' culture would be associated with lower feelings of belonging because the lack of representation may indicate to youth that they are not valued.

I expected the same interpersonal interactions dimensions would be positively associated with competence because they can provide encouraging feedback about youths' ability. Again, I did not have a specific hypothesis for frequency of interaction. I expected school racial socialization that represents youths' culture in a positive way would be associated with feelings of competence (i.e., support for cultural competence and cultural socialization), while color-blindness, individualism, and stereotyping would be negatively associated with feelings of competence.

I expected belonging and competence would be positively associated with intrinsic motivation because individuals whose basic needs are met should experience more inherent enjoyment of the domain. Finally, I expect school racial climate would be indirectly associated with intrinsic motivation through belonging and competence.

Method

Participants

The participants were 99 students (53% girls and young women) enrolled at a public charter middle/high school in an urban area in Southeastern Michigan. The school is 91% Black, and participants self-identified as predominantly Black: 76% as monoracial and 17% as multiracial (Black and some other race[s]). The remaining students identified as Hispanic/Latino, Middle Eastern, or White. The participants ranged in age from 11 to 18 years (M age = 15.21 years, SD = 1.53 years). About 85% of the school's students were eligible for free or reduced lunch, and the median reported parental income for the sample was \$25,000 to \$34,999. At the school, about two thirds (64%) of the teachers were White and 25% were Black.

Measures

School racial climate. The school racial climate items were developed based on existing scales of school racial climate and racial socialization. Items were reviewed by experienced survey researchers and school personnel for appropriateness, both for fit with the desired construct and for the target age group. To create the subscales, I conducted an exploratory analysis on all of the items using principal axis factor analysis with oblique rotation. I then conducted a confirmatory factor analysis with all of the items using the subscales from the exploratory analysis.

Quality of interaction consisted of four items ($\alpha = .67$) measuring how well students of different races got along on a 5-point Likert-type scale ranging from 1 (*not at all true*) to 5 (*completely true*). An example item is "Students of different races trust each other." Frequency of interaction consisted of two items ($r = .52$) asking how often students of different races ate lunch together and studied together on a 5-point Likert-type scale ranging from 1 (*never*) to 5 (*every day*).

The equal status subscale consisted of three items ($\alpha = .80$) measuring how much participants perceived that students of different races are treated equally by staff and administrators on a 5-point Likert-type scale ranging from 1 (*not at all true*) to 5 (*completely true*). An example item is "Teachers at your school are fair to students of all races." Finally, the support for positive interactions subscale consisted of four items ($\alpha = .79$) measuring how much teachers, administrators, and other students encouraged students of different races to get along on a 5-point Likert-type scale ranging from 1 (*not at all true*) to 5 (*completely true*). An example item is "The principal here likes students to have friends of different races."

School racial socialization was measured with six subscales. Promotion of cultural competence consisted of three items ($\alpha = .57$) assessing opportunities to learn about other cultures on a 5-point Likert-type scale ranging from 1 (*not at all true*) to 5 (*completely true*). An example item is "In school you get to do things that help you learn about people of different races and cultures." Cultural socialization was measured with four items ($\alpha = .82$) asking how often adults at school encouraged youth to learn about their culture and to feel pride in their culture on a 3-point Likert-type scale ranging from 1 (*never*) to 3 (*more than twice*). An example item is "Encouraged you to learn about the history of your culture." Colorblindness was measured with four items ($\alpha = .66$) asking how often adults at school encouraged youth to ignore group differences on a 3-point Likert-type scale ranging from 1 (*never*) to 3 (*more than twice*). An example item is "Told you that race doesn't matter." Individualism messages were measured with three items ($\alpha = .65$) encouraging youth to overlook race in favor of individual traits on a 3-point Likert-type scale ranging from 1 (*never*) to 3 (*more than twice*). An example item is "Told you that everyone who works hard can be successful, regardless of race." Stereotyping consisted of six items ($\alpha = .85$) asking

how much teachers and other students endorsed negative stereotypes about Blacks and immigrants on a scale of on a 5-point Likert-type scale ranging from 1 (*not at all true*) to 5 (*completely true*). An example item is "Other students think Black students aren't as smart as other students." Finally, critical consciousness was measured with five items ($\alpha = .81$) asking how often adults communicated messages about individual and institutional discrimination on a 3-point Likert-type scale ranging from 1 (*never*) to 3 (*more than twice*). An example item is "Told you that society is not fair for people who are not White."

