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Relationships of teacher perceptions and racially diverse third grade student achievement: an analysis of ECLS-K:2011 data

University at Albany

Lynnette Renee Williams
University at Albany, State University of New York, lynnr718@hotmail.com

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ABSTRACT

It has been over 50 years since desegregation efforts began and many public-school systems in the United States are still battling with performance gaps between White and historically underrepresented students. The term historically underrepresented refers to people from diverse racial, cultural, linguistic, and economically disadvantaged backgrounds who have been denied access or suffered institutional discrimination in the United States, and according to the U.S. Census includes Blacks/African Americans, Asian Americans, Hispanics, and Native Americans (Artiles et al., 2010). Many historically underrepresented students are lagging behind their peers on academic performance measures, standardized achievement tests, high school graduation, and college-career readiness (Carter & Welner, 2013). Although researchers may debate the root cause to these disparities, the common denominator is students spend their school days in social interaction with teachers. By virtue of making decisions in the classrooms, teachers furnish a rationale for the implementation of curriculum, pedagogical decisions, and social emotional learning. These decisions, along with their consequences, are reflections of teacher perceptions, attitudes, and expectations (Gay, 2000). The purpose of this study was to explore the association between teachers’ perceived relationships with racially diverse students and students’ academic performance in schools with racially different demographic compositions.

Teachers are an important source of information for students. However, little is known about whether teachers’ perceptions of their relationships with students and student performance are systematically biased. Using the Early Childhood Longitudinal Study (ECLS-K:2011), I used a quantitative methodology to foster a deeper understanding of the association between teachers’ perceptions of their relationships with students and student academic performance in schools with racially diverse student demographics. Using regression analyses, I found teachers perceive
significantly greater conflict with Black students than they do with White students. These effects are significantly less for Asian students than White students. Teachers perceive significantly less closeness with Black, Asian, and Latinx students than they do with White students. Teachers rate the math and reading performance of Black and Latinx students significantly lower than White students and significantly higher for Asian students. Implications for education include the need to emphasize culturally responsive sustaining policies, practices, and curricula in schools. These findings add to a growing literature on the role of limited information in perpetuating educational attainment gaps.

KEY WORDS: Achievement gaps, opportunity gaps, performance gaps, student–teacher relationships
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CHAPTER 1

Significance of the Problem

The United States Census Bureau estimated historically underrepresented people made up 28% of the nation’s population in 2000 (U.S. Bureau of the Census, 1998). In 2020, a diversity milestone was achieved where more than 40% of Americans now identify as one or more racial and ethnic groups (U.S. Census Bureau, 2020). According to Frey (2021), the new 2020 Census results make clearer than any survey to date the nation is becoming far more racially and ethnically diverse, especially among its young. For example, in some of the largest cities and metropolitan areas such as Chicago, Los Angeles, Washington, D.C., New York, Seattle, and San Francisco, half or more of the public-school students are students of color (Gay, 2000).

These immense demographic changes sweeping the United States are massive concerns for educators and policy makers alike because they are coupled with alarming issues of educational inequality between historically underrepresented students and their White peers (Dee, 2004; Downey & Pribesh, 2004; Howard, 2003; Paris & Alim, 2017). Current discussions highlight significant differences in school results between racialized student groups based on measured outcomes such as test scores and graduation rates (Carter & Welner, 2013; Reardon, 2018; Reyna, 2008; Washington, 1982; Yarrell-Harris, 2003). For example, the average White 13-year-old reads at a higher level and performs better in math than the average Black or Latinx 17-year-old (KewalRamani, 2007). These gaps are especially disheartening if incongruences in academic performances reflect biased beliefs, low expectations, and opportunity gaps (Burgess & Greaves, 2013; McGrady & Reynolds, 2013; Peterson et al., 2016; Taylor, 2015). Because teacher–student relationships occur almost exclusively in the context of the school environment (Gay, 2000; Ladson-Billings, 1995), I examined the association between teachers’ perceived
relationships with racially diverse students and students’ academic performance in schools with racially different demographic compositions.

A sustained effort has never been mounted to attend to the so-called achievement gaps with sustenance hence the reason meaningful progress has not come to fruition (Burchinal et al., 2011; Carter & Welner, 2013). The achievement gap frame focuses attention to the symptoms instead of the root causes of disparities and predictably leads to deficit-based policies grounded in high-stakes testing and exerting pressure on already marginalized students (Carter & Welner, 2013; Paris & Alim, 2017). These deficit-based approaches to understanding academic disparities between historically underrepresented students and their peers is the basis of much of the existing literature (Paris & Alim, 2017; Ladson-Billings, 2000; Samuelson & Litzler, 2016).

Across the centuries, countless philosophers and teachers-and legions of students-have asked that age-old educational question: What is the purpose of schooling? In the context of the United States and other nation-states living out the legacies of genocide, land theft, enslavement, and various forms of colonialism, the answer to this question for historically underrepresented people has been rather clear: The purpose of state-sanctioned schooling has been to forward the largely assimilationist and often White imperial project, with students and families being asked to lose or deny their language, literacies, cultures, and histories in order to achieve in schools. In the United States and beyond, this saga of cultural and linguistic assault has had and continues to have devastating effects on the access, achievement, and well-being of students of color in public schools (Paris & Alim, 2017, p. 1).

Some might argue unpacking the purpose of schooling is the key to understanding the school performance gaps. The notion schools were created to foster disproportionate outcomes for marginalized, culturally, linguistically, and socioeconomically diverse students suggests schools are doing exactly what they were intended to do. Although this researcher is of the belief historically underrepresented populations bring a wealth of culture, ingenuity, creativity, resilience, and value to the global society, this study may appear to present itself from a deficit-based perspective due to a lack of availability in research that encompasses an asset-based
approach to understanding disparities in academic performance among racialized subgroups of students. An asset-based approach to exploring inconsistencies in academic performance among students of different races is an implication for further research.

Although some researchers discuss inconsistencies in terms of achievement gaps, others refer to opportunity gaps and still others argue performance gaps. Achievement gaps are defined as the persistent disparity in test scores between historically underrepresented students who have demographic characteristics typically associated with lower socioeconomic backgrounds and the test scores of students with backgrounds considered to be more advantaged (Chatterji, 2006; Paunesku, 2019). Nonetheless, achievement gaps are a result of historical, political, economic, and moral decisions society has made over time (Carter & Welner, 2013; Ladson-Billings, 2000), and the notion of achievement “gaps” suggests something is inherently amiss with the group that underachieves. While achievement gap refers to outputs (i.e., the unequal or inequitable distribution of educational results and benefits), opportunity gap, in contrast, focuses on inputs (i.e., inequitable distribution of resources and opportunities; Milner, 2012). Vast opportunity gaps limit children’s future prospects in schools and communities across the United States (Carter & Welner, 2013; Darling-Hammonds, 2007). Learning gaps refer to relative performance of individual students (i.e., the disparity between what a student has actually learned and what students are expected to learn at a particular age or grade level) and draw attention to the conditions and obstacles young students face throughout their educational careers and places responsibility on inequitable systems that do not provide the opportunities for all students to thrive and succeed (Milner, 2012). Performance gaps are defined as the difference of performance in the current situation compared to the expected performance in the intended situation (Ladson-Billings, 2000). It refers to disparity in academic performance between groups
of students and shows up in grades, standardized-test scores, and other success measures. It is most often used to describe the troubling performance gaps between African-American and Hispanic students, at the lower end of the performance scale, and their non-Hispanic White peers, and the similar academic disparity between students from low-income families and those who are more advantaged (Ansell, 2004). Depending on the source of the literature, different terminologies are used throughout this study.

Carter and Welner (2013) contended opportunity and achievement are inextricably linked but yield very different goals. When schools focus solely on at-risk behaviors exhibited by students, they tend to work reactively rather than proactively (Renkly & Bertolini, 2018). Schools, therefore, should focus on enhancing student–teacher relationships, building up, and identifying students’ assets to promote positive development and outcomes (Ferguson, 2003; Renkly & Bertolini, 2018). This asset–framed model focuses on what a student can do: their strengths, skills, talents, interests, and competencies (Alber, 2013).

Education, academic performance, and the lens from which education is presented are major components of the school environment. The quality of teacher–student relationships has been found to predict a number of academic outcomes (Hung et al., 2020). In studies comprised of predominantly White teachers, White children have been found to have closer relationships with teachers than Black children do (Gallant & Moore, 2008). Levels of conflict at kindergarten were higher for children who were Black, male, had greater mean hours of childcare, lower academic achievement scores, and greater externalizing behavior (Ladd et al., 1999); yet, there is limited research about whether there is an association between teachers’ perceptions of their relationships with students and teachers’ perceptions of student academic performance in schools with racially different student body compositions. Moreover, the divergence of results in
previous studies is indicative of the need for further research to determine whether the racial
demographic composition of schools serves as a greater risk or a protective factor for students
with different racial backgrounds (Alter et al., 2013).

The efforts realized by a variety of initiatives aimed at education reform confirms
attempts to close performance gaps exist. This is evidenced by the increased amount of time
lower-performing students have been assigned to spend in core academic studies, extended
school days for academic study, summer school offerings to extend the school year, students
placed in special classes, students grouped by perceived ability, and in some cases, a reduction of
the amount of time spent on choice-based activities (Paunesku, 2019). Even so, there exists a
void in the actualization of outcomes in response to these initiatives and school reform efforts.
Instead, the educational gaps in academic performance for marginalized populations of
historically underrepresented students expand as do the approaches meant to close them.

Substantially important, therefore, are the inequitable inputs that create disproportionality
in classrooms in the United States. Disproportionality refers to a group’s representation in a
particular category differing substantially from the representation of others in that category
(Artiles et al., 2010). Regardless of per pupil expenditures, high quality learning materials, and
funding sources, the common denominator is children spend their days in social interaction with
teachers and other students. As students and teachers immerse themselves in the routines of
schooling, perceptions determine achievement goals and rewards expected from the efforts
students make to progress academically (Ferguson, 2003).

Caring, interpersonal relationships are characterized by validation, patience, persistence,
facilitation, and empowerment (Ford & Moore, 2013; Gay, 2000). Uncaring interpersonal
relationships are distinguished by intolerance, impatience, dictations, and control (Gay, 2000).
Using Pianta’s (2001) student–teacher relationship scale (STRS) for the purpose of this study, relationships between teachers and students are defined as the level of perceived conflict and closeness teachers perceive exist in their relationships with students. Conflict is defined as perceived negativity in the relationship (e.g., “This child remains angry or is resistant after being disciplined;” “This child is sneaky or manipulative with me;” and “This child easily becomes angry with me”), whereas closeness indicators ascertain the extent to which the relationship is characterized as warm, affectionate, and involving open communication (e.g., “I share an affectionate, warm relationship with this child;” “If upset, this child will seek comfort from me;” and “This child spontaneously shares information about himself/herself;” Pianta, 2001).

Teachers’ perceptions of students they serve are potent as they furnish a rationale for a variety of decisions including the implementation of curriculum, pedagogical decisions, socioemotional learning, and grading practices (Carter & Welner, 2013; Gay, 2000; Goodlad, 1984; Ladson-Billings, 1995; Page, 1987). By virtue of making decisions in the classrooms, teachers decide who will participate in what, when, where, and how (Goodlad, 1984). These decisions, along with their consequences, are direct reflections of teacher perceptions, attitudes, and expectations (Gay, 2000). According to Gay, students perceived positively are advantaged in instructional interactions and students perceived skeptically are disadvantaged (Carter & Welner, 2013; Gay, 2000; Ladson-Billings, 1995). This disadvantage can result in total exclusion from participation in substantive academic interactions (Card & Rothstein, 2007). Interactions between teachers and students in the classroom are frequently identified as the “actual sites” where learning success or failure is determined (Gay, 2000). Research studies have suggested teachers play a pivotal role in these interactions (Page, 1987; Steele, 1997). Specifically, the
tone, structure, and quality of instruction are largely determined by teachers’ beliefs about teaching (Gay, 2000).

Additionally, disparities in classroom interactional opportunities are impacted by variables that may have little to do with the intellectual abilities of students (Gay, 2000; Taylor et al., 2021). Racial identity, ethnicity, gender, social class, home language, and even physical appearance can impact teachers’ perceptions of students (Gay, 2000). In their meta-analysis, Ritts et al. (1992) found students considered physically attractive received higher grades and considered to be better behaved, but because implicit associations are outside of conscious awareness, biases may not necessarily align with explicit beliefs (Greenwald & Krieger, 2006). Educators’ implicit racial biases are of particular interest due to their potential consequences for students (Chin et al., 2020; De Houwer, 2019). Teachers with implicit biases are liable to provide biased evaluations of students’ academic performance or potential, which can negatively impact students of color through self-fulfilling prophecies (Feldman, 2018; Greenwald & Krieger, 2006).

In recent years, much has been written about the disproportionate impact of bias in schools (Staats, 2014), but despite theoretical support for its influence in education, few researchers have directly measured teachers’ implicit racial biases in the United States (De Houwer, 2019; Greenwald & Krieger, 2006). This is of distinct concern because the teaching population is predominately (over 80%) White while the majority of students particularly in urban areas are predominately students of color (Staats, 2014), and researchers have found non-Black teachers have lower expectatons for Black students than Black teachers (Gershenson et al., 2015).
Staats (2016) contended teachers’ implicit biases and subjective interpretations of student behaviors influence how teachers respond in terms of instruction and discipline. Researchers have found when implicit bias is operating, it leads to an adultification of Black children in which Black boys are more likely to be interpreted as threatening and Black girls are assumed to need less protection and seen as less innocent than White girls (Epstein et al., 2017; Goff et al., 2014).

Teachers can misinterpret Black students’ behaviors, incorrectly believing them to be signs of disrespect (Feldman, 2018; Staats, 2016). Boykin (1994) asserted rules of decorum and social etiquette hinder participation for some students and expedited it for others. One compelling example of this hindrance or cultural intrusion on quality interactions between teachers and students is what Boykin (1986) termed as “verve.” Verve is defined as the energy and exuberance with which highly culturally affiliated African Americans invest their interactions (Boykin, 1986). Some view this behavior as overemotional, impulsive, and out of control (Hamilton & DeThorne, 2021). Consequently, high level achievement may be constrained as students may be reprimanded for undesirable behaviors more often than they are instructed on academic learning (Gay, 2000) leading, over time, to learned helplessness (Holliday, 1985).

Good and Brophy’s (1994) compilation of research of teacher expectations on student achievement substantiates what is termed a “self-fulfilling prophecy effect.” The researchers postulated if teachers expect students to be low or high achievers, they will act in ways that cause that to happen (Good & Brophy, 1994). This concept was popularized in the 1968 landmark study entitled, Pygmalion in the Classroom, conducted by Rosenthal and Jacobson. This study outlined the influence teachers’ assumptions about students’ behavior and intellect have on how
they treat students in instructional interactions (Gay, 2000). Reyna (2008) claimed teachers’
expectancies are based on the knowledge they have about their students, such as previous grades
and perceptions of in-class performance and teachers’ prejudices or stereotypes. The
expectancies teachers form about their students have been shown to impact students’ future
achievement (Friedrich et al., 2015). This is often labeled the “Pygmalion” effect. Using a
transactional perspective, Holliday (1985) projected over time, negative teacher attitudes and
perceptions of students can cultivate a sense of learned helplessness resulting in students being
intellectually disengaged in classroom interactions.

Although there exists some research to explore how disjuncture between teachers and
culturally different students can generate negative teacher expectations, few studies have been
conducted that examine differential relationships between teachers’ perceptions of their
relationships with students and student achievement according to varying compositions of
racially diverse populations in schools.

A pattern of expectations that emerged from educational research, theory, and practice
was teachers tend to have higher universal academic expectations for White students than for
students of color, with the exception of some Asian American students (Card & Rothstein, 2007;
students in first and fourth grades. Both European and African American teachers viewed Black
boys most negatively and White girls most positively (Washington, 1982). Black boys, and to a
lesser degree Black girls, were perceived as being uncooperative, immature, and destructive;
having academic and social problems; not applying themselves; and needing to improve their
physical appearance (Washington, 1982). White female students, by comparison, were perceived
as being cooperative, high-achieving, well-adjusted to school, physically attractive, and as
having winning personalities (Washington, 1982). When students do not conform to these expectations, they are considered as “exceptions to the rule,” but no modifications are made to the rule itself (Gay, 2000).

It seems a reasonable argument focus should be placed on providing the environment, support, and opportunities students need to make higher levels of learning probable instead of treating students as though they have deficits that need to be addressed. When students feel a sense of belonging, they are more likely to invest in learning and take learning risks (Paunesku, 2019). When students see choice, relevance, and purpose in what they are learning, they tend to be more engaged, motivated, committed, and persistent when faced with learning challenges (Friedrich et al., 2015). When learners have strong, positive relationships with their teachers and feel their teachers believe they can succeed, they are more apt to exert greater effort (Ford & Moore, 2013). The argument here is not student learning should not be measured, but a piece of the puzzle is missing when educators focus solely on student deficiencies without consideration of the role teachers’ perceptions of their relationships with students play in fostering student learning.

**Purpose of the Study**

The purpose of this study was to explore the association between teachers’ perceived relationships with racially diverse students and students’ academic performance in schools with racially different demographic compositions. The performance gaps, along with their possible causes and potential solutions, has been a central issue in public education (Uhlenberg & Brown, 2002). Education literature regarding student achievement is replete with reports and research findings emphasizing the failure of historically underrepresented students in schools in the United States. It has been reported African American students, regardless of socioeconomic
background, attain less education, receive substantially lower grades, show higher dropout rates, score lower on standardized tests, and experience disproportionate placement in special education classes when compared to their White counterparts (Carter & Welner, 2013). These reports often attribute underachievement to exposure to contextual risks including poverty, neighborhood violence, crime, housing, nutrition, and out of school learning experiences (Carter & Welner, 2013; Ferguson, 2003; Irvine & Irvine, 2007; Ladson-Billings, 1995; Thompson & Massat, 2005). Other published works ascribed underachievement to a lack of parental involvement, teacher quality, school quality, and classroom resources (Carter & Welner, 2013; Hill, 2017).

Although the existence of performance gaps between historically underrepresented students and their peers are well documented, many research studies provide only fragmentary resolutions for dismantling this disproportionality (Uhlenberg & Brown, 2002). Few studies have concentrated on the impact racially diverse student bodies have on informing teachers’ perceptions of the relationships they have with students they serve and the manner in which these perceptions impact student achievement. This research filled this void.

Racial and cultural gaps in the United States continue to grow exponentially (Carter & Welner, 2013). This is largely because the school-aged population has become increasingly racially, culturally, ethnically, and linguistically diverse, and the teaching workforce remains predominantly White (Guarino et al., 2006; Little et al., 2010). Henceforth, there appears to be renewed calls in favor of diversifying the teaching workforce and recommendations that support specific policy levers to advance same-race teacher assignments for historically underrepresented students (Dee, 2005).
In contrast, the empirical evidence regarding the benefits of matching on students’ educational outcomes has been mixed (Banerjee, 2013). Some researchers demonstrated academic achievement is higher among students matched with same-race teachers (Dee, 2004; Oates, 2003), and others found historically underrepresented students do not necessarily benefit in terms of achievement scores from assignment to same-race teachers (Morris, 2005). Although some educators argue in favor of diversification of the K–12 teacher workforce, supporters of same-race teacher assignment highlight teachers of color have positive expectations, act as role models, improve learning experiences, and enhance educational opportunities for students who share their cultural and racial identities (Banerjee, 2013; Dee, 2005; Delpit, 1995; Downey & Pribesh, 2004; Irvine & Irvine, 2007; Villegas & Irvine, 2010). Moreover, the broader literature on racial mismatch between teachers and students highlights the short and long-term implications on the persistence of racial and socioeconomic gaps in achievement on standardized tests, disproportionate referral to gifted and honors programs, and college enrollment and retention rates (Dee, 2005; Ladson-Billings, 1995; Oates, 2003).

