A Quantitative Evaluation of a Culturally Relevant Reading Intervention Program on Academic Achievement and Reading Self-Perception in an Urban High School in New Jersey

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A Quantitative Evaluation of a Culturally Relevant Reading Intervention Program
on Academic Achievement and Reading Self-Perception
in an Urban High School in New Jersey

by

Jessica Urban

Submitted in partial fulfillment of the requirements for
The Degree of Doctor of Education
Seton Hall University
Department of Education Leadership Management and Policy

2021
APPROVAL FOR SUCCESSFUL DEFENSE

Jessica Urban has successfully defended and made the required modifications to the text of the doctoral dissertation for the Ed.D. during this Spring Semester.

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Abstract

The purpose of this study was to understand the possible effects that participation in a culturally relevant reading intervention program had on students’ reading growth and reading self-perception, when compared to students who did not participate in the program but demonstrated similar prior academic achievement. To assess the relationship between program participation and reading achievement, students’ scaled score growth and student growth percentile on the STAR Reading Assessment were compared and analyzed across 3 school years. In each sample, there was no evidence to suggest that the program influenced students’ scaled score or SGP. The multiple regression models revealed that gender (male), students with disabilities status, and English Learner classifications were statistically significant predictors of both scaled score and SGP for the 2018-2019 sample only. The Reader Self-Perception Scale 2 was administered at the end of the semester to students who were either recommended for or enrolled in the reading intervention program during the 2020-2021 school year. A statistically significant relationship was found between program participation and survey score when other variables were held constant using the multiple regression model, denoting a positive beta. Therefore, there is evidence to suggest that students who participated in the program had higher reading self-perception scores than those who did not. Two other variables were found to be statistically significant predictors of reading self-perception scores, including free and reduced lunch status and previous grade-level equivalent, the latter of which was significant at the $\leq .10$ threshold.

Key words: culturally relevant pedagogy, program evaluation, secondary reading intervention, reading achievement, reading self-perception.
Acknowledgements

This work would not have been possible without the support of the many people who helped and encouraged me throughout this process.

I would like to extend my thanks and gratitude to my dissertation committee who provided guidance and insight. To my mentor, Dr. Alexandra Freidus, thank you for picking up where Dr. Blissett and I left off; you never missed a beat. Your feedback was always precise and well-taken. I have grown as a writer and researcher under your direction.

Dr. Blissett, thank you for sticking with me throughout this entire process. Your weekly check-ins kept me accountable at the start of this journey. And I have grown to actually love statistics because of your mentorship. Your ability to make foreign concepts comprehensible and tangible supported me throughout my graduate experience.

Dr. Mary Starzynski, thank you for pointing me in the path of education so many years ago. You continue to be an inspiration to me and a reminder that with hard work, determination, and balance, you can “have it all.”

Thank you to my colleagues, especially Dr. Vivian Rodriguez, for allowing me to conduct this research. I would be remiss if I did not mention Mr. Michael Heidelberg and Mrs. Stacy Lemongelli. You have both been a great sounding board throughout this journey and continue to profoundly impact my administrative posture and paradigm. I am grateful for the experience to work alongside you.

Finally, thanks to Cohort 23 in the K-12 School Administration Executive Ed.D. program at Seton Hall University. Getting to know all of you has truly been a pleasure. Thank you for keeping me informed of deadlines, commiserating with me, and being a source of laughter.
Dedication

This dissertation is dedicated to my parents,

my husband, Michael,

and my daughter, Scarlett.

…Mom, I would not be where I am without you. You ignited in me a love for books and reading that I will never quell. Your tenacity and decades long career in public service has inspired my own fight towards educational equity. Words could never fully express how thankful I am for all the sacrifices you have made for me along the way.

…Dad, thank you for checking in with me throughout this process and motivating me to finish.

…Michael, thank you for always being so on top of things and sticking with me throughout all my professional endeavors. You are “my person.” I look forward to all that life has in store for us, now that I am done with school!

…To my young daughter, Scarlett. You are my motivation. I started this research while you were in my belly and finished with you on my lap. I hope to always make you proud. Thank you for making me a mommy.
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CHAPTER I
INTRODUCTION

Context of the Study

For late elementary school students and beyond, reading is more than just a practice in decoding and comprehension. Rather, it is a dynamic process whereby what they read influences how they position and understand themselves in both school and the world at large (McCarthey, 2001; McCarthey & Moje, 2002). When students engage with texts they find relevant to their own lives, they build intrinsic motivation to read, which promotes achievement in reading (Guthrie, 2001). On the contrary, students who have had limited encounters with texts they find fascinating or, worse, have had adverse classroom experiences, are more likely to have developed poorly constructed reading identities and possess less desire to read (Santoli & Wagner, 2004).

Access to meaningful reading material posits a challenge for students who reside in low socioeconomic (SES) or predominantly Latinx and African American communities, where there may be a pattern of underachievement and the average ratio of age-appropriate, let alone relevant, books is 1 for every 300 children (Neuman & Celano, 2001). In response, local school districts may seek to sustain readers through culturally responsive literacy instruction that not only fosters student engagement and affirms identity, but also prepares students to meet the demands imposed by state-mandated assessments, such as the New Jersey Student Learning Assessment (NJSLA). This consideration is extremely important as public schools continue to diversify and accountability measures increase.

Recent events remind us all about the centuries-long series of racial injustices, particularly against the Black community and people of color, that continue to exist in this
country. Taking a stand against systemic oppression is not limited to protests and demonstrations. It begins in school. It is the lessons we teach our students, the books we read to them, and the discussions we facilitate in our classrooms. Developing culturally responsive curricula sends the message to students that their experiences matter and their voices have a place not only in the school community, but in society at large. This study evaluated the impact of a program designed with this intention.

**Problem Statement**

Data from the National Assessment of Educational Progress (NAEP) revealed that only 36% of eighth grade students nationwide performed at or above the *Proficient* level on the 2017 reading assessment. For Black and Hispanic students, this number is increasingly dismal, with proficiency levels of 18% and 23%, respectively. According to the Alliance for Excellent Education (2019), students with below-level reading skills are twice as likely to drop out of high school. Lagging literacy skills denote a recurrent trend among the 7,000 students who drop out of school each day (Biancarosa & Snow, 2004).

Just as motivation is strongly linked to learning (Linnenbrink & Pintrich, 2003), it is also an integral factor in learning to read (Verhoeven & Snow, 2001). Even though 75% of literacy leaders in the United States felt that engagement was highly important in addressing adolescent literacy concerns (Cassidy Valadez et al., 2010), many current approaches used to remediate the difficulties typically encountered by adolescent readers tend to focus only on improving specific reading skills (Quirk & Schwanenflugel, 2004) and do not consider motivation, self-perception, or reading identity (Atkinson, 2009; Guthrie et al., 2009). To retain struggling readers, schools must look beyond universal intervention frameworks that only address foundational and comprehension skills.
“The Matthew Effect” (Cunningham & Stanovich, 1998) suggests that the relationship between engagement and achievement is a reciprocal process. For students to be motivated and achieving readers, it is important that they see themselves in the books they read. For students of color, a lack of diverse representation in literature may result in less desire to read. Because a student’s academic, vocational, and social opportunities beyond school are closely linked to their literacy levels (Merga, 2019), schools must provide access to relevant books that students want to read in order to close the opportunity gap that persists in this country.

**Purpose of This Study**

Via program evaluation, this study sought to assess the relationship between culturally relevant reading instruction, academic achievement, and reading self-perception for predominantly Latinx students enrolled in a secondary supplemental reading intervention program in one urban school district. I deemed this program as culturally relevant because of its focus on academic outcomes, its commitment to cultural competence, and its promotion of critical consciousness (Ladson-Billings, 1992, 1994, 1995, 2008).

Adolescents are at the pinnacle of identity development and, therefore, are likely to engage in activities that provide meaning and purpose as they seek to answer the question “Who am I?” while negotiating their position in both school and society (Yeager & Bundick, 2009). In addition to self-exploration, students seek to establish group identity by raising questions such as “What does it mean to be Latino?” or “What does it mean to be African American?” (Sellers et al., 2006). Culturally responsive curriculum and instruction promote this type of dialogue through access to texts and instructional materials that are both relevant to students’ own lives and supportive of their blossoming group identities. This study considered the degree to which a
culturally relevant program, as experienced by students, promotes the development of readers’ self-perception and academic outcomes.