Outcomes. Intrinsic motivation ($\alpha = .89$), or the extent to which youth were interested in and enjoyed school, was measured by a three-item 5-point Likert-type scale ranging from 1 (*not at all true*) to 5 (*completely true*). An example item was "I find school interesting." School belonging ($\alpha = .86$) was measured with the relatedness subscale of the Basic Needs Satisfaction scale (Deci & Ryan, 2000) adapted for school. The scale included eight items asking youth how much they like people at the school and how much others at the school like them, and was measured on a 5-point Likert-type scale ranging from 1 (*not at all true*) to 5 (*completely true*). An example item was "I really like the people at my school." Adolescents' perceptions of their academic competence were assessed with a scale ($\alpha = .83$) that included eight items asking youth to rate themselves on a 5-point Likert-type scale ranging from 1 (*below average*) to 5 (*above average*) scale in several academic subjects, grades, and overall intelligence. Also measured were youth-reported gender, age, and whether youth identified as monoracial Black or not.

Procedure

After obtaining approval from the Institutional Review Board and school leaders, letters explaining the purpose of the study and consent forms were sent to parents of all students at the school. Students who returned signed consent forms completed the paper/pencil survey during school hours on 1 of 3 survey days in the fall. The survey took about 20 min, and each participant received a movie pass as compensation.

Results

Descriptive statistics and correlations are presented in Table 1. Several of the subscales had extremely skewed distributions: frequency of interaction, equal status, individualism, and stereotyping. Therefore, I dichotomized the variables around their endpoints. That is, frequency of interaction was divided into scores equal to 5 (which corresponded to answering "every day" for both items) and scores less than 5. Equal status was dichotomized in the same way (with the higher category corresponding to answering "completely true" for each item). Individualism was treated similarly,

TABLE 1. Descriptives and Correlations

Variable	M	SD	1	2	3	4	5	6	7	8	9	10	11	12
1. Quality of interaction	4.03	0.73												
2. Frequency of interaction	4.65	0.83	0.19 [†]											
3. Equal status	4.48	0.80	0.44 ^{***}	0.27 ^{**}										
4. Support for positive interaction	3.51	0.94	0.16	0.25 [*]	0.31 ^{**}									
5. Support for cultural competence	3.38	0.90	-0.08	0.09	0.10	0.48 ^{***}								
6. Cultural socialization	2.23	0.65	0.01	0.19 [†]	0.05	0.14	0.36 ^{***}							
7. Colorblindness	2.00	0.59	-0.16	-0.12	0.01	0.17	0.19 [†]	0.27 ^{**}						
8. Individualism	2.63	0.49	0.06	0.09	0.31 ^{**}	0.40 ^{***}	0.32 ^{**}	0.32 ^{**}	0.32 ^{**}					
9. Stereotyping	1.34	0.62	-0.42 ^{***}	-0.04	-0.24 [*]	-0.08	0.07	0.01	0.15	-0.05				
10. Critical consciousness	1.70	0.58	-0.26 [*]	-0.01	-0.15	-0.06	-0.01	0.17	0.23 [*]	0.18 [†]	0.34 ^{**}			
11. Belonging	3.56	0.88	0.28 ^{**}	0.12	0.11	0.15	0.18 [†]	0.08	-0.18 [†]	0.20 [†]	-0.17 [†]	-0.09		
12. Competence	3.76	0.70	0.10	0.22 [*]	0.29 ^{**}	0.21 [*]	0.20 [†]	0.16	-0.19 [†]	0.32 ^{**}	-0.10	-0.05	0.39 ^{***}	
13. Intrinsic motivation	3.65	1.12	0.21 [*]	0.07	0.15	0.30 ^{**}	0.29 ^{**}	0.13	-0.20 [†]	0.14	-0.13	-0.03	0.59 ^{***}	0.34 ^{**}

Note. Frequency of interaction, equal status, individualism, and stereotyping are continuous.

[†] $p < .10$. * $p < .05$. ** $p < .01$. *** $p < .001$.

TABLE 2. Standardized Model Results

Variable	Belonging		Competence		Intrinsic indirect	
	B	SE	B	SE	B	SE
Intercept	3.21*	1.42	4.61**	1.50		
Gender	-0.28**	0.10	-0.08	0.11		
Age	0.05	0.10	0.03	0.10		
Black monoracial	-0.15	0.10	0.00	0.10		
Quality of interaction	0.25*	0.10	-0.03	0.11	0.13*	0.07
Frequency of interaction	-0.10	0.09	0.08	0.10	-0.04	0.06
Equal status	-0.12	0.11	0.14	0.11	-0.04	0.07
Support for positive interactions	-0.03	0.11	0.06	0.12	-0.01	0.07
Support for cultural competence	0.29*	0.11	0.13	0.12	0.17*	0.07
Cultural socialization	-0.11	0.11	0.10	0.11	-0.04	0.07
Colorblindness	-0.23*	0.10	-0.24*	0.10	-0.16**	0.06
Individualism	0.21†	0.11	0.16	0.12	0.14*	0.07
Stereotyping	-0.25*	0.11	-0.21†	0.11	-0.17*	0.07
Critical consciousness	0.01	0.10	0.07	0.11	0.02	0.06
Residual variance	0.70***	0.08	0.76***	0.08		

