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Through Their Eyes: A Descriptive Phenomenological Study Examining the Role of the Teacher Certification and Licensure Process and the Teacher Racial Diversity Gap in New York State Public Schools

Abstract

The purpose of this qualitative descriptive phenomenological study was to investigate if and how the teacher certification and licensure process influenced the Black public school teacher participants, who were teaching in New York State schools, and how they perceived and experienced the certification and licensure exam process.

Through the lens of critical race theory, this study examined 12 Black teacher participants' lived experiences and perspectives regarding if and how the teacher certification process influences New York State schools' teacher racial diversity gap. Following descriptive analysis steps, three essential themes emerged: (a) minimal information on how to become a teacher, (b) standardized tests, and (c) my Black experience. The findings highlighted the lack of diversity within the teaching profession as well as the obstacles faced by Black learners and teachers on state exams. Given the lack of resources, accessibility issues, and the underrepresentation of Black and brown teachers in the classroom, academic progress is hindered, and Black students are discouraged from pursuing careers in education. This study recommends policy and certification examination modifications to create a more equitable educational system and teacher education and support programs to be developed for all students—particularly those from underrepresented groups.

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Through Their Eyes:
A Descriptive Phenomenological Study Examining the Role of the Teacher Certification and
Licensure Process and the Teacher Racial Diversity Gap in New York State Public Schools

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Submitted in partial fulfillment
of the requirements for the degree
EdD in Executive Leadership

Supervised by

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St. John Fisher University

August 2023

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2023

Dedication

I am extraordinarily blessed to have the opportunity to engage in personal growth and self-development as part of the EdD program. Similarly, to my participants, I struggled to pass the teacher certification examinations, and I share some of their same Black experiences. It is due to my own Black experience that I am now engaged in advocacy, access, equity, and teacher racial diversity work. I dedicate this dissertation to the courageous Black teachers who relived and shared their personal experiences to make this study possible, as well as to all future Black teachers.

To my family, close friends, and new friends gained during this endeavor, I thank you for your prayers, support, patience, love, and guidance. Lord knows I would not have succeeded without you being part of this journey. You know who you are; I am forever grateful for each and every one of you!

Thank you, Dr. Brown, Dr. Allen-White, and Dr. Pulos for your leadership and support. In some way, you contributed to my accomplishment in completing this dissertation. I am learning to “Trust the Process.”

This is for all the Black scholars looking to pursue a career in education. Your Black experience matters. Black teacher, you matter, and we need you!

Biographical Sketch

Nichole Brown is currently the Director of the Clinical Practice and Partnerships Office and the Project Director for the Teacher Opportunity Corps (TOC II) Initiative at the State University of New York at Oswego. Ms. Brown attended the University of Tennessee at Martin from 2000 to 2005 and graduated with a Bachelor of Sciences degree in 2005. She attended Middle Tennessee State University from 2006 to 2007 and 2008 to 2010. Nichole graduated with a Master of Education in Administration & Supervision degree in 2007 and with an Education Specialist degree in Curriculum & Instruction/Educational Leadership in 2010. She came to St. John Fisher University in the summer of 2021 and began doctoral studies in the EdD Program in Executive Leadership. Ms. Brown pursued her research in teacher diversity by exploring Black teachers' lived experiences and perspectives about whether and how the teacher certification process influences New York State schools' teacher racial diversity gap under the direction of Dr. David Brown and Dr. Katrina Allen-White and received the EdD degree in 2023.

Abstract

The purpose of this qualitative descriptive phenomenological study was to investigate if and how the teacher certification and licensure process influenced the Black public school teacher participants, who were teaching in New York State schools, and how they perceived and experienced the certification and licensure exam process.

Through the lens of critical race theory, this study examined 12 Black teacher participants' lived experiences and perspectives regarding if and how the teacher certification process influences New York State schools' teacher racial diversity gap. Following descriptive analysis steps, three essential themes emerged: (a) minimal information on how to become a teacher, (b) standardized tests, and (c) my Black experience. The findings highlighted the lack of diversity within the teaching profession as well as the obstacles faced by Black learners and teachers on state exams. Given the lack of resources, accessibility issues, and the underrepresentation of Black and brown teachers in the classroom, academic progress is hindered, and Black students are discouraged from pursuing careers in education. This study recommends policy and certification examination modifications to create a more equitable educational system and teacher education and support programs to be developed for all students—particularly those from underrepresented groups.

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Chapter 1: Introduction

In the United States, the most prevalent occupation is primary and secondary education (Ingersoll & Merrill, 2017). The proportion of educators from diverse backgrounds to students with the same race or ethnicity remains low despite evidence demonstrating a correlation between racial and ethnic representation among educators and improved student performance (Vinopal & Holt, 2019). Moreover, minority educators are underrepresented in American classrooms (Perkins, 2016). In 1972, when the United States Department of Education (USDOE) began collecting demographic data on newly desegregated institutions, approximately 22% of students were of color. Educators of color comprised 12% of the teaching force, a 10% disparity compared to White educators (USDOE, 2001). Since the mid-1980s, when several Black academics, school administrators, and unions brought attention to the student-teacher demographics in elementary and secondary public schools, efforts to diversify the teaching workforce has garnered national attention (Villegas et al., 2012).

Since the 1954 *Brown v. Board of Education* decision, which substantially whitened the teaching profession, efforts have been ongoing to diversify the teaching workforce (Marrun & Clark, 2020). Despite research documenting the importance of a diverse teacher workforce, after decades, these efforts have been largely unsuccessful (Carver-Thomas, 2018; Schwartz, 2001). As a result, a greater understanding of the obstacles to increasing diversity in the teaching field is required. Diversity can be defined in many ways; however, diversity is defined in this study as an individual's racial and ethnic background (New York State Education Department [NYSED], 2019). Teacher diversity refers to different elements of diversity in the aggregate makeup or

population of kindergarten through Grade 12 (K–12) public school teachers (Council of Chief State School Officers [CCSSO], n.d.). The primary focus at the time of this research was the diversity of Black in-service educators who were employed within a school district in New York State.

The Black educator shortage is one structure that a historic race-neutral policy, *Brown v. Board of Education*, significantly shaped (Johnson, 2019). *Brown* desired that everyone would have equitable access to resources, schools, and learning opportunities. The objective of the *Brown* case was to ensure that all students, regardless of race, received an exceptional education (Zepeda & Ponticell, 2018). The decision paved the way for the Civil Rights Movement and provided African Americans with optimism that the status quo of separate but equal would be overturned (Loder-Jackson et al., 2023). Unfortunately, the objective did not come to full fruition. Although schools were desegregated, *Brown*'s unintended implications precluded the integration of Black educators into White schools (Lash & Ratcliffe, 2014). The *Brown* decision resulted in well-intentioned improvements, but the unforeseen consequences harmed Black communities and schools—the very institutions the decision was supposed to support (Lash & Ratcliffe, 2014). Between 1954 and 1965, the *Brown* decision led to the dismissal of over 6,000 Black teachers and over 50% of the Black principals in 11 out of 17 Southern states (Ethridge, 1979). The majority of the 17 states with segregated school systems removed Black teachers who had high educational qualifications and replaced them with White teachers with fewer educational qualifications, lower levels of teachers' licenses, and, in certain instances, White teachers with no teaching certifications (Will, 2022). Again, White teachers remained in the classrooms, including those with provisional certificates (Ethridge, 1979; Tillman, 2004).

During the 1950s in the United States, those working in the field of education constituted a significant proportion of the Black professional workforce (Foster, 1996). There were 6.9% fewer Black educators between 1971 and 1986 (Foster, 1996) than there were in the 1950s and 60s. The fall in the employment of Black teachers in public schools across the United States during the 1950s and 1960s has been linked to the phenomenon of school integration (Ethridge, 1979; Karpinski, 2006). As noted previously, the *Brown* case was only focused on school integration—not teacher integration across schools (Lash & Ratcliffe, 2014).

There were substantial challenges for Black educators after *Brown*, with the examination and certification procedure having a disproportionate effect (Carter Andrews et al., 2018; Lash & Ratcliffe, 2014). Before the 1950s, the only requirement to become a teacher was a 2-year degree, and there were no certification examinations (Stennis-Williams, 1996). By 1984, 38 states required competency-based exams for initial and/or continuous certification (Sandefur, 1984). During the period from 1984 to 1989, a significant number of Black teachers, totaling 21,500 individuals, were terminated as a result of the implementation of the new teacher education program and certification prerequisites (Will, 2019). In order to enhance the caliber of educators, assessments of competence were devised; yet, certain Black teachers were subjected to exclusion from the teaching profession, and throughout the majority of states, the success rates for Black candidates were significantly inferior to those of their White counterparts (King, 1993). The exams were used to evaluate or screen out Black teachers from entering the profession (Ethridge, 1979; Lash & Ratcliffe, 2014; Tillman, 2004).

According to Sundaram (2023), the average pass percentage for the National Teachers Examination (NTE), which was adopted in 1984 in New York State, was 84% for White test-takers, 44% for Black test-takers, and 40% for Latino test-takers. A class-action lawsuit was filed

in 1996 by four Black and Latino teachers who lost or were refused jobs, were downgraded to substitute status, or were given pay reductions after failing the exams in New York State (Sundaram, 2023). The estimated number of Black and Latino teachers impacted by the exam between 1993 and 2014 ranged from 8,000 to 15,000 teachers in New York State (Modan, 2022).

According to Binayao and Dales (2020), passing licensure exams is a requirement for practicing one's profession and for achieving expert status in one's field. In educational research, however, problems with teacher certification examinations have been identified, demonstrating that minority teachers are disadvantaged by licensing exams. The majority of this study focused on claims that examinations are unfair and racially biased.

A multitude of investigations and judicial actions have been initiated, including the research conducted by Baker-Doyle and Petchauer (2015), Graham (2013), Souto-Manning (2019), and Tillman (2004), among other prominent scholars. The research undertaken by Ellis and Epstein (2015) and the legal case of *Gulino v. Board of Education* (2021) have provided evidence to suggest that assessments have discriminatory tendencies and may contain biases related to language and culture. Therefore, it is crucial to acknowledge and tackle the adverse impacts that these assessments have on the demographic makeup of the teaching profession. Furthermore, empirical research proposes that these examinations possess little efficacy in accurately predicting the extent to which prospective teachers will impact student achievement (Hill et al., 2012). Research has demonstrated that teacher licensure examinations contribute to the perpetuation of inequitable practices that disproportionately impact students of color (Neal et al., 2015). This is mostly achieved through the implementation of gatekeeping assessments, which restrict the diversity within the teaching profession (Neal et al., 2015).

Individual states regulate teacher licensure. The complexity of the teacher licensing landscape is influenced by the intricacies of teaching and the diverse range of initiatives undertaken by different jurisdictions to enhance teaching and learning. States require candidates to complete education and supervised teaching requirements, pass required tests, demonstrate high moral character, and adhere to additional licensure standards (Mitchell et al., 2001). Laws and policies are the product of the people.

Institutional racism continues to be part of the structures, policies, and functions of schooling (Pizarro & Kohli, 2020). Consequently, certain mechanisms operate as obstacles that impede the process of recruiting and retaining educators from diverse racial backgrounds, thereby undermining efforts to promote educational achievement (Carter-Andrews et al., 2016). This study examined how 12 New York State Black public school teacher participants experienced the teacher certification and licensure exam process, as well as to examining if and how the teacher certification and licensure process influenced the teacher racial diversity gap in schools. The perspectives expressed by Black educators regarding the discrepancy in racial representation among teachers possess substantial scholarly merit as they provide an understanding of the intricate dynamics of racism and race that contribute to the enduring underrepresentation of teachers of color, specifically Black teachers, within the profession (Villegas et al., 2012). Insight into the Black teacher perspective could inform policies and practices that eliminate obstacles (Carter Andrews et al., 2018).

Importance of Teacher Diversity

Education researchers have uncovered data suggesting that a more diverse teaching staff could benefit children of color, specifically Black and Latino students (Putman & Walsh, 2021b). Empirical evidence supports the notion that children who receive instruction from a teaching

staff that reflects greater diversity tend to experience a decrease in disciplinary measures, an increase in enrollment in gifted programs, a diminished probability of being assigned to special education programs, and superior educational achievements (Grissom et al., 2015). More than half of the student demographic in schools within the state of New York currently consists of individuals from ethnically and racially diverse backgrounds (NYSED, 2019). On the contrary, it is noteworthy that almost 80% of the total population of teachers in New York, which amounts to 210,000 individuals, are identified as belonging to the White racial group (NYSED, 2019).

According to the CCSSO (2019), racial diversity enriches all workforces, including schools and classrooms in the Americas. In a society characterized by diversity, the presence of a diversified teaching workforce offers benefits to all students. However, it is imperative to emphasize the importance of racial diversity within the teaching profession to promote educational equity (CCSSO, 2019). It is essential to recruit and retain a greater range of ethnically and racially diverse teacher personnel to ensure that all young people have role models who reflect the nation's diversity (Carver-Thomas, 2018). Increasing racial diversity within the teaching profession is crucial for improving the educational outcomes of students from marginalized racial backgrounds and addressing the existing discrepancies in academic performance (Carver-Thomas, 2018).

According to Driessen (2015), the presence of a more diverse teaching staff is associated with increased racial alignment, ethnic unity, and racial consonance among students of color. Consequently, this may lead to improved academic performance among these students. The topic of equitable education for students of color is multifaceted and encompasses a significant body of knowledge. In order to effectively address this educational reform, the presence and active involvement of teachers of color are important (Jackson & Kohli, 2016). Since 1978, the New

York State Board of Regents' primary objective has been to improve educational equity (NYSED, 2019). Despite the increasing diversity of the student bodies, the state's teaching personnel remains predominantly White (NYSED, 2019).

Same Teacher-Student Academic and Nonacademic Benefits

The importance of promoting diversity within the teaching profession is emphasized by the wide range of academic and nonacademic accomplishments exhibited by students from diverse racial and ethnic backgrounds (Noonan & Bristol, 2020). A multitude of research studies demonstrate the significant advantages associated with increased teacher diversity, with a special emphasis on the valuable contributions that teachers of color can make to the educational experiences of all students, particularly those from minority backgrounds (Carver-Thomas, 2018). According to Vinopal and Holt (2019), the number of studies demonstrating the significant benefits that educators from diverse backgrounds bring to schools and learners of color continues to rise.

The matter of representation is of great importance in the field of education, since scholarly research has demonstrated that educators from diverse racial and ethnic backgrounds have a beneficial influence on the academic performance of every student, particularly those from diverse backgrounds (Carver-Thomas, 2018). In addition, educators who are members of racial and ethnic minority groups demonstrate a heightened level of culturally responsive pedagogy. They also hold a more favorable perception of students from diverse backgrounds, actively contribute to cultivating an inclusive atmosphere for students of color in the educational setting, and receive commendable evaluations from all students (Carver-Thomas, 2018). Research has demonstrated that the inclusion of Black educators in the teaching profession yields beneficial outcomes for Black students in terms of their academic performance. This is

evidenced by notable enhancements in standardized test scores, heightened rates of college admission, greater likelihood of receiving recommendations for gifted and talented programs, as well as diminished instances of disciplinary actions and attrition (Egalite et al., 2015; Gershenson et al., 2017). This is evidenced by increased test scores, college enrollment, and recommendations to gifted and talented programs. To address the discrepancies in opportunities and academic achievement among different racial and ethnic groups in public schools, Redding (2019) argues that it is imperative to identify and implement practices and policies directed explicitly to the needs of historically marginalized racial and ethnic groups.

Teacher Preparation

Since 2008, enrollment in teacher preparation programs, which constitute as the entry point for individuals into the teaching profession, has decreased by more than 30% (USDOE, 2016). The recruitment and retention of ethnically diverse teacher candidates is further complicated by decreasing numbers and funding in teacher preparation programs (ACT, 2015). To use resources effectively and efficiently, frameworks that promote effective recruiting and retaining strategies must be developed (American Association of Colleges for Teacher Education, 2013). Advocating for inclusive recruiting, employment and retention practices—removing barriers and providing resources and actions for change—can offer pathways for increasing workforce diversity (Casey & Welborn, 2020). Strengthening teacher pipelines requires aligned systems that open diverse entry points, provide initial preparation, and create ongoing growth and development (Nava-Landeros et al., 2020).

There were 2,172 teacher preparation providers and 515,514 students enrolled in programs for educator preparation in the country and territories during the 2018–2019 academic year (USDOE, 2018). In the past decade, there has been a gradual shift in overall enrollment by

race and ethnicity. There were 53,674 Black students were enrolled in a teacher education preparation program during the 2018–2019 academic year (Title II, 2018). According to the 2019–2020 Title II report, New York State had 129 teacher preparation providers. Throughout the 2019–2020 academic year, only 0.10% or 51,165 students were enrolled in a program, but only 5,169 of the students identified as Black (Title II Higher Education Act, n.d.).

There are two primary pathways for individuals seeking entry into the profession of education: traditional preparatory programs and alternative certification programs. Traditional teacher preparation programs are typically pursued concurrently with a bachelor’s degree in education. Alternate certification programs, on the other hand, are frequently designed for career-changers seeking to enter the field and frequently lead to a master’s degree or postgraduate certificate. According to the 2019–2020 Title II report, 51,165 students were enrolled in teacher preparation programs. There were 45,076 traditional preparation program registrants and 6,089 alternative certification program registrants among the 51,165 total registrants (Title II, n.d.). Black students comprised only 5,169 of the 51,165 who matriculated through an educator training program for 2019–2020 (Title II, n.d.).

Traditional Pathways to Certification

Historically, the most widely chosen pathway for individuals seeking licensure in the State of New York has been through traditional educator preparation programs offered by institutions of higher education (Title II, n.d.). The Council for the Accreditation of Educator Preparation (CAEP, 2020) accredits educator preparation programs in higher education institutions. To acquire certification through the conventional pathway in New York State, individuals must successfully fulfill the requirements of a teacher education program at a university or college inside New York State. Subsequently, they must receive a recommendation

for certification, contingent upon the program's registration with NYSED. In addition to completing a teacher training program, candidates are required to pass the necessary exams and obtain fingerprint clearance.

Alternative Pathways to Certification

In contrast to higher education institutions' traditional educator preparation programs, alternative certification programs provide adults with different routes to becoming teachers (Zhang & Zeller, 2016). Alternative certification programs have attracted individuals from different professions to the teaching vocation. Alternative certification programs have also increased the number of males and individuals from diverse backgrounds entering the education profession. Alternative pathways comprised 34% males, whereas standard educator preparation programs had only 22% men (USDOE, 2016).

Additionally, 41% of individuals enrolling in alternative pathways were from underrepresented groups (USDOE, 2016). In comparison, just over one-quarter of those enrolled in traditional educator preparation programs were from underrepresented populations (USDOE, 2016). New York State provides an alternative preparation program for experienced second-career employees. State colleges in New York State offer alternative programs in collaboration with local institutions. They feature a brief introduction and paid job opportunities with intensive coaching, coursework, and other institutional and educational support (NYSED, 2019).

Teacher Licensure Examinations

Licensure exams are an essential part of the professional matriculation process for potential teacher candidates. Because of inequalities in passing rates, the examinations directly affect racial demographics and contribute to the teacher shortage (Ingersoll & May, 2011; Petchauer et al., 2015; Taylor et al., 2018). States employ competency examinations to judge

admittance into or the continuation of the teaching profession (Stennis-Williams, 1996).

Competency examinations have been the topic of ongoing discussion regarding their impact on the decreasing proportion of teachers of color (Stennis-Williams, 1996). The National Teacher Examination (NTE), which emerged in the 1950s, has become the prevailing assessment tool for evaluating teacher competencies. However, it was not widely mandated for license purposes until the 1980s (Stennis-Williams, 1996).

Like most other states, New York has traditionally expected aspiring educators to successfully complete a series of certification exams demonstrating they possess the necessary abilities and expertise to become certified (NYSED, 2019). Depending on their field of certification, New York State requires candidates to pass two licensure exams: Educating All Students (EAS) and one or more of the Content Specialty Tests (CSTs) (NYSED, 2019).

Problem Statement

After the *Brown v. Board of Education* decision, teacher competency evaluations were devised to prevent Black educators from working in White schools (Tillman, 2004).

Consequently, post-*Brown*, teacher certification examinations, such as the NTE were used for many years to dismiss Black teachers (Fultz, 2004). The underperformance of Black teacher candidates on certification exams can be shown by their underrepresentation in the teaching profession, according to research published by Moser (2012) and Petchauer (2014).

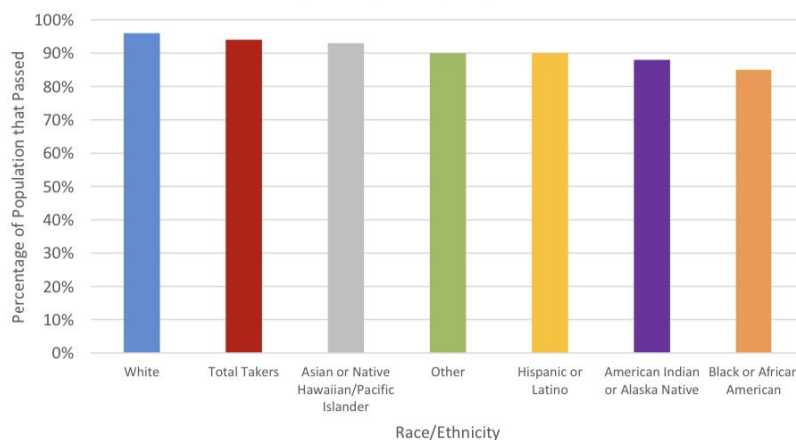
In New York State, 12,217 students completed a traditional preparatory program in 2019–2020, while 2,096 students completed a program via an alternate pathway (Title II, n.d.). For the 2017–2018, 2018–2019, and 2019–2020 school years, New York State maintained an 86% pass rate on state credentialing examinations (Title II, n.d.). Out of 9,925 test takers for the 2019–2020 academic year, 8,537 individuals passed the examinations (Title II, n.d.). According

to the 2019–2020 Title II data for program completers, 3,680 students did not take the state certification exams. Unfortunately, the ethnic and racial makeup of the program graduates and test takers who passed the required certification exams during each of those academic years is unknown.

In order to obtain certification in the State of New York, participants in this study were required to complete and pass three exams for teacher certification. For a more comprehensive picture of the pass rates for these exams for takers between 2013–2019, Figure 1.1. shows the pass rates for roughly 93,000 candidates’ highest CST attempts (NYSED, 2019). The number excludes 7,627 test takers who refused to identify their race or ethnicity. Figure 1.1 illustrates that White candidates achieved a pass rate of 96%, surpassing the overall average pass rate of 94% by a margin of two percentage points. In contrast, Black candidates exhibited an average pass rate of 85%.

Figure 1.1

CST Pass Rates, 2013–2019



Note: Reprinted from the New York State Department of Education December 2019 Educator Diversity Report

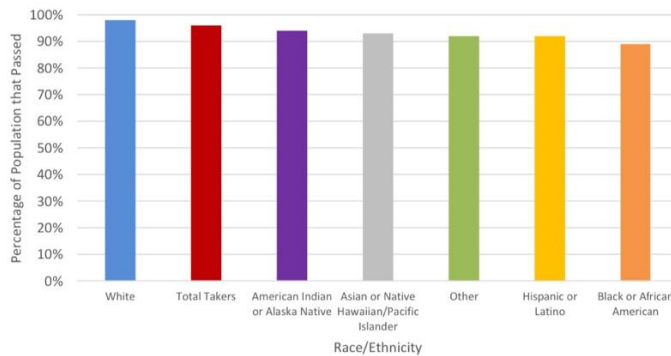
(<https://www.nysed.gov/sites/default/files/programs/educator-quality/educator-diversity-report-december-2019.pdf>) In public domain.

Figure 1.2 shows the pass rates for 87,000 candidates' highest EAS exam attempts. The percentage excludes the 6,456 respondents who declined to disclose their race or ethnicity.

Figure 1.2 shows that White candidates had the highest pass rate at 98% on the EAS, whereas Black candidates had the lowest at 89%.