**Significance of the Study**

The number of minority students in the United States continues to grow, yet the opportunity gap still remains. For students of color to have robust postsecondary opportunities, there is a need for strong literacy skills. This research contributes to the present body of knowledge about ways in which culturally responsive education is related to student outcomes. As the national landscape continues to evolve, it is the responsibility of educators and policymakers to adapt culturally responsive practices that enable all students to see “academia” as part of their collective narrative.

Despite the “achievement gap” that persists in the United States, few studies have been published about the role school plays in not only developing curriculum that reflects the school population, but also demonstrating the effectiveness of such instructional programs in promoting academic achievement. Although there is a significant body of research on culturally responsive education, most studies tend to be teacher-centric, without much consideration of the curriculum or instructional program itself. In addition, many studies fail to explicitly acknowledge measurable academic outcomes or causal academic effects in the evaluation of such programs. The lack of such studies may be attributed to the difficulty in isolating the curriculum and instructional program themselves from other variables, such as teacher practice.

There is limited available research that evaluates culturally responsive programs using standardized achievement scores. In addition, many quantitative studies in this field tend to prevail in ethnic studies programs in which participation is elective. The program under investigation is a requirement for all ninth and tenth grade students who need additional support
in reading instruction, as demonstrated by their previous reading attainment levels. Therefore, participation in this program was mandatory rather than elective. In this regard, this study sought to assess the effectiveness of culturally relevant reading intervention, whereas traditional approaches to remedy reading deficits may have previously proved futile (Fisher & Ivey, 2006).

Finally, much of the existing research on reading, motivation, and identity has been conducted with younger students as they are in formative years of schooling and are still in the process of developing these self-perceptions. By studying older readers, this study examined how the program under investigation influences the mindset of students who may have arrived at previous definitions of who they are as readers. Through the use of a program evaluation model, readers of this research may come to understand the impact of such a program and can replicate this framework to fit the needs of their unique school contexts.

**Researcher Positionality**

During my first year of teaching elementary school, I was painfully aware of the lack of representation that was reflected in the books I read to my students. As I looked at the faces of nearly 25 African American and Hispanic children, I realized that the literature in my dismal classroom library did not reflect their experiences. In the absence of culturally responsive texts, I found myself turning to books with animals including *The Berenstein Bears*, *Sesame Street*, and *Clifford the Dog*. In my mind, these were better alternatives to the conventional texts with White characters in homes with two parents and a traditional family structure. I feared that if my students did not see themselves reflected in the texts we were reading, they would consciously or subconsciously believe that my classroom was not a place that valued their individual and collective identities.
As I transitioned to teaching older students, I quickly realized that this problem was exacerbated in the texts that were available to adolescent readers as well. While some books featured characters of color, their roles were often limited to sidekicks, at best. More so, it was difficult to engage students in text-based critical conversations without the proper literature. Without texts that students found engaging and relevant, I found them to be unlikely to read, which was integral to their success not only in reading, but in school as well. As a result, these students were often classified as remedial readers in need of intervention.

Up until my arrival at my current district, I had been hard pressed to find reading programs that addressed the urgency of this matter in a manner that resonated with students. Of the few reading intervention programs targeted at adolescent readers, most employed skill acquisition practices such as decoding exercises and fluency drills. To see an intervention program that was meant to address adolescent readers with a culturally responsive curriculum and instruction was a novelty I was determined to learn more about.

Although I am an employee in the district under investigation, I have only observed this program peripherally as I do not supervise the program. I chose to use a quantitative method of analysis to provide implications for the district that are reflected from the student achievement data. Through this research, I hope to make the case for instructional programs that meet students where they are in a way that matters to them.

**Research Questions**

The overarching research question central to this study was: What are the effects of a culturally relevant reading intervention program on academic achievement and reading self-perception for ninth and tenth grade students enrolled in a supplemental reading intervention class? The following two sub-questions guided this investigation:
What is the association of culturally relevant reading intervention on students’ reading achievement as measured by the STAR reading assessment?

What is the association of culturally relevant reading intervention on students’ reading self-perception as measured by the Reader Self-Perception Scale?

**Research Design**

The purpose of this quantitative study was to analyze the performance of students enrolled in a secondary reading intervention program in comparison to those who were not enrolled in the program in order to understand the possible influence of a culturally relevant reading intervention program with respect to students’ academic outcomes and self-perception as readers. To answer each research question, I employed a multiple regression analysis to explore the relationship between the independent variable of interest, program participation, and the dependent variables, the academic achievement of students in reading and reader self-perception scores. Other variables, such as race, gender, and English Language Learner status, were also used to control for the dependent variable and offer possible explanations to any variance in the outcome variables.

The data contained within this study were collected using two primary data sources: the Enterprise Standardized Test for the Assessment of Reading (STAR™) and the Reader Self-Perception Scale 2 (RSPS2). The STAR assessment provides information about students’ scaled scores in reading at the start and end of the program, allowing growth, as measured through their student growth percentile (SGP) score, and scaled score change to be observed. Student achievement data are presented across 3 school years. The RSPS2 is a Likert survey that was administered to students at the end of the program to assess differences in reader self-perception among the two groups.
Limitations and Delimitations

One limitation of this research was the use of a cross-sectional survey to gather information about students’ self-perception in reading as a result of participating in this program. While this tool provided information regarding students’ self-perception in reading as a result of culturally responsive instruction, it did not illustrate longitudinal trends over time.

A second limitation in this study was the use of only posttest data to assess students’ reading self-perception at the end of the program. Because a pretest was not administered, it was difficult to determine the magnitude of the outcomes and whether the outcomes were due to the program or some other cause. In addition, a posttest does not account for starting point differences among the two groups.

As this study was not truly experimental, there may be alternative explanations that cannot be explained by the treatment or intervention, signaling a third limitation of this study. Although the intent of this study was to examine the impact of an intervention on outcome variables, it cannot fully explain cause and effect. As this study was not causal, the reading intervention program alone cannot explain changes in students’ achievement scores or their reader self-perception.

A final limitation to this study coincided with the timing in which it was conducted. In the wake of the COVID-19 pandemic, this research took place in a hybrid environment, meaning that students spent less than half of their time physically in school, while the rest of the time was spent at home using a virtual instruction model. Although the intent of the program remained relatively the same, some activities and experiences had to be adjusted to reflect the remote environment, which may have influenced findings. Because even the best online instruction is unlikely to match quality in-person instruction, it is likely that the results of this study would
have had a different outcome if conducted in pre-pandemic times. For this reason, historic student achievement data were presented for students who were enrolled in this program during their freshman year.

A delimitation of this study included the use of a program evaluation model. As previously stated, this study assessed the impact of a secondary reading intervention program within one urban high school, deemed to be culturally responsive. As such, the conditions described in this study were unique to the research site and the participants.

Key Terms

- **Curriculum** - the detailed package of learning goals, units, and lessons; assignments, activities, projects, books, materials, videos, presentations, and readings used in the class.

- **Culturally Responsive Curriculum** - a curriculum (see above) that centers on students’ culture, identities, and contexts (Bryan-Goodeen et al., 2019).

- **Culturally Relevant Pedagogy** - an instructional approach that prioritizes academic outcomes, cultural competence, and sociopolitical/critical consciousness (Ladson-Billings, 1994).

- **Representation** - the extent to which students are reflected in their curriculum, and the extent to which they are being exposed to a group of diverse authors, characters, identities, and cultures in text.

- **Reader Identity** - how capable individuals believe they are in comprehending, the value they place on reading, and their understanding of what it means to be a particular type of reader (Hall, 2012, p. 369).
• **Opportunity Gap** - the ways in which a person’s race, ethnicity, socioeconomic status, English proficiency, community wealth, familial situations, or other factors determine their opportunities in life, rather than all people having the chance to achieve to the best of their potential (Teach for America, 2019).

• **NJSLA-ELA** - the New Jersey Student Learning Assessment for English Language Arts, which measures student proficiency with grade-level skills, knowledge, and concepts that are critical to college and career readiness.

• **Enterprise Standardized Test for the Assessment of Reading (STAR™)** - a nationally recognized computer-adaptive test that measures student achievement in reading in Grades K-12 (Renaissance Learning, 2020).

• **Scaled Score** - a norm-referenced score ranging from 0-1400 that is obtained from the difficulty of questions a student answers and the number of correct responses (Renaissance Learning, 2020).

• **Grade Level Equivalency** - a score ranging from 0.0 to 12.9 that denotes a student’s grade-level equivalency that is derived from the scaled score. It shows how a student’s test performance compares with that of other students nationally (Renaissance Learning, 2020).

• **Student Growth Percentile** - a score that reflects student growth between test administrations when compared to that of academic peers nationwide (Renaissance Learning, 2020).