Note. Correlation between belonging and competence = .30, $p = .001$; frequency of interaction, equal status, individualism, and stereotyping are dichotomous.
 † $p < .10$. * $p < .05$. ** $p < .01$. *** $p < .001$.

except the endpoint was 3 (which corresponded to answering “more than twice” for each item). Finally, stereotyping was dichotomized around the lowest endpoint, with the lower category representing those who had a mean of 1 (meaning the respondent choose “not at all true” for each item), and the higher category representing those who had a mean greater than 1.

I explored differences in perceptions of climate by gender and racial group (Black monoracial or other). In terms of gender, boys differed from girls only on their perceptions of support for positive interactions: Girls perceived more support ($M = 3.75, SD = 0.82$) than boys ($M = 3.40, SD = 0.89$), $t(97) = -2.03, p = .05$. Compared to students of other races ($M = 4.76, SD = 0.40$), monoracial Black students perceived less equal status ($M = 4.40, SD = 0.87$), $t(97) = 1.99, p = .05$. Monoracial Black students also perceived more stereotyping ($M = 1.43, SD = 0.68$) than students of other races ($M = 1.07, SD = 0.18$), $t(97) = -2.58, p = .01$.

Analyses were conducted using path analysis in MPlus (Muthén & Muthén, Los Angeles, CA) with observed variables computed as the average of scale items (except for the four variables noted previously). I modeled the direct effects of each dimension of school racial climate on belonging and competence, the direct effects of belonging and competence on intrinsic motivation, and the indirect effects of school racial climate on intrinsic motivation. Standardized model parameters for the direct effects of climate on belonging and competence and the indirect effects on intrinsic motivation are displayed in Table 2. Standardized parameters for the direct effects of belonging and competence on intrinsic motivation are displayed in

Table 3. The model had good fit: $\chi^2(10, N = 92) = 13.52, p = .20$; root mean square error of approximation = .062; comparative fit index = .96, and explained a significant amount of variance in each outcome: 30% for belonging, 24% for competence, and 46% for intrinsic motivation.

Belonging

I hypothesized that perceiving positive interactions, fair treatment, and encouragement for positive interactions would be associated with greater feelings of belonging at school. My hypothesis was partially supported: Perceptions of better quality of interaction were positively associated with feelings of belonging ($B = 0.25, p = .01$). I also expected school racial socialization to be associated with feelings of belonging, and I found support for this hypothesis. Youth

TABLE 3. Direct Effects on Intrinsic Motivation

Variable	B	SE
Intercept	2.10*	0.97
Gender	0.28**	0.08
Age	-0.23**	0.08
Black monoracial	0.13†	0.08
Belonging	0.54***	0.08
Competence	0.15†	0.08
Residual variance	0.54***	0.08

† $p < .10$. * $p < .05$. ** $p < .01$. *** $p < .001$.

who perceived that their teachers and peers held negative stereotypes and who perceived more colorblind messages reported lower feelings of belonging ($B = -0.25, p = .02$; $B = -0.23, p = .02$). On the other hand, perceiving more opportunities to learn about other cultures was associated with greater feelings of belonging ($B = 0.29, p = .01$). Unexpectedly, individualism messages were marginally associated with greater feelings of belonging ($B = 0.21, p = .06$).

Competence

I predicted that perceived quality of interaction, equal status, and support for positive interactions would be associated with competence, but the variables were not significantly related. Additionally, I expected perceptions that the school encouraged youth to learn about different cultures, including their own, and represented their group in nonstereotypical and positive ways to be associated with higher ratings of competence. My hypothesis was partially supported: Perceiving more messages about colorblindness was associated with lower ratings of competence ($B = -0.24, p = .02$), though hearing more messages about emphasizing individual traits was associated with marginally higher ratings of competence ($B = 0.21, p = .06$).