Figure 1.2

EAS Pass Rates, 2013–2019



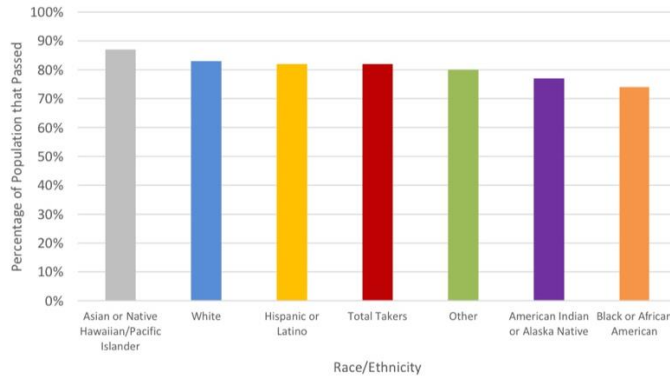
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(<https://www.nysed.gov/sites/default/files/programs/educator-quality/educator-diversity-report-december-2019.pdf>) In public domain.

The pass rates for approximately 50,000 candidates' best Educative Teacher Performance Assessment (edTPA) attempts are shown in Figure 1.3. The proportion excludes the 4,940 respondents who did not specify their race or ethnicity. Figure 1.3 shows that White candidates scored the second highest rate at 85% on the edTPA, whereas Black candidates scored the lowest at 74%.

Figure 1.3

edTPA Pass Rates, 2013–2019



Note: Reprinted from the New York State Department of Education December 2019 Educator Diversity Report

(<https://www.nysed.gov/sites/default/files/programs/educator-quality/educator-diversity-report-december-2019.pdf>) In public domain.

There is an ongoing dearth of diversity among educators. The impact of certification and licensure processes on teacher diversity in New York State remains questionable. This current study explored the Black teacher candidates’ lived experiences and perspectives regarding if and how the teacher certification and licensure process influences New York State schools’ teacher racial diversity gap. This study gave Black in-service teachers, who attended a New York State teacher education program, and who, at the time of this research, were teaching in New York State public schools, the opportunity to share their experiences with the teacher certification and licensure process concerning teacher racial diversity among K–12 teachers, which provided valuable information to help policymakers close that teacher racial diversity gap.

The research concern that was addressed was the lack of diversity among teachers (Boser, 2014). What is unknown, in terms of teacher racial diversity among K–12 teachers, is the Black teachers’ perceptions of the licensure and teacher certification process. Black educators’ perspectives on the teacher racial diversity divide are crucial for comprehending the integral part

that race, as well as racism, play in explaining why there is still a shortage of educators of color—particularly Black teachers—in the workforce. The Black teacher perspective could be used to provide insights that could be used to create policies and procedures that reduce barriers.

As the diversity of New York State’s student demographic composition has become broader, the ethnic and racial makeup of the teaching staff has remained unchanged (NYSED, 2019). Based on the findings of NYSED (2019), it was observed that around 80% of New York State's teaching workforce, which amounts to just over 170,000 individuals, consisted of individuals who identified as White. Consequently, it was evident that educators from racial and ethnic minority backgrounds were not proportionally represented within the teaching profession. The number of Latino or Hispanic teachers increased from 13,877 in 2011–2012 to 16,078 in 2016–2017, but the number of Black teachers had remained moderately stable at 10%, around 18,000 (NYSED, 2019).

The number of students of color fluctuates by district, whereas educators of color have little representation statewide. The greater proportions of educators of color tend to be hired in regions and school districts with a disproportionately large number of students of color. Despite this, there is still a substantial disparity between the number of educators of color and the number of students of color (NYSED, 2019). From 2011 to 2017, New York City had the least overall percentage of educators of color to students of color, with one teacher for every 30 (1:30) students of color. During the exact same time period, the ratio was one teacher for every 64 (1:64) students of color in the four largest cities in New York State, but the ratio for the rest of the state was one teacher for every 129 (1:129) students. NYSED (2019) also reported that in the Big 5 school districts of New York State (Buffalo, New York City, Rochester, Syracuse, and Yonkers), the ratio was 1:64. Buffalo reported a ratio of 1:56, New York City reported a 1:3-

ratio, Rochester reported 1:47, Syracuse reported 1:102, and Yonkers reported 1:50 ratio of teachers to students of color. More than 200 of the New York State's public school districts did not have a single minority educator on staff during the 2016–17 school year (NYSED, 2019).

Throughout the 2018–2019 school year, only 19% of the state's public school teachers were teachers of color, and more than 175 districts had no teachers of color. Within the state's Big 5 districts, Buffalo Public Schools employed 255, or 0.08%, Black teachers; Rochester City School District employed 322, or 0.12%, Black teachers; and Syracuse City School District employed 131, or 0.09%, Black teachers (NYDatabases.com, n.d.). There were 143, or 0.08%, Black teachers in the Yonkers Public Schools and 12,161, or 0.17%, in the New York City Public Schools. In 2018–2019, NYSED (2019) reported that only 13,012, or 16%, of the 79,135 Big 5 district teachers in New York State were Black, and only about 8% of the teachers, statewide, were Black individuals (Campbell, 2020).

In order to have a full comprehension of strategies for the recruitment and retention of a diverse teaching workforce, it is imperative to place increased emphasis on the experiences of preservice and novice teachers from racially diverse backgrounds (Sleeter, 2001). In the initial years of teaching, teaching styles and methods become established as novice educators establish their professional identification distinct from their student teaching experience (Wang et al., 2008). Most prevalent are school context influences on retention (Wang et al., 2008).

The case of *Brown v. Board of Education* is of great significance due to its key role in advancing the cause of ensuring equitable educational opportunities for Black children. Nevertheless, an examination of critical race theory (CRT) reveals insights into the benefits that school desegregation imparts to White children and teachers. The central tenet of CRT is that race is a construct of society, and racism is not solely the result of human prejudice or bias, but it

also has its roots in judicial structures and regulations (Wysocki, 2011). The methodology and framework of CRT, which posits that racism is ingrained in the legal system and government policies rather than being only attributed to human prejudice, may be traced back to significant historical origins. CRT views race law and policy as instruments of power. As a result of school integration, the verdict led to the loss of many Black teachers and administrators. *The Brown v. Board of Education* ruling initiated a phase characterized by unparalleled legal, educational, economic, and political initiatives that sought to dismantle the systems of oppression and racism rooted in segregation. (Lynn & Dixon, 2013). Yet, decades later, schools remain segregated, and institutional racism persists.

Theoretical Rationale

This research investigation explored the role of race and racism in the underrepresentation of teachers of color, with a specific focus on Black educators, within the education workforce. This study employed the CRT paradigm to analyze this phenomenon. CRT is a scholarly framework that centers its attention on the examination and alteration of the dynamics between power, racism, and race (Delgado & Stefancic, 2017). The theoretical analysis for this research regarding if and how the teacher certification and licensure exam procedure contributes as a barrier to workforce diversity is based on CRT.

This study employed Amedeo Giorgi's data analysis approach, using a framework based on CRT. CRT was implemented in three ways: the tenets guided the development of the interview protocol, analysis, and the use of storytelling. Education researchers have initiated the development of a critical analysis pertaining to racism and race within the field of education (Crenshaw, 2002), CRT formulates a discourse centered on racism and race in the law. CRT within the academy challenges the established assumptions made by the education system and its

organizations regarding neutrality, meritocracy, prejudice, racial impartiality, and equal opportunity (Solórzano & Yosso, 2001). CRT educators advanced the study of race within academia (Tate, 1997) from a perspective of racial deficiency to uncovering the persistence and prevalence of racism in our societal fabric.

CRT’s function in education research usually follows core tenets. Some interconnected tenets are frequently utilized in CRT research, and they are typically grounded in law or education. Table 1.1 provides the CRT tenets from different disciplinary perspectives and was reprinted from Horsford (2010). These tenets facilitate a comprehension of how CRT can serve as both a theory and a methodology, as well as how CRT has been utilized in empirical education research (Sablan, 2018). More specific empirical studies related to the tenets are elaborated on in Chapter 2.

Table 1.1

Tenets of CRT

CRT Tenet	Definition	Source
Permanence of racism	Racism, both conscious and unconscious, is a permanent component of American life	Bell (1992); Ladson-Billings and Tate (1995); Tate (1997); Ladson-Billings (1998)
White as property	Because of the history of race and racism in the United States and the role U.S. jurisprudence has played in expressing conceptions of race, the notion of Whiteness can be considered a property interest	Harris (1995); Ladson-Billings (1998); Ladson-Billings and Tate (1995)
Counter storytelling and majoritarian narratives	A method of telling a story that aims to cast doubt on the validity of accepted premises or myths, especially ones held by the majority; majoritarian narratives are also recognized as stories and not assumed to be facts or the truth	Matsuda (1995); Ladson-Billings and Tate (1995); Tate (1997); Delgado (1995); Ladson-Billings (1998); Solórzano and Yosso (2001)
Interest convergence	Significant progress for Black people is achieved only when the goals of Black people are consistent with the needs of Whites	Bell (1980, 2004); Ladson-Billings (1998)
Critique of liberalism	Critique of basic notions embraced by liberal ideology to include color blindness, meritocracy, and neutrality of the law	Crenshaw (1988); Ladson-Billings and Tate (1995); Tate (1997); Ladson-Billings (1998)

Note: Reprinted from Hosford (2010) (<https://doi-org.pluma.sjfc.edu/10.1177/0013161X10365825>) In public domain.

The third tenet of CRT is “counter-storytelling and storytelling,” which asserts that the firsthand insights and personal experiences of people of color are valid and provide evidence against systemic racism (Delgado, 1989). The methodology of this study was guided by the CRT narrative of intersectionality (Berry & Cook, 2019) to highlight the perspectives of the Black teacher participants regarding if and how the teacher certification and licensure process impacts the teacher racial diversity gap in New York State schools. The purpose of this study was to determine if and how the teacher certification and licensure process influences New York State schools’ teacher racial diversity gap.

CRT supports the majority of research on race, education, and leadership that seeks to uncover and eliminate inequity (Maylor et al., 2021). This theoretical framework supports the qualitative method, allowing for in-depth analyses of people’s experiences (Parker & Roberts, 2011). Furthermore, oral storytelling is viewed as a form of resistance, resulting in the counter-narrative, which is defined as a technique for conveying the experiences of individuals whose stories are rarely told (Maylor et al., 2021).

Statement of Purpose

State regulations and policies, such as those regulating licensure and teacher certification, are portrayed as unbiased, implemented for everyone equally without regard to race or other demographic identifiers, and based on notions of teacher quality (Sleeter, 2016). Gitomer et al. (2011) discovered, however, that a disproportionately high number of Black candidates fail licensure exams. Griffin and Tackie (2016) asserted that identifying the unique needs of Black

teachers requires paying close attention to how their experiences are articulated in their own terms. This qualitative descriptive phenomenological study sought to investigate how Black public-school teachers in New York State perceived and experienced the certification and licensure exam process.

Research Questions

From the Black teacher participants' experiences and perspectives, the following research questions helped to determine if and how the teacher certification and license process influenced the teacher racial diversity gap.

1. What are Black public school teachers' perceptions of the teacher racial diversity gap in schools?
2. What are the lived experiences of Black public school teachers in New York State regarding the certification and licensure process?

Potential Significance of the Study

The shortage of educators from diverse backgrounds recruited into the profession of education is a nationwide issue (Ingersoll & May, 2011; Villegas et al., 2012), and it continues to be a concern in New York State. This study contributes substantially to the qualitative research on racially diversifying the K–12 teacher workforce, with the goal of contributing knowledge that supports improving the percentage of Black teachers, which will fundamentally benefit our growing culturally diverse population of students (Villegas & Irvine, 2010). Black educators significantly impact the lives of all students, particularly Black students (Lindsay & Hart, 2017).

Definitions of Terms

Big 5 – New York State’s five largest urban school districts (Buffalo Public Schools, New York City Department of Education, Rochester City School District, Syracuse City School District, and Yonkers Public Schools (Big 5 School Districts, n.d.).

Black – the term pertains to the demographic composition of educators from minority backgrounds, specifically those who are categorized as Black, Negro, African American, or of African lineage (U.S. Census Bureau, 2017).

Brown v. Board of Education 1954 – U.S. Supreme Court ruled unanimously that racial segregation in public schools violated the 14th Amendment of the Constitution. The 1954 decision declared that separate educational facilities for White and Black students were inherently unequal (Duignan, 2018).

Of color – individuals who identify as Alaska Native or American Indian, Black or African American, Hispanic or Latino, Asian or Native Hawaiian/Pacific Islander, or Multi-Racial (NYSED, 2019).

Licensure examinations – tests that attempt to measure an aspiring teacher’s knowledge and skills, and the examinations are used by most public schools in the United States to determine if teachers are qualified to teach.

Systemic racism – a form of bigotry that is embedded in the laws and regulations of a society or an organization.

Teacher – an instructor who perform duties that include planning educational experiences for students, providing classroom instruction, supervising students (New York State United Teachers, n.d.). Teachers are primarily and directly responsible for a student’s learning activities

that are aligned to the performance measures of a course or class and is deemed the teacher of record.

Teacher certification – the process by which prospective educators are licensed to teach, within a given area, after completing the required coursework, degrees, tests, and other specified criteria.

Teacher diversity – the practice or quality of including or involving individuals from a range of different social and ethnic backgrounds in the collective makeup or pool of educators within kindergarten through Grade 12 (K–12) public school teacher workforce (CCSSO, n.d.).

Whiteness – the concept of Whiteness encompasses a hegemonic framework that sustains specific dominant notions regarding the allocation of power and privilege. The idea of Whiteness is perpetuated and upheld within cultures through power dynamics in several domains, such as language, religion, social class, race relations, and sexual orientation (Power Carter et al., 2007).

Chapter Summary

There is a prevalent perspective regarding the absence of teacher diversity in schools across the United States (Carter-Andrews et al., 2016). The shortage of racial and ethnic teacher diversity in the United States has a longstanding history (Carter-Andrews et al., 2016). This was most evident in the segregation of Black teachers in White schools after the 1954 *Brown v. Board of Education* Supreme Court decision. Increased professional licensing requirements and other tactics have led to a national scarcity of Black teachers (Witty, 1982).

Despite the growing diversity of the student population, 80% of K–12 teachers are White, and 7% are Black (De Brey et al., 2019). Ethnically matching students and teachers is favorable for students of color, particularly in terms of their educational achievement, high school

graduation, college attendance, and other crucial nonacademic outcomes (Bristol et al., 2021; Cherng & Halpin, 2016). In past years, there has been an increase in the demand for a more diverse teaching workforce, which is predicated on the finding that teachers of color improve learning outcomes for all children, but especially students of color (Carver-Thomas, 2018).

At various stages of their professions, people of color face structural barriers to becoming and retaining teaching positions. In educational research, difficulties with licensure tests have been identified as one of these barriers, demonstrating how certification tests can put teachers of color at a disadvantage. The predominant focus of this research centers on the documentation of racial disparities in test fairness and proposing approaches that increase the preparation anxiety of educators or training programs (Ellis & Epstein, 2015; Souto-Manning, 2019; Souto-Manning & Emdin, 2020; Tillman, 2004). This study used CRT to investigate the marginalization of licensure procedures and teacher certification through the perspectives of the Black teacher participants.

This descriptive qualitative phenomenological study investigated how Black public school teachers in New York State perceived and experienced the certification and licensure exam process. Using a CRT framework, this study also investigated the perspectives of Black teachers regarding if and how the teacher certification and licensure process influenced the teacher racial diversity gap in New York State schools. Insights gained from their narratives can inform policies and practices that remove barriers to recruiting and retaining Black candidates in the teaching profession and provide incentives in this regard (Villegas et al., 2012).

Chapter 2 synthesizes the peer-reviewed and empirical research studies that substantiate and provide evidence for the problem. The literature review will focus on four specific research problem statement topics. Each topic is divided into sections and/or subsections and includes

empirical studies that help foster a better comprehension of the research problem. Following this, in Chapter 3, is a description of the research design and a brief explanation of why this design is suitable for addressing the questions being investigated. The context of the research is then described, followed by a summary of the participants. The data collection and analysis procedures are described after discussing the data collection instruments. The research findings are presented in Chapter 4, and Chapter 5 provides recommendations for researchers, policymakers, and executive leaders at the local, state, and federal levels.

Chapter 2: Review of the Literature

Introduction and Purpose

According to the USDOE (2016), 82% of U.S. public school teachers identify as White, making the elementary and secondary educator workforce overwhelmingly homogeneous. Only 7% of the population of teachers are Black (O'Donnell, 2018). The shortage of Black educators is not a new issue or phenomenon (Petchauer, 2019).

Historically, well-intended education policies have frequently had unanticipated and undesirable outcomes, resulting in increased inequity (Anyon, 2005; Nieto, 2005), and reduced teacher racial diversity (Dillard, 1994; Irvine, 1988) in public education. The 1954 *Brown v. Board of Education* ruling effectively ended legally sanctioned school segregation in the United States. However, this landmark judgment also led numerous White district and state officials to adopt discriminatory educator recruiting and placement practices, particularly in the Southern region. These policies were characterized by overt racism and a deliberate disregard for equality. During the late 1970s and early 1980s, the implementation of these policies resulted in the displacement of tens of thousands of Black educators, which, therefore, caused a notable decrease in racial diversity among teachers (Dilworth & Brown, 2008; Fultz, 2004). Suh et al. (2020) provided a summary of the results of 19 empirical studies that examined the lived experiences of Black educators in desegregated elementary, middle, and high schools. To address the research questions, the study examined the desegregation of schools in the wake of the *Brown v. Board of Education* decision and its impact on Black teachers in light of the current teacher shortage.

The researchers examined the findings of the investigations using grounded theory (Suh et al., 2020). Of the 19 studies, 18 employed qualitative research methods, such as narrative inquiry, case study, phenomenology, and archival research, while the remaining study employed quantitative methods with descriptive statistics. Suh et al. (2020) found that the average number of participants in qualitative studies ranged from 1 to 20. Of the 18 qualitative investigations, 15 concentrated on the experiences of Black teachers, while two focused on the experiences of Latinx and Asian American teachers in addition to Black teachers. Since *Brown*, the results have uncovered two central themes: chronic systemic obstacles and emerging obstacles. After *Brown*, the trajectory of school desegregation demonstrated that desegregation practices and policies had a significant impact on Black schools, teachers, and students (Suh et al., 2020). As such, between 1984 and 1989, the *Brown* decision expanded teacher education programs and certification requirements, displacing approximately 21,500 Black teachers in the Southern states (Roberts & Andrews, 2013).

It is estimated that eight out of every 10 teachers in the United States are White (de Brey et al., 2021.). Despite the fact that less than half of K–12 students are White (USDOE, 2016), the percentage of teachers of color has remained unchanged at 20%, with Black teachers comprising less than 7% of the teaching force (de Brey et al., 2021). A consistent disparity continues to exist in the proportion of educators belonging to ethnically and racially diverse backgrounds in association to the enrollment of minority students (NYSED, 2019).

According to the NYSED's (2019) Educator Diversity Report, there was just one educator of color for each of the 129 (1:129) students of color in New York State's public schools during the 2011–2017 school years. The ratio in the five major urban school districts in New York State, as reported by NYSED (2019), was 1:64 in the Big 5 cities. New York City

reported one teacher of color for every 30 (1:30) students of color, Buffalo reported 1:56, Rochester reported 1:47, Syracuse reported 1:02, and Yonkers reported 1:50. In the academic year of 2016-2017, it was observed that over 200 public school districts in the state of New York did not have any Black teachers employed (NYSED, 2019).

Although students from diverse backgrounds make up most of the K-12 population in the United States, the overwhelming majority of teacher preparation programs continue to produce cohorts of teachers who are roughly 80% White (USDOE, 2016). Despite the growing prevalence of culturally responsive teaching in teacher preparation programs, it remains the case that around 80% of teacher cohorts produced by these programs are composed of individuals from White racial backgrounds (USDOE, 2016).

According to the USDOE (2016), the diversity of university students pursuing a major in education has decreased. In reality, a smaller number of diverse students enrolled in programs for teacher education nationwide, and the percentage of Black and Hispanic students who graduated from teacher preparation programs was significantly lower than the percentage of White students who graduated from these programs. Mitchell et al. (2001) found that the complexity of teaching and the differences in states' efforts to improve teaching and learning influence the complexity of the teacher licensing landscape. States require candidates to complete education and supervised teaching requirements, pass required tests, demonstrate high moral character, and adhere to additional licensure standards (Mitchell et al., 2001).

According to Carter Andrews et al. (2016), multiple variables play a significant part as gatekeepers, keeping underrepresented and diverse students out of teacher preparation programs. Additionally, these factors contribute to the attrition of teachers of color during their enrollment in such programs or before they enter the teaching profession. One example is the toxic

environment, bias, and racist situations that preservice teacher candidates of color experience throughout their preparation programs, thereby contributing to recruitment, preparation retention, and completion challenges (Carter Andrews et al., 2016). Another barrier with significant and wide-ranging consequences is high-stakes, standardized licensure tests (Carter Andrews et al., 2016). Low percentages of preservice teacher candidates passing licensure examinations, particularly candidates of color, have sparked significant discussion in states throughout the nation (Putman & Walsh, 2021a).

Licensure exams continue to be a significant barrier, influencing non-White teacher candidates disproportionately and imposing unnecessary barriers to diversifying the teaching workforce (Mooney, 2021). Black and Latino candidates pass these examinations at a lower percentage than their White counterparts, leading to fewer prospective teachers from diverse backgrounds entering the teacher workforce (Nettles et al., 2011). Some researchers contend that regardless of the intended use they serve, standards-based assessments might perpetuate a segregated teacher labor force and the tests and environments for testing may be discriminatory toward those of racial or ethnic background (Petchauer, 2012). The high professional certification standards and other requirements have led to a national paucity of Black educators (Roberts & Andrews, 2013).

The research problem to be addressed is the shortage of diversity among kindergarten through Grade 12 grade public educational institutions. There is a persistent shortage of diversity among educators, and the influence of New York State's certification and licensure processes on teacher racial diversity is unknown. Given the prevailing homogeneity evident among K–12 teachers, it is necessary to investigate the impact of prejudice and/or systemic racism on the teacher certification process.

Relating to the research problem, the literature review in Chapter 2 begins with the significance of teacher racial diversity and the academic and nonacademic benefits for students of color. The second section contains studies on teacher racial diversity as well as the overall barriers to diversifying the teacher workforce as they relate to the teacher certification and licensure process. Following that, a brief comparison of teacher preparation programs and various paths leading to certification are discussed. The fourth section contains information on the certification exams. Through a CRT lens, the literature review concludes by showing how the structures of racism and race are embedded in the teacher certification and licensure process. Each section offers a concise and insightful narrative synthesis of cited peer-reviewed and empirical studies that substantiate and provide evidence for the problem.

Importance of Teacher Diversity

Researchers in the education field have long been concerned about the inequalities in outcomes between students of different ethnicities and races (Hart, 2020). To establish the relationship between student and teacher cognitive and ethnicity and noncognitive outcomes, a number of empirical, as well as theoretical, arguments have been made for diversifying the teacher workforce. Barnum (2017) discovered that having a Black teacher benefits Black students by increasing their exam scores, recommendations for rigorous classes, motivation to learn, and fewer discipline issues. According to Barnum (2017), there is a claim that Black educators demonstrate greater expectations for academic success among Black learners when compared to educators who are not Black.

Same Teacher-Student Academic Benefits

According to Redding (2019), a substantial body of research has been conducted to investigate the potential educational benefits for students of color when taught by educators who share the same ethnic or racial background. In a study conducted by Dee (2004), it was shown that the practice of racial matching over 1 year resulted in a notable improvement in reading and math academic achievement among Black male students, with an increase of 3 to 4 percentage points. Clewell et al. (2005) also investigated if Black and Hispanic elementary students' math and reading achievement scores increased when instructors of the same race taught them. The findings of Clewell et al. (2005) revealed a positive outcome, but limited to the Grade 4 level. Although the outcomes for Black learners with Black educators were slightly declining, the Black fourth graders had greater math score gains when instructed by a teacher of the same racial background (Clewell et al., 2005). The strength of the Clewell et al. findings would have been better understood had the actual percentage gains been reported.