• **Reader Self-Perception** - the process of understanding how students view themselves as readers and how they feel about and value the act of reading (Henk et al., 2012).
• **Reader Self-Perception Scale 2** - a tool for measuring how students feel about themselves as readers (Henk & Melnick, 1992, 1995).

• **Young Adult Literature (YA)** - a genre of literature that is intended for adolescents. YA books typically contain relevant and/or controversial themes and are reader-friendly.

**Organization of This Study**

This research study is organized into five separate chapters. The first chapter oriented the reader with information regarding culturally responsive reading intervention at the secondary level and established program evaluation as the chosen method of analysis. This chapter also included the context of the study, the statement of the problem, the purpose and significance of the study, the research questions and research design, the limitations of the study, and the definition of key terms.

The second chapter provides an extensive review of literature related to this study. It includes a historical overview of culturally responsive education and offers a summation of research and literature related to culturally relevant curriculum, reading engagement, textual representation, and secondary literacy intervention practices.

The third chapter describes the data and methods used, including the research questions, research design, and sample population. The program context, instrumentation, data collection, and data analysis are also presented. The methods utilized in this study are quantitative.

The fourth chapter presents the statistical findings of the study and the analysis of the data. Variables such as academic growth in reading and reading self-perception scores are analyzed through the use of descriptive statistics and a multiple regression model.
The fifth chapter denotes the conclusions based on the gathered data and provides recommendations for future research and policy implications.
CHAPTER II

REVIEW OF LITERATURE

Purpose of the Review

The purpose of this literature review is to provide a historical context for the emergence of culturally responsive education (CRE) and shed light on studies that have established a relationship between CRE and academic achievement. As the program under investigation is a reading intervention course, this review also provides the reader with a basic understanding of standard secondary literacy intervention practices and discusses themes related to literacy instruction, including identity literacy and textual representation. This allows the reader to draw comparisons and contrasts between standard literacy intervention programs and the culturally relevant reading intervention program described in this study. To reflect the backgrounds of the students in this study, this review also includes literature regarding culturally relevant pedagogy for Latinx students.

Organization of Existing Literature

The first part of this literature review discusses the emergence of culturally responsive education (CRE) and highlights the parallels between CRE and other related, but separate frameworks. This is established to clarify what CRE is and is not, as the term is often confused with other related disciplines. The literature in this section consists of scholarly articles that provide the reader with a theoretical understanding of key terms, important figures, and historical events upon which CRE is predicated.

The second part of this review focuses on literature related specifically to the three pillars of culturally relevant teaching and instruction that are included in the theoretical framework: academic achievement, cultural competence, and critical consciousness. To explain this
relationship by means of student achievement, most of the studies included in this section are quantitative. As the majority of research in this specific field is highly contextual, this section is rich with case studies and small-scale comparative studies across diverse ethnic groups. While there is evidence to suggest culturally relevant teaching and curriculum promote gains in math and science, the majority of literature included in this section is relevant to English language arts or liberal arts, as that is the basis for this particular study. Student participants in this section were from elementary, middle school, high school, and postsecondary programs and represented a variety of ethnic backgrounds. Also included in this section is the use of culturally responsive practices with Latinx students and justification for the study’s theoretical framework.

The third part of this review serves to orient the reader with an understanding of standard literacy intervention practices. This is included to inform the reader about how secondary reading intervention programs typically work, what their theory of action is, and how they are implemented. This lays the groundwork for the unique context of the intervention program described later in this study, so that the reader may come to understand what makes the program under investigation unique in comparison. Included in this discussion is literature regarding identity and textual representation.

This chapter concludes with a synthesis of findings relevant to the elements of the program and an identification of critical variables in the proposed evaluation.

**Culturally Responsive Education and Related Terms**

of this study, I refer to CRE as the inclusive term used to describe the umbrella of these philosophies; however, the term “relevance” is applied to discussion regarding the practice of teaching, curriculum, and instruction. Whereas culturally responsive teaching is focused on teacher practice (Gay, 2002, 2010), culturally relevant pedagogy refers to teacher posture and paradigm (Ladson-Billings, 1994, 1995, 2008, 2014).

**Historical Perspectives of Culturally Responsive Education**

The origin of culturally responsive education is a contested terrain as the underpinnings of this tradition draw from an array of other movements, including multicultural education, bilingual education, ethnic studies, critical race theory, culturally relevant pedagogy, and social justice education, among others. Despite the differences in pedagogical and curricular priorities, the apex of each tradition is characterized by a commitment to providing students with social and educational equity (Dover, 2013). An examination of the history of CRE is inclusive of the other pedagogical approaches that have come before it. As such, the terminology used in this section reflects the dynamic nomenclature of the associated equity-oriented frameworks.

CRE evolved from the multicultural education reform efforts of the 1960s and is predicated on the earlier writings of W. E. B. DuBois, Carter G. Woodson, and Charles C. Wesley (Banks, 1993). This approach gained momentum in universities and K-12 schools in response to events during the Civil Rights era, such as the desegregation of public schools and the rise of nationalist groups such as the Black Panthers who helped ignite the Black Power Movement and used college campuses as a site of protest (Gay, 2002, 2010). In 1968, the Third World Liberation Front coalition was formed on the campuses of San Francisco State University (SFU) and demanded access, democracy, and autonomy for students and faculty of color. This
mobilization gave rise to ethnic studies programs not only at SFU, but across California and eventually the United States (Sleeter, 2011).

The emergence of ethnic studies programs at the university level soon made its way across K-12 schools. This need was further propagated by the *Lau v. Nichols* (1974) Supreme Court decision, which required students to be taught in their primary language, and the Bilingual Education Act, which made federal funds available to aid in the research and design of bilingual programs and ethnic studies programs. As ethnic studies programs gained momentum, they gave rise to the pedagogical approach referred to as multicultural education. The five dimensions of multicultural education include content integration, knowledge construction, prejudice reduction, equity pedagogy, and empowerment (Banks, 1993).

Separate from multicultural education, which is additive in context, CRE requires teachers to undertake both an ideological and instructional shift in their practices (Schmeichel, 2012). A pioneer in CRE, Ladson-Billings (1994, 1995, 2008, 2014) argued that culturally relevant pedagogy engages learners whose traditions and cultures have been historically excluded from mainstream settings. This type of teaching extends beyond individual empowerment and emboldens the collective (Ladson-Billings, 1995). In her 2-year-study, she observed the pedagogical approaches of esteemed teachers of African American students and noted that these individuals were similar in how they thought about themselves as teachers, how they saw their students, how they structured social relations within their classroom, and how they conceived of knowledge (Ladson-Billings, 1992). Culturally relevant pedagogy, she argued, ensures that students experience academic success, develop or maintain cultural competence, and challenge the status quo through critical consciousness. Ladson-Billings also suggested that academic excellence must be demanded and supported through a curriculum that utilizes
students’ culture as a tool for learning and promotes critical analysis. Culturally responsive teachers are able to meet the demands of the locally enacted curriculum but use this as an opportunity to introduce new interpretations to the existing standards, ensuring that the content of the curriculum is continually open to critical analysis (Ladson-Billings, 1995, p. 163).

In Ladson-Billings’ (2014) later work, she referenced the significance of culturally sustaining pedagogy (Paris, 2012) and has since reworked her own definition of what it means to be culturally relevant, by considering students’ static culture and evolving culture (Paris & Alim, 2014). Culturally relevant and sustaining pedagogy, she argued, urges those in the “majority” and “minority” to raise critical questions and push the discourse. Like culture, “our pedagogies must evolve to address the complexities of social inequalities” (p. 77).

Gay (2010) extended the framework of culturally relevant pedagogy to include culturally responsive teaching, which places an additional onus of responsibility on the teacher to connect students’ “out of school living” with “in school learning” (Gay, 2013, p. 49). Similar to her previous definition, Ladson-Billings (2010) defined culturally responsive teaching as “using the cultural knowledge, prior experiences, frames of reference, and performance styles of ethnically diverse students to make learning encounters more relevant to and effective for them” (p. 31). Culturally responsive teachers must (a) replace deficit perspectives of students and communities, (b) understand the resistance and criticism they may face, (c) understand the importance of culture and differences as they are essential to humanity, and (d) make pedagogical connections within the context in which they are teaching.