The findings in studies that have examined the experiences of historically underrepresented teachers in diverse school settings further complicate the limited conception of cultural matching (Mabokela & Madsen, 2007). These studies revealed historically underrepresented teachers report feeling the responsibility of bearing the burden of dispelling myths and representing their race in their exchanges with coworkers (Mabokela & Madsen, 2007). Additionally, there is a great deal of evidence documenting how teachers’ race affects their perception of students from different races (Downey & Pribesh, 2004). Nonetheless, there has been limited systematic investigation about how teachers’ contact with diverse student bodies moderate their effectiveness when teaching different-race students in the classroom.
context. This is an important line of inquiry because extant empirical studies have not yet found conclusive evidence as to whether there is a relationship between diverse student bodies and teachers’ perceptions of their relationships with students. In addition to the general scholarly neglect in estimating the extent to which teachers’ perceptions of their relationships with students are conditioned by school organizational context, there is limited insight into how the aforementioned influence relates to student achievement and how these conditions are moderated by the racial demographic composition of schools.

This research contributes to the existing literature in several ways. First, drawing from Bell’s (1980) critical race theory (CRT) on using a race-conscious approach to understanding educational inequality, this study brought a contextual dimension to understanding the effects of schools’ demographic compositions on teachers’ perceptions of their relationships with students. Second, this study examined the ways teacher perceptions moderate student learning outcomes. The study focused on third grade students who were members of a cohort of early elementary grade students followed from kindergarten through fifth grade.

An emphasis on early elementary grades is important because studies have shown students unable to develop reading and math skills in early grades face increased likelihood of later school failure (Carter & Welner, 2013; Dee, 2004). Hunter College sociology professor and researcher, Donald J. Hernandez, noted for many students, third grade is a pivotal point in learning (Sparks, 2011). In a study released at the American Educational Research Association convention, students who do not read on grade level by third grade are 4 times less likely to graduate by age 19 than a child who reads proficiently by that time (Sparks, 2011). Third grade reading level is a significant predictor of eighth grade reading level and eighth grade reading, in turn, is a significant predictor of ninth grade outcomes and differences in graduation and college
enrollment rates (Lesnick et al., 2010). In addition, students who read above grade level in the third grade tend to enroll in college at higher rates than their peers who read at or below grade level (Lauer, 2008). A team of researchers with the National Center for the Analysis of Longitudinal Data in Education Research used 14 years of school district data across six states (Sparks, 2020). They tracked the graduation rates and academic progress of 2.5 million children based on how they performed on third grade math and reading tests and found after controlling for errors in state test measurements, a student’s ranking in the state’s third grade reading and math tests was 80% predictive of 10th grade performance (Sparks, 2020). Students’ third grade performance was also 25% to 35% predictive of whether they earned a high school diploma in 4 or 5 years (Sparks, 2020). Attention to elementary grades is also important because most work that has been done in the area of disproportionality has focused on adolescent years (Downey & Pribesh, 2004). Finally, this study answered several important policy questions ranging from the appropriateness of culturally responsive sustaining pedagogical approaches for improved learning outcomes to finding out how school contextual factors are associated with teachers’ perceptions of their relationships with students and student performance.

Theoretical Bases for the Study

CRT

CRT is a framework that sets its sight on identifying, analyzing, and altering oppressive facets of education that sustain the status quo in educational contexts (Tate, 1997). It is a lens that can be used to facilitate discourse on race, racism, and power (Solórzano & Yosso, 2001). The central argument is that it is not enough to simply treat the symptoms of racism, classism, and gender bias in education. Rather, the causes of these issues need to be addressed in tandem
with the outcomes. To that end, CRT theorists view race and class inextricably inseparable (Solórzano & Yosso, 2001). They noted poverty is strongly correlated with race and ethnicity.

CRT presents the assertion race is an endemic in the United States. It further maintains racial oppression is naturally intertwined in society’s social structures (Delgado & Stefancic, 2017). For CRT theorists, traditional education can function to support and maintain stereotypical perceptions of students of color. Specifically, using CRT in education means placing race and racism at the forefront of critiques about educational and societal inequities. In this vein, Delgado and Stefancic (2017) identified the hallmarks of CRT as being such that racism is normal and not aberrant in U.S. society, there exists an interest convergence when events materialize, race as a social construction, intersectionality is critical, and counter narratives need to be focused on.

CRT in education is guided by the following five tenents (Solórzano & Bernal, 2001):

- **Centrality of race and racism: All CRT research in education must centralize race and racism and acknowledge the intersection of race with other forms of subordination.**

- **Challenging the dominant perspective: CRT research works to challenge the dominant narratives, often referred to as majoritarian stories.**

- **Commitment to social justice: CRT research must be driven by a social justice agenda. Critical race theorists define social justice research as work that (a) responds to the oppression of historically underrepresented people, which includes intersections between racism, poverty, sexism, and dehumanization; (b) aims to eliminate those oppressive conditions; and (c) is centered around the empowerment, healing, and liberation of historically underrepresented people (Solórzano & Bernal, 2001; Yosso, 2005).**
• Valuing experiential knowledge: CRT scholars believe in the power of story. Building on the oral traditions of many indigenous historically underrepresented people around the world, CRT research values the experiences and narratives of historically underrepresented people when attempting to understand social inequality.

• Being interdisciplinary: CRT scholars believe the world is multidimensional and research about the world should reflect multiple perspectives.

**Culturally Relevant Pedagogy**

Curious about the role of teachers in creating liberatory opportunities in oppressive spaces, this study drew on the Culturally Relevant Pedagogy (CRP) framework as a guide. Concerned with the endemic nature of racism in the United States and the importance of cultural identity, this approach leads to an articulation and broad interpretation of emancipatory pedagogical strategies and techniques that lead to success with racially and culturally subordinated students (Lynn, 1999). The New York State Education Department (NYSED) asserted culture far transcends practices such as cuisines, music, art, and celebrations to also include ways of thinking, values, and forms of expression. These ways and forms are in constant flux, renegotiation, and evolution (NYSED, 2010). Schools then become a meeting point for cultures, containing students and adults who bring with them multiple facets of their identity, along with unique experiences and perspectives (NYSED, 2010).

Researchers in teacher education (Gay, 2000; Ladson–Billings, 1995) responded to the imperative of improving education for students by centering culture in the classroom. Teachers who employ CRP hold high expectations for academic achievement, value the cultural resources of students, and develop sociopolitical awareness among students (Gay, 2000). CRP is
predicated on the idea classroom cultures should be congruent with student’s home and community cultures and is characterized by drawing on students’ cultural and linguistic knowledge, prior experiences, and performance styles in adapting instruction and curricula (Wilcox et al., 2015).

**Culturally Sustaining Pedagogy**

Paris and Alim (2017), scholars and visionaries of the culturally sustaining pedagogy (CSP) framework, asserted the framework of CRP laid the groundwork for pedagogies that maintain the longstanding cultural practices of historically underrepresented people, and students also learn to critique dominant power structures. They argued, nonetheless, the term “relevant” does not explicitly support the goals of maintenance and social critique (Paris & Alim, 2017). They posited CSP explicitly calls for schooling to be a site for sustaining cultural ways of being especially in light of shifting demographic trends in schools (Paris & Alim, 2017; Taylor, 2014). CSP challenges the purpose of schooling in pluralistic societies and “seeks to perpetuate and foster-to sustain-linguistic, literate, and cultural pluralism as part of schooling for positive social transformation” (Paris & Alim, 2017, p. 1). CSP theorists support Morrison’s (1998) notion of *White gaze* in that they postulate it as a fallacy to measure historically silenced communities against White middle class norms of knowing dominant notions of educational achievement (Paris & Alim, 2017; Wallowitz, 2008). It is through these lenses this study explored the relationships between teacher perception and student academic achievement in schools with racially diverse student demographics.

Demographic trends and the presence of a persistent achievement gap have triggered a movement in the field of teacher education to improve education for racial and cultural historically underrepresented students (Dallavis, 2011). The stark differences in the educational
resources and outcomes for historically underrepresented students compared to their White peers in the United States are no secret (Joshi et al., 2018; Reardon, 2018). As Ladson-Billings (2000) aptly outlined, the amassed political, economic, and historical losses in educational services have created an “educational debt” toward students of color. One manifestation of resource disparities for students of color comes in the form of the race-representation gap (Joshi et al., 2018). The U.S. Department of Education (2016) contends although students of color represent 51% of the public elementary and secondary school population, only 18% of public-school teachers identify as belonging to a historically underrepresented group. Some researchers insist teachers of race-congruent students provide increased attention, time, resources, and support to their students for a number of hypothesized reasons (Joshi et al., 2018). Proponents of racial matching in schools maintain a race-congruent teacher may (a) possess a better understanding of his or her students’ abilities, experiences, and beliefs (Gershenson et al., 2015); (b) demonstrate this understanding through culturally competent practices (Ladson-Billings, 1995); (c) serve as a role model for students from socially significant historically underrepresented populations (Joshi et al., 2018); or (d) decrease the stereotype threat students of color may experience (Dee, 2005; Steele, 1997).

Conversely, some researchers address the need to understand cultural mismatch between teachers and their students (Fasching-Varner, 2013). They contend teacher educators should be aware of “counter stories” against generalizations made about White teachers’ inability to challenge deficit thinking toward youth of color in elementary schools (Settlage, 2011).

The goal of this study is to add to growing literature and to better understand how the perceptions teachers have of their relationships with students is related to student academic achievement and school demographic composition. This study used a dataset from a national sample survey known as the Early Childhood Longitudinal Study dataset (ECLS-K:2011, 2011).
to analyze teachers’ perceptions of their relationships with students in schools and student academic performance in schools with varying degrees of racially diverse student demographics.

This dataset contains longitudinal data on a nationally representative sample of students systematically followed from kindergarten through fifth grade with repeated information being collected about student achievement scores, family background, teacher quality, classroom composition, and school characteristics. Focusing on third grade students in this study, the following research questions were examined:

RQ1: How do teachers’ perceived relationships with third grade students differ by student race in schools with different student demographic compositions?

RQ2: In schools with racially different student demographic compositions, how do teachers’ perceived relationships with third grade students compare to teachers’ ratings of the students’ academic skills in reading and math?

This dissertation will consist of five chapters. Chapter 1 provided the significance of the problem, purpose of the study, a brief overview of the main theoretical frameworks and conceptual definitions, and the research questions that guide this study. Chapter 2 provides a historical perspective of the evolution of education in the United States, particularly in relation to educating students of color. Chapter 2 also provides a literature review that will unpack the intersection between achievement and racial demographics, examine the representation gap between teachers and students, inspect the impact of segregatory conditions on student achievement, consider the significance of diversifying the teaching force, and explore the influence of teacher perceptions on informing student achievement. It will also provide an overview of the three theoretical lenses that guided this study: (a) CRT, (b) CRP, and (c) CSP. Chapter 3 provides background information on the methodology for this study. This chapter
includes information on the research paradigm. Chapter 4 includes my findings. Chapter 5 provides a discussion of the findings including implications for further study.
CHAPTER 2

Literature Review

Radical empathy is not about you and what you think you would do in a situation you have never been in and perhaps never will. It is the kindred connection from a place of deep knowing that opens your spirit to the pain of another as they perceive it.

–Isabel Wilkerson

Inequities across the school system are a major issue in the United States (Hanauer, 2019) making achievement outcomes for children overwhelmingly unequal (Hill, 2017). Consequently, much information is available in educational discourse about existing achievement gaps between historically underrepresented students and their peers (Milner, 2012). Individually, and in combination, home and neighborhood stressors are implicated in problematic outcomes, raising questions about the power of schools to mollify them (Hopson et al., 2014). The purpose of this study was to explore the association between teachers’ perceived relationships with racially diverse students and students’ academic performance in schools with racially different demographic compositions.

From even the most cursory glance at publicly available test score data, it is obvious average student academic performance varies among school districts (Fahle & Reardon, 2018). Given the growing diversity in the United States, the trends in achievement gaps raise concerns. There is broad consensus the Black–White achievement gap in reading and math occurs as early as elementary school years (Reardon & Portilla, 2016). Although the predictable litany of achievement gaps continues to grow, so do the expanding representation gaps between the racial compositions of students of color and their teachers. The purpose of this study was to explore the association between teachers’ perceived relationships with racially diverse students and students’ academic performance in schools with racially different demographic compositions.
Many published works include the need to address out-of-school factors such as health, housing, nutrition, safety, enriching experiences, socioeconomic status, out-of-school learning, and learning-related resources as precursors to resolving these gaps (Carter & Welner, 2013; Irvine & Irvine, 2007; Ladson-Billings, 1995). Meanwhile, other studies have focused on the equally elaborate impact of factors such as teacher preparatory programs, school quality, and classroom resources (Carter & Welner, 2013; Paris & Alim, 2017). Although these previous studies offer valuable insight into the inequitable outcomes of trends and disparities in education, they provide only partial solutions for addressing disproportionality in achievement. Fewer studies have concentrated on how school context such as the racial composition of the student body affects teachers’ perceptions, attitudes, and actions toward students (McGrady & Reynolds, 2013). The analyses present here fills this void.

Although it cannot be expected of educators on their own accord to fully reduce achievement gaps, it can be expected of them to educate more expansively and less selectively (Carter & Welner, 2013). By factoring in the impact diversifying the teaching force might have on teachers’ perceptions of their relationships with students, this research offers ways teacher preparatory programs and professional learning communities in schools can mitigate achievement gaps and improve academic outcomes for historically underrepresented students. This literature review aimed to summarize the barriers for students of color in educational settings and to contextualize practices that helped cultivate disparate systems in the first place. This discussion includes considerations from the literature that addresses the representation gap between students and their teachers. Finally, through this study, I sought to apply critical race theory (CRT), culturally responsive pedagogy (CRP), and culturally sustaining pedagogy (CSP) as theoretical frameworks for understanding the impact of systemic racism in schools and
promoting equity in institutions of learning and dismantling the achievement gap between White and historically underrepresented students.

Given the diversity of the demographic populations in the United States, this literature review examined the racial demographic imbalances in schools. Furthermore, this study explored the outcomes that patterns in disproportionality tend to propose for students of color. To that end, there are focused sections on the following areas of the literature most relevant to this study: (a) the intersection between achievement and racial demographics, (b) an examination of the representation gap between teachers and students, (c) the impact of segregatory conditions on student achievement, (d) the significance of diversifying the teaching force, and (e) the influence of teacher perceptions on informing student achievement.

**Search Strategy**

This study’s search strategy started with establishing a literature review outline, which guided the search databases’ keywords. Keywords included but were not limited to: teacher perception, diversity, segregation, and achievement gap. The ProQuest, ERIC, JSTOR, EBSCOHOST, and SAGE databases were searched. Google Scholar was also leveraged to search for information. Sources of information included peer-reviewed journal articles, books, government statistics, and dissertations. The following inclusion criteria were used to identify articles for review: (a) available in full text, (b) published in English, and (c) published in a peer-reviewed journal. Over 250 sources, dating from the 1950s to the present, were identified with relevant material. Older sources were included to provide the reader with a perspective on the topic’s longevity and history. Zotero was leveraged to help identify duplicate material. A subset of the sources retrieved, as listed in the references section of this dissertation, was identified as the most relevant sources for this study and to provide the foundation of the literature review.
Historical Perspective of Education in the United States

Since its inception, race has figured prominently in the evolution of public schooling in the United States (Blanchett et al., 2009). Some have argued the role of schooling was a means for social reproduction rather than for social mobility (Feldman, 2018). As we entered the 20th century, schools in the United States were just coming to terms with compulsory public education (Allington & McGill-Franzen, 2000). Child labor laws had been enacted and compulsory attendance was spotty (Tyack, 1974). Only a few students, mostly boys, attended school during this time (Snyder & National Center for Education Statistics, 1993). In 1890, fewer than 10% of students were enrolled in secondary schools and an even smaller percentage of girls were enrolled (Allington & McGill-Franzen, 2000). In 1920, conversely, there was a rapid acceleration in high school attendance, and universal high school education was required in most states (Feldman, 2018). According to Rothstein (1998), two thirds of students who entered high school failed to graduate. Additionally, the century marked the emergence of the scientific method as the modern way to solve social problems (Allington & McGill-Franzen, 2000; Feldman, 2018). As a result of global competition, the United States demanded more highly skilled workers and schooling; therefore, had to improve (Allington & McGill-Franzen, 2000). Improvements were drawn from scientific analyses and standardized assessments to estimate both the intellectual capacity of students and effectiveness of teachers (Allington & McGill-Franzen, 2000). An educational bureaucracy with more centralized and vigorous control of curriculum and assessment was proposed to manage the new methods of schooling.

By 1930, schooling evolved to include age and grade groupings wherever the number of students was sufficient, and graded curriculum materials were standardized nationally through textbook and test publishers (Allington & McGill-Franzen, 2000). Although centralized
educational bureaucracies had developed at state, county, and city levels, schools were legally segregated by race in many states and were commonly segregated by social class. Nonetheless, the nation’s future was seen as imperiled because schools were simply not sufficiently preparing skilled workers, scientists, and scholars. Meanwhile, the United States emerged as a world power both militarily and economically.

On October 4, 1957, the Soviet Union successfully launched *Sputnik*, the world’s first manmade satellite (Kapalka Richerme, 2012). Prior to *Sputnik*, Americans thought of themselves as the world’s technological leaders, but the satellite launch demonstrated Americans were not without competition (Kapalka Richerme, 2012). The 1957 launch of the Russian space satellite accelerated demands for education reform (Allington & McGill-Franzen, 2000). Education was touted as a national defense issue and, for the first time, the calls for reform implicated a substantive role for the federal government. However, it was probably the Supreme Court’s 1954 *Brown v. Board of Education of Topeka* decision undoing the separate but equal doctrine that had allowed racially segregated schooling that would lead most immediately to U.S. federal involvement in education (Allington & McGill-Franzen, 2000). Critical race theorists note these occurrences as an “interest convergence,” which stipulates Black people achieve civil rights victories only when White and Black interests converge (Milner, 2008).

**Leading Up to Brown v. Board of Education**

In 1896, the United States Supreme Court decided the seminal case of *Plessy v. Ferguson* (1896) where an African American plaintiff brought an equal protection claim against the state of Louisiana, challenging a law that required railroads to provide separate cars for Blacks and Whites (Daniel & Walker, 2014). To add to its argument, the court pointed to the practice of school segregation in the North, where the civil rights of African Americans had been enforced
the longest and most earnestly, as a clear example of the law’s legitimacy; therefore, the doctrine of separate but equal was conceived, solemnizing racial segregation until the Supreme Court filed a decision on Brown v. the Board of Education some 58 years later. Following Plessy and leading up to Brown, federal courts exclusively applied the separate but equal doctrine to matters of race in education, and the Supreme Court jurisprudence during this time focused largely on African Americans’ rights to a substantially similar educational experience as their White counterparts.