Indirect Relationships

The second research question concerned indirect relationships between school racial climate and intrinsic motivation through belonging and competence. I expected those racial climate dimensions that were directly related to belonging and competence, would be indirectly related to intrinsic motivation. This would suggest that the more autonomous motivation and better performance of students could be explained by the satisfaction of their basic needs.

To answer the first question, the results showed that belonging was significantly and positively associated with intrinsic motivation ($B = 0.54, p < .001$) and competence was marginally positively associated with intrinsic motivation ($B = 0.15, p = .07$). Table 2 gives the total indirect effects of each dimension of school racial climate on intrinsic motivation. All of the indirect effects were through belonging. Therefore, all of the significant effects for belonging were significantly associated with intrinsic motivation through belonging.

Discussion

The purpose of this study was to explore the relationship between multiple dimensions of school racial climate and academic outcomes. I also investigated whether basic need satisfaction—feelings of belonging and competence—mediated the relationship between school racial climate and intrinsic motivation. The results showed that several aspects of climate were important for both belonging and competence and that school racial climate was associated with intrinsic motivation through belonging.

In the present study I addressed several limitations in the school racial climate literature. First, the framework used in the present study is multidimensional, and thus I was able to show, for example, the unique influence of quality of interaction compared to promotion of cultural competence. The findings were in line with existing research showing the positive benefits of positive intergroup interactions and support for diversity in schools (e.g., Green et al., 1988; Hurtado & Ponjuan, 2005; Johnson et al., 2007; Nuñez, 2009) and the research on the damaging effects of stereotypes (e.g., Smith, 2004; Solorzano et al., 2000; Steele, 1997; Teranishi, 2002; Tran & Birman, 2010) while providing more specific indications of what aspects of the school racial climate were important.

The second strength of this study was that I examined perceptions of both intergroup relations and multicultural education. Previous studies have included some measures of how schools promote positive intergroup relations or learning about other cultures (e.g., Brand et al., 2003; Chavous, 2005; Green et al., 1988), but the present study is the first to measure students' perceptions of other racial socialization messages, such as colorblindness, individualism, and critical consciousness. The results showed that perceptions of such messages can be measured reliably and are related to student outcomes. The findings for colorblindness, in particular, were consistent with theory in multicultural education (Ladson-Billings, 1995, 2004; Young, 2010). Teachers' and administrators' colorblind attitudes, even in a predominantly one-race school, may ignore the experiences of youth who are outside the mainstream experience and contribute to those students' feelings of alienation (Lewis, 2003; Schofield, 2006). The present study showed that, when students heard messages from teachers about ignoring race, they felt less connected to others at school and had a more negative view of their academic abilities. The findings may even underestimate the effects of colorblindness in schools because of the focus on explicit messages. Additionally, though individualism messages were unexpectedly positively associated with belonging, their positive impacts may come from the implicit high expectations in the messages (i.e., "everyone who works hard can be successful"), which Ladson-Billings (1995) noted is an important aspect of culturally relevant teaching. Other educational research suggests that the emphasis on hard work may be beneficial. For example, Yeager and Dweck's (2012) research on mindsets suggests that youth who are taught that their abilities can be developed are more resilient and academically successful. While individualism messages may implicitly downplay the significance of race, the results of the present study suggest that the overall message may be positive for youth. It may also be that multiculturalist messages such as promotion of cultural competence will balance the lack of a racial focus in individualism messages. Future researchers should attempt to understand how students perceive different types of complex messages and combinations of messages.

The third way the present study addressed limitations in existing literature was that it included a measure of intergroup contact that accurately measured students' perceptions of the context rather than just their own experiences. Furthermore, the measure of quality of interaction included both positive and negative aspects of intergroup contact, in contrast to discrimination measures that only focus on negative aspects. Again, the findings confirmed existing discrimination and hostile climate research (e.g., Hurtado & Carter, 1997; Huynh & Fuligni, 2010; Wong, Eccles, & Sameroff, 2003).

Fourth, the sample included an understudied context, a predominantly Black school. Importantly, the results showed that, even in a seemingly homogenous environment, perceptions of school racial climate varied and were associated with how students saw themselves and connected to others. Studies of culturally relevant teaching have examined predominantly African American schools and classrooms but not considered the impact of messages about diversity and intergroup interactions (e.g., Howard, 2001; Young, 2010), while studies of diversity programming and intergroup interactions often intentionally exclude homogenous settings such as historically Black colleges and universities (e.g., Hurtado, 1992; Jayakumar, 2008; Park, 2009). The present study highlights the fact that both intergroup interactions and multiculturalism are present and impactful in all types of settings.