Scholarly research, like culture, is fluid and ever evolving. In the past 30 years, much research has been devoted to identifying the salient characteristics of culturally responsive classrooms. The aforementioned theoretical frameworks highlight the importance of teacher
practice and pedagogy in optimizing academic outcomes for all students and provide a basis of understanding for the studies discussed later in this chapter. What matters not is the distinction of what is relevant or responsive, but the belief that all students can achieve at high levels when culture is embraced and reflected in the classroom and the curriculum.

Theoretical Framework

This study was based on the educational theory proposed by Ladson-Billings. Culturally relevant pedagogy focuses on the attitudes and dispositions a teacher might embrace which would influence his/her instruction, planning, and assessment (Arsonon & Laughter, 2016). Because I sought to understand how program design influences student outcomes, this framework was most appropriate for understanding the correlation between program participation, academic achievement, and reader self-perception.

Culturally relevant pedagogy demonstrates a commitment to academic achievement, cultural competence, and sociopolitical consciousness. Although reader self-perception is not explicitly connected to one of these three pillars, positive self-perception is linked to many favorable outcomes, including strong academic performance (Valentine et al., 2004). Thus, both research questions in this study was designed to understand academic achievement, the first pillar of culturally relevant pedagogy, in its relation to program participation. Finally, students in this program engage explicitly in activities intended to promote their cultural competence and critical consciousness. This is described in Chapter III.

Few studies have been conducted to examine the relationship between culturally relevant pedagogy and academic achievement, as measured by standardized test scores. The reason for this omission may be because practitioners of CRE embrace lifelong learning as an outcome, rather than achievement that is quantified in such measures. This study addressed this gap in the
literature because it used quantitative evidence, obtained from a nationally recognized norm-criterion referenced test, to understand the relationship between culturally relevant program design and academic outcomes. Much of the quantitative research regarding culturally relevant pedagogy is at the college level, where students voluntarily elect to participate in the program. This study is unique in that the pedagogy is practiced at the secondary level and can be adopted on a larger scale. This study also offers a unique approach to reading intervention, which traditionally has focused solely on foundational skill acquisition and is not offered as a credit-bearing course.

Sleeter (2011) implored the need for evidence-based research that makes connections to student outcomes via culturally relevant pedagogy, asserting that it is essential to gaining political momentum and inclusion in mainstream agenda setting. This study intended to fulfill this need through its examination of how culturally relevant pedagogy is enacted in a secondary reading intervention program within one district in central New Jersey. It is my hope that this study can demonstrate that reading instruction for all is enhanced when culturally relevant practices are employed. Likewise, as the majority of similar research in the field has been conducted in elective settings, this study may potentially demonstrate that culturally relevant curriculum and instruction can be applied in broader contexts and can yield positive academic outcomes for diverse student populations.

Much of the literature presented in the following section suggests that culturally relevant curriculum promotes academic gains for students of color. This is consistent with findings by researchers such as Dee and Penner (2017), whose results indicated “that a culturally relevant curriculum implemented in a strongly supportive context can be highly effective at improving outcomes among a diverse group of academically at-risk students” (p. 130). Prior to discussing
the results of similar studies, it is important to note that other variables must be considered when examining the relationship between curriculum and academic outcomes. For instance, although the curriculum is a doctrine of ‘what to teach,’ it is still enacted by the teacher, who ultimately decides ‘how to teach it.’ For this reason, much of the forthcoming literature also includes discussion of teacher practice as it is difficult, if not impossible, to discuss the causal effects of curriculum and pedagogy in isolation. While the following sections provide an understanding of research studies that have explicitly or implicitly attended to each component of culturally relevant pedagogy, their reach is multifaceted and may address more than the single component discussed.

**Culturally Relevant Pedagogy: Academic Achievement**

The first component of culturally relevant pedagogy (CRP) emphasizes student learning. This includes students’ intellectual growth and development, problem-solving ability, and reasoning. Several studies, to date, have been conducted to demonstrate the effects of CRP on academic achievement. Evidence of such relationships exist across diverse age groups, school types, and ethnic backgrounds. To do this work, teachers must “critically examine the [existing] curriculum and revise it as needed to make issues of diversity central rather than peripheral” (Villegas & Lucas, 2002).

The Webster Grove Writing Project (WGWP) used a culturally relevant pedagogical approach to teach writing to African American students in Grades 6-12 and others across Missouri. The program included eight principles and strategies that were based on African American cultural characteristics and contributions, as noted in Gay’s (2002) research. Krater et al. (1996) analyzed quantitative data, including standardized test performance and normed writing sample scores, to evaluate the effectiveness of the strategies within this program. They
concluded that students who participated in the program outperformed non-participants; however, African Americans’ writing scores remained significantly lower than their White counterparts (Gay, 2002), which may reveal the urgency of attending to racial disparities in achievement prior to adolescent years.

An earlier but dated study was conducted with elementary students in Grades Kindergarten-3 via the Rough Rock English-Navajo Language Arts Program (RRENLAP). Begay et al. (1995) found that the use of culturally relevant pedagogy, deemed “progressive” at the time of the study, promoted academic gains for Navajo students in their reading and listening comprehension, as demonstrated on the state’s norm-criterion achievement test. In this program, teachers attended to the special linguistic and cultural characteristics of their students to make the intended curriculum more accessible. Similar to the results of the WGWP, White students still outperformed students of color, despite the curricular adaptation.

In a more recent study, Kanu (2007) sought to determine if the inclusion of Aboriginal perspectives within the curriculum promoted academic achievement, class attendance, and school retention for ninth grade Aboriginal students in the Canadian public school system. He used two social studies classrooms as part of this experimental research, in which one site was traditional in its coverage of content and the other was “enriched” to include content, resources, instructional methods, and interaction patterns commonly associated with Aboriginal students, which he justified as being culturally responsive, using Gay’s (2002) cultural discontinuity framework. While the findings did not indicate any relationship between curriculum integration and attendance or retention, students in the enriched class performed dramatically better than their counterparts in the regular class on social studies tests and exams. Students in the enriched class identified teacher knowledge, attitude, and instructional style as the primary factors
attributing to their achievement and the curriculum content as a secondary but also important variable.

Dee and Penner (2017) sought to understand the causal effects of an ethnic studies course for ninth grade students in the San Francisco Unified School District. Because students were enrolled in this class based on their eighth grade GPA, the researchers used a regression discontinuity design in which they compared the outcomes of enrolled students versus those whose GPA put them marginally above the participation threshold. They concluded that participation in the program had positive effects on student outcomes, including gains in attendance, grade point average, and credits earned. This study suggested that ethnic studies courses and culturally relevant pedagogy, when enacted in a supportive context, provide support to struggling students.

The aforementioned studies revealed that academic gains are increased when a culturally relevant curriculum is employed. Despite these positive outcomes, however, developing a culturally relevant curriculum remains a challenge. Teachers must negotiate how to teach critical content standards while employing culturally relevant/responsive pedagogy and practices. Cammarota (2007) insisted that skill acquisition alone is not enough to close the achievement gap that persists among students of color. “Indicators pointing to low academic performance should lead to curricular changes that motivate and challenge students, instead of remedial approaches that simplify the curriculum to rote learning” (p. 88). While some organizations have begun to draft standards-based accountability tools and rubrics, many educators still grapple with how to employ these practices in the midst of the other requirements to which they must attend. Developing cultural competence and invoking problem solving through critical consciousness
are just some of the ways that teachers can promote academic gains through the curriculum and their daily instruction.

**Culturally Relevant Pedagogy: Cultural Competence**

The second component of culturally relevant pedagogy is the promotion of cultural competence. Cultural competence refers to the skills that enable students to affirm and appreciate their own culture, while developing fluency in other cultures. For students to be culturally competent, teachers must be as well. Ladson-Billings (2001) urged educators to make an effort to learn about the home and community culture of his or her students as it is the “basis for learning” (p. 99).

Garth-McCullough (2008) sought to validate the effect of culturally relevant instruction through a quantitative study in which he analyzed the extent to which culturally-bound prior knowledge supported African American eighth grade students in their ability to comprehend text. A prior knowledge assessment was administered to 117 students to assess their culturally bound item knowledge, and these scores were correlated with their individual reading comprehension scores, obtained after reading short stories that were relevant to African American culture, Chinese culture, and European American culture. The results of this research indicated that students with high levels of culturally bound prior knowledge had higher comprehension scores, even when compared to peers who read at a higher reading level. This study may suggest that students experience positive outcomes when teachers use texts and teaching tools to adapt to the cultural proficiencies of their students. Moreover, when students develop competence in understanding their own culture, they may be more equipped to understand and analyze other cultures as well.
Luna et al. (2015) used a program evaluation mixed-methods study to measure the effectiveness of a culturally relevant community-based program in the promotion of identity affirmation and academic aspirations for Mesoamerican students. As part of the Anahuac School and Community Engagement Project, students participated in 10 2-hour sessions, in which they learned more about their culture and discussed college planning using a personalized Mesoamerican-centric curriculum. Survey results and interviews revealed that students had an increased sense of ethnic background, more understanding of their group identity, an enhanced sense of cultural awareness, and increased academic aspirations. Despite these favorable results, the results were not tracked longitudinally, so it is difficult to determine if changes in academic aspirations and ethnic identity were maintained over time.