In two longitudinal studies, Banerjee (2018) and Joshi et al. (2018) investigated if same-race teacher-student matches impacted math and reading scores. Neither study found a significant increase in reading scores among elementary-aged learners from diverse racial backgrounds when taught by educators of the same race. However, Joshi et al. (2018) discovered a positive outcome for learners in the lowest percentile of the elementary sample in mathematics, 0.06 *SD*.

In their longitudinal study, Egalite et al. (2015) examined data pertaining to a large sample of learners in the state of Florida. The study encompassed almost three million learners in Grades 3–10, who were linked to a total of 92,000 teachers. The researchers followed the participants' progress as they were assigned to teachers for over 7 years, looking for correlations

between achievement and student-teacher demographics. Students in Grades 3–10 who had been assigned to the same ethnicity or race teacher performed better by a standard deviation of .001 on reading and a standard deviation higher of .008 on math assessments. Lower-performing Black students, in particular, benefited from having the same race teacher in both math, with a standard deviation of .007, and reading at a .006 *SD*. Ouazad (2014) discovered that elementary students who had the same-race teacher performed better on math, with a standard deviation of 0.07, and at 0.04 *SD* on reading assessments on average.

Goldhaber et al. (2015) published a literature review on the effect of a diverse educational workforce on achievement among students. The researcher's analysis included investigations conducted in a variety of states over the years 1998 to 2015. Students taught by a teacher of the same race scored 0.02 to 0.06 standard deviations higher in reading and 0.03 to 0.011 standard deviations higher in mathematics than students taught by a teacher of a different race, according to multiple studies. The academic performance of Black students was shown to be 0.04 *SD* higher in both mathematics and reading when they were assigned to Black teachers, compared to when they were assigned to White teachers.

Goldhaber and Hansen (2010) conducted a study to evaluate teacher proficiency data provided by teacher certification exams. Goldhaber and Hansen analyzed data from 4,051 North Carolina Grade 4 through 6 teachers and 174,828 pupils between the 1994–1995 and 2004–2005 school years using empirical modeling. The data were gathered and analyzed using official school records kept by a research data center.

The state-mandated, standardized end-of-grade literacy and mathematics examinations evaluated the achievement of students. The data also included learner demographic data such as race, ethnic background, and gender, as well as eligibility for federal free and reduced-price

meals. Included in the data on teachers were their degrees, levels of experience, licensure status, and Praxis II examination results. According to Goldhaber and Hansen (2010), the universal distribution of teacher certification standards presumably resulted in disparities in the proficiency rates of all ethnicities of teacher candidates. Regardless of teachers' proficiency on standardized tests, Black students benefited from being instructed by Black educators or other teachers of color (Goldhaber & Hansen, 2010).

Hanushek (1992) investigated the impact of educator ethnicity on the academic performance of Black students in vocabulary and reading. The results of the study indicated that Black educators exhibited a greater degree of effectiveness in enhancing student academic performance, resulting in a notable increase of 3-5 percentage points in accomplishment outcomes. Comparatively, Evans (1992) found that Black students who were instructed by Black educators achieved a test score in financial literacy that was 2.25 points higher than Black students who were taught by educators of a different ethnic background. Additional studies can be found in Tables A1 and A2 in Appendix A.

Grissom et al. (2017) aimed to examine the potential relationship between the racial diversity of educators and the enrollment of students of color in gifted and talented education programs. The researchers utilized data from schools and staffing surveys and survey data collected by the Office for Civil Rights, specifically focusing on the school years of 2003-2004 and 2011-2012. The sample comprised a total of 2,170 primary schools across the nation that offered programs specifically designed for gifted and talented students. Grissom et al. (2017) discovered that schools with a higher proportion of Hispanic and Black teachers had a higher proportion of Black and Hispanic learners in gifted and talented education programs, with a rise in the percentage of representation connected to the proportion of Hispanic or Black teachers. A

10% increase in the percentage of Hispanic educators in a school was correlated with a 3.1% increase in Hispanic gifted students, and a 10% increase in the percentage of Black teachers was associated with a 3.2% increase in Black gifted students (Grissom et al., 2017).

According to the research conducted by Grissom and Redding (2016), there exists a significant disparity in the referral rates to gifted programs between Black and White students, even when considering children who demonstrate exceptional test scores. Specifically, the likelihood of Black students being sent to such programs was shown to be 66% lower compared to their White counterparts. Black educators demonstrated a significantly higher likelihood, three times greater, of enrolling Black students in gifted programs for literacy and mathematics.

The Measures of Effective Teaching (MET) Study monitored approximately 3,000 teachers in six school districts across the United States between 2009 and 2010. In their study, Egalite and Kisida (2017) examined the impact of assigning students to teachers who shared comparable demographic characteristics on many aspects of student experience, including personal effort, class satisfaction, and perception of care and motivation from their teacher. By employing a classroom fixed-effects methodology, the findings of this study demonstrated that when students and teachers shared similar racial and/or gender characteristics within a classroom setting, there was a notable enhancement in various aspects of the student experience. Specifically, students reported higher levels of happiness in class, a greater sense of being cared for and motivated by their teacher, and an improved quality of communication between students and teachers. Black male students assigned to Black male educators and Black female students assigned to Black female teachers garnered the greatest benefits. The findings would have been more compelling if the actual percentage gains had been reported. In summary, multiple research studies have demonstrated that having a Black teacher positively impacted Black leaders

academically. The next section provides studies that proved the benefits of having a gender and race match for students has important nonacademic benefits as well.

Same Teacher-Student Nonacademic Benefits

Studies have shown that a gender and racial alignment among students and teachers may assist in reversing some of the obstacles faced by Black students, such as a higher attrition rate, a lower likelihood of attending college, and higher suspension rates (Toussaint, 2019). Gershenson et al. (2015) examined longitudinal data on student-teacher demographic mismatches that influenced high school instructor expectations for students' academic achievement. The analysis demonstrated that non-Black educators had expectations that were lower than Black educators' expectations for their students. Non-Black teachers had a 12% lower likelihood, compared to Black educators, of expecting Black learners to earn a degree requiring 4 years of study. In their study, Gershenson et al. (2017) utilized longitudinal research administrative data obtained from the North Carolina Education Research Data Center. Their investigation revealed that Black students who had the opportunity to be taught by Black teachers at least once during Grades 3, 4, and 5 exhibited a 39% reduced likelihood of prematurely discontinuing their education before graduation. Additionally, these students demonstrated a 28% increased probability of enrolling in a 4-year college program.

A study conducted by Dee (2004) showed that Black students in kindergarten through Grade 3 had a 15% lower likelihood of high school dropout compared to their White counterparts. Additionally, some Black students demonstrated a higher inclination to undertake a college admission examination when instructed by a teacher of the same racial background. Will's (2018) study from Johns Hopkins University brought attention to the significance of having Black educators assuming leadership roles within educational settings. According to a

comprehensive study conducted on a sample of 100,000 Black kids who were enrolled in public schools in North Carolina from 2001 to 2005, it was found that those who had the opportunity to be taught by at least one Black teacher during their third to fifth grade years exhibited a 29% reduced likelihood of high school dropout (Will, 2018). There was a significant decrease of 39% in the danger faced by low-income Black males, but there was a notable increase in the probability of Black students earning a college degree (Will, 2018).

Lindsay and Hart (2017) discovered that being exposed to Black educators is correlated with a reduction in the average disciplinary rates of Black learners. The researchers investigated the influence of teacher racial composition on student disciplinary outcomes, employing a simplistic methodology. The results indicated that Black students who were exclusively taught exhibited a 2–3 percentage point decrease in the probability of experiencing exclusionary disciplinary measures compared to those solely exposed to non-Black teachers in the educational setting (Lindsay & Hart, 2017). When Black students are paired with a higher proportion of Black educators, their exposure to exclusionary discipline decreased moderately but persistently. The average graduation rate of Black learners would decrease by approximately half a percentage point to one percentage point if the percentage of Black educators in the teaching profession increased from 22% to 50% (Lindsay & Hart, 2017). According to Lindsay and Hart (2017), a one-percentage-point decrease would result in a 3%–9% reduction in suspension rates. Only 11% to 35% of students were susceptible to exclusionary discipline.

Improving the proportion of teachers of color is a moral imperative for increasing diversity in the educational profession (Darling-Hammond, 2010). Educators of color have increased the academic and nonacademic achievements of students with similar backgrounds

(Darling-Hammond, 2010). Students of color commonly look up to Black educators and professors as models for themselves (Darling-Hammond, 2010). It is conceivable that a growth in the number of people of color considering careers in education will follow efforts to increase the number of diverse teachers (Darling-Hammond, 2010). However, jurisdictions that require licensure tests face a conflict between boosting teaching standards and remaining culturally attentive to students' needs (Sawchuk, 2015).

Barriers to Teacher Diversity

In the early stages of the teaching pipeline, educators of color encounter structural obstacles (Smith et al., 2022). Several researchers have hypothesized that there are numerous causes for the disparity in racial makeup in the profession of education and the reduction in the number of Black educators, including the marginalized character of teacher preparation (Marinell & Coca, 2013); the racist micro/macroaggressions experienced by university preservice teacher candidates (Williams, 2015). Black educators were compelled to abandon their identities in order to conform to the predominance of Whiteness in the educational system and racially biased teacher licensure examinations (Carver-Thomas, 2018; Emdin, 2016).

Using a qualitative approach and 28 school districts/networks, Smith et al. (2022) explored the barriers to increasing teacher racial diversity. Smith et al. (2022) demonstrated that the schools' recruitment efforts were futile when qualified candidates were unavailable. Additionally, three networks cited cost as an impediment to attracting diverse candidates, citing the credentialing process and identifying inherently discriminatory admissions processes (Smith et al., 2022). All educational institutions struggled to achieve diversity goals, indicating that states should pursue alternative policy mechanisms as opposed to reliance on mandates from legislation to promote diversity (Smith et al., 2022).

The objective of the Van Overschelde and López (2018) study was to investigate some of the limitations of previous research and to contribute to policy discussions regarding grade point average (GPA) admissions criteria for teacher preparation programs and the issue of diversity in programs for preservice educators. The researchers conducted two experiments to determine what would have occurred if the GPA requirement for admission to a large traditional teacher preparation program had been raised from 2.50 to 2.75 or 3.00 (Van Overschelde & López, 2018).

One of the Van Overschelde and López (2018) study's research questions was: Who would be denied admission if the sophomore grade point average criterion for teacher preparation program admission was raised? The researchers conducted inferential and descriptive analyses to establish whether increased GPA criteria had a negative impact on specific groups of students (Van Overschelde & López, 2018). Table A4 (Appendix A) shows the dependent and independent variables. If the GPA requirement had been raised from 2.5 to 2.75, 294 (22%) of the 1,314 applicants for undergraduate studies would have been prohibited entry.

Black leaders were two times more likely to be denied admission than other students, and male students were more likely to be denied admission than female students, $Wald = 4.96, p = 0.03$, with males being 1.4 times more likely to be denied admission than females (Van Overschelde & López, 2018). Van Overschelde and López also found that if the admittance eligibility were raised from a GPA of 2.5 to 3.0, 581 (44%) Black students would have been denied admission. Male students were two times more likely to be denied admission than female students, and Black students were three times more likely to be denied admission (Van Overschelde & López, 2018). Licensure exams disproportionately impede the access and opportunity for Black teacher candidates who aspire to enter the profession (Barnum, 2017). In

2019, approximately 8,600 of the 16,900 Black educators seeking certification were screened out by the results of the Praxis Core Test (Wynter-Hoyte et al., 2020).

Wallace and Gagen (2019) investigated two questions regarding Black male educators who completed an authorized teacher education program and obtained state licensing. The first research question investigated the incentives, barriers, and supports for retaining Black males in university and university teaching programs. Wallace and Gagen (2019) surveyed and interviewed 11 Black male teachers from elementary and secondary teacher preparation programs. The primary goal of Wallace and Gagen's study was to describe the participants' supports and barriers regarding the completion of teacher preparation programs. The costs of educator preparation programs, state certification tests, and sentiments of feeling isolated experienced by candidates of color have remained significant obstacles to workforce diversification (Wallace & Gagen, 2019).

The first research question examined the obstacles, support structures, and motivation of K–12 Black male teachers who graduated from an accredited educator preparation program at a historically Black university over a 4-year period. The researchers discovered that teacher certification examinations impeded completion of the program. On the initial attempt, only three of the 11 participants passed all of the required exams. All participants concurred that the examinations should be discussed at the outset of the educational process, and that the content of subject area license examinations should be consistently reinforced in pertinent courses (Wallace & Gagen, 2019).

Another impediment was that the majority of the preservice teacher candidates of color were prepared in programs with a preponderance of White students (Hollins & Guzman, 2005). Amos (2016) conducted a qualitative study to investigate the negative impacts White teacher

candidates had on minority teacher candidates during a mandatory intercultural education session. The findings indicated that four preservice teacher candidates of color struggled to establish their identities in the face of the overwhelming silencing force of Whiteness in the classroom (Amos, 2016). Through colorblind discourses and preying on the minority teacher, the White students were adept at dodging issues of race and power and reducing existing hierarchical power relationships.

The teacher candidates of color worried that they would be classified as the individual who spoke out in opposition to the White students, and they feared retribution and social exclusion from their White peers (Amos, 2016). According to Amos, the structure of the teacher education program allowed White candidates to exert significant negative peer pressure on the teacher candidates of color. Kornfeld (1999) discovered that Black teacher candidates in predominantly White teacher education programs frequently encountered varying degrees of racial prejudice and lacked the confidence to speak up.

Dinkins and Thomas (2016) analyzed the perspectives and experiences of 10 Black students at an institution with a preponderance of White students to determine why they remained or left the teacher education preparation program. The Dinkins and Thomas (2016) qualitative research study identified three key factors affecting the attrition of Black preservice teacher candidates from teacher education preparation programs: the importance of other educators in inspiring Black individuals to become teachers, the function of a desire for social justice in motivating Black college students to choose or leave teaching as an occupation, and the effect of mandatory testing and financial inequity (Dinkins & Thomas, 2016).

Decades of empirical research have revealed substantial differences in the performance of Black and White learners on standardized tests (National Center for Education Statistics [NCES],

2012; Reardon, 2018). White students outperform Black students on standardized reading, math, and vocabulary tests, as well as scholastic aptitude and IQ tests (Jencks & Phillips, 1998). The Coleman Report (Coleman et al., 1996) was one of the first nationwide studies to establish racial differences in academic testing, reporting that academic success disparities between Black and Whites students existed at every grade level and grew with student age. According to Jencks and Phillips (1998), the achievement disparity begins before kindergarten, grows over time, and persists into adulthood. White students outperformed Black students by an average of one standard deviation (Miksic, 2014). According to Jencks and Phillips (1998), the average score of a Black student was below 75% that of a White student.

Teacher Preparation

According to Ahmad and Boser (2014), historically, it has been more difficult for students of color to complete teacher preparation programs due to inequitable progress monitoring gate systems. Throughout history, this has been a problem for students of color. The inability of students of color to pass the progress monitoring gates has caused them to decline out of the teacher training pipeline. This has been attributed to a lack of culturally responsive practice in the curriculum, which is supported by the findings of the research (Ahmad & Boser, 2014).

Traditional Versus Alternative Pathways to Certification

Before becoming a teacher of record, a bachelor's degree in education and student teaching is traditionally required (Shuls & Trivitt, 2015). Although requirements differ by state, every state mandates a certain type of teacher credentials (Shuls & Trivitt, 2015). To increase the number of people of color pursuing careers in education, a number of states offer different paths

to licensure for bachelor's degree holders interested in transitioning to a teaching career (USDOE, 2016).

Using Integrated Postsecondary Education Data System (IPEDS) data, the USDOE (2016) found that alternative routes to teacher preparation are more diverse than traditional teacher education-preparation programs. In particular, 26% of students of color get into the education field through nontraditional undergraduate teacher preparation programs, while only 9% enter through traditional undergraduate programs for teacher preparation (Partelow et al., 2017). The researchers concluded that alternative routes to teacher licensure are more attractive to individuals from diverse backgrounds because they provide greater flexibility in terms of the required curriculum, admission exams, and accelerated time frames (Bond et al., 2015).

Matsko et al. (2021) conducted research to analyze preservice teachers' preparation experiences across all of the routes and institutions that served the Chicago Public Schools. This study compared three alternative certification programs to 28 traditional certification programs to determine if and how preservice teacher candidates and their experiences varied across pathways. In the survey administered by Matsko et al., nearly 800 preservice student teachers and their mentor teachers participated.

The study established that nontraditional teacher preparation programs in Chicago provided unique pathways to the profession. Matsko et al. (2021) uncovered substantial variations in the categories of preparation offered by each pathway, including curriculum and student teaching experience duration and load of coursework methods. In terms of preparation, participants who took the traditional route and reported feeling significantly more prepared than those who took the alternative route.

Van Overschelde and Wiggins (2019) examined demographic differences between teachers selected for university teacher preparation programs and alternative certification programs. One of the research questions was: Does the demographic of new teachers differ between those prepared through traditional versus alternative-preparation programs? Alternative teacher certification programs were created to increase the number of teachers, but research on who chose alternative certificate programs over teacher preparation programs yielded contradictory results (Van Overschelde & Wiggins, 2019).

Van Overschelde and Wiggins (2019) examined over 225,000 new teachers' employment and preparation data. There were 125,562 (56%) alternate certificate programs and 100,340 people in the sample (44%) for the teacher preparation programs. Regardless of the reality that the alternative certificate program teachers comprised 56% of the sample, the researchers discovered that 78% of new Black teachers were alternative certificate program graduates and 71% were males (Van Overschelde & Wiggins, 2019). The first research question's logistic regression results revealed substantial and insignificant differences between the categories of teachers trained through teacher preparation programs and alternative certificate programs. The results revealed that female teachers were 2.3 times more inclined to have been teacher preparation programs prepared than male teachers ($Z = 75.22, p = .001$); males were statistically more likely to be alternatively prepared. Furthermore, Black teachers were 3.2 times more inclined than White teachers to be alternatively certificate program prepared (Van Overschelde & Wiggins, 2019).

Teacher Licensure Examinations

Many states require teachers to take mandatory licensure tests before entering the field of education (Goldhaber & Hansen, 2010). Exams for teacher certification are the first and most

fundamental barriers to entry into the teacher workforce (Petchauer, 2013). As a concept and societal construct, race intersects with teacher licensure examinations in three primary ways. First, an increasing body of empirical research uncovered significant gaps between racial groups' passing rates (Petchauer, 2013). According to the Educational Testing Service (ETS) research, a disproportionate number of Black test takers failed licensure exams in comparison to White test takers (Gitomer et al., 2011; Gitomer & Latham, 2000; Nettles et al., 2011).

Petchauer (2016) conducted a 3-year qualitative study comparing the percentage at which candidates of color passed the basic skills teacher licensing exam to the rate which White candidates passed the exam. The discrepancy between the passing rates of students of color and White students was 50% (Petchauer, 2016). On further examination, Petchauer (2016) argued that the licensure examinations were not culturally homogeneous.

Gitomer et al. (2011) investigated if basic skills certification exams were merely a checkpoint or if they provided useful insight into how individuals would probably do on future licensure exams. Between 1999 and 2005, the study sampled prospective teacher candidates who took all three components of the Praxis Pre-Professional Skills Test (Praxis I) and one of the four Praxis II content-knowledge subject tests relevant to their licensure area. One of the three research questions examined the correlation between the achievement of Praxis I and Praxis II tests for different racial and gender groups with varying scholarly histories, according to measurements by major and GPA (Gitomer et al., 2011). Gitomer et al. found that although basic skills tests were the most reliable indicators of licensure performance, in general, race remained an important indicator of licensure performance even after controlling for all other variables. After controlling for GPA, the likelihood that Black preservice teachers who struggled with the

basic skills tests who would pass the licensure examinations declined significantly (Gitomer et al., 2011).

In a qualitative portraiture study, Petchauer (2013) examined how race became a cognizant and significant aspect of teacher licensure exams for Black preservice teachers. Because of the racialized nature of the encounter and the great pressure to pass the exam, the findings focused on one Black preservice teacher and how she identified as White on the demographic questionnaire leading up to her license exams. The results revealed that the technical aspects of test administration, in conjunction with the racialized discourse surrounding Black students and standardized examinations, played a significant role in the participant's deciding to identify as White. In addition, the research results demonstrated the way her decision led to feelings of shame and contrite diligence, which influenced her preparation for subsequent licensure examinations.

Albers (2002) investigated how the Praxis II standardized teacher certification exam affected Black teacher candidates seeking licensure. Albers found that while Black teacher preservice candidates might have accomplished their teacher education internships and coursework, they did not satisfy the state's Praxis II score requirements. Albers examined four Black participants who were highly regarded by faculty and had graduated from reputable undergraduate colleges or universities. The four Black preservice teacher candidates took the Praxis II for the first time and failed the content knowledge section (Albers, 2002). Two of the four Black teacher candidates performed poorly on the exam's writing portion (Albers, 2002). The study's findings suggested that mandated tests must meet the cultural realities of teacher candidates (Albers, 2002).

Bennett et al. (2006) examined the Praxis I experience of Black undergraduates and other students of color pursuing admittance into a teacher education program at a major university. From a large sample, 44 candidates were chosen from underrepresented minority groups to participate (Bennett et al., 2006). Bennett et al. inquired whether the Praxis I assessment was an instrument of oppression and privilege. The study results demonstrated that the Praxis I exam was biased against Black test takers, which was due to its implementation as the sole mandate to assess teacher candidates with inadequate preparation and access to similar resources as White teacher candidates (Bennett et al., 2006). Bennett et al. addressed validity and fairness issues and uncovered differences and similarities across gender, race, and class. The results purported substandard test preparation as the predominant factor in the candidates' underperformance.

Baker-Doyle and Petchauer's (2015) findings were related to this result because the candidates who participated in exam-preparation programs had more positive experiences during the exam. These conditions were caused by the candidates learning test-taking strategies and test-preparation exercises, which supported candidates experiencing anxiety or other negative emotions (Baker-Doyle & Petchauer, 2015). According to Baker-Doyle and Petchauer's (2015) findings, unfavorable conditions for Black candidates were related to the relationship between their own abilities and the exam rigor, physical environment characteristics, and exam stress and anxiety.

Graham (2013) investigated the Praxis I exam experiences of Black candidates at a historically Black institution. The researcher selected 52 candidates from an introductory teacher preparation class to focus on student perceptions of standardized tests such as the Praxis I exam, the context of identity, bias, and stereotypes. Despite the candidates being in a monolithic setting, the findings revealed that the candidates were subjected to stereotype threats throughout

the entire test administration (Graham, 2013). The findings revealed that, although the research candidates had prior experience with standardized assessments, the participants were unfamiliar with the processes and protocols of mandatory testing (Graham, 2013). Furthermore, while test participants did not consider the Praxis I assessments to be culturally biased, they agreed that the assessments did not accurately represent their abilities and knowledge base (Graham, 2013).

Grimes-Crump's (2001) studied Virginia's licensure policies and the effect of licensure examinations on the availability of teachers, with a particular focus on the representation of teachers of color. The study examined reading, mathematics, and writing assessment data from the 1995–1996 and 1996–1997 testing cycles for the Praxis I exam. During the 1995–1996 testing cycle, the passing percentages for candidates of color were 34% for reading, 18% for math, and 18% for writing, whereas the passing rates for White teacher candidates were 58%, 62%, and 72%, respectively (Grimes-Crump, 2001).

For the 1996–1997 testing cycle, passing rates were 28% for writing, 36% for reading, and 35% for math. The passing rates for White teacher candidates were 63%, 66%, and 74%, respectively. Despite the increases in the passing rates, candidates of color were still underperforming White teacher candidates (Grimes-Crump, 2001). Results of the study indicated that the rise in passing requirements in Virginia impacted the increase of interest in becoming a teacher and the decline of teachers of color in the profession (Grimes-Crump, 2001).