Brown v. Board of Education

In the landmark 1954 case of Brown v. Board of Education of Topeka, the United States Supreme Court officially declared the “separate but equal” doctrine established 58 years earlier in Plessy v. Ferguson had no place in the field of public education (Whitman, 1998). According to the court, racially segregated schools were inherently unequal (Whitman, 1998). The court referenced compelling psychological evidence demonstrating how state segregation laws not only denote inferiority, but also impact the ability of Black children to learn properly, which in turn frustrates educational development among Black students (Daniel & Walker, 2014). The justices deemed students in the United States, regardless of race or ethnicity, deserved equal access to educational opportunities, something virtually impossible under the existing system (Benner & Crosnoe, 2011). Because of these evidence-based negative repercussions of segregation, the court found segregated education could never be equal (Brown, 1954).

More than 60 years after the Brown v. Board of Education desegregation order, the pattern among public education continues to be separate and unequal (Logan, 2011). Despite the monumental ruling intended to create more equitable opportunities for students, historically underrepresented students are still experiencing systemic barriers to their success in schools in
the United States (Salle et al., 2020). The failure to truly integrate schools is an enormous loss because no other U.S. institution brings together so many children from so many diverse backgrounds so often (Tyson, 2011). The issue of resegregation of schools is often systematically linked to other forms of inequality. It also tends to concern socioeconomic segregation, which is a stubborn, multidimensional, and fundamental cause of educational inequality (Orfield & Lee, 2005).

Resistance to Brown was so widespread and persistently defiant that even years after the high court’s decision, minimal progress had been made toward dismantling the dual education system (Daniel & Walker, 2014). In 1964, only 2% of Black students were attending formerly all White schools in the states of the former Confederacy (Walsh, 2014). Many studies have traced the trends in segregation, which persist at fairly high levels despite efforts to desegregate schools in the 1970s in the wake of the Brown v. Board of Education decision.

**Civil Rights Act of 1964 and Elementary and Secondary Education Act**

The landmark Civil Rights Act of 1964, signed by President Lyndon B. Johnson, made the Elementary and Secondary Education Act (ESEA) of 1965 and federal intervention in schools possible (Allington & McGill-Franzen, 2000). ESEA, designed by Commissioner of Education Francis Keppel, was passed on April 9, 1965. This piece of legislation constituted an important educational component of what is called the “War on Poverty” launched by President Lyndon B. Johnson. Through a special funding known as Title I, the allocation of large resources were earmarked to meet the needs of educationally deprived children through compensatory programs for the poor (Meyers, 2012). This legislation authorized the U.S. Department of Justice to compel desegregation by suing school districts and states (Walsh, 2014). The U.S. federal government began to fund education programs to improve schools, particularly schools recently
desegregated (Allington & McGill-Franzen, 2000). This approach to federally fund excessively poor schools included dollars targeted to particular categories of need (Meyers, 2012). Title VI of the law prohibited discrimination on the basis of race, color, or national origin in federally funded programs (Walsh, 2014).

The ESEA was intended to provide funding for a variety of initiatives, but its primary function was to improve the educational programs of economically disadvantaged children and youth (Allington & McGill-Franzen, 2000). Federal intervention was motivated by growing evidence schools served only some students well (Allington & McGill-Franzen, 2000). These monies imposed significant desegregation plans on schools throughout the nation and directed interest toward disparities in learning opportunities and outcomes for historically underrepresented and low-income youngsters (Meyers, 2012). As part of President Johnson’s effort to provide equal educational resources and opportunities to disadvantaged students, a team of researchers raised the concern that peer influences and family could explain a greater proportion of the variance in student achievement than the school attended (Meyers, 2012).

**Coleman Report**

How schools contribute to educational inequality remained the subject of debate (Hill, 2017). Congress commissioned Equality of Educational Opportunity Study, colloquially known as the 1960 Coleman Report (Hill, 2017), which had a major impact on educational research and was a wake-up call to educators. It challenged some of the assumptions that came out of the ESEA and acknowledged schools served only to perpetuate the economic and social inequality of society at large (Allington & McGill-Franzen, 2000). The report concluded schools equalize along class lines but likely stratify along racial and ethnic lines (Hill, 2017). The large gap in achievement between historically underrepresented and White students provided the impetus to

In the Fall of 1965, sociologist Coleman and his colleagues collected data from approximately 66,000 teachers, 4,000 schools, and 600,000 first, third, sixth, ninth and 12th graders—one of the largest stand-alone testing and survey efforts ever undertaken in U.S. schools (Hill, 2017). In some respects, Coleman’s analysis found what one might expect looking retrospectively to 1960s United States—mostly segregated schools across all geographic regions and the urban/nonurban divide; disparities favoring White children in some resources such as class size, school facilities, and the availability of advanced coursework; and heavy race-based inequality on tests of academic achievement. Surprising to many, however, was the new schools serving African American and White children looked different on a bundle of other measures, including the age of textbooks and school facilities, the availability of extracurricular clubs, and many teacher and principal characteristics (Hill, 2017). Even more surprising was Coleman’s assertion inequities in school resources did not explain the observed inequalities in school-average student achievement. Instead, family background proved a strong influence on student test scores. The research also pushed for busing and integration. The report has profoundly influenced how scholars have unraveled, and are still unraveling, the relationship among race and children’s academic achievement (Hill, 2017). Nonetheless, critics pointed out Coleman may have left unmeasured some of the most critical aspects of schools that generate inequality—teacher quality, characteristics, and influence (Downey & Condron, 2016). To that end, the literature on this topic has neglected to investigate how the racial compositions of schools might
be associated with teachers’ perceptions of their relationships with students and further influence academic disparities (Morris, 2005).

**Disparities in Education in the United States**

The public school system remains the primary educational delivery system in the United States (Forte, 2018). As of the 2002–2003 school year, there were 14,465 public school districts in the United States and 95,615 public schools (Forte, 2018). Forty percent of students in our nation’s schools come from ethnically diverse backgrounds, and in our largest school districts, one half or more of the students are diverse (Irvine & Irvine, 2007); yet, historically underrepresented students are most at risk for falling behind academically (Forte, 2018). Researchers have emphasized segregation undermines equal opportunity not only because it separates children by race but also because it leaves historically underrepresented children in inferior schools (Orfield & Yun, 1999).

National studies have found sizable gaps between historically underrepresented and White students. The National Assessment of Education Progress regularly reports White students’ proficiency rates on reading and mathematics exams are double or even triple those of African American and Latinx students (U.S. Department of Education, 2016). In the U.S. 2010 Project, researcher Logan from Brown University conducted a study to document the national disparities in student performance between Whites and Asians compared to Blacks, Latinx, and Native Americans. He found public schools remain not only separate but also unequal. Moreover, disproportions are already clear in the elementary grades, where Black, Latinx, and Native American children attend schools that are on average at the 35th to 40th percentile of performance compared to other schools in the same state (Logan, 2011).
Intersection Between Race and Achievement

Educational disparities and intergenerational economic inequality are highly correlated with skin color, ethnicity, linguistic, and social class status (Carter & Welner, 2013). Given the growing diversity in the United States, the trends in achievement gaps continue to raise concerns. There is a broad consensus Black–White achievement gaps in reading and math occur as early as elementary school (Reardon & Portilla, 2016).

Closing performance gaps has long been an unrealized goal of U.S. education policy (García & Weiss, 2014). This pernicious problem reveals itself in the data. Some success measures in which research identifies gaps in student outcomes include test scores, report card grades, attendance rates, high school graduation rates, and college entry (García & Weiss, 2014). Black children in the United States start school approximately one half of a standard deviation behind their White peers on standardized reading and math tests (Burchinal et al., 2011). Fryer and Levitt (2006) asserted racial disparities in school achievement increase by about one tenth of a standard deviation during each year.

In 2019, the U.S. graduation rate stood at 86%. The graduation rates for White and Asian Pacific Islander students were higher than the United States average at 89% and 93% respectively (U.S. Department of Education, 2021). On the other hand, the graduation rates for American Indian/Alaska Native, Black, and Latinx students were below the United States average at 74%, 80%, and 82% respectively (U.S. Department of Education, 2021). According to Carter and Welner (2013), the dropout rate for African Americans is more than double the national average. Another telling tale is the failure rates for historically disadvantaged groups. Compared to the overall rate of 1 in 10, 1 in 5 African American students will fail a grade in elementary or secondary school (Carter & Welner, 2013). Furthermore, many African American
and Latinx students are embedded in the continuously expanding school to prison pipeline. Although African American youth only comprise 16% of the overall population, they constitute 45% of juvenile arrests according to the 2006 National Association for the Advancement of Colored People Legal Defense and Educational Fund (as cited in Carter & Welner, 2013). The 2006 National Association for the Advancement of Colored People Legal Defense and Educational Fund further asserted Black students in kindergarten through 12th grade are twice as likely as their White peers to be suspended from school and 3 times as likely to be expelled (Carter & Welner, 2013).

Although the existence of the Black–White performance gap is supported with data, its origins remain the focus of substantial debate among scientists, educators, and policymakers (Burchinal et al., 2011). Some studies point to out-of-school influences such as housing, socioeconomic factors, and poverty (García & Weiss, 2014), whereas a substantial body of research substantiates there exists a cultural gap between White teachers who work with Black students (Boucher, 2016). Although policy determinants of student achievement have focused mainly on the possible benefits of educational resources that reduce class size and improve teacher salaries and training (Dee, 2004), social science literature provides provocative evidence several other contextual factors might also help to the mitigate Black–White student performance gap (Ladson-Billings, 1995).

**Racial Composition of Classrooms**

In addition to the persistent performance gaps between historically underrepresented and White students in public schools in the United States, the expanding changes in the racial and ethnic composition of public school enrollment merits exploration. Many educational researchers theorize the two gaps are linked. Between Fall 2009 and Fall 2018, public school enrollments
among White students decreased from 26.7 million to 23.8 million. Correspondingly, the number of Black students decreased from 8.2 million to 7.7 million. In contrast, the number of Latinx students increased from 11.0 million to 13.8 million. These enrollment trends produced changes in the overall composition of U.S. public school students (U.S. Department of Education, 2020).

The conversation of race distribution is not what is significant here. The importance rests in the indicative ways racial segregation plays a role in fostering patterns of disparity. As noted, one well established and dynamic social problem related to race involves the trends, patterns, and effects of segregation in education (Tate & Jones, 2017). Hogrebe and Tate (2019) asserted education continues to operate as a spatially defined enterprise situated in designated geographies. With boundaries created by laws, customs, and related political engagement, these geographies vary in terms of demographic characteristics, including family resources, school quality, and academic attainment (Hogrebe & Tate, 2019; Oka & Wong, 2015). Galster’s (2012) synthesis of the literature suggested racial isolation that results from spatial separation intimately links many students’ educational outcomes. He argued a cumulative segregation effect negatively influences the ability to support high-quality learning experiences due to school district revenue, disparities, teacher inequality, and insufficient cognitive demand of implemented curriculum (Galster, 2012).

Income segregation is another factor often accompanied by racial segregation and can have cumulative effects that compound each other (García & Weiss, 2014). García and Weiss (2014) asserted historically underrepresented students are more likely to be in schools with historically underrepresented students and have peers with lower socioeconomic statuses. Three fifths (approximately 60%) of White kindergartners are in classrooms in which only about 12% of their classmates are socioeconomically deficient (García & Weiss, 2014). Nearly as great a
share of Black students (approximately 57%) and Latinx students (approximately 55%) are in classrooms in which almost half of their peers are of low socioeconomic status. Less than 5% of White children are in classrooms heavily poor.

Nonetheless, the ability to disentangle factors associated with historically underrepresented status in the United States is a daunting task (García & Weiss, 2014). When racial identity is isolated, the statistical disadvantages of being historically underrepresented are often revealed by other factors. Therefore, race becomes a robust determinative factor of access to resources and a host of variables that may result in disproportionate student outcomes. As such, data analyses must be used to help unpack the intersection between race and school-related factors to uncover channels that link race and student outcomes. One such phenomenon is the impact of teacher perceptions on student achievement given the disparity of representation in the classrooms as noted in the research. By identifying these interactions, policies can be outlined that address the impediment of educational progress for many children.

**Representation Gaps in Classrooms**

One of the most significant changes in the last several decades is the rising percentage of students of color (Carter & Welner, 2013; Sprott, 2007). Segregatory conditions in school systems are evident. What merits further exploration is the expanding representation of students of color might be associated with teachers’ perceptions of their relationships with students and teachers’ perceptions of students’ academic achievement. Many educational researchers theorize the two gaps are linked (Hung et al., 2020).

The U.S. Department of Commerce projects by 2050, African American, Asian American, and Latinx students will constitute approximately 60% of all U.S. students (Howard, 2003). In the United States, roughly 83 of public school teachers identified as White in the most
The recent public release of the 2012 National Center for Education Statistics’ (NCES) Schools and Staffing Survey. Meanwhile, approximately 23% of elementary and secondary school students identify as Latinx and another 14% identify as Black (Davis & Bauman, 2014). According to the 2010 Census, more than 50% of children under the age of 1 year are historically underrepresented (U.S. Census Bureau, 2012). This means future cohorts of elementary and secondary school students will likely be composed mostly of students from historically underrepresented groups. Barring a dramatic shift in teachers’ demographic profile in the United States, White teachers will more likely continue to teach students racially different from themselves (Cochran-Smith, 2004). These demographic transitions are especially vital when investigating substantive differences in how racial organizational structure affects teachers’ perceptions of their relationships with students.

Be that as it may, students of different social groups may attend “good” schools together; yet, racial, ethnic, class, and gender dynamics that pervade the wider society often also permeate school walls (Carter & Welner, 2013). In many schools, African American and Latinx students are rarely exposed to the upper-echelon college-preparatory classes (Carter & Welner, 2013). In this fundamentally unequal system, achievement and opportunity gaps are further exacerbated when students are assigned to schools or classes with fewer resources than their more affluent counterparts (Carter & Welner, 2013).

**Intersection Between Race and Teacher Perceptions**

The educational system is inclusive of cultural meanings educators, students, and communities attach to everyday schooling practices, and who is defined as a successful or smart student is often predicated on cultural practices of particular cultural groups. This often goes above and beyond exhibiting behaviors such as studying or getting good grades (Carter &
Welner, 2013). Many low-income racial and ethnic minorities—especially those who are stereotyped or expected to be low achievers—find their ways of being, speech, language, style of interaction, tastes, and other cultural factors pegged as dysfunctional when they do not conform to the mainstream ways prescribed for academic success (Carter & Welner, 2013).

Although academic skills are as important as children’s social and behavioral skills in early childhood for determining school success, studies have suggested behaviors of all children are not evaluated equally by teachers (DiPrete & Jennings, 2012). The current literature supported the argument racial biases influence teachers’ perceptions of children’s behaviors (Downey & Pribesh, 2004). Many of these studies attempted to assess potential racial biases by examining how White teachers evaluate their students as compared to non-White teachers. Research has consistently found White teachers often rate the behaviors and academic abilities of Black students more negatively than White students (Downey & Pribesh, 2004). As policy makers, educators, and researchers construct meaningful approaches for reducing achievement disparities, they must be aware of how cultural inequities, both in wider society and in schools, exacerbates that gap. One such way stakeholders have attempted to address inequalities in schools is with the attempted diversification of the teaching force.

**Diversification of the Teaching Force and Student Achievement**

The contested debate is whether the influence of diverse teaching staff is limited in its merit or whether diversifying the teaching force plays an active role in increasing student achievement. There is a pervasive view diversifying the teaching force adds value to schools and classrooms. Advocates for diversifying the teaching force contend (a) teachers of color serve as role models for all students and (b) teachers of color have greater potential to improve academic outcomes and school experiences of students of color. Contrarily, literature exists that positions
the diversification of the teaching force less favorably. Critics have suggested the absence of empirical studies that test claims inherent in the argument to diversify teaching force lacks merit and substance. The casting of historically underrepresented teachers as role models assumes a cultural split that may foster the phenomenon of the self-fulfilling prophecy (Villegas & Irvine, 2010). Some see historically underrepresented teachers as instruments of culturally relevant pedagogy but with a very limited role in actually closing the gap due to their limited presence in classrooms.

In 2016, Education Secretary John B. King, Jr., spoke to faculty, staff, and students at Howard University. He asserted the following:

Without question, when the majority of students in public schools are students of color and only eighteen percent of our teachers are teachers of color we have an urgent need to act. We’ve got to understand that all students benefit from teacher diversity. We have strong evidence that students of color benefit from having teachers and leaders who look like them as role models and also benefit from the classroom dynamics that diversity creates but it is also important for our white students to see teachers of color in leadership roles in their classrooms and communities. (U.S. Department of Education, 2016, p. 1)

The U.S. Department of Education (2016) claimed diversity is inherently valuable and teachers and leaders of color play a critical role in ensuring equity in our education system. In the common understanding, diversity in a group of people refers to differences in their demographic characteristics, cultural identity, ethnicity, expertise, and training (Dee, 2004). Advocates of diversity conclude identity diverse groups can outperform heterogeneous groups (Klopfenstein, 2005). In addition to providing social advantages for all students, emerging research suggests racial diversity of the teaching workforce can help to close the achievement gap (Dee, 2004; Klopfenstein, 2005). Both qualitative and quantitative studies find teachers of color can improve the school experiences of all students (Dee, 2004). Further, teachers of color contribute to improved academic outcomes and serve as strong role models for students (U.S. Department of
Improving diversity in schools can break down negative stereotypes and prepare students to live and work in a multiracial society. A more diverse teacher workforce can also supplement training in the culturally sensitive teaching practices most effective with a variety of student populations.

Milner (2006) posited by virtue of their out of school interactions and deep cultural understanding of what it meant and means to be Black in America, teachers of color often bring a level of knowledge and connectedness into the classroom revealed in their teaching. Although there is a substantial body of research that postulates students of color perform better academically with teachers of color, it is critical not to fall heir to what Gay (2000) termed as professional racism. Gay (2000) asserted:

The need for more Latino, Asian, Native, and African American teachers in U.S. schools is unquestionable. But to make improving the achievement of students of color contingent upon fulfilling this need is based on a very fallacious and dangerous assumption. It presumes that membership in an ethnic group is necessary or sufficient to enable teachers to do culturally competent pedagogy. This is as ludicrous as assuming that one automatically knows how to teach English to others simply because one is a native speaker. (p. 205)

Some may argue even if there is staunch agreement racial matching is an effective tool to close the achievement gap, there are not enough African American teachers in schools or in teacher preparation programs to meet that goal. According to the National Center for Educational Information (NCEI), the U.S. teaching force is 84% White and only 7% African American and has remained steady since 1986, when the percentage of Black teachers in the United States was 6% (U.S. Department of Education, 2016). Consequently, the majority of teachers seen by African American students will more than likely be White. Thus, although training and placing more teachers of color is a worthy goal, it is, at best, a long-term solution to mitigating achievement disparities (Boucher, 2016). In the meantime, if we are to close the gaps in
performance between White students and students of color, greater focus should be placed on the educators already in the classroom (Villegas & Irvine, 2010). In this vein, Gay (2000) further asserted the following:

Knowledge and use of the cultural heritages, experiences, and perspectives of ethnic groups [of students] in teaching are far more important to improving student achievement than shared group membership. Similar ethnicity between students and teachers may be potentially beneficial, but it is not a guarantee of pedagogical effectiveness. (p. 205)

**Measurements of Success**

Teacher biases and assumptions play a significant role in the perceptions and expectations of students. Institutional culture has the potential to influence teachers’ perceptions of their relationships with students, and therefore, the quality of students’ education (Saltman, 2018). Some researchers rationalize identity cannot be understood apart from the historically produced social forces and struggles infused with power relations to inform its development (Saltman, 2018). The subject and the world are coincident, which indicates each develops and evolves within the other (Saltman, 2018). The presumption here is the kind of communication the classroom fosters models the views and values held by society.