The studies discussed in this section suggested that students are more equipped to maintain and positively identify with their culture when it is embraced in the classroom. This promotion can yield positive academic effects. Furthermore, literature can be used as a vehicle to help teachers promote this positive association, as noted in Garth-McCullough’s (2008) study and discussed later in this review of literature.

**Culturally Relevant Pedagogy: Sociopolitical Consciousness**

The third component of culturally relevant pedagogy is the development of critical or sociopolitical consciousness. This refers to the ability of students to identify, analyze, and problem-solve real world issues, often pertaining to inequalities. This paradigm shift requires teachers to provide students with access to critical content standards while also unveiling explicit and covert systems of inequity and oppression so that students are empowered to advocate for societal change and systemic reform (Bell et al., 2007). By this regard, the curriculum must
extend beyond the inclusion of issues of diversity to encapsulate the critique of societal structures that sustain social injustices (Cochran-Smith, 2000; Dover, 2013; Sleeter, 2015).

One program that encouraged students to develop critical consciousness was the Social Justice Education Project for high schoolers in Tucson, Arizona (Cammarota, 2007). This program promoted active participation and critical consciousness for Latino students who were previously deemed as academically at risk. Exit interviews and student surveys revealed that 88% of students finished high school and 56% enrolled in college, double the projection for U.S. Latinos, according to the 2003 U.S. Census. Although many students felt empowered to advocate for their communities as a result of their participation in the course, it is important to note that participation in the program was elective and only included a small group of students (n = 17).

Another program arising from Tucson was the Mexican American Studies (MAS) program, which has since been eliminated for a curriculum deemed “too political” (Horne, 2010, p. 2). The MAS program was intended for the lowest-performing high school students across the district and sought to develop in them a sense of empowerment by encouraging them to be social change agents (Cammarota & Romero, 2006). In his quasi-experimental study, Cabrera (2014) compared students enrolled in MAS to those who were not enrolled but had similar ability levels. His findings indicated that MAS students not only scored higher on Arizona’s standardized state assessment, but were more likely to graduate high school than those who did not participate. This suggested that agency and identity are vital components of supplemental instruction, especially for high school students of color.

Lewis et al. (2006) documented the effectiveness of Project Excel (Ensuring Excellence through Communalism, African Education & Leadership) for a group of eighth grade students who were enrolled in the emancipatory education course. In this experimental research, 32
students were randomly assigned to this course, while the remaining 33 students participated in a life skills or course. As part of Project Excel, students learned about African American cultural exchanges, opportunities for Black adolescent leadership, and ways to enact these understandings to empower their own communities. Results obtained from student questionnaires revealed that students who participated in Project Excel had more motivation to achieve, increased communalism, increased social change involvement, and stronger feelings of school connectedness than those who participated in the Life Skills program. While this study was promising, the effects were measured as a result of students’ participation in one class period over a 4-month study. To disrupt “old” patterns of thinking and offer new avenues for accessing content, programs such as these need to become implicitly woven into core content instruction.

As documented throughout this section, identity affirmation is a core component of any culturally responsive curriculum. Individuals must have a strong construct of self in order to advocate for the needs of the collective. Therefore, it is critical that curricula teach one’s history, disrupt present inequities, and empower youth to champion for a better tomorrow. The following section discusses the ways the curriculum, culturally responsive teaching practices, and multicultural literature can embolden Latinx students to develop these habits.

**Culturally Relevant Pedagogy and the Latinx Community**

Although Latinx students account for nearly 27% of school-age children in the United States, their educational attainment remains stark in comparison to their White counterparts. The most recent data from the National Center for Education Statistics (McFarland et al., 2019) revealed that 81% of Latinx students are graduating high school, in comparison to 89% of White students. In addition, Latinos account for just 7.9% of the teaching force in the country, whereas 81.9% of U.S. teachers are White. As Lee (2005) suggested, “The problems that many children
of color face in school are due to cultural differences/mismatches between the students’
home culture and the school culture” (p. 41). In order to account for this demographic
disproportionality, schools can seek to embrace culturally relevant pedagogy and provide
teachers with the tools to hone their cultural competence. Ramirez and Jimenez-Silva (2015)
suggested that students are more likely to acquire enhanced literacy skills when their
backgrounds and cultural histories are represented in the classroom. As noted by Villegas and
Lucas (2002), teachers can show confidence in students’ abilities when they provide a rigorous
curriculum, hold students accountable, and embed students’ cultural and linguistic differences in
their daily instruction.

One way teachers can validate the culture of Latinx students is through the utilization of
multicultural literature. Multicultural literature has been defined as the literature created by or
about marginalized groups in society (Webster, 2002) and as the voices typically ignored in the
traditional canon (Glazier & Seo, 2005). When teachers embed multicultural literature in their
instruction, they support students in the development of not only their language and
comprehension skills but their identity as well (Mora, 1998). As Vasquez (2005) noted, when
Latinx students read Latino literature, they can identify the parallels between their own lives,
family traditions, and cultures that are depicted in the text, which promotes a sense of pride.
Therefore, there is a need for accessible literature that reflects the daily experiences of Latinos.

Naidoo and Vargas (2011) argued that Latino youth will have greater respect for their
cultural identity and a stronger sense of self if they see themselves represented in the literature
used in the classroom. In their later work, Naidoo and Vargas (2012) suggested that these books
should include topics that potentially reflect the struggles encountered by the Latinx community,
such as growing up in poverty, being undocumented, experiencing racism, having hardworking
families, and hiding one’s identity to fit the status quo. However, teachers should heed caution when selecting literature to avoid essentializing ethnic groups and oversimplifying cultural stereotypes (Gonzalez & Montaño, 2008). Instead, they encouraged teachers to critically analyze these texts and develop a robust criterion for incorporating them into the classroom. Ideally, these texts should be added to the curriculum to promote academic goals and objectives (Easter et al., 1999) and allow educators to engage students in critical discussions that tackle bias and prejudice, institutional racism, and privilege (Cochran-Smith, 2000).

Several studies have been conducted which denote the ways teachers can use multicultural literature and/or culturally relevant pedagogy to promote academic achievement, critical competence, and sociopolitical consciousness for Latinx students. Lopez (2016) examined the link between culturally responsive teaching and academic outcomes for Latinx students in Arizona in Grades 3 through 5. Through hierarchical linear modeling, she concluded that teachers’ beliefs about the role of Spanish in instruction, funds of knowledge, and critical awareness were all positively related to students’ reading outcomes. This study suggested that teachers reduce educational disparities when they view students’ culture as an asset. This affirmed prior research (Pérez-Huber et al., 2015) indicating that Latinx students will experience increased connection to and engagement in school when teachers and administrators adopt an asset view of Latina/o culture and language.

Vasquez (2005) studied the impact of Chicano literature on Latino and non-Latino student and found that multicultural literature can be used to promote social justice. Using multicultural literature that covered topics such as immigration and acculturation, she noted Latino students identified with the literature and found a sense of “ethnic validation” (p. 909), while non-Latinos reported increased critical consciousness as they were able to reassess their
previous perceptions of the Latinx community. In a similar study, Ramirez and Jimenez-Silva (2015) found that the use of poetry by Latinx authors promoted classroom discussion regarding equality and social justice and supported students in their analytical and interpretive reading skills.

The aforementioned studies suggested that Latino literature can be used in the classroom to bridge cultural and linguistic differences and honor students’ identities. Because identity is strongly linked to language, it must be attended to in the development of culturally relevant curriculum. The forthcoming section provides insight into the role literacy plays in promoting positive identity association. Prior to this discussion, though, I present a brief overview of traditional approaches in secondary literacy interventions to understand what makes the reading intervention program, described in Chapter III, unique in its approach to remedial reading instruction.

**Traditional Approaches to Secondary Literacy Intervention**

After elementary school, students are no longer learning to read. Rather, they are reading to learn. For students to explore information and concepts in content area subjects such as literature, mathematics, history, or science, they must possess sophisticated language tools (Hinchman & Zalewski, 1999). Ensuring adequate and ongoing literacy development for the estimated 8 million struggling readers in Grades 6-12 remains a difficult task as adolescent readers are not universally motivated to read better or as interested in school-based reading as younger students (Biancarosa & Snow, 2006).