CRT

Over the course of the past 2 decades, CRT has been an increasingly integral part in the toolset of education researchers (Ledesma & Calderón, 2015). These academics strive to critically assess pedagogy, representation, educational opportunities, and school atmosphere. According to Ledesma and Calderón, CRT has been implemented as both a methodological and

epistemological strategy with the purpose of assisting in the analysis of the experiences of historically underrepresented people throughout the K–20 educational pipelines (Ledesma & Calderón, 2015).

Focusing on topics, such as leadership, policy pedagogy, curriculum, and school politics, CRT in education draws attention to the pervasiveness of racism throughout the educational system (Ledesma & Calderón, 2015). Narratives can reveal the existence of those outside of the status quo, in opposition to prevailing narratives. From a CRT perspective, a personal narrative is effective because it discloses frequent racialized encounters experienced by people of color (Evans & Leonard, 2013).

Sleeter (2016) employed elements of CRT to draw attention to the prevalent trend in teacher preparation programs that focus on training predominantly White cohorts of teacher candidates to educate students of color. Sleeter (2016) identified three particularly useful premises for this current study's analysis: interest convergence, questions to assertions of impartiality and colorblindness, and experienced understanding. Sleeter (2016) also suggested three areas of apparent interest convergence: the racial mix of schools' education faculty, the curriculum of multicultural teacher education courses, and the interaction between the university and teacher education programs. Sleeter (2016) discovered, in an analysis of 416 early childhood teacher preparation programs, that the more culturally diverse the full-time faculty, the more likely the courses were to emphasize interacting with families and children from diverse cultural backgrounds.

CRT challenges the dominant ideology's claims of neutrality, meritocracy, and color blindness (Solórzano & Bernal, 2001). This tenet, according to Sleeter (2016), aids in the deconstruction of three areas: colorblind conceptions of effective teaching and teachers, teacher

certification testing, and the university-based structure of teacher education. Colorblind perceptions of quality teaching contribute to the continued Whiteness of teacher education by failing to account for how race matters in education (Sleeter, 2016). State credentialing regulations often reinforce Eurocentric knowledge by specifying what instructors must know in disciplinary content areas (Sleeter, 2016).

Huber et al. (2006) analyzed the California Subject Examination for Teachers (CSET) and found only a passing mention of ethnic and racial minorities in the United States and a brief mention of Latinos in the United States in social studies. Teachers could obtain a certificate in social studies despite having a background in ethnic studies. Additionally, Kohli (2013) stated that teacher candidates with a background in ethnic studies struggled to pass the CSET. The certification requirements had the effect of maintaining the curriculum's Eurocentric orientation while discouraging prospective preservice teacher candidates of color. Kohli (2013) also revealed that individuals shared racist experiences from elementary school to college, culminating in feelings of internalized racism (Table A3, Appendix A).

CRT values counter stories by people of color who call majoritarian narratives into question (Solórzano & Yosso, 2002). Sleeter (2016) used this tenet to investigate the lived experiences of students of color in predominantly White teacher preparation programs, asking who was heard and who was routinely not heard. Sleeter (2016) discovered that the voices of teacher candidates of color were frequently ignored and argued that much about teacher education could change; the author proposed significant changes and made recommendations based on the CRT tenets. Sleeter asserted that programs that specifically address the Whiteness of teacher education would continue to face challenges from problematic policies such as testing. Such policies were not intended to broaden the pool of teachers or to ensure that teachers could

establish solid pedagogical connections with learners of color. Many aspects of teacher education could be improved if issues of racial disparity were addressed directly (Sleeter, 2016).

Baber (2015) examined the connections between discriminatory practices and post-racial ideology in higher education by employing CRT. Brown (2014) utilized CRT to evaluate the literature on preservice teachers of color and teacher education in the United States, with an emphasis on teacher education preparation using CRT. Similarly, Seriki et al. (2015) used CRT to investigate the persistence of racism in teacher education. Additionally, the persistence of racism can be traced to the gate system in teacher education-preparation programs, which prevents college students of color from enrolling or matriculating owing to inequitable standards (Seriki et al., 2015).

Bell and Busey (2021) examined teacher education as a fundamentally racist system of a larger educational structure that mainly served and advanced upper, middle-class White individuals. The researchers refined the concept of racial grammar and pulled from CRT in education, concentrating on counter-narratives and intersectionality to broaden the comprehension of systemic racism in teacher preparation programs through the viewpoints of the participants (Bell & Busey, 2021). The findings indicated racial incongruence underscores preservice teachers of color experiences in teacher education programs. The experiences of the participants illuminated how class, race, and gender interact to form a grammar of teacher education that creates entry barriers for educators of color (Table A3, Appendix A).

Scott and Rodriguez (2016) drew from a larger phenomenological study on Black academic persistence to investigate the unique experiences of three Black male teachers who faced concentrated forms of stereotype threat in teacher education. The study aimed to identify new avenues for improving outcomes for Black males by examining the narratives of Black male

preservice teachers (Scott & Rodriguez, 2016). Through the lens of CRT, the investigator elicited untold stories of Black males. The participants' voices elicited insights into how power and privilege were exercised in teacher education programs. Three themes emerged as significant factors in their schooling experiences and motivations to teach: stereotype threat, marginalization, and influential role models (Scott & Rodriguez, 2016).

The voices of the participants served as counter narratives, shedding light on Black students' racial marginalization and totalization and the unconscious racism that persists within schools (Scott & Rodriguez, 2016). Scott and Rodriguez's study discovered that Black male preservice teachers faced centralized forms of negative stereotypes in higher education settings, significantly impacting their career aspirations. In the 2016 study, all participants discussed the impact of significant role models on their academic aspirations and persistence to teach, both inside and outside of academia. Scott and Rodriguez's (2016) findings shed light on the critical role of role models and the increased likelihood of males performing when not subjected to ongoing racism.

Mensah (2019) chronicled the journey of a Black female in a science teacher education program using the CRT methodology. The longitudinal case study examined the participant's educational background from the primary grades through her first year as a teacher. One of the four findings, racial narratives, identified was a loss of voice in the teacher education program. The narrative themes noted how racism and race were prevalent in many aspects of the participant's teacher education program. Mensah's (2019) conclusion to the study, which can be found in Table A3 (Appendix A).

Wynter-Hoyte et al. (2020) researched 10 Black students over 3 years using a qualitative CRT framework and approach grounded in culturally appropriate, sustaining, and responsive

pedagogies. The researchers examined the students' experiences in their teacher education program as they worked to pass the Praxis Core exam (Wynter-Hoyte et al., 2020). Analyzing data guided by CRT required the researchers to interpret data with particular attention to the participants' stories and with an eye toward the sociological realities related to the racialized makeup of Praxis Core exam and testing support structures. They also had to interpret data regarding commitment to students' success; combating racialized and deficit assumptions about students' abilities, cross-cultural competence, and motivation; and the empowerment of students and liberation (Wynter-Hoyte et al., 2020).

Wynter-Hoyte et al. (2020) found that teachers who lacked enthusiasm and critical thinking, as well as those who were culturally, linguistically, and emotionally isolated, were incapable of performing their duties effectively. Wynter-Hoyte et al. also recommended the development of support systems by faculty who comprehended the biased nature of the Praxis Core exam and who could assist students in examining the test items, strategizing accordingly, and using their linguistic and cultural knowledge and agility to beat the testing game. Faculty members should be able to assist students in analyzing test items, formulating effective strategies, and successfully completing the tests.

Chapter Summary

This literature review provided an overview of past and present educational structures and systems, focusing primarily on the lack of teacher racial diversity in K–12 classrooms. Studies have found that teachers of color enact more culturally relevant teaching, have more positive perceptions of students of color, assist in helping students of color feel welcomed at school, and are rated highly by all students (Carver-Thomas, 2018). However, there are barriers to diversifying the teaching workforce. Studies have found that inadequate academic preparation,

adverse working circumstances, financial constraints, a lack of social or cultural support groups, and an increase in teacher expectations are barriers to diversifying the workforce (Smith et al., 2022).

Further exacerbating the issue of diversity in the classroom are the teacher licensure examinations. Studies have found that students of color who identify as education majors often encounter roadblocks on the path leading to teacher certification and licensure when acceptable passing scores are not attained. Testing requirements discourage a disproportionate number of Blacks from entering the teaching workforce (Petchauer et al., 2018). The disproportionate frequency of Black students failing teacher certification exams is a well-documented problem (Blackford et al., 2012; Sandals, 2020). In a 2019 EdWeek analysis, 38% of Black teachers and 75% of White teachers passed their certification exams (Petchauer, 2019).

Although selective admission is a critical component of sustaining the quality of a teacher education-preparation program, the criteria for admission and the rising use of certification and licensure have exacerbated the depletion of the Black teaching force throughout the United States (Acosta et al., 2018, Sleeter, 2016). It was within the literature review that the problem statement was derived. There is a persistent teacher racial diversity gap. The effects of the certification and licensure process on the diversification of teachers in K–12 schools in the New York State Big 5 urban school districts are unknown. Research on Black educators’ perspectives indicate they experience the exams as barriers to their entrance into the profession, they can articulate the mismatch between content on the exams and their lived realities in a racist society, and they want to see both explicit preparation for the exams as they exist as well as change in the exams to be more culturally relevant and inclusive of their experiences. This study, by providing an opportunity for Black in-service teachers from teacher education programs in New York State

to share their experiences regarding the teacher certification and licensure process in connection with the teacher racial diversity within K–12 teachers will help to fill that gap.

Chapter 3 outlines the research methodology. A qualitative, specifically descriptive phenomenological study seen through the lens of a CRT framework, was used for this study. The study's data analysis is guided by several components of the research design, including the context, information pertaining to participants, recruiting and selection criteria, and the instruments employed in data collecting.

Chapter 3: Research Design Methodology

Introduction

The educational institutions in the United States are experiencing a progressive increase in racial and cultural diversity. Comparatively, the racial diversity of primary and secondary school teachers is not changing (USDOE, 2018). For over the past 15 years, teacher racial diversity numbers have not changed significantly (USDOE, 2018). This study aimed to examine the role of the teacher certification and licensure process in connection to the teacher racial diversity gap in New York State public schools, centering on the voices of Black educators and the teacher racial diversity gap impact on children.

Licensure exams continue to be a significant barrier, disproportionately affecting non-White teacher candidates and creating unnecessary barriers to diversifying the teaching workforce (Mooney, 2021). Black and Latino candidates pass the licensure exams at a lower rate than their White peers, resulting in fewer candidates of color entering the teaching field (Nettles et al., 2011). Some scholars claim that standardized examinations may sustain a segregated teacher workforce and be biased against minorities (Petchauer, 2012). The implementation of heightened professional certification criteria and other requirements has led to a shortage of Black educators on a national scale (Roberts & Andrews, 2013). This study addressed the problem of the lack of teacher racial diversity. Little is known about Black teachers' perceptions, and the limited research available suggests they have much to offer in terms of understanding how racism is built into the exams, how the preparation for the exams is provided, and their experiences of the exam process.

The current state of the teaching profession is characterized by a notable absence of diversity. The relationship of the impact of certification and licensure processes on teacher racial diversity in New York State are unknown. Griffin and Tackie (2016) believed that identifying the distinct needs of Black teachers requires paying close attention to how their experiences are articulated in their own words. African Americans have long had different personal narratives regarding the impact of race on the depth and breadth of their personal life journeys (Delgado & Stefancic, 2012). In this study, CRT explains the legitimacy, acceptability, and significance of the human voices of oppressed communities in conceptualizing ideological, attitude-based, and structural racial inequities (Delgado & Stefancic, 2012). Giving Black in-service teachers, who attended New York State teacher education programs and who, at the time of this study, were actively teaching in an New York State public school, the opportunity to share their experiences with the teacher certification and licensure process in relation to teacher racial diversity among K–12 teachers may help to close that gap.

The research methodology, setting and participants, data collection tools, and data analysis tool were determined based on the research questions, as outlined in Chapter 3. These research questions helped to determine if the teacher certification and license process influence the teacher racial diversity gap.

1. What are Black public school teachers' perceptions of the teacher racial diversity gap in schools?
2. What are the lived experiences of Black public school teachers in New York State in New York State regarding the certification and licensure process?

Research Design

This qualitative phenomenological study necessitated interaction between the researcher and the participants. Qualitative research enables researchers to acquire comprehensive insights into the participants' perspectives, challenges, culture, behaviors, and motivations (Creswell & Poth, 2018). A qualitative methodology approach is best suited to answer research questions. This study's research design was phenomenology, specifically the descriptive phenomenological method, through a CRT framework. The researcher interviewed the Black teacher research candidates utilizing a CRT framework to elicit alternative narratives through personal narratives (Mensah, 2019).

Using counter storytelling as a research method allows the researcher to gain a comprehensive understanding of the lived experiences of others. This approach effectively transports the reader into an unknown and novel realm as they delve into the narratives shared by the storyteller and the individuals recounting their stories (Delgado & Stefancic, 2017). The prioritization of voice within a CRT paradigm presents an alternative narrative to the prevailing narrative that is frequently recounted and acknowledged (Dixson & Rousseau, 2005). Thus, the beauty of the method and theory of CRT employed in this study emphasizes the experiences and journey of the participants, as reflected by the narratives each participant shared (Mensah, 2019).

The lifeworld and viewing of phenomena as humans experience them constitute the ontology of phenomenology (Jackson et al., 2018). Edmund Husserl, a German philosopher, established the phenomenology method in 1900 (Eberle & Schnettler, 2020). Phenomenology explores the essence of experiences by describing the relationship between participants and situations (Giorgi et al., 2017). Amedeo Giorgi followed Husserl's phenomenology approach and developed descriptive phenomenology (Giorgi et al., 2017). With a descriptive approach, the

goal is to investigate the meaning of the lived experiences of the participants to determine the essence of those experiences (Giorgi et al., 2017). The essences of the experiences contribute to understanding the phenomenon (Bloomberg & Volpe, 2019). This approach is the most effective method for identifying the fundamental foundations of related social phenomenon experiences (Bloomberg & Volpe, 2019).

The qualitative phenomenological approach was chosen as the best method for framing the research questions for this study. This phenomenological study aimed to examine the experiences and perspectives of the Black public school teacher participants regarding the role of the teacher certification and licensure process, as well as the teacher racial diversity gap in schools. Descriptive phenomenology is an empirical qualitative research method used to investigate the lifeworld and essence of the participants' experiences (Todres, 2005). There are four distinctive characteristics of descriptive phenomenology: (a) it is descriptive, (b) it uses reduction, (c) it looks for essences, and (d) it focuses on intentionality (Giorgi, 1999).

The descriptive phenomenology design is most suitable for this study because it permitted the researcher to examine the participants' lived experiences through their perspectives on their experiences and how they made meaning of those experiences. The goal was to ensure that the participants' experiences were used to identify the phenomenon's structure rather than the researcher's interpretation. As an educator who went through a formal teacher education program and who, at the time of this study, worked at a higher education institution, the researcher used the bracketing and reflexive approach to acknowledge and limit researcher bias. Using a descriptive research design, the researcher sought to eliminate all biases, to ensure phenomenological reduction, and to set aside all prior beliefs and prejudices regarding the phenomenon by bracketing. In Giorgi's (2017) analysis, reduction refers to the researcher's idea

of accepting the meaning of any experience exactly as it appears in the consciousness of the other person (Giorgi, 1999). In terms of essence, the researcher sought unchanging characteristics of the phenomenon under investigation (Giorgi, 1999).

Research Context

The context of this study was within public schools located in New York State, specifically the Big 5 urban school districts. Participants' feedback from the Buffalo Public Schools, the New York City schools, the Rochester City School District, the Syracuse City School District, and the Yonkers Public Schools is included in this study to provide a variety of perspectives and experiences. This study focused on the participants' lived experiences with the phenomenon, rather than on the school or school district in which they worked.

The diversity of New York's teacher workforce does not match the diversity of its students. According to the NYSED (2019) Diversity Report, there was one teacher of color for every 219 (1:129) students of color in New York State during the 2016–2017 academic year. NYSED (2019) then reported that in the Big 5 cities, the largest urban school districts in New York State, the ratio was 1:64, teacher of color to students of color. New York City reported having one teacher of color for every 30 (1:30) students of color, Rochester reported a ratio of 1:47 teacher of color to students of color, Buffalo reported 1:56 teacher of color to students of color, Yonkers reported a 1:50 ratio of teacher to students, and Syracuse reported 1:102 ratio teacher of color to students of color.

During the 2018–2019 school year, only 19% of the state's public school teachers were people of color, and more than 175 school districts had no minority teachers at all. More specifically with the Big 5 districts, there were only 255 Black teachers among the 3,080 teachers employed in Buffalo Public Schools; 322 Black teachers among the 2,608 teachers

employed in the Rochester City School District; and 131 Black teachers among the 1,412 teachers employed in the Syracuse City School District (NYDatabases.com, n.d.). There were only 143 Black teachers among the 1,657 teachers employed in Yonkers Public Schools and a total of 12,161 Black teachers among the 70,378 employed in New York City Public Schools. According to NYDatabases.com (n.d.) of the 79,135 teachers in the New York State Big 5, only 13,012, 8%, were Black statewide during the 2018-2019 school year.

Research Participants

The participants in this study were chosen based on the focus of the research study, allowing the researcher to meet the research goal and answer the research questions. The researcher conducted a purposive criterion sample and utilized snowball sampling to select the participants. Purposive sampling involves the deliberate selection of individuals or groups who possess expertise and familiarity with a particular phenomenon and are willing to engage in the research process (Creswell, 2013). The purposive sampling technique captures the richness and depth of the individual's experience (Todres, 2005). Snowball sampling is a popular method of sampling in qualitative research, with networking and referrals as the primary characteristics (Parker et al., 2019). According to Giorgi (2015), the descriptive phenomenology method requires at least three participants. The number of participants in other descriptive phenomenological studies has ranged from three to 15 (Giorgi, 2015). For phenomenological analysis, descriptive phenomenological sampling is more concerned with quality than quantity (Todres, 2005).

Therefore, through purposive sampling, 12 Black teachers from three of the five Big 5 school districts were recruited. Recruitment occurred through professional networks and professional teaching associations developed in New York State, My Brother's Keeper Teacher

Opportunity Corps, and local and state unions. The participants were 12 Black teachers, two from Rochester, four from New York City, and six from Syracuse, and they agreed to participate in this research study. Participant tenure in the classroom ranged from 3 to 21 years.

The research participants for this study were required to meet the following criterion: (a) identify as a Black in-service teacher employed, at the time of their interviews, in a public New York State urban classroom in Buffalo Public Schools (BPS), New York City Department of Education (NYC), Rochester City School District (RCSD), Syracuse City School District (SCSD), or Yonkers Public Schools (YPS); (b) have a minimum of 1 year of teaching experience; and (c) have had prior experiences with the teacher education certification and licensure process. The goal was to interview six to 12 participants. Each participant agreed to participate in a 60–90 minute semi-structured interview. The average combined duration of all interviews was 62 minutes. The primary researcher designated pseudonyms to the research participants for the purposes of maintaining confidentiality. Table 3.1 presents the participant demographics.

Table 3.1

Research Participant Demographics

Participant Pseudonym	Participant ID	District	Grade Level	Years Teaching
Aaeesha Car	AC10	NYC	Elementary	7
Anne Barnes	AB07	SCSD	Elementary	5
Jackie Goodloe	JG12	SCSD	Elementary	4
Kesha Martin	KM03	NYC	Secondary	4
Lacresia Roberson	LR09	SCSD	Secondary	3
London Lampkin	LL01	NYC	Secondary	3
Love Alexander	LA06	SCSD	Elementary	21
Lucia Malcolm	LM11	SCSD	Elementary	10
Marquisha Starks	MS02	SCSD	Elementary	5
Samaj Reese	SR04	RCSD	Secondary	6
Shaqushia Martin	SM05	NYC	Elementary	7
Tasha Mac	TM08	RCSD	Secondary	5

Instruments Used in Data Collection

Qualitative methods were employed to conduct this research study. Three instruments were used to collect the data: (a) the interview protocol, (b) a reflexive journal, and (c) the researcher. The researcher used the interview protocol to keep the researcher on track and to reflective journal. The researcher used the reflexive journal to log notes, including brief memos of personal experiences that the participants shared, personal introspections, evolving perceptions, and methodological decision points. Following the completion of each interview, the researcher utilized Otter.ai, a transcription tool, to transcribe the contents of each recorded session.

The utilization of phenomenological interviewing techniques was employed in this study to establish a coherent connection between the research questions and the data collection processes. This approach facilitated the exploration of the underlying meaning of the research questions and enabled the collection of relevant data from the participants. As a result, the data were gathered through individual interviews with each participant. The researcher served as an instrument because it was the researcher's responsibility to determine what was essential and what data should be recorded (Creswell, 2014).

According to Giorgi (1997), questions should be generally broad and open-ended so that participants have many opportunities to express themselves fully. Semi-structured interviews employ a predetermined set of questions to facilitate the interview process, characterized by a conversational and unstructured approach. The utilization of semi-structured interviews allowed for a higher degree of freedom in obtaining valuable insights and ensuring that the data collected from the interview questions was in line with the research goals and objectives. The interview protocol was customized to align with the research questions. The methodology was

intentionally structured to address potential questions proactively, fostering several occasions for generating fresh insights and knowledge through the participants' exchange of their personal experiences.

Creswell and Creswell (2018) assert that the researcher often assumes the role of the primary data gathering instrument in qualitative research. The interview protocol and primary researcher (Appendix B) were used to collect data for this study. During data collection, researchers gain insight into the distinctiveness and unpredictability of the lifeworlds of the participants. This enables the researcher to authentically establish a more immediate connection with the phenomena rather than relying solely on conceptualizations (Bendell et al., 2017).

Creswell (2013) stated that an interview protocol must be developed to conduct interviews and record responses. The interview protocol is an approach to gathering qualitative data in which the researcher directs an interviewee's activities and records the interviewee's information (Creswell, 2013). The protocol comprises a header, major substantive questions, and closing instructions (Creswell, 2013). In addition, Creswell and Creswell (2018) stated that qualitative interview protocols should include (a) basic information about the interview, (b) introductions, (c) opening questions, (d) content questions, and (e) probing questions. To examine the feasibility of the interview approach that was intended to be used and to establish trustworthiness, credibility, and authenticity, the interview protocol was piloted with in-service teachers who met the protocol criteria but who were not participants in this study.

To aid with identifying an initial participant, in each district, the researcher also utilized a recruitment post (Appendix C). Once the participants were identified for this study, each received an invitation with a more detailed description of the study (Appendix D). Qualtrics was

another tool used to collect and electronically store all signed consent forms and related consent data (Appendix E).

Procedures Used for Data Collection

The participants were initially recruited through professional networks and professional teaching associations developed in New York State, My Brother's Keeper Teacher Opportunity Corps, and local and state unions (Appendix C). All prospective participants were contacted by email, followed by a phone call from the researcher. Following verbal confirmation of their intent to participate in this study, each prospective participant received a detailed email invitation to confirm their participation. The invitation provided a brief overview of the researcher's overall intent and direction of the study (Appendix D).

There are two methods for gathering data when a researcher wants to learn about another person's lived experience with a phenomenon. There were two primary methods for gathering information in this study. The initial approach involves conducting a conventional in-person interview, while the other method is soliciting a written or recorded narrative of the individual's experience (Giorgi, 2015). In phenomenological research, what one seeks from a research interview is a complete description of the participant's experience and the experience that the participant lived (Giorgi, 2015). The questions in a phenomenological interview should meet the description criteria (Giorgi, 2015). The following key concepts guided the structure of the phenomenological interview method: phenomenological reduction, natural attitude, description, modes of appearing, lifeworld, and imaginative variation (Bevan, 2014; Giorgi, 1997).