Although achievement gap discourse in education typically focuses on students’ scores on standardized tests, in many ways, using scores as the only assessment method is antithetic to diversity because it suggests all students live and operate in homogeneous environments with equality and equity of opportunity afforded them (Ladson-Billings, 2000; Milner, 2012; Tate, 2008). Results on standardized tests only report one dimension of a much more complex and nuanced reality (Milner, 2012). Moreover, Carter and Welner (2013) maintained the obsessive compulsion of measuring achievement solely through pencil and bubble tests leads to a mountain of consequences.
Contrary to relying solely on standardized tests, educational researcher and teacher Irvine (2010) postulated a perceived achievement gap is the result of other gaps that coerce people into believing achievement gaps really exist. Other gaps Irvine put forward included the teacher quality gap, the teacher training gap, the challenging curriculum gap, the school funding gap, the digital divide gap, the wealth gap, the income gap, the employment opportunity gap, the affordable housing gap, the healthcare gap, the nutrition gap, the school integration gap, and the quality child care gap.

When the focus is solely on achievement according to standardized measures, albeit unknowingly, culturally diverse students can be positioned through conceptual deficits in the minds, practices, and designs of analysts. This can happen when students’ beliefs, experiences, and epistemologies do not align with the “norm” by which students are compared, measured, assessed, and evaluated (Foster, 1999). Many scholars have argued teachers’ perceptions of students impact academic performance particularly as it relates to cultural capital. One rationale is cultural capital is a resource students implicitly draw on to maintain educational advantages. Although race is not a direct measure of cultural capital, it can serve as a proxy for cultural capital because there are documented differences in the distribution of cultural capital as it relates to race (Wildhagen, 2009).

Educator and scholar Delpit (1995) submitted education and schooling can engender a culture or power, which embodies tastes, styles, preferences, and dispositions of the most dominant social groups in society. Achievement often depends on the degree to which students can employ this dominant cultural capital (Bourdieu, 1986).
Intersection Between Perceptions and Achievement

The interplay between school and student cultures typically receives less attention because these relationships are more challenging to measure. It is difficult for research and intervention studies to yield causal or generalizable claims about their impact on student outcomes, especially test results (Carter & Welner, 2013). Nevertheless, a multitude of researchers have documented comprehensively how student–school cultural differences reproduce opportunity and produce achievement gaps (Tyson, 2011).

The extant literature has suggested two general ways the demographic matches between students and teachers could influence educational outcomes (Dee, 2005). One broad class of explanations involves what could be called “passive” teacher effects (Dee, 2005). These effects are simply triggered by a teacher’s racial, ethnic, or gender identity, not by explicit teacher behaviors (Dee, 2005). The most widely discussed examples are “role model” effects, which occur when the presence of a demographically similar teacher raises a student’s academic motivation and expectations (Dee, 2005). A related type of passive teacher effect is the phenomenon known as “stereotype threat” (Steele, 1997). Stereotype threat refers to the possibility that, in situations where students are perceived according to stereotypes (e.g., Black students with White teachers, female students with male teachers), they experience an apprehension that hinders their academic identification and subsequent achievement. Another class of explanations for the educational benefits of own-race teachers points to unintended biases in their prior expectations of and interactions with students who have different demographic traits (Ferguson, 2003).

Giving teachers’ evaluative role over students, teacher racial bias has been of long-term interest to many educational researchers (Redding, 2019). Rooted in the critical role teachers
play in their students’ cognitive and behavioral development, using racial matching as a means to improve students’ opportunity to learn has received considerable attention. Compared with their peers, research shows that teachers of color are more likely to have higher expectations of students of color as measured by higher numbers of referrals to gifted programs, serve as advocates and cultural brokers, confront issues of racism, and develop more trusting relationships with students—particularly those with whom they share a cultural background (Grissom & Redding, 2016).

Drawing on experimental data from the measures of the effective teacher project, Kraft (2019) showed teachers have an impact on standardized tests and competencies such as a growth mindset, perseverance, and effort in class. A substantial body of research opines perceptions are linked to an inequitable allocation of classroom and school resources (Ferguson, 2003). Although research has indicated Black and Latinx students may be more negatively perceived in schools than their White peers, it leaves open the question of whether the demographic composition of schools has a significant enough influence on the perceptions teachers have of their relationships with students to the extent these perceptions may correlate with students’ academic achievement (Gay, 2000).

A considerable body of research indicates teachers’ positive dispositions toward students elevate scholastic performance (Oates, 2003). More unsettled is whether the racial composition of student bodies factor significantly in the tendency for teacher perceptions of their relationships with students to facilitate the perpetuation of the achievement gap. Thus, unfavorable teacher perceptions, even if justified by prior performance and other relevant information, may more strongly undermine the performance of students of color (Oates, 2003). Although evidence is mixed as to whether teachers’ attitudes are informed by racial bias, Oates (2003) asserted teacher
perceptions may facilitate perpetuation of the Black-White achievement gap even if they arise from a process that is largely race neutral. I explored this question by assessing whether the impact of teacher perceptions of their relationships with students hinges on the racial composition of the student body in which historically underrepresented students are educated.

Among the scholarship that has examined academically successful Black students, as determined by high achievement on standardized tests or placement in gifted programs, is the notion students’ academic success came at the expense of their cultural and psychosocial well-being (Ladson-Billings, 1995). The dilemma for African American students becomes one of negotiating the academic demands of school and demonstrate cultural competence (Ladson-Billings, 1995). In principle, the embrace or rejection of the perceived cultural default should have little to do with a student’s capacity to learn or cognitive ability (Carter & Welner, 2013); yet, conformity to dominant cultural codes is likely to demarcate who is “accepted” and reproduce social and cultural hierarchies. These social and cultural boundaries have the tendency to not only influence academic engagement but also educational mobility.

**CRT**

CRT is a theoretical and interpretive framework that examines the appearance of race related concepts and racism across dominant cultural modes of expression. In adopting this theoretical approach, CRT scholars attempt to understand how systemic racism influences cultural perceptions of race and how historically underrepresented groups are able to represent themselves and their experiences via the use of counter narratives.

The notion of CRT, conceptualized by Bell (1995), is based on the premise racism is not aberrant. Rather, the day to day interactions people encounter are often riddled with microaggressions so much so to recount instances of racism almost seems counterintuitive due to
the normalcy of racist encounters (Delgado & Stefancic, 2017). CRT also asserts counter
narratives are significant and benefits to law and policies are often the result of convergence such
that outcomes benefit a dominant race and by default, racialized subgroups may benefit as well
(Delgado & Stefancic, 2017). Critical race theorists are concerned with disrupting, exposing,
challenging, and changing racist policies that work to subordinate and disenfranchise certain
groups of people and attempt to maintain the status quo (Milner, 2008).

CRT sprang up in the 1970s as the advances of the civil rights era of the 1960s stalled. Instead,
subtler forms of racism were gaining ground. Lawyers, activists, and legal scholars met
from a variety of disciplines to thresh out internal problems and to clarify central issues (Delgado
& Stefancic, 2017). Delgado and Stefancic (2017) defined the CRT movement as a collection of
activists and scholars engaged in studying and transforming the relationship among race, racism,
and power. The movement considers issues such as history, economics, setting, group and self-
interest, and emotions and the unconscious (Delgado & Stefancic, 2017).

Unlike traditional civil rights discourse, which stresses incrementalism and step-by-step
progress, CRT questions the very foundations of the liberal order, including equality theory,
legal reasoning, Enlightenment rationalism, and neutral principles of constitutional law (Delgado
& Stefancic, 2017). Critical social theorists presume society is constituted by differences in the
form of social antagonisms between competing groups (Saltman, 2018). Few individuals escape
having their ideologies framed, at least in part by the pedagogies found in educational
institutions (Saltman, 2018). Compulsory schooling teaches many children about dominant
values and how to accept these as natural, moral, and inevitable (Saltman, 2018).

CRT promulgates an “interest-convergence theory,” which holds the dominant culture
typically supports successes of marginalized groups when these successes also serve the larger
interests of Whites (Litowitz, 1997). Critical race theorists believe racism is ordinary, not aberrational—“normal science,” the usual way society does business, the common, every-day experience of most historically underrepresented people in this country (Saltman, 2018). Critical race theorists also believe the system of White-over-color ascendancy serves both psychic and material purposes for the dominant group (Saltman, 2018). They have asserted racism is difficult to address or cure because it is not acknowledged. Color-blind, or “formal,” conceptions of equality, expressed in rules insist only on treatment the same across the board, can thus remedy only the most blatant forms of discrimination (Delgado & Stefancic, 2017). Carter and Welner’s (2013) assertion was in a pluralistic and democratic society, schools must respond to students’ actual needs, be culturally responsive, build on their unique strengths, and provide opportunities necessary to give every student a fair chance at academic success.

The importance of CRT for education research was cogently established in 1995 by Ladson-Billings and Tate in their 2006 influential paper entitled, “Toward a Critical Race Theory of Education.” Concerns with the effects of race-based assumptions continue to underpin contemporary education debates, policies, practices and research (Vass, 2015). This is not to suggest a concern with race is the defining factor that explains education inequalities with regard to learner engagement or outcomes (Vass, 2015). CRT accepts race is located at an intersection of oppression alongside other factors including gender, socioeconomic status, age, sexual orientation, and (dis)ability (Delgado & Stefancic, 2017). CRT is an approach that focuses on exploring the social (re)construction of race in ways that have material impacts on the lives of people (Vass, 2015). In agreement with the position Vass (2015) presented, this framework helps explain how and why power and influence are distributed in ways that privilege White interests, and concurrently and relationally discriminate against non-White interests.
Critics of CRT

Opponents of CRT argued the work substitutes emotions for reason and self-dealing for fairness. Subotnik (1998) juxtaposed CRT advocates have mounted a relentless attack upon mainstream institutions, but until very recently, there has been almost no broad-based evaluation of CRT during the 1990s from outside the movement. Subtonik (1998) further asserted a comprehensive and systematic public review of CRT is overdue. Brown (1995) postulated critical race narratives have not incorporated the extensive social science research indicating an increased sophistication of White attitudes toward race.

Critical race narratives simply have not incorporated the extensive social science research indicating an increased sophistication of White attitudes toward race (Brown, 1995). Survey research over the last 2 decades has consistently shown White Americans generally do not perceive themselves as actively contributing to racial privilege (Brown, 1995). Some scholars may approach CRT with apprehension because thinking about racism as a fundamental part of the U.S. societal structure is simply unsettling. Nonetheless, even critics of CRT tend to agree with some of its fundamental tenets. In his critique of CRT, Litowitz (1997) asserted CRT is doubtlessly correct racism is endemic in U.S. society. He further contended racism is deeply ingrained, not merely in certain aspects of our legal system, but in our collective unconscious and our everyday attitudes toward historically underrepresented people, and because racism is typically unconscious, everyday acts of racism are subtle and very difficult to regulate by law (Litowitz, 1997).

Although Litowitz (1997) agreed with the significance of the personal narrative, he referenced there seems to be a similarity between CRT and Freud’s expression of narcissism of minor differences. Litowitz contended various ethnic groups proclaim their uniqueness based
upon a handful of idiosyncratic traits. He maintained instead of writing an article on why a particular law is wrong or unconstitutional, the critical race scholar provides a “raced” or “situated” analysis of various situations and many other scholars question the ultimate value of this scholarship.

Although critical race quantitative work has not reached its full potential in its combination of theory and method, it does provide a heightened awareness of the impact of living in a racialized society. To Litowitz’s (1997) point, CRT does the following: (a) it clarifies and brings to the forefront the racist stereotypes and assumptions which pervade our psyches; (b) it reminds us of our brutal history of racial prejudice and exclusion; and (c) it humanizes historically underrepresented people so they do not seem as the other and instead appear as living, breathing people who deserve equal treatment.

Regardless of the opposition or agreement of CRT as a framework, what is less disputed is the application of a student-centered approach to teaching. One such pedagogical approach in which students’ unique cultural strengths are identified and nurtured to promote student achievement and a sense of well-being about the student’s cultural place in the world is known as CRP (Ladson-Billings, 1995).

**Theory of CRP**

The responsibility of education is not only to prevent the exclusion of historically silenced, erased, and disenfranchised groups but also to assist in the promotion and perpetuation of cultures, languages, and ways of knowing have been devalued, suppressed, and imperiled by years of educational, social, political, economic neglect, and other forms of oppression (NYSED, 2019). Proponents of CRP have argued for the effective use of cultural characteristics, experiences, and perspectives of ethnically diverse students as tools for teaching (Carter &
Welner, 2013). Gay (2000) claimed there is a demonstrated correlation among increased writing performance, reading comprehension, self-esteem, and an appreciation of racial and ethnic historically underrepresented students’ own and others’ cultures.

    Although scholars such as Milner (2017) pointed to out-of-school influences such as housing, socioeconomic factors, and poverty, other scholars such as Ladson-Billings (2000) and Carter (2013) offered a slightly divergent perspective. They specifically espoused a perspective based on the cultural gaps that exist between historically underrepresented students and White teachers. Although CRT embraces a mindset concerning race related relationships, CRP supports the tools applicable in the classroom to improve race relationships.

    Ladson-Billings (2000), pedagogical theorist, researcher, and teacher educator, introduced the theory of CRP to describe methods of teaching that call for engaging learners whose cultures and experiences are traditionally excluded from mainstream settings. She suggested culturally relevant teaching must meet three criteria: (a) an ability to develop students academically, (b) a willingness to nurture and support cultural competence, and (c) the development of a sociopolitical or critical consciousness. She further argued culturally relevant teaching is distinguishable by three broad propositions or conceptions regarding self and other, social relations, and knowledge (Ladson-Billings, 1995). Ladson-Billings (1995) contended earlier sociolinguistic explanations have failed to include the larger social and cultural contexts of students and cultural ecologists have failed to explain student success. Ladson Billings predicated the need for a culturally relevant theoretical perspective on the growing disparity between the racial, ethnic, and cultural characteristics of teachers and students along with the continued academic failure of African American, Native American, and Latino students.
The focus of many revised teacher education programs throughout the nation has become to prepare prospective teachers in ways that support equitable and socially just educational experiences for all students (Ladson-Billings, 1995). Ladson-Billings proposed CRP inhabits a range or continuum of teaching behaviors, not fixed or rigid behaviors teachers must adhere to merit the designation “culturally relevant.” The three broad propositions that emerge from Ladson-Billings’ (1995) research included: (a) the conceptions of self and others held by culturally relevant teachers, (b) the manner in which social relations are structured by culturally relevant teachers, and (c) the conceptions of knowledge held by culturally relevant teachers.

**Conceptions of Self and Others**

Ladson-Billings (1995) postulated teachers who deliver CRP demonstrate their commitment to the conceptions of self and others in a consistent and deliberate manner. Students are not permitted to choose failure. These teachers do not instruct from a deficit mindset. Absent from their discourse about students is the language of lacking. Instead, Ladson-Billings (1995) observed in her research culturally responsive teachers talked about their own shortcomings, limitations, and ways they needed to change to ensure student success. According to Ladson-Billings, the teachers also made conscious decisions to be a part of the community from which their students come. If the teachers did not live in the same community their students lived in, they made deliberate efforts to go to the community for goods, services, and leisure activities, demonstrating their belief in the community as an important and worthwhile place in both their lives and the lives of the students.

**Social Relations**

Ladson-Billings (1995) asserted culturally relevant teachers consciously create social interactions to help foster academic success, cultural competence, and critical consciousness.
These teachers maintain fluid student–teacher relationships, demonstrate a connectedness with all of the students, develop a community of learners, and encourage students to learn collaboratively and be responsible for another (Ladson-Billings, 1995). In these teachers’ classrooms, the teacher–student relationships appear to be equitable and reciprocal. In Ladson-Billings’ (1995) research, she noted teachers she observed highlighted the expertise of various students and required other students to consult those students before asking for help. Because the teachers acknowledged a wide range of expertise, the individual students were not isolated from their classmates. Instead, all of the students were made aware they were expected to excel at something and the teacher would call on them to share that expertise with classmates. The culturally relevant teachers encouraged a community of learners rather than competitive, individual achievement. By demanding a higher level of academic success for the entire class, individual success did not suffer. However, rather than lifting up individuals (and, perhaps, contributing to feelings of peer alienation), the teachers made it clear they were working with smart classes (Ladson-Billings, 1995).

**Conceptions of Knowledge**

The third proposition that emerged from Ladson-Billings’ (1995) study was one that indicated how the teachers thought about the curriculum or content they taught and the assessment of that knowledge. She summarized their conceptions or beliefs about knowledge in the following ways: (a) knowledge is not static—it is shared, recycled, and constructed; (b) knowledge must be viewed critically; (c) teachers must be passionate about knowledge and learning; (d) teachers must scaffold, or build bridges, to facilitate learning; and (e) assessment must be multifaceted, incorporating multiple forms of excellence. Although cognizant of the need to teach the mandated curriculum, teachers helped their students engage in a variety of
forms of critical analyses (Ladson-Billings, 1995). For example, one teacher in Ladson-Billings’ study encouraged students to critique the social studies textbooks under consideration by a state evaluation panel. Several of the culturally responsive teachers actively fought the students’ right-answer approach to school tasks. They provided students with problems and situations and helped them to say aloud the kinds of questions they had in their minds but had been taught to suppress in most other classrooms. Thus, just as the students were affirmed in their ability to code-switch, or move with facility, in language between African American language and a standard form of English, they were supported in the attempts at role switching between school and home.

**Theory of CSP**

Ladson-Billings (1995) posited although her work in elevating CRP resulted in evidence there were teachers capable of fostering academic success among African American students and upon that premise, she was able to craft a theoretical platform known as CRP, today the term is ubiquitous and corrupt in most of its applications (Paris & Alim, 2017). CSP is the emergence of a rather recent framework that in many ways blends and extends some of the concepts presented in previous frameworks regarding culture and pedagogy. CSP supports students to critique and question dominant power structures in societies and build on the asset-based pedagogical research by viewing schools as places where cultural ways of being are sustained (Peristeris, 2017).