In addition, secondary teachers are often ill-equipped to provide students with explicit foundational reading instruction as they are content-area teachers (Fisher & Ivey, 2006) rather than “reading” teachers, such as the case with elementary school specialists. Another challenge
in implementing reading intervention programs at the secondary level includes scheduling and credit requirements. As noted by the RTI Network, “Students need opportunities to recover lost credits in order to graduate and schools should avoid reducing opportunities to gain credits in order to provide interventions.” The difficulties experienced by secondary schools may keep students from getting the support they need to advance their literacy skills.

Although secondary schools may struggle with finding the time and certified personnel to provide remedial reading instruction, there is no shortage of programs aimed at advancing literacy skills for adolescents. Slavin et al. (2008) conducted a thorough review of more than 200 published studies that documented the effectiveness of reading programs for students in Grades 6-12. Of the 36 experimental-control comparisons that met the inclusion criteria, 8 were studies of computer-assisted instruction, 16 were instructional process programs, and 12 were mixed-method models. Effect sizes were averaged across the studies and weighted by sample size to reveal that each program classification ranged in limited to moderate effectiveness in improving student outcomes, with no classification evaluated as strongly effective. The theory of action for each of these program classifications is included below.

**Computer-Assisted Instruction**

For schools that cannot provide reading specialists and literacy coaches, computer-assisted instructional programs serve as a way to deliver individualized instruction to students without the explicit support of a classroom teacher or specialist. As part of these programs, students typically take a diagnostic test that matches them to text and instruction that is at their level as they accelerate, at their own pace, through an individualized learning progression. These programs typically provide formal and summative assessments that allow teachers to monitor students’ progress and tailor instruction to the needs of individuals or the whole class (Cheung
et al., 2012). In this model, whole-class instruction presents a challenge because each student is likely working on different learning goals. As a result, the impact of quality-led teacher instruction, peer-to-peer discussion, and cooperative learning is sacrificed. Another common criticism of this type of instructional model is that it is unlikely to evaluate accurately a student’s strengths, needs, and motivation for reading and writing (Alvermann & Rush, 2004).

**Instructional Process Programs**

Instructional process programs provide teachers with the professional development needed to implement specific instructional methods, such as cooperative learning and strategy instruction. In cooperative learning programs, students work in small groups to help one another master content. Strategy instruction programs support students in developing specific reading strategies such as paraphrasing, summarizing, and predicting (Slavin et al., 2008). Although these programs may attend to the social nature of adolescent learning, they merely offer students strategies and discussion protocols and do not address the importance of engaging literature. Worthy et al. (1999) argued that struggling students may choose to read more frequently if they had access to readable high-interest texts. Unfortunately, secondary schools do not often make available the texts students prefer to read. This is an important consideration as struggling readers are likely to read less and, consequently, do not get any better at reading (Stanovich, 1986).

**Mixed-methods Models**

These programs combine large-group, small-group, and computer-assisted individualized instruction and are designed as complete literacy interventions. Read 180 is a highly popular example of such a model. In this program, groups of 15 students or less receive 90 minutes of instruction, beginning with a 20-minute shared reading skills lesson. Students then rotate among
three activities in groups of five: (a) computer-assisted instructional reading, (b) modeled or independent reading, and (c) small-group instruction with the teacher. Not only is this program time-consuming and difficult to schedule, but it has been criticized as being isolating and overly scripted in that it does not provide students with the opportunity to draw on their own schema to construct meaning (Whitford, 2011).

Regardless of the program classification, many secondary reading interventions tend to target word- and sentence-level skills in addition to isolated practice with meaning construction. Although struggling readers need opportunities to engage in word- and sentence-level processes, these activities rarely support deeper comprehension and will lack relevance for students if they are not given the time to apply these strategies with cognitively challenging texts and literacy activities (Kim et al., 2017).

Reading motivation is another critical component of adolescent literacy instruction. It refers to an individual’s attitudes, beliefs, values, and goals related to reading (Wigfield & Guthrie, 2000). However, weak motivation is a common barrier for struggling adolescent readers and may keep students from participating in activities that have the potential to improve reading skills (Kamil et al., 2008; Solis et al., 2014). For the struggling reader, experiencing success is paramount; successful readers are more motivated to read and, thus, more likely to identify themselves as readers (Gambrell et al., 2007, p. 272). As Atkinson (2009) stated, “evidence-based methods for improving student engagement and motivation should have a high priority in efforts to improve adolescent literacy outcomes” (p. 53).

Guthrie and Klauda (2014) have documented features of reading programs that can support motivation. This includes relevance (topics and texts that relate to students’ lives), a thematically organized curriculum that integrates skills and content, opportunities for students to
experience success through readable text, increasing independence in skills application, and student collaboration. The reading intervention program, described in Chapter III, addresses the components above by utilizing young adult literature as the primary vehicle teachers use to deliver instruction. Young adult literature uses high-interest, lower-level texts to engage students with content. Texts are often filled with events and themes that are relevant to the changing lives of students (Ivey & Johnston, 2012). Because reading engagement contributes to growth in students’ reading skills (Guthrie et al., 2012), engaging literature is essential. At the time of this study, I am not aware of any studies to date that employ young adult literature as part of an approach to intervention.

The following section provides information about the role of culturally relevant literature in instruction, making the case for the inclusion of young adult literature.

**Culturally Relevant Literature**

Literature transforms human experience and reflects it back to us, and in that reflection, we can see our own lives and experiences as part of a larger human experience. Reading, then, becomes a means of self-affirmation, and readers often seek their mirrors in books. (Bishop, 1990)

The research presented in the previous section posited the importance of engaging struggling readers with relevant literature. However, published statistics documented by the Cooperative Children’s Book Center School of Education at the University of Wisconsin-Madison revealed that only 23% of children’s books and young adult literature published in 2018 represent students of color (1% American Indians/First Nations, 5% Latinx, 7% Asian Pacific Islander, 10% African/African American). Of the remaining titles, 50% of characters were White, while 27% of characters were animals or other creatures. Statistics like these emphasize the role literature plays in sending implicit and explicit messages of inclusion and exclusion, or ‘seeding power and control.’ This practice is nothing new. Since the inception of mass-produced
children’s literacy materials such as the White nuclear family of the *Dick and Jane* series, concern has been raised about who is represented and how they are represented (van Belle, 2010). The explicit and implicit content within these texts plays a role in the discourses that children construct about themselves, others, and the greater world (Bishop, 1990; MacCann, 2001). This consideration is extremely important for *all* students in building more tolerant and accepting public schools.

Because books are the tools in which secondary English Language Arts teachers deliver the intended school curriculum, they must be evaluated for their unintended consequences. To do this, educators may consider how functional literacy and critical literacy can intersect. While functional literacy promotes skills needed to thrive autonomously (Gutstein, 2006), critical literacy encompasses the ability to challenge paradigms of knowledge and question institutionalized systems of power (North, 2009). In other words, texts can serve as a tool for teaching students how to understand and use printed information and how to critique the messages these texts contain. These texts can also support academic achievement, motivation, identity development, and critical analysis, as documented below.

**Academic Achievement**

Freeman and Freeman (2004) sought to illustrate how culturally relevant texts can promote significant academic gains. To illustrate this relationship, they developed a rubric that assessed texts for cultural relevance based on how the characters and events in the text matched the experiences of the students who read them. This study, which also documented the miscue analysis of young readers in Arizona, found that students made higher-quality miscues and produced better retellings of text when culturally relevant stories were used. Citing Freire and Macedo’s work from 1987, Freeman and Freeman concluded the importance of connecting texts
to student experiences. “Reading the world always precedes reading the word, and reading the word implies continually reading the world” (p. 35).

A similar study was conducted by Ebe (2010), who drew comparisons between culturally relevant texts and reading proficiency. To support teachers and students in determining what makes a text culturally relevant, the author developed a rubric that could be used as a text selection tool to help teachers identify culturally relevant text. Building on Goodman’s (1982) previous research, this tool supported teachers and students in choosing texts based on the ethnicity, age, and gender of the characters, the setting, the language or dialect used in the story, the genre, and the background experiences of the reader. In this study, Eve used the rubric to rate the cultural relevance of two stories from a standardized assessment reading kit, one of which he evaluated as being significantly more culturally relevant. While students read both texts with similar accuracy, the comprehension and retelling scores were markedly higher for the text that was determined to be more culturally relevant. This study suggested that culturally relevant texts can promote greater gains in reading proficiency as students have more schema required to comprehend the story.