For the purpose of data collection, 12 semi-structured interviews were conducted using the interview protocol for guided questioning, which included nine guiding questions and five probing questions (Appendix B). The researcher formulated each question and reflected the

concepts presented in the research questions. To ensure the validity of the research questions, the researcher's committee and two educators who were not involved in the study (Appendix B) reviewed the interview protocol. Before the transcription process with Otter.ai, each interview was recorded with Zoom.

Out of the total of nine interview questions, five were found to align with the research questions. As a follow-up to the prepared questions, the researcher asked some probing questions. An example of a probing question was specifically asking the participants to talk about their experience in all courses that dealt with diversity, equity, race, and culturally relevant pedagogy, and teaching as a Black male/female student. The probing questions were designed to prompt the participants for clarification on particular responses and/or direct the participants to one of the associated interview prompts.

The purpose of the first four interview questions was to familiarize the participants with the questions' format. In addition, by beginning the interview with these sorts of questions, the participant was able to ease into the interview. This process began to build a relationship of trust with the interviewer. The questions progressively shifted from the joy of teaching to the participants' perspectives on teacher racial diversity, their perceptions of the teacher racial diversity gap, and their lived experiences and perceptions of the certification and licensing procedure.

Qualitative data was collected through the utilization of semi-structured, individual interviews. Each of the interviews were 60–90 minutes in length. The interviews were conducted and recorded using Zoom. The interviews were recorded using a digital recorder that could record and be converted into a text format through a web-based transcription site. Word caption was enabled on the video conferencing platform to assist with the transcription.

The disadvantages of qualitative data collection and analysis techniques are that they are time consuming and may lack consistency, validity, and reliability if not performed correctly (Rahman, 2017). To help stay organized for notetaking and to assist with the data analysis, the researcher also utilized an interview protocol (Appendix B). The researcher asked clarifying questions during the interviews, transcribed the data within 48 hours, and followed up with the participants, if necessary, within 48 hours after the interview to ensure neutrality, dependability, credibility, confirmability, and transferability.

To ensure confidentiality, participants were assigned a pseudonym, and an alpha and number code known only to the researcher, and all identifiers will be removed. All interviews stayed confidential, and all data are stored electronically. MAXQDA and Otter.ti were used to import interview recordings for data analysis and coding, transcription, and storage.

All data were stored electronically on a dedicated computer with a back-up, encrypted data storage device by the researcher. Field notes, reflexive writings, and other physical research materials are archived and stored in a locked cabinet at the researcher's home, and they are in a secured, password-protected Google Docs cloud connected to the St. John Fisher University secure platform, to which only the researcher will have access. All study records with identifiable information, including approved IRB documents, recordings, transcripts, and consent forms, will be destroyed by shredding and deleting from all computers and devices after 3 years of this study's publication.

Procedures Used for Data Analysis

For data analysis, the researcher utilized the Giorgi et al. (2017) data analysis steps. This was accomplished in part by collecting detailed descriptions of the experiences of the Black public school teachers through semi-structured interviews and by assuming an attitude of

reduction. The Giorgi et al. (2017) data analysis procedures included five steps: Step 1: Bracketing, Step 2: Learning about the data, Step 3: Determining meaning units, Step 4: Clustering meaning units and transforming them into descriptive expressions, followed by Step 5: Synthesis and Integration. The interview protocol (Appendix B) was also used as an instrument in the data analysis. An explanation of the data analysis includes a comprehensive description of the Giorgi et al. (2017) descriptive phenomenological method used for this investigation. The chosen design proved to be highly advantageous for this particular research endeavor as it facilitated the researcher in obtaining a comprehensive understanding of the participants' lived experiences, their subsequent reflections on these experiences, and how they derived meaning from them (Giorgi et al., 2017).

Throughout the data analysis process, the researcher employed bracketing and reflexive procedures in order to acknowledge and mitigate potential biases. Consequently, the researcher adopted this stance throughout the totality of data collection and analysis, accepting the participants' interpretations of all shared experiences as they were presented. Using the Giorgi et al. (2017) methods of learning about an experience, and through the lens of CRT, the researcher's data analysis included the following:

To properly immerse oneself in the language encounters of the participants, the researcher undertook a comprehensive procedure of analyzing audio recordings. This involved attentively listening to the recordings of each participant interview and meticulously analyzing the texts of all 12 interviews. This enabled the researcher to acquire a comprehensive comprehension of the study in its entirety, rather than concentrating exclusively on each participant's individual responses.

The researcher then reread the transcripts to identify elements or meaning units of the interviews that highlighted each participant's lived experiences and perceptions regarding if and how the teacher certification and licensure process influence New York State schools' teacher racial diversity gap. The transcripts were entered into MAXQDA, and the data was initially analyzed inductively to identify meaning units, or instances in the language where the researcher perceived a shift in meaning from the previously mentioned teacher's attitude. In MAXQDA, meaning units were represented using color coding and memoing. There were 1,261 initial codes identified. To aid with the overall organization and to combine the codes to develop meaning units, the researcher organized and sorted the meaning units by research questions and experiences. Reflexive journaling was then used to establish a correlation between these transitions and the researcher's own attitude and perspectives.

This qualitative descriptive phenomenological study was designed to investigate how Black public-school teachers in New York State perceive and experience the certification and licensure exam process. This study's findings are covered in Chapter 4. The implications and recommendations for executive leaders based on these findings are outlined in Chapter 5.

Chapter 4: Results

Introduction

This study examined Black teachers' lived experiences and perspectives regarding if and how the teacher certification process influences New York State schools' teacher racial diversity gap. This study employed a qualitative approach of research because the researcher sought a comprehensive understanding of the perceptions and experiences of Black teachers regarding the role of the teacher certification and licensure process in relation to the teacher racial diversity gap in New York State public schools. Using the CRT framework, a descriptive phenomenological approach was used to comprehend the participants' beliefs, perspectives, emotions, and lived experiences. Counter narratives recognize the lived experiences of racialized individuals and disrupt dominant narratives.

The CRT research method and theory used in this study emphasized the participants' journeys and experiences as the primary focus of the investigation. This technique, which incorporated the phenomenological focus on constructing meaning, shed light on the participants' understanding of their experiences and different perceptions, as evidenced by the distinct narratives that each participant shared.

Three essential themes and seven subthemes were revealed through the data analysis. Each essential theme and subtheme comprised the experiences and perceptions of the Black teacher participants regarding the teacher racial diversity gaps. After completing the data analysis, there were two essential themes and four subthemes for Research Question 1, and one

essential theme and three subthemes for Research Question 2. At the conclusion of the data analysis, the following three essential themes were identified:

1. Minimal information on how to become a teacher
2. Standardized tests
3. My Black experience

Each theme and subthemes are introduced and investigated to answer the research questions for this study. Later in Chapter 4, the findings are presented and analyzed in response to the study's research questions to demonstrate the connections to the themes. More explicit information about the key themes and subthemes can be found in the findings section of this study. Chapter 4 concludes with an overview of the research findings.

Research Questions

The research questions that guided this study were:

1. What are Black public school teachers' perceptions of the teacher racial diversity gap in schools?
2. What are the lived experiences of Black public school teachers in New York State regarding the certification and licensure process?

Findings

The researcher used MAXQDA's creative coding feature to transform the data into expressions or key themes. The essential themes and subthemes emerged as they were conveyed in the teachers' own voices and as they described their shared experiences. All essential themes and subthemes were identified to include the Black teacher participants' voices authentically and to grasp their personal experiences within the phenomenon being studied. Once discovered, these shared experiences clarified the structure and meaning of the teachers' lived experiences and

perceptions regarding if and how the teacher certification and licensure process influences New York State schools’ teacher racial diversity gap. Returning to the purpose of this study, the researcher synthesized the essential themes into a statement of the structure that gave meaning to the role of the teacher certification and licensure process in connection with the teacher racial diversity gap in New York State public schools.

Table 4.1 displays the alignment of interview questions to a research question. As illustrated in Table 4.2, three essential themes and seven subthemes were revealed after thoroughly analyzing the identified meaning units within each transcript. Essential Themes 1 and 2 and the four subthemes aligned with Research Question 1. In Research Question 1, the participants were asked to share their perceptions of the teacher racial diversity gap in schools. Essential Theme 3 and the three subthemes aligned with Research Question 2. For Research Question 2, the participants talked about their lived experiences relating to the certification and licensure process. The following section discusses each theme and subtheme.

Table 4.1

Interview Questions in Alignment to Research Questions

Interview Question	Aligned Research Question
Can you describe your experiences as a Black teacher candidate in your teacher education program?	2
How would you describe your experience with the teacher certification process?	2
Tell me about your experience with the licensure exam process.	2
What factors do you believe contribute to Black students performing at disproportionately lower rates than White students on the teacher certification standardized tests?	1
Can you tell me about your perceptions of being a Black public-school teacher in New York State regarding the certification and licensure process?	2

Table 4.2*Essential Themes and Subthemes*

Theme	Subthemes
Minimal information on how to become a teacher	1a. You can't be who you don't see 1b. To get a foot in the door 1c. Going in blindly
Standardized Tests	2a. This test was not designed for us
My Black experience	3a. Misalignment between theory, practice, and reality 3b. The isolation 3c. Teacher certification exams

The researcher paired each essential theme with a statement directly provided by a study participant. This was done to provide a clearer explanation of how each essential theme addressed the study's research questions. The references were gathered by conducting interviews with the study's participants.

Theme 1: Minimal Information on How to Become a Teacher

All 12 participants supported this first essential theme, minimal information on how to become a teacher, with three subthemes. "You cannot be who you do not see" was the first subtheme. In this subtheme, participants talked about how the lack of exposure to teacher racial diversity could impact the teacher racial diversity gap in schools. In the second subtheme, to get a foot in the door, participants explored the challenges of becoming the teacher-of-record after failing certification exams. Thus, they revealed how they got into the classroom to gain experience. In the third subtheme, going in blindly, participants shared their perspective on how the lack of access to information and resources contribute to the teacher racial diversity gap.

You Can't Be Who You Don't See. The research participants expressed that children needed to see themselves reflected in the classroom; however, the lack of diversity makes it almost impossible to diversify the workforce, and the lack of diversity among teachers is a continuing trend. The teaching profession is primarily female and White. Aaesha proclaimed, “The teaching profession is mostly female and White, and there is a lack of interest in diversity among some peers. So, the lack of diversity is a big, big problem.” The lack of diversity is a big problem, as it affects the messaging.

For seven participants, the findings revealed that exposure to diverse teachers and awareness of the possibility of pursuing a career in teaching are essential factors in increasing diversity in the field. Lack of exposure to teachers and awareness of the possibility of pursuing a teaching career may also contribute to the underrepresentation of Black teachers. Representation is essential, as students need to see increases in Black and brown teachers in the classroom to be encouraged to pursue the field. Anne reflected on her own experiences and shared:

I attended an urban school district from kindergarten to 12th grade. I had maybe two Black teachers—and I didn't see any Black teachers until I got to high school And I thought that was odd, considering that most students are Black or brown, particularly in the Syracuse City School District. And I had only had two Black or brown teachers in my life. (AB07)

Aaesha shared the same experience as Anne, who did not have a male or a teacher of color until middle school. “I'm thinking about when I was a kid in the 90s growing up in New York City, like, I didn't have males personally. I didn't have male teachers or teachers of color, who taught me until middle school.” Samaj talked about how different his schooling was in Africa compared to the United States. He shared that when he moved to Rochester,

My teachers, most of them, were all White; they were all White and growing up here. I thought maybe all teachers must be White. Most teachers must be White. No, we got Black teachers where I came from. There were Black teachers, and, yes, Black people can also be teachers. (SR04)

Nevertheless, the participants all asked, “but where are the Black teachers?” Samaj then went on to share, “I’m teaching, and kids who look at a teacher and see themselves, you know, it makes a big difference.” Samaj then stated,

My perception of being a Black male teacher in New York State, I think we need more of us of people like me, first of all, and secondly, those of us who are here teaching, you know, we need to try to let the students know because these are the students who will later turn into us, you know, one day, you know, so we need like to encourage them to pursue education. Let them know that they could also be teachers just like us. They could do this no matter their background; no matter how hard it gets, they could keep on going. They could become teachers. (SR04)

Kesha added,

Surrounded by White individuals in a field that, honestly, just kind of seems like, in certain areas, is being Whitewashed, and what hurts so much about that is the fact that there are so many Black individuals I feel that really do want to become teachers had I decided “okay, you know, it was not for me, you know?” (KM03)

London questioned:

How many Black and brown teachers are you seeing? If you want to see more Black and brown teachers in the classroom or if you want me to pursue that field, I have to see it to

be it. So, being exposed to teachers or being just aware of the fact that they can also pursue that route, that path, is important. (LL01)

Lacresia believed that teacher racial diversity is crucial for the education of the diverse student population in the United States. However, she felt that the current lack of teacher racial diversity is not adequately supporting the needs of students from different backgrounds and identities. Shaqushia believed that it is important for students to see people who look like them in the classroom. All the participants recognized the benefits of diversity and believed that more diversity could benefit all students, especially Black and brown students. Aaesha proclaimed,

The lack of diversity among teachers is a continuing trend, with progress being made but more work [is] still needed. The teaching profession is mostly female and White, and there is a lack of interest in diversity among some peers. This lack of diversity is a big problem, as it affects the messaging being taught to future leaders. While there are programs aimed at solving this problem, there is still a long way to go. The messaging and narratives you are saying in your classroom are very important. (AC10)

The findings revealed that for seven participants, exposure to diverse teachers and awareness of teaching as a career are critical to increasing diversity in the teaching profession. The participants perceived that a lack of exposure to teachers and awareness of teaching careers might also contribute to the underrepresentation of Black teachers. Even though some progress has been made, the participants believed there is still a great deal of work to be done to increase the diversity of public school teachers.

The participants discussed their initial interactions with a Black teacher. Many of the participants did not encounter their first Black or brown teacher until they entered secondary school. Furthermore, they discussed the significance of diversity in the classroom. The

participants perceived that a diverse group of teachers is necessary for the education of the multiethnic student population in the United States and New York State, and that even greater diversity among teachers would be beneficial for all students, especially children of color.

To Get a Foot in the Door. In this subtheme, the participants discussed the difficulty of entering the classroom as the teacher of record because of the failure of the certification exam(s). Therefore, they shared what they had to do to get access into the school system just to gain experience in the classroom. “I often say that I had to come to the district or get a job in the district through the back door,” Anne stated. The participants’ most common explanation was that they either did not take the exam or did take it but failed on their first, second, or third attempts; hence, it was difficult to obtain a teaching position. Seven of the 12 participants shared how they succeeded in teaching as teaching assistant in the classroom. Two participants were able to secure employment as tutors to acquire teaching experience in the field of education. The other seven participants were successful in obtaining employment as teaching assistants and/or long-term substitutes. Three individuals talked about their experiences of working in charter schools because they were not required to be certified.

Anne faced barriers in obtaining a teaching job particularly due to the difficulty of the edTPA test. Despite having a master’s degree and experience, she was often told she was not qualified for positions and had to come in through the back door. The edTPA was a significant challenge; she took it three times and still did not pass it. Anne felt she was not given a fair chance in the job market:

The edTPA was a barrier because, obviously, when you are getting a teaching job, districts want you to have everything you need before you get the job, and I get that. However, I feel like the edTPA was very, very difficult. So that was a challenge, all in

itself. As I pursued trying to get a job after graduation, I was often told “no, you know, we can’t give you a job, even with your masters,” even with just the one test that you do have to take those very difficult tests. Like I said, I took it three times, and I paid for it three times. And I still didn’t pass it. I was told that “no, we can’t, we can’t give you a job with just your experience.” I often say that I had to come to the district or get a job in the district through the back door. I started my career as a teaching assistant and then moved into a long-term substitute teacher before becoming the teacher of record. (AB07)

Given the edTPA exam’s difficulty, Anne could not obtain a teaching position, and given the difficulty of the examination, she was frequently denied positions—despite having a master’s degree and years of experience. She failed the examination despite taking it three times. This experience motivated Anne to pursue a career as a teaching assistant, a long-term substitute teacher, and ultimately the teacher of record. She believed that, despite her efforts, she was not given a fair opportunity within the job market.

Both Love and Lucia talked about having a degree, but how they could not get into the district as a teacher after completing their teacher education program due to not having passed the certification exams. After graduating, Love became a teacher’s assistant (TA) and then a long-term substitute teacher, and she decided to continue working in the school district where she grew up. She wanted to gain hands-on experience in the urban area where she wanted to teach. Lucia shared,

I had the degree, but I had not passed the special ed test. So, I went in as a TA. Again, no one ever told me that while you’re working on that, you can come in the classroom and teach—that wasn’t offered to me. So, I could sub. So, I would sub, and then when I wanted something a little more stable. (LM11)

Aaesha shared,

Until I was completely certified, I did I worked as a tutor, and I was an assistant in a public school. I also worked in a charter school in New York City. They're more lenient about that with charter schools since they're a little bit more independent than fully public schools. (AC10)

Aaesha relied on charter schools due to their flexibility with licensing. She noticed that charter schools tended to hire people of color at higher rates, many of whom were not certified. While this provided employment opportunities, it also created a complacent attitude toward certification. London stated,

I'm speaking from personal experience. I've taught [in] charter schools in New York City. And so, I know that charter schools are unique in that they don't necessarily require, not all of them, require teaching certifications. So that's a way that many, many Black and brown teachers enter the teaching profession without even having a teacher certification. (LA06)

Kesha shared,

I can't completely give up on my dream of teaching. I just spent 4 years trying to become one. So, I took a job working at a preschool, and that was like my first step into the teaching role on my own. (KM03)

Love and Lucia discussed their experiences with teacher education programs, but their inability to pass the certification exams prevented them from entering their districts as teachers. Love became a substitute teacher in her hometown school district following graduation. Lucia had a degree but failed the special education examination, so she worked as a teaching assistant. Aaesha worked as a tutor, an assistant, and in a charter school in New York City, which

provided greater licensing flexibility. Which, therefore, resulted in her having a dismissive attitude toward certification.

London, who taught in New York City, emphasized the unique characteristics of charter schools, which enable many Black and brown teachers to enter the field without certification. Kesha, who spent 4 years attempting to become a teacher, began her teaching career at a preschool. Despite having performed inadequately on the examinations, the participants believed they had to do whatever it took to gain experience in the classroom, even if that meant entering teaching through lesser positions as a teaching assistant, substitute teacher, or tutor.

Going in Blindly. The participants shared that the lack of access to information and resources is a major contributor to the disproportionate representation of Black students, affecting every area and creating a significant barrier to passing the certification exams and achieving academic success.

Nine of the 12 participants shared the same sentiments: the lack of access to information and resources is a major contributor to the disproportionate representation of Black students. White students have access to exemplars on exams that Black students do not, given their families' access to positions of authority. This lack of access affects every area and is a significant barrier to passing tests and achieving academic success.

Lacresia shared, “most of us just don’t have the access and the opportunities like our White counterparts.” Lack of exposure and experience in the certification process and limited access to family members who have gone through the process can also contribute to lower performance on certification exams. Marquisha stated, “so the access their parents, their grandparents, their family members, who are in position and authority, have access that we don’t have.”

Marquisha continued by stating, “so I think one of the reasons why we are so disproportionately fragmented, again, is because of our lack of access in every area, to the information, you know, to the resource is the lack of access.” Marquisha shared,

Access to the information that would allow us to pass. The test is not an easy one, but the lack of access. In addition, I’ve observed that White students who have completed the very same academic content as I have but have been given exemplars that are on the exam, that Black students are not privy to. (MS02)

Tasha, Lacroesia, and Kesha all agreed with Marquisha’s statement regarding access to family members who, too, are educators. Kesha stated, “I want to say resources in terms of family members and exposure and all of that, too, because I remember being in class in multiple classes, and all my peers were just saying how they had help.” Kesha went on to say that her White classmates had their family members as a resource since many had family members who, too, were teachers. Kesha went on to state that she did not have that type of access, because there were no educators in her family:

I feel like not a lot of us [Black individuals] came from families that may have either had careers in this, you know, in the teaching field, or, you know, anything that they needed to go through a similar process, like my entire family knew nothing about what I was doing. (KM03)

Kesha shared,

Resources in terms of the teacher education programs in the universities and outside of it. Um, I didn’t know, if I didn’t have access or couldn’t find it. But I didn’t really feel like I had a lot of support in terms of, like, preparing for the exam or like knowing exactly what was going to be on the exam. (KM03)

Aaesha, Lacsia, and Samaj also talked about the lack of access to resources like study guides.

Marquisha mentioned a conversation “with a White colleague who offered resources and a tutor.” However, she was surprised to learn that she and her Black colleagues were unaware of these resources. The lack of access to resources and information is a disadvantage for her and her Black colleagues. Shaquisha agreed, “the biggest factor in assessment success is preparation, but Black students are not being prepared at the same rate as their White counterparts. This lack of preparation is due to a lack of support.”

Aaesha suggested, “that one reason for the lower performance of Black individuals on standardized tests may be due to lack of access to resources and support, such as study materials,” and added “collaboration with peers who have successfully passed the tests.”

London brought in a different perspective. She recalled having access to study guides; however, the lack of information and preparation tools that were available, was a barrier. The lack of exposure to important questions, resources, and study guides caused anxiety for test takers like her. London shared,

I remember studying for my teacher licensing test, and there were only, like, maybe, like, I want to say, five to 10 questions on what the test would be like, but you really didn't have too much exposure to those questions, which means you don't have many opportunities to study, and so you're going in kind of blindly. (LL01)

Love shared her frustration with the lack of resources and support for preparing for exams and feeling like the study booklets provided were not helpful. Love also discussed her experience with exam preparation and how their counterparts would spend money on expensive prep courses while they received it for free. As she reminisced on the experience she shared,

I remember the preparation, being prepared differently. Because my counterparts, when I say, “I need your help for taking these exams?” They like, “oh, okay, yeah. Can I help you? Because I passed it with?” And I’m like, and “it was that easy for you? Where did you study from?” And it’s all I can show you. So, it became, what book are you looking at? Who did you go to? And then, you know, finding out who they would go to, you know, they would spend like, \$200–\$300 to be prepped by somebody was like, “yeah, no, [I did not have] 200 300 extra dollars just floating somewhere to get the preparation.

(KA06)

Lacresia believed that “there is an opportunity gap that sets Black students back in education. They feel that White students are heavily supported and have more access. The lack of financial support for certification exams is another barrier to success.”

The participants perceived that the lack of access and opportunities for Black individuals in the certification process resulted in lower performance on exams. Opportunities included limited access to family members who had gone through the process, and resources such as study guides and information about the exams. The participants also believed that White students often had access to those resources and exemplars that Black students did not. The participants felt that the lack of preparation and support was a disadvantage for Black individuals, and there was an opportunity gap that set them back in education. The lack of financial support for certification exams was another barrier to success.

Theme 2: Standardized Tests

All 12 participants expressed their concerns regarding standardized testing, and they supported this theme with a subtheme, this test was not designed for us. Eight of the 12 participants discussed how the wording on standardized exams is not culturally responsive and

how this was not only not their experience but also that Black students in K–12 perform poorly on exams.

This Test Was Not Design for Us. The participants reported that examinations lack cultural sensitivity. Standardized tests employ language and experiences to which the majority of Black students and individuals have not been exposed, experienced, or had prior knowledge. “I think the language is one of the issues; it’s not written for people of color Black students can’t make a connection, because you’re not talking about anything that they know about,” stated Lucia.

The findings revealed that the language used in teacher preparation materials is not written for people of color, which contributes to Black students performing at lower rates. The lack of welcome and excitement in the testing process can also be intimidating, especially for first-generation educators who are unsure of what to expect. The participants then stated that the language in education materials is not written for people of color, contributing to lower performance rates for Black students.

The findings also revealed that standardized tests do not accurately reflect the experiences and language of Black students, making it difficult for them to connect and perform well on these tests. The findings suggested that this disconnection starts early on and needs to be addressed in pre-K education. The participants also acknowledged that the negative experiences with testing could create a mental block for students, making it harder for them to succeed in higher education where testing is required. Lucia discussed the use of slang and how it is not reflective of actual progress.