Two of the most outstanding tenets of CSP are: (a) a focus on the evolving and plural nature of youth identity and cultural practices, and (b) a commitment to embracing youth culture’s counterhegemonic potential and maintain a clear-eyed critique of the ways in which youth culture can also reproduce systemic inequalities (Paris & Alim, 2014).
In Brofenbrenner’s (1974) socioecological model, the micro-, exo-, and macro-systems are seen as nested one within another (Wilcox, 2013). Drawing on Bronfenbrenner’s (1974) model, Wilcox (2013) equated microsystems to the immediate classroom settings where students experience proximal processes and direct interaction between educators and students occur. Exosystems are those settings in which students do not usually participate directly but can indirectly influence students’ performance (Bronfenbrenner, 1974; Wilcox, 2019). Figure 2.1 demonstrates the hypothesized connections between the variables in this study such that there is a relationship between student race and teacher’s ratings of student academic performance when teachers’ perceptions of student–teacher relationships are considered in schools with varying student demographic compositions. Finally, macrosystems take shape as cultures, climates, bodies of knowledge, customs, lifestyles, socioeconomic conditions (e.g., status or class) that also distally influence students’ lives (see Figure 2.2; Wilcox, 2013).
Figure 2.1

Williams’ Conceptual Framework
Figure 2.2 explores the intersections among CRT, CRP, and CSP used as underpinnings to this study as they relate to the microsystem, mesosystem, and macrosystem. It asserts if the fundamental tenets of the theoretical frameworks are subscribed to then outcomes such as the affirmation of students’ backgrounds, drawing on students’ cultures to shape curriculum, and critiquing dominant power structures will manifest.

Summary

Despite relatively local and national attention, the creation of the term achievement gap is at least a century in the making (Meyers, 2012). Neither achievement differences between groups of U.S. students nor inequality in U.S. education is a new phenomenon (Meyers, 2012). Although the achievement gap is currently one of the most measured and considered educational progress characteristics for students, teachers, schools, school districts, and states, it is a relatively recently derived term for a long-standing issue: observable differences in the
educational outcomes between at least two groups of students (Meyers, 2012). Nevertheless, more research is needed to dismantle barriers students of color face in the U.S. educational system. Although teacher preparatory programs and legislation have attempted to improve equality in education, the issue of the performance gap between historically underrepresented and their peers persists. Alongside the performance gap is a representation gap between historically underrepresented students and their teachers. Perceptions tied to race, serving as a proxy for other factors that foster disproportionate outcomes for students of color, cannot go overlooked nor can the concept of socioeconomics and poverty be used as the buffer to avoid the courageous conversations needed to confront issues of systemic racism that plague our nation and educational system.

According to demographic forecasts presented by the 2008 U.S. Census Bureau, Black and Latinx students combined will make up the majority of the U.S. population by the middle of the 21st century (Carter & Welner, 2013). Unless there is a shift in the trajectory of disproportionate outcomes in our educational system, racially marginalized students will not be adequately prepared for higher educational attainment and subsequent leadership roles in society (Carter & Welner, 2013). Drawing on the extensive database of the Texas Schools Project, Hanushek and Rivkin (2009) found Black students attend schools with a less experienced teaching staff than do White students. There is evidence historically underrepresented children are more likely to be in high-poverty schools (Hanushek & Rivkin, 2009). Orfield and Lee (2005) pointed out more than 60% of Black and Hispanic students attend high poverty schools. Only 18% of White students and 30% of Asian students attend high-poverty schools. Logan et al. (2002) reported non-Hispanic Whites on average attend public elementary schools where 30% of
students qualified for free or reduced-price lunches, compared with 65% for schools attended by
the average Black student and 66% for the average Hispanic student.

If the performance measures of students are functions of their accumulated educational
opportunities, then teachers’ perceptions of their relationships with students may inhibit access to
the educational opportunities resulting in exclusion from participation in substantive academic
interactions. The barriers for historically disenfranchised youth seem fairly consistent over time.
The most marginalized populations face practices that lead to disproportionate outcomes. Once
the status quo institutionalized racism presents and challenge the biases inherent in our system is
confronted, then and only then can we begin the process of dismantling and eradicating the
forces that tear down the ideologies upon which our democracy was built. This equitable
principle lies at the core of U.S. schooling and can be traced as far back as Mann’s celebrated
call in the mid 19th century for schools to serve as the great equalizer and the balance wheel of
society (Carter & Welner, 2013).

This will take long-term initiatives such as the hiring of diverse staff, addressing
redlining, housing discrimination and interrupting the school to prison pipeline that begins in the
elementary years or prior. However, efforts should also begin with the here and now via the
establishment of professional learning communities to inform culturally responsive practices and
to cultivate habits of mind. The representation gap in classrooms is evident. Grounding
pedagogical practices in frameworks that support Ladson-Billing’s (1995) theory of cultural
responsiveness and Paris and Alim’s (2012) theory of CSP, such as New York state’s culturally
responsive-sustaining education framework, is one tool that can be used to close the achievement
gap. The four principles that undergird this framework include: (a) ensuring a welcoming and
affirming environment, (b) high expectations and rigorous instructions, (c) inclusive curriculum and assessment, and (d) ongoing professional learning.

Discovering new insights into overcoming these barriers is important in addressing achievement gaps and improved academic outcomes for students racially, culturally, linguistically, or socioeconomically diverse. Researchers have largely focused on measured and documented test score gaps, but the ability to mount a sustained effort to reduce the gaps with any sustenance has yet to be realized. The topics covered in the literature review addressed gaps in achievement and representation. However, there is no known research that has examined how the demographic composition of schools impacts teachers’ perceptions of their relationships with students and student academic achievement. This study was an opportunity to fill the knowledge gap that exists today regarding the influence of demographic composition on a school’s culture by shifting assumptions, biases, and beliefs cultivated through role modeling, professional learning communities, conversations, and advocacy for CSP. An overview of the quantitative approach, using grounded theory from the data is provided in Chapter 3.
CHAPTER 3

Methodology

Until lions have their own story tellers, hunters will always be the hero.

–African Proverb

Disproportionate access, opportunities, and outcomes for students of color continue to be of concern for educators, researchers, policy makers, and families alike. Disproportionate inputs create inequitable outputs that exacerbate racialized performance gaps and closing them is a latent goal. Furthermore, there continues to be an uptick in the number of historically underrepresented students attending schools in the United States and the teaching force remains predominantly White. To dismantle systems of inequity that impact the trajectory of children’s lives, it is critical to consider practices that perpetuate these disparate outcomes in our educational institutions.

Previous research has indicated teachers’ perceptions about their relationships with students and students’ capacities to perform academically are potent as teachers make a myriad of decisions that can result in exclusion from participation in substantive academic interactions (Carter & Welner, 2013; Gay, 2000; Goodlad, 1984; Ladson-Billings, 1995; Page, 1987), but there exists a knowledge gap regarding whether there is a relationship between the presence of racially different students in schools, the perceptions teachers have of their relationships with students, and students’ academic achievement.

This study addressed this gap by examining the association between the demographic composition of schools, student academic achievement, and teachers’ perceptions of their relationships with students in elementary schools in a quantitative manner by using data from the Early Childhood Longitudinal Study (ECLS-K:2011). This longitudinal data collection program
tracked children from kindergarten through eighth grade and was conducted by the National Center for Education Statistics (NCES, 2019), which is available to the public.

This chapter presents a discussion of the following aspects of the study: (a) research questions; (b) theoretical frameworks associated with the study; (c) research paradigm; (d) description of the ECLS-K:2011 data; (e) population and sample design; (f) instrumentation used in this study; (g) data collection procedures; (h) considerations of human subjects; (i) procedures for treating, coding and analyzing the data; (j) timeline of the study; and (k) design reliability and validity.

**Recapitulation of the Research Questions**

RQ1: How do teachers’ perceived relationships with third grade students differ by student race in schools with different student demographic compositions?

RQ2: In schools with racially different student demographic compositions, how do teachers’ perceived relationships with third grade students compare to teachers’ ratings of the students’ academic skills in reading and math?

**Theoretical Frameworks**

As previously discussed, the study used critical race theory (CRT), culturally responsive pedagogy (CRP), and culturally sustaining pedagogy (CSP) as theoretical frameworks for understanding the impact teachers’ perceptions of their relationships with students may have on the promotion of equity in institutions of learning to dismantle performance gaps between historically underrepresented students and their peers. The first, CRT, served as a framework to examine issues of racism and educational inequity by challenging prevailing notions of fairness, meritocracy, color blindness, and neutrality (Parker et al., 1999). Delgado and Stefancic (2017) identified the key hallmarks of CRT as (a) belief racism is normal or ordinary, not aberrant, in
U.S. society; (b) interest convergence or material determinism; (c) race as a social construction; (d) intersectionality and antiessentialism; and (e) voice or counter-narrative.

The second theoretical framework the study used was CRP. CRP posits culture as an invaluable asset to students in their educational process (Gay, 2000; Irvine, 2010; Ladson-Billings, 2000). CRP uses culture as a vehicle to bridge the divide between home and education and is hinged on building healthy relationships. According to Ladson-Billings (1995), CRP is based on the following three tenets: (a) academic achievement, (b) cultural competence, and (c) sociopolitical consciousness. In sum, CRT is a theoretical model that addresses student achievement and helps students accept and affirm their cultural identity and develop critical perspectives that challenge inequities schools, and other institutions perpetuate (Ladson-Billings, 1995).

The third theoretical framework is CSP. This research and the pedagogical, curricular, and teacher learning innovations it forwards is interested not in relevance or responsiveness, but rather in sustaining and extending the richness of our pluralist society (Paris, 2012).

**Research Paradigm**

This was a correlational study using an existing dataset. This type of study is appropriate as manipulation of variables is either not possible (such as race) or not ethical. Nonexperimental research lacks manipulation of the independent variables by the researcher. Therefore, the researcher studies what has already occurred or what occurs naturally and discusses how the variables are related (Johnson, 2001). Despite its limitations for studying cause and effect, nonexperimental research is critical to understanding and making advancements in education.

The purpose of this study was to examine the association between teachers’ perceptions of their relationships with students and student academic achievement in schools with different
student demographic compositions. This quantitative study used regression models to quantify
the association between the independent and dependent variables and determine the significance
of these associations.

As outlined by Cronk (2012), a quantitative approach is appropriate when a researcher
seeks to understand what can be done with answers arithmetically. This approach allowed for a
deeper understanding regarding the association between the racial composition of the student
body and teachers’ perceptions of their relationships with students.

**Description of the ECLS-K:2011 Populations and Sampling Design**

I used data collected by the ECLS-K:2011 in my research study. Broad in its coverage
and scope of child development, early learning, and school progress, the ECLS-K:2011 drew
together information from multiple sources to provide rich data on early school experiences of
children beginning with kindergarten and following them through fifth grade (Mulligan, 2015).
This study was a nationally representative sample of children from kindergarten through their
elementary school years. It was a multimethod, multisource study focused on children’s early
school experiences. It included self-administered questionnaires completed by teachers and
school administrators, one-on-one assessments of children, and interviews with parents. The
ECLS-K:2011 was sponsored by NCES in the Institute of Education Sciences of the U.S.
Department of Education. The longitudinal nature of the ECLS-K:2011 data enabled researchers
to study a wide range of school, family, and community concerns.

**Data Collection and Instrumentation**

The design of the ECLS-K:2011 and its survey instruments were guided by a conceptual
framework of children’s development and learning that emphasized the interaction among
various components such as the environments in which children live and learn and resources in
those environments to which children have access (Mulligan, 2015). Children, their families, teachers, schools, and care providers provided information on children’s cognitive, social, emotional, and physical development (Mulligan, 2015).

The children in the ECLS-K:2011 comprised a nationally representative sample selected from both public and private schools attending both full-day and part-day kindergarten in 2010–11 (Mulligan, 2015). The children were from diverse socioeconomic, racial, and ethnic backgrounds, and the sample included both children in kindergarten for the first time and kindergarten repeaters. Also participating in the study were the children’s parents, teachers, schools, and before- and after-school care providers. The ECLS-K:2011 was a voluntary study; no one selected for the study was required to respond to the questionnaires or to participate in the assessments. The information participants chose to provide and all responses that describe identifiable characteristics of individuals were used only for statistical purposes.

The ECLS-K:2011 was a longitudinal study with the same children followed from kindergarten through the fifth grade. Information was collected in the fall and the spring of kindergarten (2010–2011), the fall and spring of first grade (2011–2012), the fall and spring of second grade (2012–2013), the spring of third grade (2014), the spring of fourth grade (2015), and the spring of fifth grade (2016; Mulligan, 2015). I used a subset of the ECLS-K:2011 data set containing third grade students (Spring 2014) and self-administered questionnaires from their teachers to understand associations between student performance, student race, and teacher perception in schools with racially different student bodies. The subset of students were part of a cohort of children followed from their kindergarten year (e.g., the 2010–2011 school year, referred to as the base year). The sample included both children who were in kindergarten for the first time and children who were repeating kindergarten during 2010–2011, which was
approximately 18,170 kindergartners from 1,310 schools. While teachers, school administrators, parents, and before and after-school care providers participated in the study, my focus was on the third grade spring data collection from teachers regarding their perceptions of students’ performance and ratings of students’ academic skills.

The goal of the sample design was to obtain an approximately self-weighting sample of children (Mulligan, 2015). To be considered a base-year respondent, a student had to have child assessment data (e.g., defined as having at least one set of scorably mathematics/reading/science data or a height or weight measurement, or having been excluded from the assessment due to lack of accommodation for a disability) or parent interview data from the fall or spring data collection, or both, in the base year. Later rounds of data collection were conducted only with base-year respondents. Sampled students who did not participate in the base year were not recontacted for later rounds of data collection, and no new students were added to the study sample after the base year. Nonresponse on the child assessment, parent interview, or both, led to some of these sampled cases not being included in weighted analyses.

Consideration of Human Subjects

As anonymity and consent of subjects was ensured through ECLS-K:2011 data collection procedures, there was no need to consider ethics approval, consent, or measures to protect anonymity of subjects in this study. All data used in this study was already publicly available. The researcher had no direct contact with any subject included in the study. Exempt status was obtained from the Institutional Review Board (IRB) at SUNY Albany.

Design, Validity, and Reliability

It was assumed data collected as part of the ECLS-K:2011 was valid and reliable. Because the dataset has already been established, the researcher was unable to manipulate the
number of students in each level of the independent variables. An experimental control could not be used in this study; therefore, interactions and confounding effects of variables were examined simultaneously using statistical control. Hence, the results of this study cannot be used to determine causal relationships as there were no manipulation of study variables by the researcher. To improve parameter estimation, variable levels that only have a few samples were grouped with other variables.

**Limitations of the Study**

The data set was generated from a larger study that did not focus specifically on student–teacher relationships in relation to race. Further, no assumption of causality between racial demographics of students, racial composition of schools, or teachers’ perceptions of their relationships with students and performance outcomes were assumed in this study. Rather, the intent in this analysis was to draw from the ECLS-K:2011 study what patterns were shared in teachers’ perceptions of their relationships with students and academic performance in schools with racially different students. I also acknowledged the participants (e.g., administrators, teachers, students, parent/guardians) were identified based upon their willingness to participate in this longitudinal study. If the sampling criteria were based on different measures and different populations, different findings may have been derived.

**Procedures for Treating, Coding, and Analyzing Data**

Variables were coded as per the early childhood longitudinal study except where noted. A correlation analysis of the ECLS-K:2011 data, using SPSS software, was used to consider whether the association between variables were statistically significant. The variables included (a) teachers’ perceived relationships with students as assessed by the student–teacher relationship
scale, (b) student race, (c) teachers’ ratings of third grade students’ academic achievement skills, and (d) schools’ demographic compositions.

In some research questions, a variable served as an independent variable, and in other questions, the same variable served as a dependent variable dependent upon what the question was trying to assess. In some data sets, there were not enough cases in one or more subgroups of a key variable to provide significant statistical power (Miller, 2005). In some data sources, one or more items did not apply to certain individuals. Those categories were coded as “not applicable” and excluded from this study. Some values missing due to item nonresponse were already imputed.

**Study Variables**

The study variables in this study were the school demographic composition variable, student race codes, and student-teacher relationship scales. The following section explains how each variable was derived and coded.

**School Demographic Composition Variable**

The school’s demographic composite indicated the percentage of the student population not White in the spring of 2014 (i.e., when students in this study were in the third grade). Administrators were asked to report the number or percentage of students in the school who were the following race or ethnicities: (a) Hispanic of any race; (b) American Indian or Alaska Native, not Hispanic; (c) Asian, not Hispanic; (d) Black or African American, not Hispanic; (e) Native Hawaiian or other Pacific Islander, not Hispanic; (f) White, not Hispanic; or (g) two or more races, not Hispanic. This composite variable was originally coded as follows: (a) -9 = Not Ascertained, (b) -8 = Don’t Know, (c) -7 = Refused, (d) -1 = Not Applicable, (e) 1 = 0 to less than 25, (f) 2 = 25 to less than 50, (g) 3 = 50 to less than 75, and (h) 4 = 75 to 100. For this study,
the variables were recoded into dummy variables as follows: (a) -9, -8, and -7 = User Missing, (b) 0 = 0 to less than 25 (constant), (c) 1 = 75 to 100, and (d) 2 = 25 to less than 75.

Each research question was explored with the use of this variable as a control to assess whether the relationship between variables appeared to shift in schools with racially different student bodies.

**Student Race Codes Variable**

The race variable, an independent categorical variable, was derived from a composite drawn from either the parent-reported data about the student’s race or data reported by the school about the student’s race. Using six dichotomous race values and a Hispanic ethnicity variable, the race/ethnicity composite variables for students were created. The categories for these variables were: White, non-Hispanic; Black or African American, non-Hispanic; Hispanic, race specified; Hispanic, no race specified; Asian, non-Hispanic; Native Hawaiian or other Pacific Islander, non-Hispanic; American Indian or Alaska Native, non-Hispanic; and more than one race specified, non-Hispanic. This variable was deduced into five categories: (a) White, non-Hispanic; (b) Black or African American, non-Hispanic; (c) Hispanic, (d) Asian, non-Hispanic, and (e) Other. The researcher explored relationship between this variable, teachers’ perceptions of their relationships with students, and teachers’ ratings of students’ academic skills.

**Student–Teacher Relationships Variable**

Closeness and conflict levels were derived from the student–teacher relationship scale (STRS). These variables were used as independent variables in some questions and dependent variables in others. The STRS was a 15-item, teacher-reported measure of descriptive statements about his or her relationship with the ECLS-K:2011 child. The teacher was asked to indicate the degree to which each statement applied to their relationship using a 5-point Likert-type scale.
ranging from 1 = definitely does not apply to 5 = definitely applies. A score was computed when the respondent provided a rating on at least 5 of 7 or 8 items that composed the scales. To make conflict and closeness scores comparable in this study, each child’s total conflict and closeness scores were divided by the total number of items measuring that construct, such that conflict and closeness scores indicate the average score per item.

Closeness Scale

The closeness scale was a measure of the affection, warmth, and open communication the teacher perceived to experience with the student. The closeness subscale was comprised of seven items. Higher scores on the closeness scale indicated the teacher perceived he or she had a closer relationship with the child. The following seven statements were included on the scale to assess the level of closeness teachers perceived to experience in their relationship with the student (Pianta, 2001):

1. I share an affectionate, warm relationship with this child.
2. This child and I always seem to be struggling with each other.
3. If upset, this child will seek comfort from me.
4. This child is uncomfortable with physical affection or touch from me.
5. This child values his/her relationship with me.
6. When I praise this child, he/she beams with pride.
7. This child spontaneously shares information about himself/herself.