Finally, the present study provided evidence of a mechanism through which school racial climate impacts outcomes. The estimates of indirect effects suggested that several dimensions of school racial climate are associated with intrinsic motivation through the satisfaction of the basic need of belonging. That is, students who perceive more positive cross-racial interactions, more school support for learning about other cultures, fewer messages about ignoring race, more messages about individual hard work, and less prejudice in teachers and peers felt more connected to those around them and thus found school more inherently enjoyable. The results confirm existing self-determination theory research linking basic need satisfaction with intrinsic motivation (e.g., Close & Solberg, 2008), and thus we would expect those students who are more interested in school to have higher achievement (e.g., Fortier, Vallerand, & Guay, 1995).

The present study did have some limitations. The sample was limited in size and the results may not generalize to non-Black racial groups or schools with different demographics. The measures used need further testing and validation in diverse samples. Additionally, the school racial socialization subscales primarily focused on explicit messages and not youths' perceptions of adults' implicit messages or structural features like opportunities in the school. For example, teachers may talk about diversity but undermine that message by, for instance, scheduling a test on the day of a multicultural assembly (Ngo, 2010). Qualitative research informs our understanding of how youth think about and process such experiences (e.g., Lewis, 2003; Perry, 2001); future researchers

may be able to use quantitative measures to generalize about youths' understanding.

A final limitation was that the study was cross-sectional; therefore, I was not able to determine causality. In addition to longitudinal studies of the effects of school racial climate, work is needed to understand how school racial climate perceptions change over time as a function of cognitive development and different individual experiences (such as discrimination or parental racial socialization). It is also important to understand how the development of racial identity and a diversity ideology interact with and influence perceptions of school racial climate, as well as explore how a school's messages about diversity can shape youths' attitudes and identity.

There are several directions for future work. First, the theoretical framework should be confirmed through quantitative and qualitative methods in a variety of settings. To that end, I am conducting focus groups and individual interviews with students in the school surveyed in the present study and a predominantly White school to further explore dimensions of school racial climate. I will also have youth interview their peers about the climate of their school. The goal of this project is to identify aspects of school racial climate that may be understudied or absent from the research literature, for example intraracial interactions. Second, the measurement of the dimensions must be refined and verified. Future research will involve creating a larger pool of items, pretesting items with youth of varying backgrounds and in various kinds of settings, and conducting further exploratory and confirmatory analyses. Third, the relationships between school racial climate and the outcomes must be explored in primary schools and settings varying in racial composition.

In conclusion, the present study highlights the need for racial climate research to differentiate between constructs as well as the importance of embracing multiculturalism in schools. This work shows how race can work in complex ways in schools and calls on researchers and educators to take on the challenge of promoting true equality in our diverse society.

ACKNOWLEDGMENTS

The author would like to thank Drs. Tabbye Chavous, Stephanie Rowley, Percy Bates, and Robert Sellers for their support and feedback. She would also like to thank Ms. Jackson and the staff and students at the study school for their participation and support.

FUNDING

This work was supported by a dissertation fellowship from the Ford Foundation.

REFERENCES

- Aldana, A., & Byrd, C. M. (2013). *Learning about race and ethnicity: The implications of ethnic-racial socialization in school and community settings*. Manuscript under review.