Lacresia expressed frustration with the education system’s focus on White authors and the lack of diversity in the curriculum. She argued that “this perpetuates institutional racism and

limits teacher and student opportunities.” Aaeesha also noted that the content of the assessments might include unfamiliar topics, which can be challenging without prior exposure or background knowledge. Tasha explained, “The lack of exposure to exams, vocabulary, the world, and life experiences causes barriers to success on standardized exams for students of any age.” Lucia shared,

I think the language is one of the issues; it’s not written for people of color. I don’t know when they may have changed it, but it’s not written for us. And the language is different. The issue students face on standardized tests starts from the time they enter pre-K. And they are asked to point to a lamp, and they say, what’s that? The Black kids don’t know what a lamp is, because, in their house, it is called a light. It’s not called a lamp. You know, we don’t call it the lamp. So, you know, the Black students can’t make a connection, because you’re not talking about anything that they know about. (LM11)

Lucia continued, stating,

So, now they are sitting a little bit longer because they are trying to process based on your language and your experiences, not their own. It so happens that in their house, they all turn the light off. They turn the light on. So, you pointed to a picture and told me to show you which one is the lamp, and look, oh, no. We light it, I don’t know, show me a light switch. And I’ll tell you what to do with it, so to me, it starts then. (LM11)

Lucia ended with:

And we just build upon it, build upon and build upon it. Until you know that student gets to the point that I don’t like to take tests. So, now you internally have put up a blocker. But now you, and you in higher ed, you know, you got to take this test in order for you to become something, but you don’t put a block in it . . . in third grade, you know, put a

block on it. We don't like taking tests, but they were never designed for us to pass. But now I'm 21, and I want to be an educator; I gotta go ahead and take this test. They can't prepare me for that because how do you undo all that damage? So, it has to start much earlier? Right? And, again, I go all the way back to pre-K. (LM11)

Lacresia also questioned the validity of standardized testing and its impact on Black students' performance. She criticized the lack of diversity in the English certification exam, which heavily focuses on Shakespeare and other White authors. She shared her personal experience of struggling with the exam and feeling inadequate as a teacher:

I mean, think about thinking back at answering those questions on the certification exams, the things that they were asking me, who everybody loves Shakespeare. I don't. I don't like the man because I don't understand what the man is saying. Even at this age. And, at this point in my study, I'm a grad student. I made it into grad school without caring about Shakespeare, you know? I don't need to care about Shakespeare; however, Shakespeare and this person and this person and they said, all thy and thou and oh my god, it just drives me crazy because I don't understand what these people are saying and I have no connection with it. (LR09)

Lacresia shared,

So, the questions on the exams don't speak to any diversity at all. It speaks the one-story narrative, that one narrative that they're just trying to push, push, push, push, push, and I guess when you get to teaching your middle school and high school students, you're gonna have to teach this, too, and no, I do not. And no, I do not. Because as education is reforming, and as education is becoming, well, trying to reframe this idea, they do not need to know Shakespeare to be successful. That is, that's going to be my argument. And

I don't care what anyone has to say, because I made it to grad school without caring about Shakespeare at all, and still not understanding the man at all. There's a huge disconnect with the culture. (LR09)

Shaqushia discussed the barriers she faced with the certification exams. She found that the scenarios presented were often not relatable to her experiences as a Black student and were more aligned with suburban White students. This made it difficult to answer questions and find solutions. She shared that she had to rely on her own imagination to get through the scenarios. Shaqushia stated:

So, it's sometimes, well, it was a bit difficult to answer some of the questions and to relate to some of the scenarios that we were given on the certification exams and to find solutions for the problems or the issues because they weren't very relatable. (SM05)

The participants perceived the education system's emphasis on White authors and the lack of diversity in the curriculum perpetuated institutional prejudice. Which, therefore, restricted the opportunities of both Black teacher candidates and school-aged students. The participants believed unfamiliar topics might be included in assessment content, which could be challenging without prior exposure or background knowledge. They felt that the language used on standardized exams was not written for people of color, which creates obstacles to success beginning in pre-K. The validity and impact of standardized testing on the performance of Black learners were questioned, and the lack of diversity on certification exams was criticized. Frequently, the scenarios presented on certification exams are not relatable to the experiences of Black students, making it difficult for them to answer questions and find solutions.

Theme 3: The Black Experience

All 12 participants discussed the challenges they faced in their individual teacher education programs as the only Black teacher candidates in their cohort or as one of a relatively small number of Black teacher candidates overall. When describing their experiences, the participants utilized terms such as “isolation,” “loneliness,” “feeling like an exile,” “not being heard,” and “not belonging.” Three subthemes emerged to share the participants respective experiences and support this theme. The three subthemes were misalignment between theory, practice, and reality; the feeling of isolation; and the teacher education certification exams. Nine of the 12 participants spoke about the misalignment between theory, practice, and reality. Seven of the 12 shared their feelings of isolation to describe their experience as a Black teacher candidate attending a predominantly White institution. Additionally, all 12 participants shared their experiences with the teacher education certification exams.

Misalignment Between Theory, Practice, and Reality. Nine of the 12 participants mentioned that the information they were taught in their education courses did not correspond with what they observed in their clinical experiences, especially in urban settings. Five participants believed that the programs’ content and curriculum had been “Whitewashed,” while seven participants believed that the program did not adhere to culturally relevant standards. Everyone who participated in this study expressed a desire to return to their hometown and teach in an urban community but felt unprepared to do so because the curriculum was not culturally responsive, that is, it was not “tailored to the realities of all students.”

The research participants also criticized the lack of a positive portrayal of African richness in the literature and the lack of choice in the literature they were given. The participants noted that the literature they were given was predominantly about White people and that the

professors teaching them were also White. The participants argued that while they should be allowed to read literature about White people, it cannot be the entire conversation. The participants believed that they needed to learn about their own culture and identity in order to be able to teach others. Kesha explained,

But I know, in a lot of the courses that we took, I always said to myself, “you know, the strategies and the tools and the tips that they’re given aren’t going to work.” I always started to relate it back to myself, students that I went to school with students that looked like me, and I was always saying “this is not going to work.” And the things that they were saying were very general, regarding classroom management, and it would not relate to the students that I planned on teaching. When I went on to do my practicum in Syracuse, those were some of the most intense experiences I think, as a young up and coming teacher, could have went through; it was so shocking. And I, you know, I looked at where I was, and I said, “yeah, there’s no way I’m trying what they said to try because you can’t even get to that.” (KM03)

Kesha went on to share,

Those strategies were not working, so ,you know, I think eventually I became very frustrated that what was being taught to us, how we were being prepared, was very small and closed in comparison to what the teaching world was really like. So, I’m so glad and grateful for the practicums in Syracuse because I was able to really see what it was like out there. After all, what my classmates were talking about, what their aunts and their mom and their uncle experienced as teachers, was not what I would experience. And I knew that as a Black individual, I knew that I couldn’t really just take their experiences and just go with it. (KM03)

Lucia believed that racism exists in the real world and that programs do not make adequate accommodations for persons of color. Her perspective was that the “textbook of life” cannot adequately prepare Black educators for the difficulties they will encounter in their careers. Lucia stated,

There was no place for those of color in the program, because you would have to separate us, you know, or you would have to present it in a way where, you know, you do come in with, you know, the racism that comes along with it. And you’re going into the real world, and you’re going to be outnumbered, depending on the district that you’re in. So, most like you, constantly, have the textbook of life, but the reality is there, but once I got into it, it couldn’t. It could not prepare me for that. (LM11)

Lacresia felt that while some things she learned in her pedagogy courses were applicable, there was a disconnection between theory and what actually happened in schools. She believed that much of the research and theory they studied was outdated and did not reflect the demographics of the students she wanted to teach, particularly Black and brown students. Lacresia felt that much of the research was Whitewashed and not applicable to her students. Despite this, she was able to take what she learned and adapt it to her teaching. Lacresia then shared,

I feel like there’s a disconnect between the theory and what actually happened in schools. I feel like theory could be very outdated. And a lot of what we studied was theory and we were studying outdated theory. Not only that, but the professors I feel like, teaching the curriculum or involving their research and stuff is very far removed. What I was seeing in the Syracuse City School District, I felt like their understanding and the demographics that they studied did not reflect the demographic that I was teaching. (LR09)

Lacresia ended with,

Some things could be applied because two things can be true at once. Some things may work, but not all of the things may not work. And what I see is that research is very like theory and is found dated, and research or research is very found dated in theory. A lot of the research is just very Whitewashed. Just simply put, it was Whitewashed; they didn't study anything about Black people. They don't know anything about Black people, and so a lot of this research is just from White people thinking. (LR09)

Marquisha pointed out that there was a lack of diversity among the professors, and she had the impression that they did not completely comprehend the perspectives of people of color. She advised conducting a practical assessment of themes connected to surviving and thriving, but she questioned whether or not their community had the desire to gain information. Marquisha also shared,

Yes, we did have a Black professor, but the rest of the teachers were not. They don't live in our space. They do not cohabitate or shop in the environments. I did not feel that most of them had a true understanding. A practical one, not a theoretical one, on who we are, how we learn, how we survive, how we thrive, how we simply live. And I don't know that we're interested in learning. (MS02)

Samaj felt that the pedagogy/theory and his field experiences were not aligned. The discussions in class were from a White perspective and did not pertain to students of color or Black students. As a result, it was challenging for him to apply what he was learning in the classroom to his clinical experiences because he had to modify the information. Samaj believed he was working more than his White counterparts. Samaj had a similar experience that he shared:

There was not much alignment between the pedagogy/theory and the field experiences. A lot of what was discussed in the classes was from a White perspective. I didn't really see that alignment going into my clinicals because I worked mostly with students of color in my clinicals, and it's just a different experience. These conversations pertain to more of like a White audience or White students and not so many students of color and Black students. So, it was it was difficult at times to transfer a lot of what I was learning in the classroom into my clinicals. Because I found that the information, I was learning I had to modify and that I had to do a lot of modifications. It just made me feel like I was doing a lot of work that my White counterparts were not doing. (SR04)

The research participants discussed their frustrations with the inapplicability of the strategies and tools taught in the teacher education program and their experiences as Black individuals in pedagogy courses. The participants felt that the research and theory they were taught were out of date and Whitewashed, failing to reflect the demographics of the students they desired to teach. In addition, they believed there was a disconnection between theory and the reality in schools and that the professors instructing the curriculum were far removed from the realities of Black students.

The Feeling of Isolation. Seven of the 12 participants discussed what being the only Black person in their program was like and how it made them feel isolated. The participants discussed how they were not invited to study sessions or other outside-of-class gatherings with their peers; they also discussed how they were the only student majoring in education in their friend circle; and they discussed how their friends were unable to relate to their experience as Black students enrolled in a teacher education program.

Kesha recalled her experience. As the only person of color in her class, she did not feel comfortable speaking up on behalf of Black individuals. “I definitely don’t think I ever felt comfortable enough to speak up on behalf of Black individuals or, you know, Black teachers up and coming teachers.” Aaesha also shared her experience, and recalled an instance where she did not correct her peers’ inaccurate statements or behavior. She explained that she did not feel it was worth speaking up as she believed her peers were set in their ways and her perspective would not change much. Aaesha explained,

That a lot of times, I would be the only person of color in my class, which shouldn’t technically be a problem, but especially the kind of work that we’re signing up for. It really did, like, kind of hold up a mirror to where our country is in terms of, you know, race relations and how that affects schooling and students The lack of effort to understand the other created a disheartening and isolating environment. (AC10)

Samaj shared,

I was the only Black kid in the program of students. This is interesting because there were times when I felt like, maybe, I couldn’t do this. There were times I thought I was in the wrong program. There were times I wanted to stop going to the school that I attended. (SR04)

Anne shared her experience in the teaching program and how she struggled because of the lack of diversity among her peers. She mentioned feeling misunderstood and attacked by her peers:

So, in the program, it was really challenging. To be in the program with a bunch of people who didn’t look like me, a bunch of people that didn’t have the same perception as me, the same background as me, the same experience as me, so they didn’t understand

why I would answer a question like this or why I would do things like this or why would do things like that. (AB07)

Jackie talked about being the only Black student in the class, and how she felt uncomfortable with how her White peers and professors spoke about the Black student experiences in the urban districts. Jackie shared that one of her professors stated, “There are a lot of single mothers; they’re students living with grandparents, and some are homeless.” Jackie remembered sitting there in shock and stating to herself, “Just all this, all these just stereotypical stuff Is this for real?” Jackie shared:

I turned around, and I said “excuse me.” I was like; “I am one of those Black kids from the district. I’m one of those kids when you talk about those teachers talking about me as well,” because I aligned myself with those kids. I see my kids and myself and those kids in the background. I was like, “I see myself in those kids, and we’re gonna talk with those kids like that because I am one of those kids.” I am one of those kids that came from a single-parent home. I am one of those kids that lived with their grandparents at times and with their mom because my mom was going back to college. I was like, “I am a product of a young mother. I was excited when you guys talked about these kids. You’re looking at one of them.” They were talking about them like they can’t be successful. And I was like, I used to go home, and I used to be like, I want to drop out; I hate this program. I don’t want to go there. I was in crisis. (JG12)

Kesha also felt singled out as one of the only Black individuals in her classes and struggled to find a community of teachers who shared her experiences. She, too, shared that going through the certification process was isolating and discouraging:

So, it was a little lonely, I would say, because I didn't really have anyone to tell me what it was like in my classes of, you know, or how it was going to be. Because there wasn't anyone else like me. (KM03)

London and Lucia shared the same experience as Kesha. London shared, "Um, so in my particular experience, I was, I think, the only, you know, Black girl in the specific adolescence math program, and it felt very isolating. I didn't feel like I connected with my peers a lot." Lucia shared:

Having anybody around me or want to talk to me is, so; I just feel like, as a Black woman, [it] is kind of hard; you know, people have their already, like, self-preconceived notions about you and who you are, what you like, and what you don't like, and what you eat and what you don't eat. You know, how you dress and how you don't dress and all these other things. (LM11)

Marquisha talked about feeling disenfranchised and unheard in classroom conversations, often being perceived as aggressive despite being educated and skilled. She shared a time when she had a conflict with a colleague who attempted to minimize her feelings. Marquisha shared that she had no opportunity for restorative conversations. She also shared that she faced discrimination when her professor called her lazy for missing class because she was in the hospital with her daughter who was in labor.

Shaquishia recalled how she did not connect with many of her classmates and had to navigate independently. She also talked about how the Black students in courses dealt with race and racism and felt pressured to be the spokesperson for all Black people. Black students often started and carried the conversation, but it would end abruptly if something offensive was said to the White students. The experiences were uncomfortable.

Tasha, London, and Lacresia shared a little bit of a different experience than the other participants when it came to their experiences by speaking up as the only Black student in their education classes. The three reflected on their experiences in college and how they felt empowered to voice their opinions in class. They felt empowered to educate their White peers who would interact with Black and brown students in the future. They felt heard and could contribute their perspective, advocating for future students.

Tasha, London, and Lacresia acknowledged that cultural relevance was important in teaching and that some White students may not have been exposed to certain cultures. However, they felt that their professors and classmates were willing to learn from them, and they were able to have productive conversations. They also noted that they could pull back when they felt uncomfortable about speaking up and that the overall experience was positive. London shared:

I felt really empowered to speak up as one of the few Black and brown students. I felt like this was my area to educate, you know, my fellow White peers. I felt as though those were the classes that I really, really was able to contribute my perspective, and I felt heard. (LL01)

Lucia shared,

I felt empowered. I felt empowered. I wouldn't say that the whole experience was shaky, to the point where I couldn't voice what I needed to voice. I said what I needed to say in classes, and other students understood, and even other students could express their understanding in a way that didn't put me down. And a lot of those students didn't have the connections, so culturally relevant teaching, and this is something that they were just learning. So, I felt like they were willing to learn from someone like me. (LM11)

Tasha shared, “I was the only Black person in my cohort, but I felt welcomed and heard. I never felt excluded. I never felt like I was the token Black person.” The participants shared their experiences of being the only Black student in their education courses. Many felt alienated and uneasy when advocating for Black people or correcting their peers’ inaccurate statements or behavior. They struggled to find a community of classmates who shared their experiences and encountered prejudice and misunderstanding from classmates and professors.

However, some participants felt empowered to express their opinions and educate their White counterparts, advocating on behalf of future Black students. They acknowledged the significance of cultural relevance in the classroom and believed their professors and peers were eager to learn from them. The experiences varied, with some individuals feeling excluded while others felt welcomed and heard.

The Teacher Education Certification Exams. Eleven of the 12 participants were unsuccessful in at least one of their first attempts at the teacher education certification examination. The participants each related a story about their personal experiences with the examinations required for certification as teachers and how those experiences made them feel. Because of their difficulties in passing the certification exams, four participants questioned whether this profession was meant for them. Three of them did not achieve success until after their third attempt, and one of them was still unsuccessful after trying five times. They used phrases such as “felt like a failure,” “shame,” and “did not want others to know.” They also said that they lacked community. Three participants talked about their experiences and sensations at the actual testing site and how the sites were unwelcoming, especially if they were the only Black students there. They described how they felt unwelcomed there.

Marquisha shared, “Well, first of all, I was not prepared at all. There were no real life exemplars or examples of what may be on the exam. Right?” Aaeesha talked about how she avoided taking the edTPA for 7 years. She expressed fear and discouragement toward the edTPA exam, citing its complexity and high stakes. She found the process overwhelming, and also heard stories of people failing the exam, and she felt daunted by the possibility of immediate failure. “I ran from the edTPA for 7 years. I was fearful of the edTPA because it was a lot.” Anne talked about how she passed all but two of the exams on the first attempt.

Um, so yes, I passed everything except the edTPA. edTPA, I ended up paying for three times, and then right when I was about to retake it, I learned it was no longer needed. If I were a little bit more prepared for what they were asking for on the content exam, like the math part, I would have, I think, I would have done better. (AB07)

Jackie paid for the edTPA and recorded her lessons but heard horror stories of people failing the exam, particularly Black women. Jackie was scheduled to retake the content test for the sixth time and questioned if teaching was the right career for her. Kesha failed her content exam twice and felt isolated. Lucia also spoke about failing the content exams for her major—having to take it twice and only being a point or two away from passing. “I had to take that test twice, and it was like maybe a point or two off. So, what do you study? Because you are only a point or two away, so clearly what you knew is good.” She hesitated to ask for help because she believed she couldn’t do it anyway. Both Lucia and Jackie coped by studying and praying. During other tests, Lucia felt she needed a break to stand and move, but didn’t feel comfortable asking for one. Lucia recalled wishing the testing environment was more welcoming to her needs. Lucia also talked about how the testing sites could be intimidating, especially being the only person of color in the classroom.

Love discussed the difficulties and limitations of standardized testing in education. She argued that, “true learning comes from being in the classroom and interacting with students, rather than relying on test scores.” Lacresia shared:

I have failed my content specialty three times. I failed that thing three times. And now I’m really getting into it. But for me, for my content specialty. I failed it three times, and it makes you feel like, “yo, should I even be an English teacher?” And it makes you feel like, “should I be teaching this? Do the kids really need to know this? How did I make it this far without really knowing these things?” (LR09)

Tasha shared that she had a horrible experience with the certification exams, particularly the EAS and edTPA:

My experience with the certification exams were horrible . . . and if you don’t pass, then you don’t get a job, and you’ve already spent who knows how much money into trying to obtain the certifications and hope to change at least one person’s life. Like it should never be really expensive for you to hopefully inspire someone to do something, and it seems really counterproductive, and that was another part of it, too. (TM08)

Samaj recalled the difficulty with the EAS and failing at his first attempt. The participants discussed their challenges and obstacles when taking certification exams, particularly the edTPA and content exams. Given the examinations’ complexity and high stakes, many students expressed dread and hopelessness. Some failed repeatedly and, as a result, questioned their ability to teach.

The testing environment and lack of preparation materials were also cited as problems. Nonetheless, some passed the exam on their first attempt and believed authentic learning occurred in the classroom, not through an exam. Many participants were also concerned about

the exam expenses. The participants also highlighted Black teachers' stress and strain when attempting to obtain certification.

Summary of Results

This study focused on Black teachers' perceptions and lived experiences in New York State classrooms. This study employed a qualitative research methodology and a descriptive phenomenological research design to gain an in-depth perspective and understanding of the Black teacher participants' lived experiences regarding if and how the teacher certification process influences the teacher racial diversity gap in New York State schools. The participants' experiences and identified themes were discussed, and the participants authentic language was included.

The findings emphasized the lack of diversity in the teaching profession as well as the challenges Black students and teachers face with state assessments. As a result of a shortage of resources, accessibility concerns, and the underrepresentation of Black and brown teachers in the classroom, academic progress is impeded, and students are discouraged from pursuing a career in teaching.

It was emphasized how critical it is to recognize and embrace diversity in education, increase the amount of support and mentoring available to Black educators, and address race and cultural sensitivity issues in teacher preparation programs. It is feasible that the alternative pathways offered to Black students in urban schools do not adequately prepare them for the rigor and expectations of the actual exams. Students and teachers are, therefore, reminded of the importance of developing skills and exposing them to state examinations.

Chapter 5 presents the results and includes the implication of the findings, the study limitations, recommendations, and Chapter 5 concludes with a study summary.

Chapter 5: Discussion

Introduction

Well-intentioned educational policies have frequently had unintended and undesirable consequences. The 1954 *Brown v. Board of Education* ruling effectively abolished legally sanctioned school segregation in the United States. However, this landmark judgment also led to the adoption of discriminatory educator hiring and placement practices by numerous White district and state officials, particularly in the Southern region, which were characterized by apparent inequities and racial bias. During the late 1970s and early 1980s, the implementation of these policies resulted in the displacement of a significant number of Black educators and profoundly impacted the decrease of racial diversity among teachers (Dilworth & Brown, 2008; Fultz, 2004).

It is a problem that affects the entire nation (Ingersoll & May, 2011; Villegas et al., 2012), as well as the state of New York, because not enough educators with diverse backgrounds are being recruited into the teacher workforce. This research sought to contribute knowledge to increase the percentage of Black teachers, which will benefit our expanding population of students from diverse cultural backgrounds (Villegas & Irvine, 2010). This study's objective is to contribute considerably to empirical qualitative research on racial diversity in the K–12 educator workforce. Lindsay and Hart (2017) assert that the inclusion of Black educators within educational settings has a substantial impact on the overall well-being of students, with a specific emphasis on the experiences of Black children.

This study examined Black teachers' lived experiences and perspectives regarding if and how the teacher certification process influences New York State schools' teacher racial diversity gap. The research in this study utilized a qualitative methodology in order to gain a thorough understanding of the perspectives and experiences of Black educators regarding the impact of the teacher certification and licensure process on the racial diversity gap among teachers in public schools in New York State. Using the CRT framework, a descriptive phenomenological method was employed to comprehend the participants' beliefs, perspectives, emotions, and lived experiences. Counter narratives disrupt dominant narratives and acknowledge the lived experiences of racialized people and (Miller et al., 2020).

This study emphasized the participants' journeys and experiences through a CRT lens. Incorporating the phenomenological emphasis on meaning-making, this method illuminated the participants' individual interpretations and comprehension of their experiences, as evidenced by the participants' distinct narratives. The following research questions guided this research:

1. What are Black public school teachers' perceptions of the teacher racial diversity gap in schools?
2. What are the lived experiences of Black public school teachers in New York State regarding the certification and licensure process?

The participants in this study were Black teachers from Big 5 urban school districts. The participants were interviewed through a semi-structured interview method conducted in a virtual setting. The interview protocol helped the researcher ask the same questions to each participant. Zoom was used to video and audio record the interviews, and Otter.ai was utilized to transcribe each interview. For data analysis, the researcher utilized the Giorgi et al. (2017) data analysis method. This was accomplished in part by collecting detailed narratives of the lived experiences

of the Black public school teacher participants through semi-structured interviews and by assuming an attitude of reduction. This approach was utilized during the process of data collecting and analysis. The data analysis yielded three primary overarching themes and seven corresponding subthemes. The three themes included (a) minimal information on how to become a teacher, (b) standardized tests, and (c) my Black experience. In response to Research Question 1, two essential themes and four corresponding subthemes were identified as essential. One essential theme and three subthemes emerged in response to Research Question 2.