Conflict Scale

The conflict scale was a measure of the teacher’s perception of the negative and conflictual aspects of the teacher’s relationship with the student. The conflict subscale was comprised of eight items. Lower scores on the conflict scale indicated the teacher perceived his
or her relationship with the child to be characterized by less conflict. The following eight statements were included on the scale to assess the level of conflict teachers perceived to experience in their relationship with the student (Pianta, 2001):

1. This child easily becomes angry at me.
2. It is easy to be in tune with what this child is feeling.
3. This child remains angry or is resistant after being disciplined.
4. Dealing with this child drains my energy.
5. When this child is in a bad mood, I know we’re in for a long and difficult day.
6. This child’s feelings toward me can be unpredictable or can change suddenly.
7. This child is sneaky or manipulative with me.
8. This child openly shares his/her feelings and experiences with me.

A compilation of the variables considered in this study are presented in Table 3.1 along with the codes applied, a description of the variables (see Tables 3.2, 3.3, 3.4, 3.5), and an explanation of the associations between the independent and dependent variables. I sought to understand in each research question. I used regression analyses to determine associations between variables.
Table 3.1

Compilation of Variables

<table>
<thead>
<tr>
<th>Variable label</th>
<th>Variable type</th>
<th>Variable name(s)</th>
<th>Codes</th>
</tr>
</thead>
</table>
| School demographic composition (Percent non-White students) | Control variable | X7RCETH | 0 = 0 to less than 25%  
1 = 75 to 100%  
2 = Other (25 to less than 75%) |
| Student race | Independent variable | X_RACETH_R | 1 = White, Non-Hispanic  
2 = Black/African American, Non-Hispanic  
3 = Hispanic  
4 = Asian, Non-Hispanic  
5 = Other (Native Hawaiian/Pacific Islander, Non-Hispanic; American Indian/Alaska Native, Non-Hispanic; Two or more races, Non-Hispanic) |
| Student–teacher relationships | Dependent variable (RQ1)/Independent variable (RQ2) | X7CLSNSS (Closeness)  
X7CNFLCT (Conflict) | 1 to 5 Likert scale |
| Teacher ratings of students’ 3rd grade academic skills | Dependent variable | T7RTREAD (Reading)  
T7RTMAT (Math) | 1 = Below grade level  
2 = About on grade level  
3 = Above grade level |

Table 3.2

Descriptive Statistics of Variables

<table>
<thead>
<tr>
<th>Variable</th>
<th>N</th>
<th>Min</th>
<th>Max</th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>3rd grade teacher rating of reading skills</td>
<td>11881</td>
<td>1</td>
<td>3</td>
<td>2.03</td>
<td>.753</td>
</tr>
<tr>
<td>3rd grade teacher rating of math skills</td>
<td>11852</td>
<td>1</td>
<td>3</td>
<td>2.04</td>
<td>.688</td>
</tr>
<tr>
<td>Black/African American</td>
<td>18131</td>
<td>.0</td>
<td>1</td>
<td>.132</td>
<td>.3387</td>
</tr>
<tr>
<td>Variable</td>
<td>$N$</td>
<td>Min</td>
<td>Max</td>
<td>$M$</td>
<td>$SD$</td>
</tr>
<tr>
<td>----------------------------------------------</td>
<td>------</td>
<td>-----</td>
<td>-----</td>
<td>------</td>
<td>------</td>
</tr>
<tr>
<td>Hispanic (Race and no race specified)</td>
<td>18131</td>
<td>0</td>
<td>1</td>
<td>.25</td>
<td>.435</td>
</tr>
<tr>
<td>Asian, Non-Hispanic</td>
<td>18131</td>
<td>0</td>
<td>1</td>
<td>.09</td>
<td>.279</td>
</tr>
<tr>
<td>Other</td>
<td>18131</td>
<td>0</td>
<td>1</td>
<td>.06</td>
<td>.240</td>
</tr>
<tr>
<td>White</td>
<td>18131</td>
<td>0</td>
<td>1</td>
<td>.47</td>
<td>.499</td>
</tr>
<tr>
<td>75 to 100% NonWhite</td>
<td>17548</td>
<td>0</td>
<td>1</td>
<td>.23</td>
<td>.418</td>
</tr>
<tr>
<td>Teacher report of closeness on STRC</td>
<td>11894</td>
<td>1.0000</td>
<td>5.0000</td>
<td>4.146046</td>
<td>.7206672</td>
</tr>
<tr>
<td>Teacher report of conflict on STRC</td>
<td>11901</td>
<td>1.0000</td>
<td>5.0000</td>
<td>1.599347</td>
<td>.7688136</td>
</tr>
<tr>
<td>Valid N</td>
<td>11594</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 3.3

*Percentage of Historically Underrepresented Students in School*

<table>
<thead>
<tr>
<th>Variable</th>
<th>Frequency</th>
<th>Percentage</th>
<th>Valid percentage</th>
<th>Cumulative percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Valid</td>
<td>4380</td>
<td>24.1</td>
<td>33.8</td>
<td>33.8</td>
</tr>
<tr>
<td>1: 0 to less than 25</td>
<td>2484</td>
<td>13.7</td>
<td>19.2</td>
<td>53.0</td>
</tr>
<tr>
<td>2: 25 to less than 50</td>
<td>2128</td>
<td>11.7</td>
<td>16.4</td>
<td>69.4</td>
</tr>
<tr>
<td>3: 50 to less than 75</td>
<td>3961</td>
<td>21.8</td>
<td>30.6</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td>12953</td>
<td>71.3</td>
<td>100.0</td>
<td></td>
</tr>
<tr>
<td>Missing</td>
<td>575</td>
<td>3.2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>-9: Not ascertained</td>
<td>51</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>-1: Not applicable</td>
<td>4595</td>
<td>25.3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>System</td>
<td>5221</td>
<td>28.7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>18174</td>
<td>100.0</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 3.4

*Student Demographics by Race*

<table>
<thead>
<tr>
<th>Variable</th>
<th>Frequency</th>
<th>Percentage</th>
<th>Valid percentage</th>
<th>Cumulative percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>White</td>
<td>8488</td>
<td>46.7</td>
<td>46.8</td>
<td>53.2</td>
</tr>
<tr>
<td>Black</td>
<td>2396</td>
<td>13.2</td>
<td>13.2</td>
<td>86.8</td>
</tr>
</tbody>
</table>
Hispanic 4592  25.3  25.3  100.0
Other 2655  14.6  
Total 18131  99.8  100.0

Missing  Not ascertained  43  .2
Total 18174  100.0

Table 3.5

Third Grade Teacher Rating of Reading Skills

<table>
<thead>
<tr>
<th>Variable</th>
<th>Frequency</th>
<th>Percentage</th>
<th>Valid percentage</th>
<th>Cumulative percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Valid</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1: Below Grade Level</td>
<td>3209</td>
<td>17.7</td>
<td>27.0</td>
<td>27.0</td>
</tr>
<tr>
<td>2: About on Grade Level</td>
<td>5131</td>
<td>28.2</td>
<td>43.2</td>
<td>70.2</td>
</tr>
<tr>
<td>3: Above Grade Level</td>
<td>3541</td>
<td>19.5</td>
<td>29.8</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td>11881</td>
<td>65.4</td>
<td>100.0</td>
<td></td>
</tr>
<tr>
<td>Missing</td>
<td>-9: Not Ascertained</td>
<td>70</td>
<td>.4</td>
<td></td>
</tr>
<tr>
<td>System</td>
<td>6223</td>
<td>34.2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>6293</td>
<td>34.6</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>18174</td>
<td>100.0</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

RQ1: How Do Teachers’ Perceived Relationships With Third Grade Students Differ by Student Race?

I hypothesized teachers’ perceived relationships with third grade students will differ according to student race. I identified the mean scores of teacher responses on the closeness and conflict scales to assess how much the means differ between groups. I further assessed whether the outputs were statistically significant, how large the significance was, the direction of the difference, and whether the outputs reflect random differences or whether these differences would be ones that might be found consistently.
RQ2: How Do Teachers’ Perceived Relationships With Third Grade Students Compare to Teachers’ Ratings of The Students’ Academic Skills in Reading and Math?

I hypothesized teachers’ ratings of students’ academic skills will differ according to teachers’ perceived relationships with students. By determining the difference between the means of the variables, I explored the relationships between teachers’ ratings of their students’ academic performance and their perceived relationship with students. I sought to understand to what extent can teachers’ ratings of third grade students’ academic skills be predicted by teachers’ perceived relationships with them.
CHAPTER 4

Findings

Diversity is being invited to the dance. Inclusion is being asked to dance. Equity is allowing you to choose the music.

–Cynthia Olmedo

The march toward civil rights and access to opportunity has seen many notable but superficial successes in the U.S. educational system over the past 50 years (Carter & Welner, 2013). Educational disparities are closely related to skin color, ethnicity, social, and linguistic status (Carter & Welner, 2013, Gay, 2000). Although performance gaps do not begin in the third grade, they typically become highly apparent at that time as students begin to take standardized assessments (Barnett & Lamy, 2013).

The purpose of this quantitative study was to investigate the associations between the perceptions teachers have about student performance and student–teacher relations when student race is considered, and the demographic composition of the student body is controlled for. This study used the 2011 Early Childhood Longitudinal Study (ECLS-K:2011), a publicly available data set collected by the National Center for Education Statistics (NCES) that tracked the development of children from kindergarten through fifth grade. This study addressed a knowledge gap in the ways racially different student bodies are associated with teacher perceived student–teacher relationships and student performance.

This chapter presents the results of the analyses and includes the following aspects of the study: (a) research questions, (b) results of statistical modeling, (c) evaluation of the results, and (d) summary of Chapter 4.

Research Questions and Hypotheses

The following two research questions were used to guide this analysis:
RQ1: How do teachers’ perceived relationships with third grade students differ by student race in schools with different student demographic compositions?

RQ2: In schools with racially different student demographic compositions, how do teachers’ perceived relationships with third grade students compare to teachers’ ratings of the students’ academic skills in reading and math?

Extant literature suggested the quality of teacher–student relationships can have a strong influence on student outcomes (Mabokela & Madsen, 2007; Redding, 2019; Villegas & Irvine, 2010). I explored whether teachers’ perceptions of their relationships with students differed when student race was considered by assessing how the means on conflict and closeness scales compare between student subgroups in schools with racially different student demographics. I assessed the statistical significance of the outputs, the size of the significance, the direction of the difference, whether the outputs reflect random differences, and whether these differences would be ones we might expect to find consistently. I hypothesized teachers’ perceived relationships with students will differ according to student race in schools with racially different student demographic compositions.

Teachers’ perceptions of their relationships with students as measured by the student–teacher relationship scale (STRS; Pianta, 2001) denoted perceived closeness and conflict levels derived from a 15-item, teacher-reported measure of descriptive statements. The teacher indicated the degree to which each statement applies to their perceived relationships with students using a 5-point Likert-type scale ranging from 1 = definitely does not apply to 5 = definitely applies. Teachers’ perceived relationship with students was a dependent, continuous scaled variable. Race was specified as an independent, categorical variable. The demographic composition of the student body was a control variable.
Closeness

The closeness subscale was a measure of the affection, warmth, and open communication the teacher perceived to experience with the student. It was comprised of seven items. Higher scores on the closeness scale indicated the teacher perceived a closer relationship with the child. I sought to understand whether teachers’ perceptions of closeness in their relationships with students appeared to be associated with the racial demographics of the student body.

Multiple linear regression analyses indicated when the student racial demographic composition of schools were taken into account, the differences in the ways teachers perceived students of various racial groups (with the exception of students identified as Other) were statistically significant at $p < .05$ (see Table 4.1, Model II). There were no statistically significant differences between student subgroups when teacher perceived closeness in student–teacher relationships was considered (see Table 4.1, Model II and Model III). Nonetheless, when compared with White students, teachers perceived less closeness in their relationships with Black, Hispanic, and Asian students. In schools with 75% or more historically underrepresented students, teachers’ perceptions of closeness in their relationships with students identified as “other” were not statistically significant (see Table 4.1, Model II). Teachers perceived the least closeness with Hispanic students at an average of .207 points less than perceived closeness with White students (see Table 4.1, Model II). Teachers perceived more closeness with Black students than Hispanic and Asian students in schools with mostly historically underrepresented students (see Table 4.1, Model II). As displayed in Figure 4.1, teachers perceived the least closeness with White students in schools mostly comprised of historically underrepresented students.
Table 4.1

*The Association Between Teacher Perceived Closeness in Student–Teacher Relationships With Third Graders and Student Race*

<table>
<thead>
<tr>
<th>Variable</th>
<th>Model I</th>
<th>Model II</th>
<th>Confidence intervals</th>
<th>Model III</th>
<th>Confidence intervals</th>
</tr>
</thead>
<tbody>
<tr>
<td>Closeness perception by race in all schools</td>
<td>Intercept: 4.234, Sig: .000</td>
<td>Closeness perception by race in schools with 75% or more historically underrepresented students: 4.207, Sig: .000</td>
<td>Low: 4.11, Up: 4.305</td>
<td>Closeness perception by race in schools that do not have 75% or more historically underrepresented students: 4.235, Sig: .000</td>
<td>Low: 4.217, Up: 4.254</td>
</tr>
<tr>
<td>Black/African American</td>
<td>-1.175, Sig: &lt;.001</td>
<td>-1.38, Sig: .015</td>
<td>-2.50, Up: .027</td>
<td>-1.88, Sig: &lt;.001</td>
<td>-2.49, Up: .128</td>
</tr>
<tr>
<td>Hispanic (race and no race specified)</td>
<td>-.181, Sig: &lt;.001</td>
<td>-.207, Sig: &lt;.001</td>
<td>-.311, Up: .104</td>
<td>-.108, Sig: &lt;.001</td>
<td>-.150, Up: .066</td>
</tr>
<tr>
<td>Asian, Non-Hispanic</td>
<td>-.185, Sig: &lt;.001</td>
<td>-.191, Sig: .002</td>
<td>-.311, Up: .070</td>
<td>-.158, Sig: &lt;.001</td>
<td>-.223, Up: .092</td>
</tr>
<tr>
<td>Other</td>
<td>-.098, Sig: &lt;.001</td>
<td>-.152, Sig: .053</td>
<td>-.306, Up: .002</td>
<td>-.076, Sig: .019</td>
<td>-.140, Up: .013</td>
</tr>
</tbody>
</table>

*Note.* Dependent Variable: Teacher Perceived Closeness with Third Grade Students.
The Association Between Teacher Perceived Closeness in Student–Teacher Relationships With Third Graders and Student Race

Race was a significant predictor of teachers’ perceptions of closeness in student–teacher relationships. Consequently, teachers perceived their relationships with White students differently and more positively than they did other subgroups. Teachers perceive the least amount of closeness with Hispanic students in schools with 75% or more historically underrepresented students.

Conflict

The conflict scale was a measure of perceived negativity the teacher experienced with the student. The conflict subscale was comprised of eight items. Higher scores on the conflict scale indicate the teacher perceived a more negative relationship with the student. When compared to White students, teachers rated perceived conflict in their relationship with Black students .331 points higher and .213 points lower with Asian students in schools with 75% or more historically underrepresented students (see Table 4.2, Model II). Thus, the difference in teachers’ perceptions
of conflict in their relationships with Black students was statistically significant at $p < .05$ (see Table 4.2, Model I). Teachers perceived less conflict with Asian students when compared with White students regardless of racial demographic composition of the student body. Most notably, teachers perceived statistically significantly more conflict with Black students than with White, Hispanic, and Asian students (see Table 4.2, Model II and Model III). Teachers’ perceptions of conflict with students identified as Other were not statistically significant in schools with and without 75% or more historically underrepresented students (see Table 4.2, Model II and Model III).

**Table 4.2**

*The Association Between Teacher Perceived Conflict in Student–Teacher Relationships With Third Graders and Student Race*

<table>
<thead>
<tr>
<th>Variable</th>
<th>Model 1</th>
<th>Model II</th>
<th>Model III</th>
<th>Confidence intervals</th>
<th>Confidence intervals</th>
</tr>
</thead>
<tbody>
<tr>
<td>Conflict perception by race in all schools</td>
<td>.418</td>
<td>.331</td>
<td>.415</td>
<td>-.011</td>
<td>.636</td>
</tr>
<tr>
<td>Black/ African American</td>
<td>.156</td>
<td>.165</td>
<td>1.557</td>
<td>1.561</td>
<td>1.541</td>
</tr>
<tr>
<td>Hispanic (Race and no Race specified)</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
<td>.350</td>
</tr>
</tbody>
</table>

78
As noted in Figure 4.2, the conflict teachers perceived in their relationships with Black students was rather consistent regardless of the demographic composition of the student body, which was statistically significantly more than other subgroups. Teachers perceived higher levels of conflict with White, Black, and Asian students in schools with 75% or more historically underrepresented students (see Figure 4.2).

**Figure 4.2**

The Association Between Teacher Perceived Conflict in Student–Teacher Relationships With Third Graders and Student Race

<table>
<thead>
<tr>
<th>Race</th>
<th>All Schools</th>
<th>75% or More Hx Underrepresented</th>
<th>Not 75% or More Hx Underrepresented</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asian, Non-Hispanic</td>
<td>1.648</td>
<td>1.455</td>
<td>1.371</td>
</tr>
<tr>
<td>Other</td>
<td>1.658</td>
<td>1.445</td>
<td>1.561</td>
</tr>
<tr>
<td>Other</td>
<td>1.403</td>
<td>1.403</td>
<td>1.403</td>
</tr>
</tbody>
</table>

*Note. Dependent Variable: Teacher Perceived Conflict with Third Grade Students.*
Thus, race was a significant predictor of teachers’ perceptions of conflict in student–teacher relationships with White, Black, and Asian students. Teachers perceived their relationship with Black students more negatively than other subgroups and they perceived their relationships with Asian students to have less conflict than other subgroups.

In summary, there were statistically significant differences in the way that teachers perceived their relationships with student subgroups. Importantly, teachers perceived their relationships with African American students as being less close than their perceived relationship with White students and also as having more conflict than other racial subgroups of students. Interestingly, teachers did not perceive themselves as being closer with Asian students but when compared to other subgroups, teachers perceived the least amount of conflict with Asian students.

**RQ1: How Do Teachers’ Perceived Relationships With Third Grade Students Compare to Teachers’ Ratings of the Students’ Academic Skills in Reading and Math?**

Teachers play an important role in shaping students’ academic prospects (Burgess & Greaves, 2013; Dee, 2015; Gershenson et al., 2015). High quality student–teacher relationships are linked to positive academic achievement and behavioral outcomes for students, whereas poor relationship quality has been linked to various adverse effects such as lower school connectedness, increased discipline problems, and lower achievement (Hamre & Pianta, 2001; Redding, 2019).

In this study, self-administered hard copy questionnaires were completed by general classroom teachers for each student in their class that participated in the *Early Childhood Longitudinal Study (ECLS-K:2011)*. Teachers are asked what level they perceived students’
academic skills to be on a range of 1 to 3 (i.e., 1 being below grade level, 2 being on grade level, and 3 being above grade level) based on third grade curriculum standards for reading and math.