- Allport, G. W. (1954). *The nature of prejudice*. Boston, MA: Addison-Wesley.
- Banks, J. A. (1993). Approaches to multicultural curriculum reform. *Multicultural education: Issues and Perspectives*, 2, 195–214.
- Bennett, C. (2001). Genres of research in multicultural education. *Review of Educational Research*, 71, 171–217.
- Booker, K. C. (2006). School belonging and the African American adolescent: What do we know and where should we go? *The High School Journal*, 89(4), 1–7.
- Brand, S., Felner, R., Shim, M., Seitsinger, A., & Dumas, T. (2003). Middle school improvement and reform: Development and validation of a school-level assessment of climate, cultural pluralism, and school safety. *Journal of Educational Psychology*, 95, 570–588.
- Brown, R. P., & Lee, M. N. (2005). Stigma consciousness and the race gap in college academic achievement. *Self and Identity*, 4, 149–157.
- Byrd, C. M., & Chavous, T. M. (2011). Racial identity and intrinsic motivation among African American youth: The importance of person-context congruence. *Journal of Research on Adolescence*, 21, 849–860.
- Chang, J., & Le, T. N. (2010). Multiculturalism as a dimension of school climate: The impact on the academic achievement of Asian American and Hispanic youth. *Cultural Diversity and Ethnic Minority Psychology*, 16, 485–492.
- Chavous, T. M. (2005). An intergroup contact-theory framework for evaluating racial climate on predominantly white college campuses. *American Journal of Community Psychology*, 36, 239–257.
- Close, W., & Solberg, S. (2008). Predicting achievement, distress, and retention among lower-income Latino youth. *Journal of Vocational Behavior*, 72, 31–42. doi:10.1016/j.jvb.2007.08.007
- Cohen, J., McCabe, L., Michelli, N. M., & Pickeral, T. (2009). School climate: Research, policy, practice, and teacher education. *Teachers College Record*, 111, 180–213.
- Crocker, J., & Major, B. (1989). Social stigma and self-esteem: The self-protective properties of stigma. *Psychological Review*, 96, 608–630.
- Datnow, A., & Cooper, R. (2000). Creating a climate for diversity? The institutional response of predominantly white independent schools to African-American students. In M. G. Sanders (Ed.), *Schooling students placed at risk: Research, policy, and practice in the education of poor and minority adolescents* (pp. 207–228). Mahwah, NJ: Erlbaum.
- De Waal-Lucas, A. (2006). Multicultural education: Not needed in the suburbs! In E. Brantlinger (Ed.), *Who benefits from special education? Remediating (fixing) other people's children* (pp. 101–117). Mahwah, NJ: Erlbaum. Retrieved from <http://www.eric.ed.gov/ERICWebPortal/detail?accno=ED493816>
- Deci, E. L., & Ryan, R. M. (2000). The “what” and “why” of goal pursuits: Human needs and the self-determination of behavior. *Psychological Inquiry*, 11, 227–268.
- Deci, E. L., Vallerand, R. J., Pelletier, L. G., & Ryan, R. M. (1991). Motivation and education: The self-determination perspective. *Educational Psychologist*, 26, 325–346. doi:10.1207/s15326985ep2603&4.6
- Dessel, A., Rogge, M. E., & Garlington, S. B. (2006). Using intergroup dialogue to promote social justice and change. *Social Work*, 51, 303–315.
- Dotterer, A. M., McHale, S. M., & Crouter, A. C. (2009). Sociocultural factors and school engagement among African American youth: The roles of racial discrimination, racial socialization, and ethnic identity. *Applied Developmental Science*, 13, 61–73. doi:10.1080/10888690902801442
- Dovidio, J. F., Brigham, J. C., Johnson, B. T., & Gaertner, S. L. (1996). Stereotyping, prejudice, and discrimination: Another look. In C. N. Macrae, C. Stangor, & M. Hewstone (Eds.), *Stereotypes and stereotyping* (pp. 276–319). New York, NY: The Guilford Press.
- Fisher, C. B., Wallace, S. A., & Fenton, R. E. (2000). Discrimination distress during adolescence. *Journal of Youth and Adolescence*, 29, 679–695. doi:10.1023/A:1026455906512
- Fortier, M. S., Vallerand, R. J., & Guay, F. (1995). Academic motivation and school performance: Toward a structural model. *Contemporary Educational Psychology*, 20, 257–274.
- Gallagher, C. A. (2003). Color-blind privilege: The social and political functions of erasing the color line in post race America. *Race Gender and Class*, 10(4), 22–37.
- Goodenow, C. (1993). The psychological sense of school membership among adolescents: Scale development and educational correlates. *Psychology in the Schools*, 30, 79–90.