The results presented in Chapter 4 are discussed and are interpreted in Chapter 5. Chapter 5 is comprised of four main components. The first section discusses the implications of the findings from the 12 semi-structured interviews with the Black instructors across New York State. The second section details the limitations of the research. Recommendations for future research are provided in the third section, and Chapter 5 concludes with a connection between executive leadership and social justice and gives a summary of this study.

Implications of Findings

This descriptive phenomenological study sought to understand Black teachers' perceptions and experiences of the licensure and certification process to determine if and how the certification and licensure process influenced the teacher racial diversity divide. For data analysis, the researcher utilized Giorgi's (2017) data analysis method. This was accomplished in part by collecting detailed descriptions of the experiences of the Black public school teachers participants through semi-structured interviews and by assuming an attitude of reduction. This attitude was employed throughout the data collection and analysis.

First, the results indicate that the participants believe that a lack of information and resources on becoming a teacher hinders efforts to increase diversity, as Black teachers are

underrepresented in the teaching profession. The lack of diverse teachers hinders students' ability to see themselves reflected in the classroom. The results also indicate that standardized tests lack cultural sensitivity and are not designed for people of color, resulting in reduced performance rates for Black students. The participants criticized the lack of diversity in the curriculum and questioned the validity and effectiveness of standardized testing on the performance of Black students. Lastly, the results indicate that during their teacher education program, the Black teachers in this study experienced emotions of isolation, loneliness, and a lack of belonging. The participants noted the need for a more culturally relevant curriculum in teacher education programs. When comparing individuals of different racial backgrounds, particularly White individuals, the Black teachers encountered unique obstacles during their teacher education preparation and on their teacher certification exams. The participants' personal experiences led them to believe that standardized testing perpetuated institutional biases and created barriers to success for Black people.

Expanding the Body of Knowledge

The issue of teacher shortages and the absence of racial diversity among educators is a pervasive concern nationwide (Ingersoll & May, 2011; Villegas et al., 2012), and it remains an issue in New York (NYSED, 2019). The purpose of this study was to make a substantial contribution to the qualitative research on ethnic diversification of the K–12 teacher workforce. Specifically, this study aimed to contribute knowledge in support of increasing the proportion of Black instructors, which will be of fundamental benefit to our growing population of students from diverse cultural backgrounds (Villegas & Irvine, 2010). According to Lindsay and Hart (2017), Black teachers significantly impact the lives of all children, especially Black children. This study's findings contribute to the knowledge of Black teachers regarding if and how the

teacher certification and licensure process affects the teacher racial diversity gap in New York State schools.

During the period of investigation, despite the number of studies examining teacher racial diversity, no one study had investigated if and how the teacher certification and licensure process impacted the teacher racial diversity gap in New York State schools. In addition, none of the studies focused on the perceptions and lived experiences of the licensure and certification process among Black educators. The results of this study adds the perspectives and lived experiences of Black teachers from New York State urban school districts to the existing body of literature.

Research Question 1. Research Question 1 centered on the perceptions of Black public school teachers regarding the teacher racial diversity disparity in schools. From the data, two essential themes emerged: (a) minimal information on how to become a teacher and (b) standardized tests.

First Major Finding for Research Question 1 – Minimal Information on How to Become a Teacher. The first finding suggests that a lack of information and resources regarding how to become a teacher contributed to the underrepresentation of Black teachers, thus impeding efforts to increase diversity in the field. The lack of diverse teachers also affects students' ability to see themselves represented in the classroom, affecting if they would contemplate entering the teaching profession themselves. The findings also indicate that the Black individuals encountered obstacles in the certification process, such as limited access to preparation materials and support, putting them at a disadvantage compared to their White counterparts.

All of the participants in this study discussed the lack of diversity in the teaching profession and its impact on students of color. The participants in the study emphasized the need

for increased exposure to diverse instructors and an awareness of teaching as a career to improve the field's diversity. However, they believed that certification exam failures could make it challenging for Black individuals to access the classroom as teachers of record. Certain participants revealed that they had to enter the classrooms as teaching assistants or as long-term substitutes. The edTPA and content examinations were identified as significant barriers to obtaining a teaching position, with some participants requiring multiple attempts to pass.

The participants believed that a lack of access to information and resources was a significant factor in the disproportionate disintegration of Black students, affecting all areas and creating a significant barrier to passing certification exams and achieving academic success. The participants perceived that Black individuals' lack of access and opportunities in the certification procedure resulted in lower exam performance. Additionally, limited exposure to and experience with the certification process and limited access to family members who have undergone the process can contribute to poor performance on certification exams. Moreover, the unique characteristics of charter schools enabled many Black and brown teachers to enter the field without certification. Nonetheless, lacking access to resources and information disadvantages Black individuals, creating an opportunity divide that sets them back in their educational pursuits. Another obstacle to achievement is the absence of financial aid for certification exams.

In general, confronting these issues and increasing diversity in the teaching profession is essential for the academic success of Black and brown students. Despite these obstacles, the participants acknowledged the significance of diversity in the classroom and the need for more Black and brown instructors in the profession. The participants emphasized the importance of resolving these issues to advance diversity and equal opportunity in the teaching profession.

Second Major Finding for Research Question 1 – Standardized Tests. This theme addressed the participants' concerns and experiences regarding standardized testing. With an absence of cultural sensitivity, the participants felt that these tests were not created for them and their lived experiences. They asserted that the language used in the assessment materials and on the actual exams was not written for people of color and that this contributed to Black students' poor performance on standardized exams. In addition, the participants criticized the lack of diversity in the curriculum, specifically the excessive emphasis on White authors. They questioned the validity and impact of standardized testing on the performance of Black students. They believed that the scenarios presented on certification exams were unrelated to their experiences, making it difficult to respond to queries and find solutions. The participants felt that standardized testing perpetuated institutional prejudice and created obstacles to Black students' success.

All 12 participants in this study voiced concerns about standardized testing, specifically, the fact that it was not intended for Black students. They perceived that the language employed in examinations and teacher preparation materials lacked cultural sensitivity and did not reflect the experiences and language of Black students. The participants perceived that the disconnect began at an early age and must be addressed in pre-K education. The curriculum's lack of diversity and emphasis on White authors perpetuates institutional prejudice and restricts opportunities for Black teacher candidates and school-aged students. The validity and impact of standardized testing on the performance of Black students were called into question, as was the lack of diversity on certification exams. Frequently, the scenarios presented on certification exams lack relevance to the experiences of Black students, making it difficult for them to respond to questions and find solutions.

Research Question Number 2. Research Question 2 focused on Black public school teacher participants' certification and licensing experiences in New York State. One essential theme emerged from the analysis of the data: my Black experience. This theme was significant because this study was constructed through the lens of CRT, with a specific emphasis on counter storytelling. It gave the participants a voice to share their experiences that were counter to or distinct from the dominant experiences heard from non-Black candidates. CRT served as the theoretical foundation for this study.

Major Finding for Research Question 2 – Black Experience. The theme of the Black Experience in teacher education programs was discussed, with the participants expressing feelings of isolation, loneliness, and not belonging. Nine of the 12 participants highlighted the misalignment between theory, practice, and reality in their teacher education programs, feeling that the curriculum was Whitewashed and not culturally relevant. They also noted a lack of diverse literature and a predominance of White professors. The participants felt unprepared to teach in urban communities and questioned the applicability of the strategies taught in their program.

Amos's (2016) findings indicated that teacher candidates of color struggle to establish their identities amidst the overpowering silencing force of Whiteness within teacher education programs. Lastly, consistent with Amos's (2016) findings of candidates being concerned with being labeled as the one who spoke out against White students, the majority of the participants in this study chose not to speak up because they, too, dreaded retaliation, social exclusion, or being deemed the angry Black student.

These results are also consistent with Kornfield's (1999) research. Kornfield found that Black teacher candidates frequently experienced varying degrees of racial prejudice and lacked

the confidence to speak up. After a violation, at least three participants in this research study reported feeling silenced and unsafe to speak up. However, four participants in this study also shared positive experiences, feeling empowered to educate their White peers and being heard in their classes. Overall, the participants in this study highlighted the need for more culturally relevant education and for their experiences as Black individuals to be acknowledged and understood.

All 12 participants shared their experiences of teacher education certification exams in this study. Eleven of them faced difficulties in passing the exams, leading to feelings of failure and questioning their suitability for the teaching profession. The lack of preparation materials and unwelcoming testing environments were also highlighted as issues. Some participants expressed concerns about the high stakes and complexity of exams like the edTPA. The participants emphasized the importance of authentic learning in the classroom and criticized the limitations of standardized testing. Additionally, the financial burden of exam fees was a source of stress for many participants. This study also shed light on Black teachers' specific challenges in the certification process.

Consistent with Wallace and Gagen (2019), the results of this investigation indicate that feelings of isolation experienced by minority teacher candidates remain a significant obstacle. All of the participants in this study felt that they experienced something different from their White counterparts. Seven of the Black participants in this study often felt isolated and disconnected from their White professors and peers in their teacher education programs. As examined in the literature, students of color have had more challenging times completing a teacher education program because of curriculum deficient in culturally responsive practice (Ahmad & Boser, 2014). Nine of the participants in this study experienced a misalignment

between theory, practice, and reality, with outdated and Whitewashed research failing to reflect the demographics of the students they wanted to teach. The lack of diversity among their peers and professors created a disheartening and isolating environment for them. Regarding the culturally unresponsive curriculum, the participants expressed that this made it difficult for Black students to find a community of teachers who shared their experiences and felt prepared to teach in urban communities.

Despite these challenges, three participants in this study felt empowered to express their opinions and educate their White counterparts, advocating on behalf of future Black students. All but one of the participants struggled with certification exams, particularly the edTPA and content exams. These exams' complexity and high stakes led to feelings of dread and hopelessness. Some participants had failed repeatedly and questioned their ability to teach. As examined in the literature review, Petchauer (2016) argued that teacher licensure exams are not culturally uniform. While the participants involved in this study did not undergo an ETS examination, it is worth noting that ETS's research suggests an unequal distribution in the failure rates of licensure examinations between Black and White test takers (Gitomer & Latham, 2000; Gitomer et al., 2011; Nettles et al., 2011). Eleven of the 12 Black participants failed their first attempt at taking a New York State exam.

Albers (2002) found that while Black teacher preservice candidates might have accomplished their teacher education internships and coursework, they did not satisfy the state's Praxis II score requirements. In agreement with the findings of Albers (2002), 11 of the study participants successfully passed all coursework and graduated from their teacher education programs. However, they failed to pass the necessary teacher licensure examinations.

Furthermore, Graham's (2013) findings revealed that Black test takers felt that assessments did not accurately represent their abilities and knowledge based on standardized exams. Alber's (2002) findings suggested that mandated tests must meet the cultural realities of the teacher candidates. Seven of the 12 participants in this study had difficulty passing the content knowledge licensure exam, and they believed that the exam's language was not culturally relevant. The testing environment and lack of preparation materials were also cited as problems. Additionally, the cost of the exams is a concern for many students.

Black preservice teacher candidates also face stress and strain when attempting to obtain certification. The significance of the Black experience within teacher education programs underscores the necessity for a broad and culturally responsive curriculum. This is crucial to adequately equip Black and White students with the skills and knowledge required for teaching in diverse schools and teaching diverse students. CRT in education focuses on leadership, policy, pedagogy, school politics and curriculum to highlight the pervasiveness of racism in the educational system (Ledesma & Calderón, 2015). Narratives can disclose the existence of those who exist outside the status quo, in contrast to the dominant narratives. A personal narrative is effective from a CRT perspective because it reveals the frequent racialized encounters experienced by people of color (Evans & Leonard, 2013). Through the lens of CRT, this research methodology and theory emphasized the participants' journeys and experiences.

Limitations

This section describes the limitations that may have influenced the findings of this study. This research was limited to Black teachers employed in New York State public urban classrooms in the Buffalo Public Schools, New York City Department of Education, Rochester City School District, Syracuse City School District, or Yonkers Public Schools. However, only

New York City, Rochester, and Syracuse residents participated in the study, with Syracuse constituting the majority of the participants. Therefore, any generalizations that can be drawn are limited to Black instructors who teach in one of the three urban areas/regions mentioned.

The limited number of Black educators who participated in this study is the second limitation of this research. Invitations to participate in this study were sent to professional networks and professional teaching associations, the My Brother's Keeper Teacher Opportunity Corps listserv, and local and state unions. Not everyone who responded to the invitation could participate because they did not meet all the requirements.

The lack of diversity in the investigation is the third limitation. In terms of gender and geographic location, diversity was lacking—11 out of 12 participants identified as female, and only one participant identified as male. In terms of demographics and where the teachers taught, two were from the Rochester School District, four were from New York City schools, and six were from the Syracuse City Schools. The study lacked male participants and participants from the Buffalo Public Schools and Yonkers Public Schools.

A fourth limitation of this study is the participants' service length. Everyone had at least 3 years of experience in the field, and many had difficulty passing the edTPA, which is no longer required for certification. In addition, the examinations with which the participants were familiar may no longer exist or have been revised. Therefore, any generalizations that can be made are limited to Black teachers who participated in this study, with between 3 and 21 years of experience.

Recommendations

To enhance the generalizability of the findings, future research should include a larger sample of Black New York State teachers and eliminate geographical limitations. Additionally,

focus groups and quantitative research should be conducted to collect diverse perspectives and investigate the relationship between Black teacher education graduates and certification examinations. It is essential to investigate historically Black colleges and universities, primarily White institutions, public and private programs, alternative programs, and charter schools to gain a more comprehensive understanding of the experiences and perspectives of Black teacher candidates from each setting.

It is suggested that initiatives, such as the Teaching Opportunity Corps, NYC Men Teach, Black Male Initiative, and Call Me Mister, be implemented systemwide, along with long-term funding and partnerships for teacher education programs. Black teachers should be able to participate in roundtable discussions and focus groups to share their experiences. This would allow policymakers, higher education teacher education administrators, etc. to understand Black teacher experiences better, provide support for workforce diversification, and encourage advancement. Meaningful action should be taken to establish and implement a collaborative effort to mandate culturally responsive and culturally relevant teaching standards and pedagogy in teacher education programs. In addition, there should be a mandate that all candidates enrolled in teacher preparation programs take specific courses aligned to teach for social justice, culturally relevant, and culturally responsive teaching, and pedagogy.

NYSED should evaluate certification examinations, and performance should determine the order of significance for experiences. It is strongly encouraged to form statewide diverse educator workforce working, mentorship, and affinity groups. The various teachers' unions should collaborate to develop educational initiatives that promote cultural diversity among instructors. The formulation of educational policy must prioritize the promotion of social equity by ensuring that all individuals, including teachers, have access to educational opportunities.

Conclusion

There is a prevalent belief that there exists an inadequate representation of individuals from racial and ethnic minority groups in the teaching profession throughout educational institutions in the United States. Carter-Andrews et al. (2016) assert that the lack of racial and cultural diversity among educators in the United States has been a persistent concern for decades. One prominent illustration is the segregation of Black educators within predominantly White educational institutions after the Supreme Court's landmark ruling in the case of *Brown v. Board of Education* in 1954. Due to increased professional license requirements and other strategies, there is a nationwide shortage of Black educators (Witty, 1982).

Despite the increasing racial and ethnic composition of the student population, de Brey et al. (2019) found that 80% of educators in K–12 schools are White and only 7% are Black. Having students and teachers of the same ethnic origin is advantageous for children of color (Bristol et al., 2021; Cherng & Halpin, 2016). This is notably true regarding the educational successes of students of color, their ability to complete high school and pursue higher education, and other crucial nonacademic outcomes. The demand for a more diverse teaching workforce has increased in recent years. This is partially attributable to the discovery that instructors of color enhance learning outcomes for all children, but particularly for students of color (Carver-Thomas, 2018).

Along their professional journeys, people of color face numerous obstacles that make it more difficult than their White counterparts to acquire and advance in the teaching field. According to the findings of education-related studies, one of these obstacles is the difficulty in obtaining a teaching license, which demonstrates that certification exams are unjustly biased against educators of color. According to Souto-Manning and Emdin's study from 2020, the

majority of the research focuses on asserting that examinations are unfair on a racial basis and proposing solutions that will reduce educators' or training programs' preparation anxiety. This research utilized CRT as a framework to examine the marginalization experienced by Black educators concerning teacher certification and licensure procedures. This study sought to examine Black teacher participants' lived experiences and perspectives in New York State schools regarding if the certification process influenced the teacher racial diversity disparity, and, if so, how. This qualitative study aimed to explore the perspectives and experiences of Black teachers regarding the impact of the teacher certification and licensure process on the racial diversity gap among teachers in public schools in New York State. This was done because the researcher wanted to determine how Black educators felt about the issue. Within the context of CRT, a descriptive phenomenological methodology was employed to comprehend the participants' beliefs, perspectives, emotions, and lived experiences. Counter narratives that recognize the lived experiences of people of color were presented in opposition to the dominant narratives. The research method and theory of CRT employed in this study emphasized the journey and experiences of the participants. Incorporating the phenomenological focus on making meaning, this approach illuminated the participants' individual interpretations and understanding of their experiences, as shown by the unique narratives each participant shared.

The examinations that teachers must pass to obtain their licenses exacerbate the diversity problem in the classroom. According to several studies, students of color who self-identify as education majors frequently encounter obstacles on the path to teacher certification and licensure when they cannot achieve acceptable passing grades. According to Petchauer et al. (2018), a disproportionate amount of Black people are deterred from pursuing a career in the teaching profession by the prevalence of testing requirements. The disproportionately high failure rate of

Black candidates on teacher certification exams has been well documented as a cause for concern (Blackford et al., 2012; Sandals, 2020). In 2019, according to a study conducted by EdWeek, only 38% of Black teachers had completed their certification exams, compared to 75% of White instructors (Petchauer, 2019).

During the course of the conducted literature review, a statement of the problem was formulated. The teaching workforce has a persistent diversity deficit. It is unknown how the process of obtaining certification and a license affects the diversity of teachers in kindergarten through Grade 12 classrooms in the five largest metropolitan school districts in New York State. The findings of this research on the perspectives of Black educators indicate that they viewed the exams as barriers to their entry into the profession, were able to articulate the mismatch between the content on the exams and their lived realities in a racist society, and desired both explicit preparations for the exams as they currently exist and revisions to the exams to make them more culturally relevant and inclusive of their experiences. It is possible that if Black in-service teachers from education programs in New York State were given the opportunity to discuss their experiences with the certification and licensing process for teachers in relation to teacher racial diversity among K–12 educators, it would help reconcile the gap. This study was guided by the following research questions:

1. What are Black public school teachers' perceptions of the teacher racial diversity gap in schools?
2. What are the lived experiences of Black public school teachers in New York State regarding the certification and licensure process?

Black educators from one of the five largest metropolitan school districts comprised the study's participants. The interviews with the participants were conducted online using a method

for semi-structured interviews. Zoom was utilized to record audio and video of the interviews. Each of the interviews was transcribed using Otter.ai. The researcher employed the Giorgi et al. (2017) descriptive phenomenological method to analyze the data. This was partly achieved by collecting detailed descriptions of the experiences of Black public school teacher candidates through semi-structured interviews and adopting a reductionist viewpoint. This perspective was maintained throughout the entirety of the data collection and processing. Three major essential themes and seven subthemes emerged from the data analysis. The three themes included (a) minimal information on how to become a teacher, (b) standardized tests, and (c) my Black experience.

This study focused on the perceptions and experiences of Black teachers in New York State classrooms. This study employed a qualitative research methodology and a descriptive phenomenological research design to gain an in-depth understanding of the lived experiences of Black teachers regarding if and how the teacher certification process affects the teacher racial diversity gap in New York State schools. The participants' authentic language was incorporated into the discussions of the participant experiences and identified themes.

The findings highlighted the lack of diversity within the teaching profession and the obstacles Black learners and teachers face on state exams. As a consequence of the underrepresentation of Black and brown teachers in the classroom, concerns over accessibility and a lack of resources, academic progress is slowed, and students are discouraged from pursuing a career in education. The importance of recognizing and embracing diversity in education, increasing the amount of support and mentoring available to Black educators, and addressing race and cultural sensitivity issues in teacher preparation was emphasized. It is possible that the alternative paths provided to Black students in urban schools do not effectively

prepare them for the rigor and expectations of the actual examinations. Therefore, students and instructors are reminded of the significance of skill development and examination exposure.

Leaders must advocate for policy and certification exam modifications to establish a more inclusive education system. In addition, teacher education programs and support structures must be developed and implemented for all learners, particularly those from less dominant populations. Therefore, a more equitable and supportive education system is required to address these issues and provide learning and success opportunities for all individuals.

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Appendix A

Summary of Tables

Table A1

Summary Table of Four Quantitative Empirical Studies Related to Teacher-Student Academic Benefits

Author(s), Date	Purpose	Variables IV/DV	Hypotheses/Specific Aims/R.Q.	Research Design	Participants /Sampling Methods	Data Collection	Data Analysis	Major Findings Themes	Conclusion
Grissom et al. (2020)	Examine the degree to which student-teacher race or ethnicity congruence is associated with the differential probability of advancements in high school math courses	IV: Black and Hispanic students in A.P. math courses; race/ethnicity; binary sex/gender congruence DV: free/reduced lunch eligibility; student, teacher, class covariates	To what extent does a student's racial or ethnic congruence with their math teacher predict movement into a higher course in the high school math progression in the next school year?	Comparative research	High school students, grades 9-12, in Miami-Dade County Public Schools N= 350,000 students 9 th -11 th graders in algebra I, geometry, Algebra II 69%Hispanic, 22% Black, 74% eligible for free/reduced lunch	Longitudinal data from Miami-Dade County Public Schools	Grouped math course codes into categories	Students with same-race or same-ethnicity teachers were 2% points more likely to take a higher math course in the next year than other students taking the same course in the same school.	The researcher's results also underscore the importance of efforts to recruit and retain teachers of color, particularly in high schools
Rasheed et al. (2019)	Examine whether children's academic performance and socioemotional competencies varied as a function of teacher-child racial/ethnic match or mismatch	IV: Race/ethnicity DV: engagement, motivation, absences, social skills	Children with the same race/ethnicity teachers will have more favorable academic and socioemotional outcomes than children with different race/ethnicity teachers.	Randomized controlled trial	224 teachers (M age = 41.5) and 5,200 children (M age = 7.7) in 36 New York City elementary schools.	Teacher-rated assessments of children and from individual student records from New York City DOE.	Four analytic models were run for the eight spring assessment outcomes (engagement, motivation, reading, math, absences, social skills).	There is partial support for the hypothesis that a racial/ethnic match is advantageous for all racial/ethnic teacher-child matched pairs. Black children P=0.06, p=.001	Children's outcomes vary by teacher and child race/ethnicity, even in a diverse sample. Based on the results, schools should employ policies that increase child and teacher racial/ethnic diversity at the classroom level.
Banerjee (2018)	Investigates whether assignments to same-race teachers affected students' math and reading achievement growth in early elementary grades.	IV: Teacher diversity, Teacher-student ethno-racial mismatch DV: achievement scores in math and reading	Are there significant differences in students' math and reading achievement growth trajectories depending on their assignment to classrooms where teachers share their	Descriptive	Kindergarten- 3 rd graders N=6,350	Longitudinal Survey	Cross-classified growth model	Assignments to same-race teachers do not affect minority students' math and reading achievement growth between kindergarten and 3 rd grade	There was no significant improvement in Black and Hispanic students' academic growth when assigned to same-race teachers in early elementary grades -----

Joshi & Doan (2018)	The research aimed to substantiate earlier race-match findings and extend their analytic approach.	Control: time-varying, time-invariant	ethno-racial identities instead of classrooms where teachers do not share such identities?	Randomized	Random stratified pooled sampling N=1,088,166	Longitudinal data for students in grades 3-8	Student fixed effects estimation model	----- Race matching does not have a significant, meaningful effect on student test scores in the total analytic sample. However, they did find that having a race-congruent teacher in elementary school has a significant, positive impact on students in math (0.037 SD).	Relying on a student fixed-effect strategy that included controls for teacher quality found no significant increases in test scores from being assigned to a race-congruent teacher in reading and math in grades 3-8. However, they did find positive effects from being assigned to a race-congruent teacher for an elementary school in math
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Table A2*Summary Table of Four Qualitative Empirical Studies Related to Teacher-Student Academic Benefits*

Author(s), Date	Purpose	Specific Aims/R.Q.	Research Design	Population/Sampling Methods	Data Collection	Data Analysis	Major Findings	Conclusion
St. Mary et al. (2018)	This study examined perceptions of academic achievement among a sample of Black and African American elementary and middle school students.	How do Black and African American youth describe their perceptions of academic achievement? What role does race play in Black and African American youth's perceptions of academic achievement?	Phenomenological	Black and African American youth N=25 Purposive sample	Semi-structured open-ended questions lasted about 45 minutes.	Iterative process-questions were coded and put in themes	Four themes emerged regarding perceptions of academic achievement: (a) inequity and the internalization of messages; (b) teachers as gatekeepers; (c) family and community factors promoting & inhibiting academic success; (d) cultural	Black and African American students perceive and encounter negative perceptions and stereotypes surrounding their academic potential rooted in race, socioeconomic status, and environment.
Moon & Singh (2015)	African American adolescent males share their perceptions of the achievement gap to understand further the systemic barriers they face and what assists them in achieving academic success.	How do African American male youth describe their daily lived experiences of the achievement gap in their own voices?	Phenomenological	African American males between 14-18 years old N=12 Purposive sample	Individual semi-structured interviews and focus group data	Clustering comments into descriptions and themes	Five themes were identified: (a) achievement gap or resource gap, (b) salience of parental support, (c) environmental obstacles related to academic achievement, (d) individual motivation and effort, and (e) resiliency and persistence in the face of racism.	The African American adolescent male's voices provided a counternarrative to the dominant societal discourse about their lives related to their experiences of the achievement gap. African American men are not privy to the same educational resources as their White counterparts. Educators can develop programs in schools and community settings to support African American males in academic achievement.
Allen (2014)	To challenge deficit views of Black male education by highlighting the perspectives of academically successful Black males in secondary school settings.	What are the narratives of academically successful Black males, emphasizing race, school, and academic achievement?	Interpretive Qualitative	High school Black males N=4 Purposive sample	Structured interviews Triangulation was built into the data collection	Process and Atlas.ti qualitative research software	The support system for the student's success comprises the parents and teachers.	Despite the pervasive and prevailing deficit notions of Black male academic identity, the students succeeded despite such dominant discourse. Their systems of support were essential factors in their success.
Boucher (2014)	It provides a counternarrative to the literature on White teachers who are unsuccessful in bridging the achievement gap.	How do successful White teachers negotiate their teaching relationships with their African American students?	Ethnographic Case Study	White middle and high school teachers N=14 Community nomination	Informant interviews, pre-observation participant interviews, classroom observation, teacher journaling, and post-observation interviews	NVivo 10 qualitative software to develop themes	Two themes emerged: (a) interrogation of Whiteness and (b) solidarity with students.	Creating relationships of solidarity may be an effective framework to describe successful White teachers working with African American students.