This question investigated the association between teachers’ ratings of students’ skills in reading and math and teachers’ perceptions of their relationships with students when student race and the racial demographic composition of the student body were taken into account. I hypothesized that teachers’ ratings of third grade students’ academic skills would differ in association with teachers’ perceptions of their relationships with students when student race and school demographic compositions were considered.

**Association of Perceived Student–Teacher Relationships and Reading**

The closer that teachers perceive their relationships to be with students of various subgroups, with the exception of Asian students, the more likely they are to positively rate students’ reading skills. Asian students are rated more positively academically by teachers in all instances. Conversely, when teachers tend to perceive conflict in their relationships with students, they tend to rate their reading skills more negatively.

As demonstrated in Table 4.3, multiple regression analyses showed when student–teacher relationships as perceived by the teacher and the racial demographics of the student body were considered, teachers rated the reading skills of Black and Hispanic students statistically significantly more negatively than their White and Asian peers. In schools that were not comprised of mostly historically underrepresented students, teachers rated the reading skills of Black students an average of .269 points lower than their White peers (see Table 4.3, Model III). However, in schools with 75% or more historically underrepresented students, the reading skills of Black students were rated an average of .122 points lower than their White peers (see Table 4.3, Model II). In schools that were not comprised of mostly historically underrepresented
students, teachers rated the reading skills of Asian students an average of .142 points higher than their White peers (see Table 4.3, Model III). The teacher ratings for Asian students in schools with 75% or more historically underrepresented students were on average .118 points higher than their White peers (see Table 4.3, model II). Teachers rated the reading skills of third grade Asian students statistically significantly different and more favorably than they rated the reading skills of Black and Hispanic students. As noted in Figure 4.4, teachers rated the reading skills of all students higher in schools that were not 75% or more historically underrepresented. Nonetheless, teachers rated the reading skills of Black students less favorably than other subgroups.

Table 4.3

*The Association Between Teacher Ratings of Third Grade Students’ Reading Skills, Student–Teacher Relationships, and Student Race*

<table>
<thead>
<tr>
<th>Variable</th>
<th>Model 1</th>
<th>Model II</th>
<th>Model III</th>
<th>Confidence intervals</th>
<th>Confidence intervals</th>
</tr>
</thead>
<tbody>
<tr>
<td>3rd grade student–teacher relationships and teacher rating of rdg. skills in all schools</td>
<td>3rd Grade student–teacher relationships and teacher rating of rdg. skills in schools with 75% or more historically underrepresented students</td>
<td>3rd grade student–teacher relationships and teacher rating of rdg. skills in schools that do not have 75% or more historically underrepresented students</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3rd grade student–teacher relationships and teacher rating of rdg. skills in schools with 75% or more historically underrepresented students</td>
<td>3rd grade student–teacher relationships and teacher rating of rdg. skills in schools that do not have 75% or more historically underrepresented students</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3rd grade student–teacher relationships and teacher rating of rdg. skills in schools with 75% or more historically underrepresented students</td>
<td>3rd grade student–teacher relationships and teacher rating of rdg. skills in schools that do not have 75% or more historically underrepresented students</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Coeff.</th>
<th>Sig</th>
<th>Coeff.</th>
<th>Sig</th>
<th>Low</th>
<th>Up</th>
<th>Coeff.</th>
<th>Sig</th>
<th>Low</th>
<th>Up</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercept</td>
<td>1.875</td>
<td>&lt;.001</td>
<td>1.596</td>
<td>&lt;.001</td>
<td>1.405</td>
<td>1.788</td>
<td>1.968</td>
<td>&lt;.001</td>
<td>1.849</td>
</tr>
<tr>
<td>Black/African American</td>
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<td>&lt;.001</td>
<td>-.122</td>
<td>.026</td>
<td>-2.29</td>
<td>.015</td>
<td>-.269</td>
<td>&lt;.001</td>
<td>-.333</td>
</tr>
<tr>
<td>Student Race</td>
<td>.238</td>
<td>&lt;.001</td>
<td>.138</td>
<td>.006</td>
<td>-.238</td>
<td>-.039</td>
<td>-.242</td>
<td>&lt;.001</td>
<td>-.286</td>
</tr>
<tr>
<td>--------------------------------------------------</td>
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<td>--------</td>
<td>-------</td>
<td>-------</td>
<td>-------</td>
<td>-------</td>
</tr>
<tr>
<td>Hispanic (Race and no Race specified)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Asian, Non-Hispanic</td>
<td>.085</td>
<td>.001</td>
<td>.118</td>
<td>.045</td>
<td>.002</td>
<td>.234</td>
<td>.142</td>
<td>&lt;.001</td>
<td>.073</td>
</tr>
<tr>
<td>Other Teacher reported closeness</td>
<td>.019</td>
<td>.521</td>
<td>.092</td>
<td>.223</td>
<td>-.056</td>
<td>.239</td>
<td>.021</td>
<td>.541</td>
<td>-.046</td>
</tr>
<tr>
<td>Other Teacher reported conflict</td>
<td>.105</td>
<td>&lt;.001</td>
<td>.147</td>
<td>&lt;.001</td>
<td>.113</td>
<td>.180</td>
<td>.085</td>
<td>&lt;.001</td>
<td>.061</td>
</tr>
<tr>
<td>Note. Dependent Variable: Teacher Rating of Third Grade Reading Skills.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Figure 4.3**

*The Association Between Teacher Ratings of Third Grade Students’ Reading Skills, Student–Teacher Relationships, and Student Race Student Race*
Consequently, there was an association between teachers’ ratings of students’ reading skills and students’ race when student–teacher relationships were considered in schools with racially different student bodies.

**Association of Perceived Student–Teacher Relationships and Math**

As presented in Table 4.4, multiple regression analyses showed when student–teacher relationships as perceived by the teacher and the racial demographics of the student body were considered, teachers rated the math skills of Black and Hispanic students statistically significantly more negatively than their White and Asian peers. In schools with 75% or more historically underrepresented students, teachers rated the math skills of Black students an average of .183 points lower than their White peers. In schools that did not have 75% or more historically underrepresented students, teachers rated the math skills of Black students .292 points lower than their White peers. In schools that do not have 75% or more historically underrepresented students, teachers rated the math skills of Asian students an average of .243 points higher in math than their White peers. In schools with 75% or more historically underrepresented students, the teacher ratings for Asian students in math on are on average .260 points higher than their White peers. The teacher rating for Other students in math in schools was not statistically significant even when the demographic composition of the student body was considered. Teachers rated the mathematics skills of Asian students statistically significantly different and more favorably than Black and Hispanic students. As noted in Figure 4.4, teachers rated students’ math skills least favorably in schools with 75% or more historically underrepresented.

There was an association between teachers’ ratings of students’ math skills and student
race when student–teacher relationships were considered in schools with racially different student bodies.

Table 4.4

*The Association Between Teacher Ratings of Third Grade Students’ Math Skills, Student–Teacher Relationships, and Student Race*

<table>
<thead>
<tr>
<th>Variable</th>
<th>Model 1</th>
<th>Model II</th>
<th>Confidence intervals</th>
<th>Model III</th>
<th>Confidence intervals</th>
</tr>
</thead>
<tbody>
<tr>
<td>3rd grade student–teacher relationships and teacher rating of math skills</td>
<td>Coeff</td>
<td>Sig</td>
<td>Coeff</td>
<td>Sig</td>
<td>Low</td>
</tr>
<tr>
<td>Intercept</td>
<td>1.957</td>
<td>.000</td>
<td>1.732</td>
<td>&lt;.001</td>
<td>1.557</td>
</tr>
<tr>
<td>Black/African American</td>
<td>-.277</td>
<td>&lt;.001</td>
<td>-.187</td>
<td>&lt;.001</td>
<td>-.285</td>
</tr>
<tr>
<td>Hispanic (Race and no Race specified)</td>
<td>-.213</td>
<td>&lt;.001</td>
<td>-.133</td>
<td>.004</td>
<td>-.224</td>
</tr>
<tr>
<td>Asian, Non-Hispanic</td>
<td>.205</td>
<td>&lt;.001</td>
<td>.257</td>
<td>&lt;.001</td>
<td>.151</td>
</tr>
<tr>
<td>Other</td>
<td>-.047</td>
<td>.085</td>
<td>.019</td>
<td>.778</td>
<td>-.115</td>
</tr>
<tr>
<td>Teacher reported closeness</td>
<td>.087</td>
<td>&lt;.001</td>
<td>.126</td>
<td>&lt;.001</td>
<td>.095</td>
</tr>
<tr>
<td>Teacher reported conflict</td>
<td>-.127</td>
<td>&lt;.001</td>
<td>-.138</td>
<td>&lt;.001</td>
<td>-.168</td>
</tr>
</tbody>
</table>

**Note.** Dependent Variable: Teacher Perceived Conflict with Third Grade Students.

**Figure 4.4**

*The Association Between Teacher Ratings of Third Grade Students’ Math Skills, Student–Teacher Relationships, and Student Race*

In summary, teachers rated the math and reading skills of Black and Hispanic students more negatively than their White and Asian peers regardless of the racial demographic composition of the student body. Although teachers perceive greater closeness in their relationships with White students, they rated the math and reading academic skills of Asian students statistically significantly more favorably than White, Black, and Hispanic students regardless of the racial demographic composition of the student body.
Thus, when race and perceived closeness were taken into account, differences in teachers’ ratings of the reading skills of Black, Hispanic, and Asian students were statistically significant at \( p < .001 \). Teachers rated their perceptions of the reading skills of third grade African American students more negatively than other subgroups and math skills of third grade Hispanic students more negatively than other subgroups. Although teachers’ ratings of students’ skills were more positive in schools with 75% or more historically underrepresented students, Black and Hispanic students are still rated statistically significantly lower in reading and math than their White peers. Although there were slight differences, the demographic composition of the schools did not have a statistically significant association with the way teachers perceived their relationships with students or rated students’ academic performance. Nonetheless, student race and teacher perception of student–teacher relationships were significant predictors of the ways teachers rate their perceptions of student performance in reading and math.

**Summary**

Rosenthal and Jacobson (1968) manipulated teachers’ beliefs of student ability by providing false information regarding students’ academic performance on a nonexistent test and found significantly greater school year gains among students falsely identified to teachers as “growth spurters” (Gershenson et al., 2015). If teachers hold positive expectations toward students, they will be given more learning opportunities, be provided with more detailed feedbacks, be praised more often following success, and be encouraged more often following failure (Chang, 2011). Consequently, if teachers hold negative expectations toward students, they will engage in disadvantageous learning conditions, and teacher behaviors influence student performance in a negative way (Chang, 2011).
As demonstrated throughout this chapter, there was strong evidence to support teacher perceptions were significantly related to racially diverse third grade student achievement. Therefore, these analyses rejected the null hypothesis student performance of third grade students were not associated with student race, teacher perceptions of student–teacher relationships, and second grade academic performance even when the demographic composition of schools were considered.

When student racial demographics were considered, teachers perceived the most closeness with White students in the third grade and the most conflict with third grade Black students. When schools with student bodies consisting with and without 75% or more historically underrepresented demographic compositions were considered, teachers perceived the least closeness in their relationships with Asian students. Even so, teachers rated their perceptions of Asian students’ academic skills higher than other subgroups in math and reading.

The disparity in academic performance, teachers’ perceptions of their relationships with students, and teachers’ ratings of students’ academic skills between White and African Americans was evident. This focus is relevant because many teachers may be unaware of the complexities that can result in contentious teacher–student interactions due to unconscious biases (Milner, 2017). It is troubling, then, teachers have significantly lower expectations for African American students than other racial subgroups. However, whether these “expectation gaps” are evidence of biases in teachers’ expectations or simply reflect accurate predictions perhaps due to differences in preparation, opportunities, or early childhood, investments is an open question that requires further investigation.
CHAPTER 5
Discussion

They tried to bury us, but they didn’t know we were seeds.

–Mexican Proverb

The large and persistent underperformance of African American and Latinx students relative to their White peers is a centrally relevant policy concern because of its implications for long-run inequality (Dee, 2015; Leo & Wilcox, 2020; Wilcox, 2013). Although documenting the existence of disparities is valuable, addressing them requires an understanding of the various factors that may contribute to the observed inequalities (Roksa et al., 2017). Justifiably, the effects that broad institutions, policies, and practices have on these gaps are topics of sustained interest among educators, researchers, and policymakers. Additionally, the United States is experiencing tectonic demographic shifts in its population which are especially evident in the school-aged population (Frey, 2011) but not realized in the teaching force, which remains mostly White.

Considering the racial composition of U.S. schools are shifting, educators must arrive at an unprecedented level of cultural proficiency and instructional effectiveness (Singleton, 2014) because historically underrepresented students continue to lag behind their peers on academic performance measures, standardized achievement tests, high school graduation, and college-career readiness (Carter & Welner, 2013). An emphasis on early elementary grades is important because studies have shown students unable to develop reading and math skills in early grades face increased likelihood of later school failure (Carter & Welner, 2013; Dee, 2004) and daunting trajectories. Although 91% of the state’s White students graduate from high school on time, only 78% of African American and 77% of Latinx students do so (NYSED, 2021). In 2019,
40% of White Americans held a bachelor’s degree, but only 26% of African Americans and 19% of Hispanic Americans held a bachelor’s degree (U.S. Census Bureau, 2020). Although approximately 8% of White Americans live in poverty, 18% of Latinx and 21% of African Americans live in poverty (Frohlich, 2020). Evidence of the school to prison pipeline and arguably some of the most disheartening data is in 2018—African Americans accounted for 33% of the sentenced prison population, nearly triple their 12% share of the U.S. adult population (Gramlich, 2019). Whites represented 64% of adults but 30% of prisoners and although Hispanics represented 16% of the adult population, they accounted for 23% of inmates (Gramlich, 2019).

Addressing this state of affairs is mission critical for many reasons. In their study, Frankenberg and Siegel-Hawley (2008) explained the imperativeness of preparing teachers to work in diverse environments to ensure performance, among all subgroups, reaches increasingly demanding benchmarks since the perception that teachers have of students may exacerbate harmful effects (Steele, 1997). Low expectations either cause emotional responses that directly harm performance or cause students to disidentify with educational environments (Ladson-Billings, 2000; Steele, 1995). Stigmatization of historically underrepresented students could create a feedback loop that functions like a self-fulfilling prophecy (Burgess & Greaves, 2013), causing students to modify their expectations, and in turn, their behavior to conform to teachers’ negative biases (Ferguson, 2003). Detrimentally, teachers who stigmatize students may modify how they teach, evaluate, and advise them (Ferguson, 2003; Steele, 1997). Each of these scenarios leads to poor educational student outcomes, thus perpetuating sociodemographic gaps in educational attainment and performance.
To date, there has been limited research that has examined the intersection of race, culture, teachers’ perceptions of their relationships with students, and academic performance in schools with racially different student bodies. Failure to place these issues at the center of educational decisions makes the U.S. education system that provides service to families appear biased. Through this study, I sought to address these disparities by examining the association between the demographic composition of schools, student academic achievement, and teachers’ perceptions of their relationships with students in elementary schools in a quantitative manner by using data from the Early Childhood Longitudinal Study (ECLS-K:2011). The study used a longitudinal, nonexperimental, quantitative design. This method was appropriate given that manipulation of variables, such as race, is neither possible nor ethical. This method allows the researcher to study what naturally occurs or has already occurred and discuss how variables are related in an approach of this type. Regression models were used to quantify the relationships between the independent and dependent variables and determine the significance of these relationships.

Three theories were used to support this research: Bell and Little’s (1973) theory of critical race theory (CRT), Ladson-Billing’s (2000) theory of culturally relevant pedadgy (CRP), and Paris and Alim’s (2012) theory of culturally sustaining pedagogy (CSP). Each of these frameworks recognizes bias exists in the education system, counters deficit approaches to understanding disparities historically underrepresented people encounter, recognizes the cultural capital families of color bring, critiques dominant power structures, and connects cultural experiences.

Chapter 5 provides a summation of the research questions, findings, implications for policy, practice, and future research. This study will help educators, researchers, and policy
mommakers understand the importance of advocating for culturally responsive sustaining education in schools to mitigate performance gaps between students of color and their peers. This study highlighted:

- Teachers perceived the most closeness in their relationship with White students.
- School racial demographic composition mattered most for Hispanic students.
- In schools with 75% or more historically underrepresented students, teachers perceived the least closeness with Hispanic students.
- Conflict has the same effect regardless of school composition.
- However, closeness is more important in schools with less than 75% historically underrepresented students.
- Teachers rated the math skills of African American students statistically significantly lower than other student subgroups regardless of the racial composition of the student body.
- Teachers rated the math skills of Asian students statistically significantly higher than other student subgroups regardless of the racial composition of the student body.
- In schools with 75% or more historically underrepresented students, teachers rated all student subgroups less favorably in math.

**Research Question 1**

RQ1: How do teachers’ perceived relationships with third grade students differ by student race in schools with different student demographic compositions?

In this research question, I explored whether teachers’ perceptions of their relationships with students differ when student race is considered in schools with racially different student bodies. Teachers’ perceptions of their relationships with students as measured by the student–
teacher relationship scale (STRS; Pianta, 2001) denotes perceived closeness and conflict levels derived from a 15-item, teacher-reported measure of descriptive statements. The teacher indicated the degree to which each statement applied to their perceived relationships with students using a 5-point Likert-type scale ranging from $1 = \text{definitely does not apply}$ to $5 = \text{definitely applies}$. Teachers’ perceived relationship with students is a dependent, continuous scaled variable. Race is specified as an independent, categorical variable. The demographic composition of the student body is a control variable.

**Closeness Scale**

The closeness scale is a measure of the affection, warmth, and open communication the teacher perceives to experience with the student. The closeness subscale is comprised of eight items. Higher scores on the closeness scale indicate the teacher perceived they had a closer relationship with the child. The following seven statements are included on the scale to assess the level of closeness that teachers perceive to experience in their relationship with the student (Pianta, 2001):

1. I share an affectionate, warm relationship with this child.
2. This child and I always seem to be struggling with each other.
3. If upset, this child will seek comfort from me.
4. This child is uncomfortable with physical affection or touch from me.
5. This child values his/her relationship with me.
6. When I praise this child, he/she beams with pride.
7. This child spontaneously shares information about himself/herself.
Conflict Scale

The conflict scale is a measure of the teacher’s perception of the negative and conflictual aspects of the teacher’s relationship with the student. The conflict subscale is comprised of eight items. Lower scores on the conflict scale indicate the teacher perceived his or her relationship with the child to be characterized by less conflict. The following eight statements are included on the scale to assess the level of conflict teachers perceive to experience in their relationship with the student (Pianta, 2001):

1. This child easily becomes angry at me.
2. It is easy to be in tune with what this child is feeling.
3. This child remains angry or is resistant after being disciplined.
4. Dealing with this child drains my energy.
5. When this child is in a bad mood, I know we’re in for a long and difficult day.
6. This child’s feelings toward me can be unpredictable or can change suddenly.
7. This child is sneaky or manipulative with me.
8. This child openly shares his/her feelings and experiences with me.