**Motivation**

Freeman and Freeman (2004) also asserted that the use of culturally relevant texts promotes understanding, which, as a result, causes students to become more engaged in their reading. These types of texts help students understand who they are as they aim to connect to students’ lives, not just their cultural backgrounds. Smith’s (1995) case study confirmed the role of relevant texts, revealing that African American students displayed increased motivation to read when they were given texts to which they could culturally relate. When texts reflect students’ real lives, students feel a heightened sense of security, familiarity, and confidence,
which can promote improvement in student learning (Agosto, 2007). The incorporation of culturally relevant materials in literacy instruction can also support teachers in creating a more inclusive learning environment, which can mobilize student voices and activate engagement (Purcell-Gates, 2007).

Identity and Awareness

Relevant texts provide students with more than just an inspiration to read and can support other goals such as identity development and self-discovery. As Iser (1978) noted, “[W]ith every text we learn not only about what we are reading, but also about ourselves (p. 29).” In fact, books can affirm students’ sense of racial identity as they provide opportunities for students to see different aspects of themselves, their communities, and the people they love (Bishop, 1990; Yenika-Agbaw & Napoli, 2011).

Tatum (2006) offered an “anatomically complete” model for reading instruction that stresses the role of enabling texts in advancing the literacy development of African American male adolescents. An enabling text is “one that moves beyond a solely cognitive focus—such as skill and strategy development—to include a social, cultural, political, spiritual, or economic focus” (p. 164). These types of texts, Tatum urged, are essential for young men who are “striving for identity without the benefit of having read texts that could potentially inform [their] identity development” (p. 168). When students are exposed to enabling texts, they cultivate their “identity literacy” (Schachter & Galilli-Schachter, 2012), which refers to the way readers express willingness to apply the covert and explicit meanings within texts to their own belief system and worldview.

As students come to understand their own culture and identity, they are also more likely to develop cultural competence as these types of texts allow for critical literacy instruction.
Critical literacy instruction includes multiple perspectives and raises students’ critical and social consciousness through meaningful discourse (Soares & Watson, 2006). When diverse viewpoints are embedded in instruction, students gain a greater understanding of the global community as they vicariously experience the feelings and emotions of others through literature (Monobe & Son, 2014).

Adolescents with positive feelings towards literacy are more likely to engage in reading and writing (Alvermann, 2008, cited in Carney, 2013). This increased involvement enhances students’ reading and writing abilities (Spaulding, as cited in Henk et al., 2009). Culturally responsive teachers can promote positive literary association through the use of culturally relevant texts and stories. When students encounter these types of texts in the classroom, they emerge with a more thorough understanding of themselves (Rosenblatt, 2005).

Because different books are culturally relevant for different readers, teachers should seek to build classroom libraries that are not only representative of students’ blossoming identities, but also afford them the opportunity to learn about others and critique the status quo. As Alim and Paris (2017) wrote, “the future is a multilingual and multiethnic one.” The stories, texts, and literature used in the classroom ought not only to reflect students’ rooted ethnic identity, but also continue to shift and evolve in the way that culture has. “When there are enough books available that can act as both mirrors and windows for all our children, they will see that we can celebrate both our differences and our similarities, because together they are what make us all human” (Bishop, 1990).

**Limitations of the Literature**

Despite the positive findings of culturally relevant instruction, there are significant limitations to the research. Byrd (2016) postulated that there is a lack of empirically strong
studies showing the effectiveness of culturally relevant instruction as most studies tend to be qualitative. Moreover, few studies have measured changes in student outcomes by comparing culturally relevant programs with matched programs. While some studies employed such methods, they did not find evidence of program effectiveness. Bui and Fagan (2013) used a multiple regression model to compare two reading programs, one of which used multicultural literature and culturally relevant teaching strategies. Their findings revealed no evidence of statistically significant differences in students’ reading outcomes as a result of program enrollment. Franciosi (2009) also used a multiple regression model to compare the performance of Hispanic students enrolled in a culturally relevant program, with Hispanic students in the general population. Similarly, the analysis found no evidence of statistical significance. Cabrera et al. (2014) acknowledged the methodological challenges of comparing the performances of at-risk students, noting that program impact is likely to be understated.

Although some studies throughout this research review revealed the connection between a culturally relevant curriculum and achievement, they appeared in elective settings such as ethnic studies programs in which participation is voluntary. As Dee and Penner (2017) noted, “if students who have a latent and unobserved capacity for school engagement are more likely to enroll in these courses, naïve regressions may overstate the program’s benefits” (p. 9). Therefore, there is a need for research that compares programs at the K-12 level in which participation may not be elective. This type of research may support school districts in practical ways to implement such programs.

Finally, many studies included in this field of research have employed a case-study model, making it impossible to determine if student gains are solely limited to culturally relevant interventions or other factors such as teacher practice and experience. This study addressed these
limitations by using pre- and posttests to measure changes in student outcomes as a result of a culturally relevant program in which participation is not elective.

**Considerations for the Future**

There is a need for future research that offers guidance on how the principles of culturally relevant instruction can be applied in classrooms that are composed of culturally diverse students. As Rudine Sims Bishop (1990) explained 30 years ago, “If [children from dominant social groups] only see reflections of themselves, they will grow up with an exaggerated sense of their own importance and value in the world—a dangerous ethnocentrism.” By this regard, culturally responsive education must include access to curricula that also promote understanding for students from the dominant culture as well as marginalized groups.

Because curriculum is only as powerful as the teacher in the classroom who enacts it, professional development in this field should be prioritized. This could extend beyond engagement and motivation strategies to content-specific academic interventions aimed at diverse cultural groups. When culturally responsive teachers employ such strategies, they can help bridge the gap between students, their diverse experiences, and what the school curriculum requires (Banks et al., 2001).

Reform efforts such as No Child Left Behind (NCLB) and Every Student Succeeds Act (ESSA) reported the academic performance of diverse ethnic groups. Despite differences of opinion in accountability profiling, these results must be acknowledged by policymakers as the demographic landscape of the country continues to evolve in order to close existing achievement gaps. Policymakers and school administrators must move away from focusing solely on high-stakes tests to encouraging practices that engage both teachers and students in appropriate pedagogical practices for diverse students (Baker & Digiovanni, 2005). Ongoing research that
examines the impact of such curricula on achievement outcomes, motivation, and engagement is paramount.

**Conclusion**

As outlined in this review of literature, there is a need to creatively engage reluctant secondary readers in processes other than explicit skill acquisition. To do so, educators may seek to adopt culturally relevant programs that promote academic achievement, cultural competence, and sociopolitical consciousness. For Latinx students, identity affirmation is paramount as it can promote increased sense of self-perception and academic achievement.

This study will add to the existing body of knowledge about ways in which curriculum and program design facilitate academic achievement and reading self-perception for Latinx students. As the landscape of our country continues to grow and change, so must our curriculum and instructional programs. This is especially important in areas where traditional approaches may have failed, such as the case with secondary reading intervention programs.
CHAPTER III

METHODOLOGY

The purpose of this quantitative study was to evaluate the overall impact of a culturally relevant reading intervention program entitled Survey of Young Adult Literature II that is offered to tenth grade students in one urban high school. This study used student data from the Enterprise Standardized Test for the Assessment of Reading (STAR™) and the Reader Self-Perception Scale 2 (RSPS2). This chapter describes the program’s contextual conditions as well as the data and methods used, including the research questions, research design, and sample population. The instrumentation, data collection, and data analysis are also presented.

Program Context

The Survey of Young Adult Literature II is a credit-bearing course that focuses on building literary analysis skills using high-quality Young Adult Literature (YA) and a culturally relevant curriculum. This intervention class is currently offered to tenth grade students who are below proficiency on English Language Arts standardized assessments and typically read 3 or more years behind grade-level expectancy, as determined by the STAR reading assessment. Students in this course meet daily for 42 minutes for the entirety of the school year. Instruction is provided by educators who are dually certified as secondary English teachers and reading specialists.

This program is situated within one urban high school in central New Jersey in which 89% of students are deemed economically disadvantaged and 30% of students are classified as English Language Learners (ELLs). Of the 2,300+ students enrolled in the school, Latinos account for 94% of the population, while 4% of the student body is African American. Although the graduation rate at the program site has risen from 67% to 82% in the past 4 years, this trails
the state graduation rate by approximately 9%. In addition, postsecondary enrollment at 2- or 4-
year institutions is 49%, a difference of -24% compared with the state enrollment rate of 73%.
According to the previous Director of Curriculum, these data highlighted the need for a program
that was focused on improving students’ literacy outcomes so they may successfully graduate
from high school and experience postsecondary success.