Table A3

Summary Table of Qualitative Empirical Studies Related to Critical Race Theory

Author(s) Date	Purpose	Specific Aims/RQ	Research Design	Population/Sampling Methods	Data Collection & process/measures Instruments	Data Analysis	Major Findings/Themes	Conclusion
McDevitt (2020)	The purpose was to investigate non-traditional teachers, particularly immigrant women of color, and their diverse pathways into early childhood classrooms	How do non-traditional immigrant women of color describe their pathways to teaching in preschool classrooms? What challenges do they face in the changing landscape of preschool education?	Case Study	Immigrant women teachers of color in NYC N=2 Purposive sample	Ethnographic tradition to collect data including 3 in-depth interviews (1-2 hours), participant observations (2 per teacher), and informal conversations. The researcher kept detailed field notes and memos reflecting on the observations and interview	Open coding, funds of knowledge framework to thematically and deductively code research questions	Although non-traditional immigrant women of color enter teaching with unique and valuable life experiences, they face many challenges in the changing landscape of early childhood education.	There is the importance of cultivating a more diverse teaching force and supporting teachers' development through culturally responsive and sustaining ways that honor the wealth of knowledge they bring to benefit young children and their families, especially those with diverse cultural backgrounds.
Bell & Busey (2021)	To examine teacher education as a fundamentally racist system of a broader educational system that primarily serves and advances upper middle class White interests. The researchers further nuanced the concept of racial grammar and drew from CRT in education, focusing on intersectionality and counter storytelling to deepen the understanding of structural racism in teacher education through the participants' perspectives (normalize the standards)...	How do first-generation Black and Latina pre-service teachers make sense of and navigate the raced, gendered, and class-based racial grammar of teacher education? In what ways is the racial grammar of teacher education incongruent with first-generation Black and Latina pre-service teachers' lived experiences, experiential knowledge, and future teaching goals?	CRT intersectionality narrative	Economically underserved women pre-service teachers who identify as Black or Latina N=4	Semi-structured interviews between 1-1.5 hours. The first storytelling sessions focused on knowing more about their self-identities, backgrounds, and reasons for entering the profession. Session 2 deep dive into their various identities, how these identities impacted their retention in the program, and the support they received with those identities.	Deductively coded statements related to race, class, and gender to be consistent with the intersectional CRT framework.	Findings indicated racial incongruence underscores pre-service teachers of color experiences in teacher education programs. Students experiences speak to how race, class, and gender function together to form a grammar of teacher education that creates barriers for entry for educators of color.	Through the participants' stories, the researchers learned how the racial grammar of teacher education emerged at the intersection of class, race, gender, and language. Structural Whiteness created a barrier that also threatened and at times prohibited the retention of the four participants in teacher education programs.
Mensah (2019)	This study utilized CRT methodology to chronicle the journey of a Black female in science teacher education. The study looked at her educational history first as a young child, then as a candidate in a racialized, predominately White teacher education program, then as a first-year teacher.	In what ways did Michele understand race and racism in her educational narratives, and how did these experiences affect her preparation as a teacher of color? What were Michele's experiences as a teacher of color in a White teacher education program?	Longitudinal Case study	Female pre-service teacher of color N=1	Data was collected and analyzed multiple times over 3 years (Summer 2011-Fall 2014). The primary data source was interviews and conversations, and artifacts from the participants teacher education experience and early teaching careers were gathered	Critical race methodology, an intersectionality analysis, and methods of constructivist grounded theory were applied to data analysis	Four racial narratives were identified: (b) loss of voice in teacher education and finding a voice in science education. The narrative themes denote how race and racism were prevalent in many aspects of the participant's life, teacher education program, and early teaching career.	This study's four racial narrative themes address race, racism, power, and inequity at the individual and institutional, systemic, and teacher education levels. There must be a simultaneous commitment to the practices and curriculum that will meet the individual and collective needs of teachers of color once they are admitted to teacher education programs.
Kohli (2013)	Framed in CRT, the study investigated the process pre-service teachers of color took in unpacking their internalized racism as they strived for racially just classrooms.	The research aim was to contribute empirical data about internalized racism in schools from a cross-racial perspective through the narratives of Black, Latina, and Asian American women.	CRT narrative	Female pre-service teachers of color 4 Black, 4 Latina, 4 Asian American N=12	In-depth interviews and focus groups	Data analysis was guided by CRT methodology	Three themes from the teachers of color: (a) experiences with internalized racism, (b) self-work to unpack internalized racism, (c) challenge to internalized racism in the classroom.	Through the lens of CRT and internalized racism, the study brings light to racialized realities.

Table A4

Summary Table of Quantitative and Qualitative Empirical Studies

Author(s), Date	Purpose	Variables IV/DV	Hypotheses/Specific Aims/R.Q.	Research Design	Participants /Sampling Methods	Data Collection	Data Analysis	Major Findings Themes	Conclusion
Van Overchelde & Lopez (2019)	To examine who would be denied admission to a teacher preparation program and teaching profession if admission criterion had been increased	IV: school year, gender, race/ethnicity DV: admission status	If the sophomore grade point avg criterion for undergraduate teacher prep admission increased, who would be denied admission?	Quantitative Comparative research	1,314 undergraduate students	Longitudinal data from a large traditional teacher prep in Texas	Descriptive and inferential analysis	Implementing a 2.75 GPA admission criterion would have denied admission to 22% of students, and Black and male students would have been denied admission at higher rates. Implementing a 3.0 scenario, 44% of students would have been denied admission, and Black and Latinx, and male students would have been denied at significantly higher rates than White female students.	Policymakers and accrediting organizations assumed that admitting only high GPA teacher candidates would make it possible to increase the number of high quality teachers and increase teacher diversity. The results provide evidence that this assumption is largely invalid.
Petchauer 2014	To examine the subjective and social psychological ways African American test takers experience teacher licensure testing events	N/A	How do African American preservice teachers experience the licensure testing events? How does race become a salient aspect of the testing event experience for African American preservice teachers?	Qualitative Case Study	African American preservice teachers attending an HCBU N= 22 Randomly selected from a larger pool of 50 students	Culturally congruent research method (interviews, observations, and participant observations that center on the holistic dimension of Black experiences	Data analysis started with a provisional start list of terms to identify references to race & open coding	Findings illustrate how the licensure testing event can become a racialized experience for some participants through (a) interactions with test proctors and site admin before and during exams & (b) actions of other test takers that advertently signaled racial stereotypes about test prep, intelligence, and character.	Participants' racialized experiences were not based upon any specific test questions or content. Experiences can produce a host of cognitive and affective states that undermine performance.

Appendix B

Interview Protocol

Title of the Study: Through Their Eyes: Examining the Role of the Teacher Certification and Licensure Process and the Teacher Racial Diversity Gap in New York Public Schools

Time of interview: _____

Date: _____

Participant: _____

Position of participant: _____

Review purpose of the study: I am seeking the participation of in-service teachers in a New York State in a study investigating the role of the teacher certification and licensure process in connection to the teacher racial diversity gap in New York Public Schools. I am specifically interested in learning more about Black teachers' lived experiences and perspectives regarding if and how the teacher certification and licensure process influence New York State schools' teacher racial diversity gap. Giving Black in-service teachers who attended a New York State teacher education program and currently teaching in an NYS public school the opportunity to share their experiences with the teacher certification and licensure process in relation to teacher racial diversity among K–12 teachers may provide valuable information to help policymakers to close that gap.

Review participant rights: Participation in this study is voluntary. You may decline to answer any of the interview questions. You can withdraw your participation in the study at any point by simply informing the researcher that you no longer want to participate. There will be no repercussions from withdrawing from the study.

I would like to thank you for taking time out of your busy schedule to participate in the interview aspect of my study. Our interview today will last up to approximately 90 minutes, during which I will be asking you about your experiences and perceptions of the teacher certification and licensure process in connection to the teacher racial diversity gap. Before we begin the interview, do you have any questions for me? [Discuss the questions]. If at any point in this study you have any(more) questions or need clarification, please feel free to ask them at any time.

Research Questions (RQ)/Interview Task (IT)	Interview Questions (IQ)/Rationale for Task (RT)		CRT Framework
1. (IT) Welcome participant; ensure comfort and environment control.	1. (RT) Establish rapport.		
2. (IT) Describe the study in full detail, allow for questions, obtain written consent, and provide participants with a copy of the consent.	2. (RT) Establishing confidentiality.		
3. (IT) The researcher, will transcribe responses using the interview protocol.	3. (RT) Help with staying organized and use as a backup in the event there is a glitch in the audio recording.		
4. (IT) Opening questions.	4a. (RT) Establishing participant comfort with questions 4b. (IQ) Can you describe to me your joy in teaching? 4c. (IQ) Tell me why you became a teacher. 4d. (IQ) Tell me what you think about teacher diversity. 4e. (IQ) What was your journey towards teacher certification?		
5. (RQ) What are Black public school teachers' perceptions of the teacher racial diversity gap in schools?	5a. (IQ) What factors do you believe contribute to black students performing at disproportionately lower rates than White students on the teacher certification standardized tests?		Permanence or Centrality of racism
6. (RQ) What are the lived experiences and perceptions of Black public-school teachers in New York State regarding the certification and licensure process?	6a. (IQ) Can you describe your experiences as a Black teacher candidate in your teacher education program? 6b. (IQ) Can you tell me about your perceptions of being a Black public-school teacher in New York State regarding the certification and licensure process? 6c. (IQ) How would you describe your experience with the teacher certification process? 6d. (IQ) Tell me about your experience with the licensure exam process.	6a. (PQ) Tell me what you remember about your teacher education process. 6b. (PQ) What have your experiences been like? 6c. (PQ) Talk to me specifically about your experiences with the coursework, your clinical experiences (field experiences/student teaching), etc. What was your experience like at each juncture? Specifically, talk about your experience in all courses that dealt with diversity, equity, race, and culturally responsive pedagogy and teaching as a Black male/female student. 6d. (PQ) Talk to me specifically about your experience with the EdTPA, Educating all Students (EAS), and the Content Specialty Test (CST) exams. Before taking	Valuing experiential knowledge AND Storytelling through personal stories AND Intersectionality

Appendix C

Recruitment Flyer

My name is Nichole Brown. I am a doctoral candidate in the EdD program in the Executive Leadership program at Ralph C. Wilson Jr. School of Education at St. John Fisher University. I am seeking the participation of in-service teachers in New York State in a study investigating the role of the teacher certification and licensure process in connection with the teacher racial diversity gap in New York Public Schools. To participate, you must meet the following criterion: (a) identify as a Black in-service teacher currently teaching in a New York State public urban classroom in Buffalo Public Schools, New York City Department of Education, Rochester City School District, Syracuse City School District, or Yonkers Public Schools; (b) have a minimum of 1 year of teaching experience; and (c) have had prior experiences with the teacher education certification and licensure process.

Participation in this study is voluntary. It will involve an interview of approximately 90 minutes in length, to take place remotely, via Zoom. With your permission, the interview will be audio and video recorded to facilitate the collection of information and later transcribed for analysis.

All information you provide is considered completely confidential. Your name will not appear in the dissertation or report resulting from the study. Data collected during this study will be retained in a locked cabinet in my home, stored on my personal password-protected desktop and external drive, and stored in a secure password-protected Google Docs cloud connected to the secure university platform and destroyed from all devices after a period of 3 years.

Please be assured that this study will be reviewed to receive ethnic clearance through the Institutional Review Board (IRB) at St. John Fisher University. However, the final decision to participate is yours. Please indicate if you are interested in participating by responding to this post with your email address. You will be contacted within 24 hours with further details.

Appendix D

Email Invitation

Dear In-Service Teacher,

My name is Nichole Brown. I am a doctoral candidate in the EdD program in the Executive Leadership program at Ralph C. Wilson Jr. School of Education at St. John Fisher University. I am seeking the participation of in-service teachers in Buffalo Public Schools, New York City Department of Education, Rochester City School District, Syracuse City School District, and Yonkers Public Schools in a study investigating the role of the teacher certification and licensure process in connection with the teacher racial diversity gap in New York Public Schools. I would like to provide you with more information about this study and what your involvement will entail should you decide to participate.

Title of the Study: Through Their Eyes: Examining the Role of the Teacher Certification and Licensure Process and the Teacher Racial Diversity Gap in New York State Public Schools

This study aims to examine the role of the teacher certification and licensure process in connection to the teacher racial diversity gap in New York Public Schools. I am requesting your participation as the focus of this study will be on the participants' lived experiences with the research focus, rather than on the school or school district.

There is a persistent lack of diversity among teachers. The relationship of the impacts of certification and licensure processes on teacher diversity in New York State are unknown. This study will explore Black teachers' lived experiences and perspectives regarding if and how the teacher certification and licensure process influences New York State schools' teacher racial diversity gap. Giving Black in-service teachers who attended a New York State teacher education program and currently teaching in an NYS public school the opportunity to share their experiences with the teacher certification and licensure process in relation to teacher racial diversity among K–12 teachers may provide valuable information to help policymakers close that gap.

You will be invited to engage in an in-depth, audio and video recorded, one-on-one interview lasting approximately 90 minutes, via Zoom. At the conclusion of the interview, you will be asked to review the associated transcripts for accuracy and to provide corrections, if needed, within 48 hours after the interview.

Your identity will remain confidential. To ensure confidentiality, participants will be assigned an alpha and numeric code throughout the entire study. All digital audio and video files will be transcribed with software by the researcher on a dedicated, password-protected computer. Data

collected during this study will be retained in a locked cabinet in my home, stored on my personal password protected desktop and external drive, and stored in a secure password-protected Google Docs cloud connected to the secure university platform, that only the researcher will have access to, and will be destroyed after a period of 3 years.

Although no risk is anticipated to you as a participant, the topic could potentially invoke feelings and/or memories. Should this occur during any time of the interview, you may request the researcher to stop the interview, during which time you may withdraw from the study without penalty.

Please be assured that this study will be reviewed to receive ethnic clearance through the Institutional Review Board (IRB) at St. John Fisher University. However, the final decision to participate is yours.

Results from the data will be available to any requesting participant through an electronic version of the final dissertation. Should you wish to participate in this study, please indicate so by responding to me via email at _____@sjfc.edu. If you have any additional questions, contact me at ___ - ___ - ___ or via email at _____@sjfc.edu. You can also contact my dissertation chair, David Brown, EdD, via email at _____@sjfc.edu.

Thank you for considering participation in this study. I look forward to your response.

Respectfully,

Nichole Brown
Doctoral Candidate
St. John Fisher University
School of Education
Rochester, New York

Appendix E

Participant Consent Form



St. John Fisher College Institutional Review Board

Statement of Informed Consent for Adult Participants

Through Their Eyes: Examining the Role of the Teacher Certification and Licensure Process and the Racial Teacher Diversity Gap in New York State Public Schools

SUMMARY OF KEY INFORMATION:

- You are being asked to be in a research study of teacher diversity among K-12 classroom teachers. As with all research studies, participation is voluntary.
- This study aims to examine the role of the teacher certification and licensure process in connection to the teacher racial diversity gap in New York Public Schools.
- Approximately 12 people will take part in this study. The results will be used for the expansion of the current body of literature on K-12 teacher diversity.
- If you agree to participate in this study, you will be involved for approximately one month. This time frame is to include the actual interview and any follow-ups that may be needed. Should you decide to participate, you will be asked to engage the primary researcher in one, 90-minute interview. The interviews will take place via the electronic platform Zoom. To ensure data credibility, the researcher will follow up with participants, if necessary, within 48 hours after the interview.
- All one-on-one interviews will take place via Zoom, will be approximately 90 minutes via zoom., and be video and audio recorded. All interview sessions will be conducted when the participants are available and at a mutually acceptable time of the researcher.
- Although no risk is anticipated to you as a participant, the topic could potentially invoke feelings and/or memories. Should this occur during any time of the interview, you may request the researcher to stop the interview, during which time you may withdraw from the study without penalty. We believe this study has no more than minimal risk. As a result of the study procedures, we anticipate sitting for a time greater than one hour, approximately 90 minutes.
- Though you may not benefit directly from your participation, we hope that your inclusion in the study will advance the body of literature and policies regarding the teacher certification and licensure process in relation to racial teacher diversity among K-12 teachers.

DETAILED STUDY INFORMATION:

You are being asked to be in a research study to understand how Black public school teachers experience the teacher certification and licensure process, as well as to discover whether and how the racial teacher diversity gap in schools, is influenced by the teacher certification and licensure process. This study is being conducted via online, one-on-one interviews using the Zoom platform at a mutually agreed upon time and date. This study is being conducted by: Nichole Brown, and David Brown, Ed.D. in the College of Education at St. John Fisher University.

You were selected as a possible participant because you identify as Black in-service teachers currently teaching in a New York State urban classroom, have a minimum of one year of teaching experience, and have had prior experiences with the teacher education certification and licensure process.

Please read this consent form and ask any questions you have before agreeing to be in the study.

PROCEDURES:

If you agree to be in this study, you will be asked to do the following:

1. Declare your intent to participate in the study by responding to an email request from the primary researcher.
2. Read and sign consent for the study.
3. Participate in one, 90-minute audio and video recorded interview with the primary researcher.
4. Respond to follow-up questions and/or the review of the associated transcript for accuracy and provide corrections if needed, within 48 hours of the interview.

During the 90-minute, audio and video recorded interview, you will be asked questions specific to the certification and licensure process and teacher diversity, with respect to your experience as a Black in-service teacher. After your interview, the primary researcher will review all of the meeting transcripts with you to ensure accuracy.

COMPENSATION/INCENTIVES:

You will not receive compensation/incentive.

CONFIDENTIALITY:

The records of this study will be kept private, and your confidentiality will be protected. No identifying information will be included in any sort of report the researcher(s) might publish. Identifiable research records will be stored securely, and only the primary researcher will have access to the records. All data will be stored electronically on a dedicated computer with a backup, encrypted data storage device by the investigator. Writings, field notes, and other physical research related materials will be archived and secured in a locked cabinet in the researcher's home, stored on my personal password protected desktop and external drive, and stored on a secure password protected Google Docs cloud connected to the secure university platform, that only the researcher will have access to. All study records with identifiable information, including approved IRB documents, recordings, transcripts, and

consent forms, will be destroyed by shredding, and deleting from all devices after three years of the study closing.

The data collected in this study and the research results can be used for scientific purposes and may be published in ways that will not reveal the participants. An anonymized version of the data from this study may be made publicly accessible, for example, via professional journals, conferences, etc.), without obtaining additional written consent. The anonymized data can be used for re-analysis but also for additional analyses, by the same researcher. The purpose and scope of this secondary use are not foreseeable. Any personal information that could directly identify an individual will be removed before data and results are publicized. Personal information will be protected closely so no one will be able to connect individual responses and any other information that identifies an individual. All personally identifying information collected about an individual will be stored separately from all other data.

VOLUNTARY NATURE OF THE STUDY:

Participation in this study is voluntary and requires your informed consent. Your decision on whether or not to participate will not affect your current or future relations with St. John Fisher University. If you decide to participate, you are free to skip any question that is asked. You may also withdraw from this study at any time without penalty.

CONTACTS, REFERRALS AND QUESTIONS:

The researchers(s) conducting this study: are Nichole Brown and David Brown. If you have questions, **you are encouraged** to contact the researcher(s) at Nichole Brown at njb02593@sjfc.edu and David Brown, Dissertation Chair, at dbrown@sjfc.edu.

The Institutional Review Board of St. John Fisher College has reviewed this project. For any concerns regarding this study/or if you feel that your rights as a participant (or the rights of another participant) have been violated or caused you undue distress (physical or emotional distress), please contact the SJFC IRB administrator by phone during normal business hours at (585) 385-8012 or irb@sjfc.edu.

If the study has the potential to cause physical or emotional distress, then you must direct participants to seek out an appropriate provider. If participants are SJFC students, then refer them to the SJFC Health and Wellness Center (385-8280). If participants are not SJFC students, then refer them to their healthcare provider or an appropriate agency.

STATEMENT OF CONSENT:

I am 18 years of age or older. I have read and understood the above information. I consent to voluntarily participate in the study.

Signature: _____ Date: _____

Signature of Investigator: _____ Date: _____

Retain this section only if applicable:

I agree to be audio recorded/ transcribed *Yes* *No* *If no, I understand that the researcher will exclude me from the study. There are no alternative data collection options.*

I agree to be video recorded/ transcribed *Yes* *No* *If I do not wish to be videotaped, I will inform the researcher, who will instead exclude me from the study. There are no alternative data collection options.*

Signature: _____ Date: _____

Signature of Investigator: _____ Date: _____

If this is an online study, remove the signature sections above and instead use this language:
"Electronic Consent: Clicking on the "Agree" button below indicates that:

- I have read the above information.
- I voluntarily agree to participate.
- I am at least 18 years of age.

If you do not wish to participate in the study, please decline participation by clicking on the "Disagree" button below."

Please keep a copy of this informed consent for your records.