- Gottfried, A. E., Marcoulides, G. A., Gottfried, A. W., Oliver, P. H., & Guerin, D. W. (2007). Multivariate latent change modeling of developmental decline in academic intrinsic math motivation and achievement: Childhood through adolescence. *International Journal of Behavioral Development*, 31, 317–327. doi:10.1177/0165025407077752
- Green, C. W., Adams, A. M., & Turner, C. W. (1988). Development and initial validation of the school interracial climate scale. *American Journal of Community Psychology*, 16, 241–259.
- Greenman, N. P., & Kimmel, E. B. (1995). The road to multicultural education: Potholes of resistance. *Journal of Teacher Education*, 46, 360–368. doi:10.1177/0022487195046005006
- Gurin, P., Dey, E. L., Hurtado, S., & Gurin, G. (2002). Diversity and higher education: Theory and impact on educational outcomes. *Harvard Educational Review*, 72, 330–367.
- Gusa, D. L. (2010). White institutional presence: The impact of Whiteness on campus climate. *Harvard Educational Review*, 80, 464–489.
- Howard, T. C. (2001). Telling their side of the story: African-American students' perceptions of culturally relevant teaching. *The Urban Review*, 33, 131–149.
- Hughes, D., Rodriguez, J., Smith, E. P., Johnson, D. J., Stevenson, H. C., & Spicer, P. (2006). Parents' ethnic-racial socialization practices: A review of research and directions for future study. *Developmental Psychology*, 42, 747–770.
- Hurtado, S. (1992). The campus racial climate: Contexts of conflict. *Journal of Higher Education*, 63, 539–569.
- Hurtado, S., & Carter, D. F. (1997). Effects of college transition and perceptions of the campus racial climate on Latino college students' sense of belonging. *Sociology of Education*, 70, 324–345.
- Hurtado, S., Milem, J. F., Clayton-Pedersen, A. R., & Allen, W. R. (1998). Enhancing campus climates for racial/ethnic diversity: Educational policy and practice. *Review of Higher Education*, 21, 279–302.
- Hurtado, S., & Ponjuan, L. (2005). Latino educational outcomes and the campus climate. *Journal of Hispanic Higher Education*, 4, 235–251. doi:10.1177/1538192705276548
- Huynh, V. W., & Fuligni, A. J. (2010). Discrimination hurts: The academic, psychological, and physical well-being of adolescents. *Journal of Research on Adolescence*, 20, 916–941. doi:10.1111/j.1532-7795.2010.00670.x
- Jayakumar, U. M. (2008). Can higher education meet the needs of an increasingly diverse and global society? Campus diversity and cross-cultural workforce competencies. *Harvard Educational Review*, 78, 615–651.
- Johnson, D. R., Soldner, M., Leonard, J. B., Alvarez, P., Inkelas, K. K., Rowan-Kenyon, H. T., & Longerbeam, S. D. (2007). Examining sense of belonging among first-year undergraduates from different racial/ethnic groups. *Journal of College Student Development*, 48, 525–542.
- Kessler, R. C., Mickelson, K. D., & Williams, D. R. (1999). The prevalence, distribution, and mental health correlates of perceived discrimination in the United States. *Journal of Health and Social Behavior*, 40, 208–230.
- Kotori, C., & Malaney, G. D. (2003). Asian American students' perceptions of racism, reporting behaviors, and awareness of legal rights and procedures. *NASPA Journal*, 40, 56–76.
- Ladson-Billings, G. (1995). Toward a theory of culturally relevant pedagogy. *American Educational Research Journal*, 32, 465–491.
- Ladson-Billings, G. (2004). New directions in multicultural education. In J. A. Banks & C. A. McGee Banks (Eds.), *Handbook of research on multicultural education* (2nd ed., Vol. 2, pp. 50–65). New York, NY: Jossey-Bass.
- Lewis, A. E. (2003). *Race in the schoolyard: Negotiating the color line in classrooms and communities*. New Brunswick, NJ: Rutgers University Press.
- Marinari, M. (2006). Racial formation and success among Korean high school students. *The Urban Review*, 37, 375–398. doi:10.1007/s11256-005-0019-x
- Mattison, E., & Aber, M. S. (2007). Closing the achievement gap: The association of racial climate with achievement and behavioral outcomes. *American Journal of Community Psychology*, 40, 1–12.
- McLaren, P. L. (1995). White terror and oppositional agency: Toward a critical multiculturalism. In C. E. Sleeter & P. L. McLaren (Eds.), *Multicultural education, critical pedagogy, and the politics of difference* (33–70). Albany, NY: SUNY Press.
- National Center for Education Statistics. (2009). *Digest of education statistics, 2009*. Retrieved from http://nces.ed.gov/programs/digest/d09/tables/dt09_100.asp
- Ngo, B. (2010). Doing “diversity” at Dynamic High: Problems and possibilities of multicultural education in practice. *Education and Urban Society*, 42, 473–495. doi:10.1177/0013124509356648