I found there are statistically significant differences in the way teachers perceive their relationships with racialized student subgroups. Importantly, teachers perceive their relationships with African American, Asian, Hispanic, and Other (i.e., Native Hawaiian/Pacific Islander, non-Hispanic; American Indian/Alaska Native, non-Hispanic; and two or more races, non-Hispanic) students as being less close than their perceived relationship with White students. Although teachers perceive the least closeness with Hispanic students in schools with 75% or more historically underrepresented students and least closeness with Black students in schools that do not have 75% or more historically underrepresented students, the difference in perceived
closeness among racialized non-White student subgroups is not substantively different. Strikingly, teachers perceive having substantively more conflict with Black students than other racialized subgroup of students regardless of the demographic composition of the student body. Teachers do not perceive themselves as being in conflict with Asian students. Teachers perceive their relationship with Black students more negatively than other racialized subgroups, and they perceive their relationships with Asian students to have less conflict than other racialized subgroups, even in third grade. Race, therefore, is a significant predictor of teachers’ perceptions of their relationships with students.

As noted in Figure 5.1, conflict has the same effect regardless of school composition. However, closeness is more important in schools with less than 75% historically underrepresented students.

**Figure 5.1**

*The Association Between Teacher Ratings of Third Grade Students’ Math Skills, Student–Teacher Relationships, and School Demographics*
Implications for Policy

Concomitant changes to provide high quality and equitable opportunities for historically underrepresented students must occur in all segments of society (Gay, 2000). Policy implications include the need for schools to prioritize diversity, equity, and inclusion. Frankenberg and Siegel-Hawley (2008) found White teachers are less likely to receive preparation for working in racially diverse classrooms. As a result, some teachers may blame historically underrepresented students for a lack of success rather than acknowledging the systemic inequities that limit opportunities for them in the United States.

Programs should be designed to empower teacher educators to infuse culturally responsive strategies in their pedagogy so they can help develop students’ critical consciousness and keep cultural backgrounds salient (Gay, 2000; Ladson-Billings, 2000). It is essential practitioners advance an asset-based approach as an alternative to deficit-oriented teaching methods (Paris & Alim, 2017). Deficit models position languages, cultures, and identities of students as barriers to learning, whereas asset-based models ensure students see themselves and their communities reflected and valued in the content taught in school. Thus, culturally responsive pedagogical variability should be the normative standard for accountability in teaching effectiveness (Gay, 2000).

In May 2021, a policy statement was presented to the New York State Board of Regents to encourage and support efforts at state and local levels to create an ecosystem of success built upon a foundation of diversity, equity, inclusion, access, opportunity, innovation, confidence, trust, respect, caring, and relationship building in every school (Young, 2021).

A comprehensive policy approach, as recommended by the New York State Education Department (NYSED, 2021) should include the following:
• Discipline: Equitable codes of conduct;

• Governance: To establish a district diversity, equity and inclusion committee representative of all stakeholders, including students;

• Teaching and learning: The adoption of culturally responsive sustaining teaching and learning frameworks;

• Family and community engagement: Ensuring family and community engagement practices are based on mutual trust, confidence and respect. A shift to parent engagement and empowerment is imperative for educators to move beyond a one-way and disciplinary-focused communication outreach pattern with family members to a more reciprocal approach (Leo et al., 2019); and

• Workforce diversity: Practices and policies for the recruitment and retention of a diverse workforce in all areas and levels.

**Implications for Practice**

Milner (2017) declared a person’s worldview has a direct connection with their personal and professional agendas. Therefore, whether or not teachers connect race-based privilege with systemic inequities could have practical implications for students in their classrooms (Darling-Hammond, 2010; Frankenberg & Siegel-Hawley, 2008). Culturally competent teachers should not only possess knowledge and skills about teaching racially or ethnically different students, but also should possess a strong sense of social justice by thinking about whether or not their teaching contributes to society’s advancement (Amos, 2011).

First and far most, teaching must yield academic success. In the classroom, teachers should focus on microlevel changes by critically reflecting on their knowledge, thoughts, beliefs, and actions using an asset based approach (Gay, 2000). This can be achieved by centering CSP
in instructional techniques, instructional materials, student–teacher relationships, classroom climate, and self-awareness (Gay, 2000). CSP is essential because teachers are a primary domain of influence on student academic performance (Gay, 2000). Ladson-Billings (1995) asserted teaching must develop positive cultural identities and simultaneously enhance academic performance. Furthermore, teaching must support students’ ability to recognize, understand, and critique current and social inequalities (Gay, 2000) by using an approach that not only emphasizes using the cultural knowledge, prior experiences, frames of reference, and performance styles of ethnically diverse students to make learning encounters more relevant to and effective for them (Gay, 2000; Ladson-Billings, 1995; Paris, 2012) but also sustains students’ culture by developing a positive cultural identity and teaching math, reading, problem solving, and civics (Paris & Alim, 2017).

In addition to stabilizing the political and organizational structure of school districts, some recommendations for practice include improving student performance by developing and aligning culturally responsive sustaining policy, curricula and instructional approaches, creating concrete accountability systems for leadership and building level personnel around the sustainment of culturally responsive, data driven practices, and ensuring family and community collaboration. Culturally responsive sustaining policies, curricula, and instructional approaches are intended to help education stakeholders create student-centered learning environments that affirm cultural identities; foster positive academic outcomes; develop students’ abilities to connect across lines of difference; elevate historically marginalized voices; empower students as agents of social change; and contribute individual student engagement, learning, growth, and achievement through the cultivation of critical thinking (NYSED, 2010).
Implications for Future Research

A daunting question is whether progress resulting from microlevel changes such as culturally responsive teaching practices in classrooms will endure over time. Instructional reforms may produce increased academic performance at the classroom level that may not show up in standardized test scores (Gay, 2000). To that end, implications for further research include studies that analyze the long term impact of culturally responsive sustaining education on academic performance and teacher–student relationships. Because teachers are at the helm of instructional decisions and delivery, their perceptions are at the forefront of this study, and future studies should seek to understand how students and caregivers perceive their relationships with teachers in schools with different racial compositions of students. An ideal implication might also be to determine whether there are statistically significant differences in teacher perceptions as they relate to gender and race.

Given the COVID-19 global pandemic, an understanding of how digital inequities impacted student performance, particularly in schools with mostly historically underrepresented students, would be a key topic for further study. The pandemic also gave educators the unforeseen opportunity to take an up-and-close look into the home lives of many scholars and to understand firsthand the relationships and disparities of resources that exist in students’ homes.

An implication for further research would be to understand whether relationships forged out of the pandemic served to impact the perceptions teachers have of racialized subgroups of students. Another very alarming product of the COVID-19 global pandemic has been the racial epithets hurled at Asian Americans and Pacific Islanders fueled by dishonest attempts to associate the Asian community with the spread of the Coronavirus (Young, 2021). Although this study revealed teachers of third grade students do not perceive closeness or conflict with Asian
students but do perceive Asian students to outperform all other racialized subgroups, including White students in the third grade, it would be interesting to understand whether recent biased rhetoric and violence against Asian people impact teachers’ perceptions of their relationships with Asian students and vice versa.

**Research Question 2**

RQ2: In schools with racially different student demographic compositions, how do teachers’ perceived relationships with third grade students compare to teachers’ ratings of the students’ academic skills in reading and math?

In this question, I explored whether there is an association between the ways teachers rate the academic skills of third grade students when student race and teachers’ perceived relationship with students are considered in schools with different student racial compositions. Teachers were asked what level they perceive students’ academic skills to be on a range of 1 to 3 (i.e., 1 being below grade level, 2 being on grade level, and 3 being above grade level) based on third grade curriculum standards for reading and math.

I found teachers’ ratings of third grade students’ academic skills can be predicted by teachers’ perceived relationships with students when student race is considered. The closer teachers perceived their relationships to be with students of various subgroups, the more likely they were to positively rate students’ academic skills. Asian students, however, were rated more positively academically by teachers in all instances. Conversely, when teachers perceived conflict in their relationships with students, they rated students’ academic skills more negatively. This is especially alarming for third grade African American students with whom teachers perceived substantively more conflict in their relationships than any other subgroup.
Fundamentally, something different from what is currently happening must occur in how large numbers of racially different students are taught if academic performance is to significantly improve. The patterns of disproportionate performance among racialized student subgroups are too persistent to respond to cosmetic, sporadic, and selective reforms or to be chance occurrences (Gay, 2000; Milner, 2012). This study advances an empirically grounded and theoretically rich framework for investigation of the relationship of teachers’ perceptions and racially diverse third grade student achievement and suggests implications for future research, policy, and practice.

**Implications for Policy**

Schools can be complex places in which the formal and informal rules advantage the students and families they were originally built to serve (Feldman, 2018). Some might contend schools are doing exactly what they are designed to do—benefit students and families able to navigate invisible and informal rules. However, with tectonic shifts in student demographics, there is a critical need to respond equitably to the diversity of student ethnicities, identities, languages, families, and histories. To be equitable means lifting the veil to make rules explicit and visible by implementing policies that support equitable, transparent, and unambiguous rubrics, and standards-based grading are important shifts to ensuring equity (Feldman, 2018). A key policy recommendation is equitable grading. In this practice, schools remove nonacademic performance from final grades so grade point averages only reflect learning mastery.

**Implications for Practice**

Regardless of teacher qualifications or experience, successful learning depends on a successful student–teacher relationship (Feldman, 2018). Students are motivated, engaged, and have higher performance when they have supportive classroom climates anchored by positive relationships with their teacher (Brock et al., 2008). Hattie’s (2008, 2012), exhaustive studies of
over 900 meta-analyses of over 50,000 education research articles found a positive student–teacher relationship had one of the most powerful influences on student performance.

Particularly for students and families whose experiences have led to a distrust in power, there is a caution against showing vulnerability (Delpit, 2006; Leo & Wilcox, 2019). Traditional grading practices where students are often penalized for making mistakes can further damage trust and undermine healthy student–teacher relationships. One important strategy to limiting the perpetuation of inequities through implicit biases revealed in inequitable grading practices is to remain vigilantly aware of biases. This can happen by ensuring teachers engage in mandatory professional development regarding equity and culturally responsive practices in addition to grading practices that consider the following tenets:

- Avoiding zeros,
- Minimum grading,
- Grades based on required content and not extra credit,
- Grades based on student work and not the timing of the work,
- Excluding participation and effort,
- Rubrics,
- Standards based grade books,
- Retakes and redos, and
- Creating a community of feedback.

Regardless of race, many Americans hold implicit biases (Staats, 2014), a legacy of the U.S. inescapable history of enslavement, colonization, and discrimination (Feldman, 2018). With implicit biases operating outside of our conscious awareness, it might seem difficult to identify any we may hold (Staats, 2016). Researchers have identified several approaches for assessing
these unconscious associations such as the implicit association test (IAT; Staats, 2016). Educators can begin to address their implicit biases by taking the IAT to become consciously aware of some of the unconscious associations they may harbor as a critical first step for counteracting their influence (Devine et al., 2012).

Another approach that research has determined may help change implicit associations is exposure to counter-stereotypical exemplars such as individuals who contradict widely held stereotypes to override their preexisting biases (Dasgupta & Greenwald, 2001; Staats, 2016). Intentional and strategic hiring practices may support this claim, and the inclusion of photographs and décor that expose individuals to counter-stereotypical exemplars can activate new mental associations (Kang et al., 2012).

**Implications for Future Research**

An important study would be to understand how students’ previous grades might influence teachers’ perceptions of student performance. Also, in districts that incorporate equitable grading policies, it would be interesting to see how students perform in relation to teachers’ perceptions of how they should perform. Does in-school segregation increase when schools are more highly integrated? Are there statistically significant differences in teacher perception when gender and race are considered?

Emphasis on nurturing relationships between teachers and family members has long been seen as an important factor affecting student academic outcomes and has also been associated with positive social and emotional effects (Epstein et al., 2019). The need for educators to use better family engagement strategies is one which will undoubtedly continue to call for empirical research.
Limitations

The data in this study were limited to what was accessible to the public. Therefore, the race of teachers was inaccessible. The data set was generated from a larger study that did not focus specifically on teacher–student relationships in relation to race. Further, no assumption of causality between racial demographics of students, the racial composition of schools, teachers’ perceptions of their relationships with students, and performance outcomes were assumed in this study. Rather, the intent in this analysis was to draw out what patterns are shared in teachers’ perceptions of their relationships with students and academic performance in schools with racially different students from the ECLS-K:2011 study. I also acknowledge participants (e.g., administrators, teachers, students, parent/guardians) were identified based upon their willingness to participate in this longitudinal study. If the sampling criteria were based on different measures and different populations, different findings may have been derived.

Overall Implications of Research

- Recognize the impact of issues of race, culture, teachers’ perceptions of their relationships with students, academic achievement, and school composition on students’ access to culturally responsive sustaining practices.

- Acknowledge education and curriculum are based on cultural norms and values that may not reflect the cultural belief and values of all families, particularly families that may be socioeconomically, linguistically, and culturally diverse.

- Broaden the conceptualization of teacher education to include culturally responsive sustaining pedagogy.
• Conduct research that illuminates the complexity of the intersection of race, culture, teachers’ perceptions of their relationships with students, and academic performance from a strengths-based versus a deficit conceptual framework.

Summary

Historically underrepresented people are contributors to the culture and legacies upon which history and human society are built and should be preserved; yet, the chronicles of contributions made by historically underrepresented people are not often told. In effort to strengthen the relationship between historically represented students and teachers, it is imperative their narratives are shared and not shunned to build trust and understanding. Racially, linguistically, and culturally diverse youth carry with them resilience, power, intellect, beauty, ideas, and variable assets that enhance the schools they attend and society at large. Narratives that include the meritorious contributions of historically underrepresented people must be woven into the fabric of the global story told about the myriad of assets and cultural richness they bring, including but not limited to, the arts, sciences, and literature.

Furthermore, it is critical to include the ideas and representation of leaders from diverse backgrounds as they often develop more creative insights, offer alternative and comprehensive solutions and thus make decisions that better support the people they serve (Williamson & Scicchitano, 2015). Like governments, educational institutions representative of its people are better run, implement inclusive policies, and elevate a diverse set of role models (Williamson & Scicchitano, 2015). Simmons (2017) asserted it is important to create opportunities for people to tell their own stories. Williamson and Scicchitano (2015) further proclaimed the inclusion of underrepresented perspectives yields unique experiences, opinions, and thoughts on critical issues that help to serve the needs of the entire population, especially historically disenfranchised
communities, thus benefiting all of society. This substantiates the importance of including the narratives of historically underrepresented people in education as one way to enhance teacher–student relationships by ensuring students of color feel validated, worthy, seen, and heard in classrooms and beyond.

It is reasonable to believe the recent events of race related violence that have unfolded in social media, the digital divide, and multiple pandemics, including but not limited to COVID-19, economic and racial pandemics have exacerbated, further exposed disparities, and created feelings of unrest powerful enough to move us beyond the systems of injustice that have plagued education institutions in the United States. The approach to a culturally responsive education, nonetheless, has to be comprehensive, inclusive, holistic, and all-encompassing as today’s decisions will chart the course of the nation’s future.

Data supports teachers’ biased perceptions of their relationships with students and students’ academic skills can occur as early as the third grade against historically underrepresented students. The national trend is such that schools are becoming more populated with historically underrepresented students; yet, even in schools with mostly historically underrepresented students, data shows when student race is considered, it can be predicted that teachers’ perceptions of their relationships with students and students’ academic skills are less favorable for racialized subgroups of students. Most notably, teachers perceive statistically significant and substantively more conflict with Black students than other racialized student subgroups in the third grade.

As Young (2021) asserted, there are individuals behind each of these data points. Children need advocates. The responsibility of education is not only to prevent the exclusion of historically silenced, erased, and disenfranchised groups, but also to assist in the perpetuation
and promotion of cultures, languages, and ways of knowing that have been devalued, suppressed, and imperiled by years of educational, social, political, and economic neglect and other forms of oppression (Young, 2021).

The so-called achievement gap will continue to go misinterpreted, misdiagnosed, and mistreated if we continue to misname it. This so-called achievement gap is a gap in opportunities, a gap in sensibilities, a gap in reasoning, and a gap in love. It is a gap in the heart and soul of mankind that fails to see the uniqueness, creativity, and greatness humans can all achieve when they learn and grow together. If not filled, this gap will leave an emptiness that will destroy our children, our future, and our world.

The impetus to indulge in this study is rooted in my experiences as a youth and an educator. As a young person growing up in Brownsville, Brooklyn, I understood the critical importance of establishing connections as a means of survival. Critical thinking, awareness, and cultivating healthy relationships could mean the difference between getting home safely or ending the day with a bullet to the head.

The sounds of fighting, gun shots, the number three train, stray dogs barking, ice cream trucks at night, and bottles breaking were like white noise, and I would not change my experience for the world. It built a keen awareness of the impact relationships could have on one’s life. Understanding how to leverage negotiation skills on the block to avoid getting slashed in the face with a razor for “thinking I’m cute” required fortitude and resilience while simultaneously wearing the latest fashion and jewelry to avoid ridicule. The survival skills it took to ride the train home, for instance, meant once the train passed Atlantic Avenue, it was time to either remove jewelry, tuck it in, or put earrings on backward so that they would not get “clipped” (i.e. ripped from my ear). It also meant not sitting by the train door until I was on
familiar turf. Most importantly, it meant building relationships to build cultural capital in my neighborhood.

I also understood the importance of code switching. Although I grew up in an impoverished neighborhood, my family was extremely goal oriented. My grandparents raised seven children in the Jim Crow south and sent each one to college to receive post graduate degrees. College, for me, was the expectation even though my community surroundings told a different narrative. Nonetheless, I was determined not to be defined by my zip code but to upset the status quo.

While attending honor classes in high school, I often served as one of few historically underrepresented students in the class. I witnessed segregatory conditions in the school in terms of who had access and opportunity to take high leverage courses. Being able to leverage any social or cultural capital I was afforded meant navigating challenging student–teacher relationships, fostering negotiation skills, unpacking interest convergences, and engaging in courageous conversations at every station. I believed the perceptions teachers had of our relationships in many ways determined how they rated my academic performance.

These experiences were apparent in my personal and professional roles. Having served over 20 years in the capacities of a secondary and elementary school teacher and elementary and secondary principal, I witnessed the way teachers’ perceptions of student behavior and student–teacher relationships can impact the trajectory of a child’s life. One school system in which I worked was cited for disproportionality and depressed graduation rates for African American students and Latinx students. After disaggregating the data, I learned when African American students were suspended, the number one reason was insubordination and the descriptions of the incidents varied from refusal to remove hats to the use of profane language. However, White
students were most frequently suspended for tangible incidents, such as throwing furniture or physical altercations. The relationship perspective, therefore, was critical regarding the referrals and student discipline. The outcome was the implementation of programs designed to enhance student–teacher relationships such as advisory programs and professional learning communities (PLCs).

Ultimately, this research demonstrated student–teacher relationships matter. It matters for all students. Teachers have the power to make decisions that can predict students’ life chances. Placing students in low leverage sequenced math classes, for example, can determine the courses students are able to take later in life. It matters because as we move toward a more globally connected future, it is important all students have access and opportunities to be successful and we are intentional in our practices, policies, and research in leading the charge to more equitable outcomes for all students.
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