- Nishimura, T., Kawamura, S., & Sakurai, S. (2011). Autonomous motivation and meta-cognitive strategies as predictors of academic performance: Does intrinsic motivation predict academic performance? *Japanese Journal of Educational Psychology, 59*, 77–87.
- Núñez, A.-M. (2009). A critical paradox? Predictors of Latino students' sense of belonging in college. *Journal of Diversity in Higher Education, 2*, 46–61. doi:10.1037/a0014099
- Orfield, G. (2009). *Reviving the goal of an integrated society: A 21st century challenge*. The Civil Rights Project.
- Osterman, K. F. (2000). Students' need for belonging in the school community. *Review of Educational Research, 70*, 323–367. doi:10.3102/00346543070003323
- Park, J. J. (2009). Are we satisfied? A look at student satisfaction with diversity at traditionally White institutions. *Review of Higher Education, 32*, 291–320.
- Perry, P. (2001). White means never having to say You're ethnic. *Journal of Contemporary Ethnography, 30*(1), 56–91. doi:10.1177/089124101030001002
- Pettigrew, T. F. (2008). Future directions for intergroup contact theory and research. *International Journal of Intercultural Relations, 32*, 187–199. doi:10.1016/j.ijintrel.2007.12.002
- Pewardary, C., & Frey, B. (2002). Surveying the landscape: Perceptions of multicultural support services and racial climate at a predominantly White university. *Journal of Negro Education, 71*, 77–95.
- Plaut, V. C. (2010). Diversity science: Why and how difference makes a difference. *Psychological Inquiry: An International Journal for the Advancement of Psychological Theory, 21*, 77–99. doi:10.1080/10478401003676501
- Rivas-Drake, D. (2011). Ethnic-racial socialization and adjustment among Latino college students: The mediating roles of ethnic centrality, public regard, and perceived barriers to opportunity. *Journal of Youth and Adolescence, 40*, 606–619. doi:10.1007/s10964-010-9564-z
- Ryan, R. M., & Deci, E. L. (2009). Promoting self-determined school engagement: Motivation, learning, and well-being. In K. R. Wentzel & A. Wigfield (Eds.), *Handbook of motivation at school* (pp. 171–196). New York, NY: Routledge.
- Sampson, D., & Garrison-Wade, D. F. (2011). Cultural vibrancy: Exploring the preferences of African American children toward culturally relevant and non-culturally relevant lessons. *The Urban Review, 43*, 279–309. doi:10.1007/s11256-010-0170-x
- Schofield, J. W. (2006). The colorblind perspective in school: Causes and consequences. In J. A. Banks & C. A. McGee Banks (Eds.), *Multicultural education: Issues and perspectives* (pp. 271–295). New York, NY: Wiley.
- Simmons, S. J., Wittig, M. A., & Grant, S. K. (2010). A mutual acculturation model of multicultural campus climate and acceptance of diversity. *Cultural Diversity and Ethnic Minority Psychology, 16*, 468–475. doi:10.1037/a0020237
- Smith, J. L. (2004). Understanding the process of stereotype threat: A review of mediational variables and new performance goal directions. *Educational Psychology Review, 16*, 177–206.
- Solorzano, D., Ceja, M., & Yosso, T. (2000). Critical race theory, racial microaggressions, and campus racial climate: The experiences of African American college students. *Journal of Negro Education, 69*, 60–73.
- Steele, C. M. (1997). A threat in the air. How stereotypes shape intellectual identity and performance. *The American Psychologist, 52*, 613–629.
- Tan, G. (1999). Perceptions of multiculturalism, academic achievement, and intent to stay in school among Mexican American students. *Journal of Research and Development in Education, 33*, 1–14.
- Teranishi, R. T. (2002). Asian Pacific Americans and critical race theory: An examination of school racial climate. *Equity & Excellence in Education, 35*, 144–154.
- Tran, N., & Birman, D. (2010). Questioning the model minority: Studies of Asian American academic performance. *Asian American Journal of Psychology, 1*, 106–118. doi:10.1037/a0019965
- Tyson, K., Darity, W., & Castellino, D. R. (2005). It's not "a black thing": Understanding the burden of acting white and other dilemmas of high achievement. *American Sociological Review, 70*, 582–605.
- Wong, C. A., Eccles, J. S., & Sameroff, A. (2003). The influence of ethnic discrimination and ethnic identification on African American adolescents' school and socioemotional adjustment. *Journal of Personality, 71*, 1197–1232. doi:10.1111/1467-6494.7106012
- Yeager, D. S., & Dweck, C. S. (2012). Mindsets that promote resilience: When students believe that personal characteristics can be developed. *Educational Psychologist, 47*, 302–314. doi:10.1080/00461520.2012.722805
- Young, E. (2010). Challenges to conceptualizing and actualizing culturally relevant pedagogy: How viable is the theory in classroom practice? *Journal of Teacher Education, 61*, 248–260.
- Zullig, K. J., Koopman, T. M., Patton, J. M., & Ubbes, V. A. (2010). School climate: Historical review, instrument development, and school assessment. *Journal of Psychoeducational Assessment, 28*, 139–152. doi:10.1177/0734282909344205

AUTHOR NOTE

Christy M. Byrd is a NSF Postdoctoral Fellow in the Department of Teacher Education at Michigan State University. Her research examines adolescents' perceptions of race in their school contexts and the implications for their identity development and motivation.