**Program Theory**

The primary goal of the course is to advance students’ reading skills by providing
intensive support in vocabulary, fluency, and comprehension using high interests. According to
the district-approved curriculum, “as a result of participating in the course, students will:

- identify and develop a passion for reading a variety of genres and authors;
- select books that promote and increase both students’ comprehension skills and
  awareness of social issues;
- select books from a wide range of genres and subjects, i.e., cultural identity, social
  justice, memoirs, and graphics novels;
- select books written from people of color in which characters reflect diverse
  backgrounds;
- integrate key ideas, theme, and structure to produce projects that utilize multimedia to
demonstrate students’ comprehension of the text and understandings of purpose, craft,
and structure;
- motivate students’ desire to read by cultivating and encouraging students;
- engage in collaborative discourse that embraces multiple perspectives so that students
increase their ability to express their ideas clearly and concisely while acknowledging
the ideas of others.
To improve learning outcomes, the program emphasizes development of students’ cultural competence and sociopolitical/critical consciousness to promote academic achievement. This theory of action reflects the definition of culturally relevant teaching first proposed by Gloria-Ladson Billings in her 1995 article, “But That’s Just Good Teaching!” Culturally relevant pedagogy, she argued, produces “students who achieve academically,” “students who demonstrate cultural competence,” and “students who can both understand and critique the existing social order” (p. 474). This definition is reflected in the program’s pedagogical approach and instructional activities, as referenced in the curriculum and revealed by the department supervisor.

To validate this program as being culturally relevant, I also used the Culturally Responsive Scorecard (Bryan-Gooden et al., 2019) in my assessment of the curriculum. The score obtained on the rubric revealed that the curriculum is “culturally responsive.” Included below are program activities that justify the program as culturally relevant.

**Academic Achievement**

- Teachers demand academic excellence and inventory what students already know in order to scaffold their knowledge (Ladson-Billings, 2008, p. 32).
- Teachers deconstruct and reconstruct the curriculum by selecting texts, topics, tools, and themes that are relevant to the students they serve (Ladson-Billings, 2008, p. 32).
- Teachers provide students with insight into what they are learning and why they are learning it (Ladson-Billings, 2008, p. 35).
- Teachers engage in explicit strategy instruction (Carnine et al., 2006).
● Teachers provide individualized feedback that is unique to each student’s learning goals and prior attainment; feedback is derived from multiple sources (Hammond, 2014, p. 79).

● Teachers use real-life examples and events to illustrate teaching points and engage students in academic concepts (Ladson-Billings, 2008, p. 35).

**Cultural Competence**

● Teachers use mentor texts that feature diverse characters, different ethnic and cultural traditions, and diverse family structures (Freeman & Freeman, 2004, p. 7).

● Teachers provide students with the opportunity to share their own experiences when discussing literary themes and application (Ebe, 2010, p. 196).

● The curriculum includes non-dominant populations and their strengths and assets, so students of all backgrounds can relate and fully participate (Aguilar-Valdez, 2015).

● Students engage regularly in self-selected reading, allowing them the time and space to cultivate their unique reading identity (Wigfield & Guthrie, 2000).

● Teachers use book clubs as a way for students to learn, connect, and communicate with each other (Au, 2009, p. 182).

● Teachers use poems, rap lyrics, and other familiar frames of student reference to teach craft and structure (Ladson-Billings, 1995, p. 161).

● Teachers explicitly teach “code switching” to students in order to understand and differentiate home language versus academic language (Ladson-Billings, 1995, p. 161).

● Teachers create a classroom of inclusion by using and modeling respectful language, behavior, and discussion habits (Ford & Kea, 2009, p. 6).
Sociopolitical/Critical Consciousness

- The curriculum and instructional activities promote or provoke critical questions about the societal status quo (Ladson-Billings, 2008, p. 37).

- Instructional activities encourage alternate points of view and multiple perspectives (Villegas & Lucas, 2002, p. 27).

- The curriculum provides opportunities for students to connect learning to social, political, and environmental concerns that affect them and their lives and contribute to change (Ladson-Billings, 2008, p. 37).

- Teachers encourage students to take actions that challenge inequity or promote equity within the school environment (Ladson-Billings, 1995, p. 162).

- The curriculum provides time for embedded reflection through the use of journaling, reading logs, and student discussion (Dover, 2013, p. 8).

As noted throughout this literature review, students are more likely to develop lifelong reading habits and keener self-perceptions as readers when they encounter literature they find interesting and relevant to their own lives. The research questions presented in the next section were developed to assess these relationships.

Research Questions

As described in Chapter I, I sought to understand the extent to which a culturally relevant reading intervention program, as experienced by students, influences their academic achievement and reading self-perception. The following two research questions (RQ) and hypotheses (H) guided this investigation:
**RQ1:** What is the association of culturally relevant reading intervention with student reading achievement as measured by the STAR reading assessment?

**H1:** Students receiving culturally relevant reading intervention will demonstrate more significant growth on the STAR reading assessment compared to students who do not receive the intervention (comparison group).

**RQ2:** What is the association of culturally relevant reading intervention with students’ reading self-perception as measured by the Reader Self-Perception Scale 2?

**H2:** Students receiving culturally relevant reading intervention will score significantly higher on their reader self-perception scale compared to students who do not receive the intervention (comparison group).

Research Question 1 was asked to understand the extent to which a culturally relevant reading intervention program promotes academic gains for students who participate. This was addressed by using growth data obtained from the STAR assessment. Student growth is measured by subtracting students’ Fall scaled score from their Winter scaled score. The student growth percentile (SGP) score was also used as a measure of growth and indicates students’ growth in comparison to their peers nationwide who read at the same level. As opposed to performance, growth explains the progress students make over time. This allowed me to isolate the growth that may or may not have occurred as a result of participation in the program/course. Multiple regression analysis was used to assess this relationship.

Research Question 2 was intended to understand the extent to which the same culturally relevant reading program influences students’ self-perception as readers. This was addressed by using data collected from the RSPS2 inventory, a Likert survey designed to capture students’
self-perceptions as a reader. Unlike Research Question 1, this research question was addressed using only posttest comparison design. This relationship was also assessed using multiple regression analysis.

The goal of this study was to analyze the performance of students enrolled within the reading intervention program and those who were not enrolled in the program in order to understand the possible influence of a culturally relevant reading intervention program on student outcomes. Multiple regression analysis was used to control for other variables in order to determine the relationship between program participation and student outcomes.

**Research Design**

To evaluate the impact of this program, I utilized a research/nonequivalent, comparison-group design. As a cross-sectional study, data were collected from the participants during a single time period. This type of design allowed me to compare the outcome on the basis of the intervention by taking account of alternative explanations. It did not enable me to make definitive claims about causality.

Data were collected from a sample of 120 students from September 2020 through March 2021 using a pretest-posttest comparison group and a posttest comparison group (see Figure 1). The treatment group (n = 46) received 18 weeks of culturally relevant reading intervention, whereas the comparison group (n = 74) did not receive the intervention. The evaluation of the culturally relevant reading intervention program on academic achievement was measured at pretest (time 1) and posttest (time 2), while reading self-perception was measured only at posttest time (time 2).
To answer each research question, I used a multiple regression process to explore the relationship between the independent variable (program participation) and the dependent variables of this quantitative study, the academic achievement of students in reading and reader self-perception, while controlling for demographic variables and participation in other programs. In addition, reading achievement data were also collected from students who participated in Young Adult Literature I during ninth grade in prior academic years.

**Population and Sample**

The target population for this study was the treatment group, all tenth grade students (n = 46) who participated in the supplemental reading intervention program entitled Survey of Young Adult Literature II during the 2020-2021 school year, and the comparison group (n = 74). The comparison group consisted of students who were recommended for the course but did not participate due to other scheduling constraints or priorities, or students who were not recommended for the course but had similar reading levels. In the 2020-2021 school year,
students with disabilities and ELLs did not participate in the program because they received other interventions and services.

The Survey of Young Adult Literature II is a 5-credit English Language Arts elective that is open to all tenth grade students who scored between a 650-724 on the 2018-2019 New Jersey Student Learning Assessment (NJSLA) for English Language Arts and read 3 or more years below grade level, as measured by the STAR assessment. This indicated that the sampling frame included all students who performed at a level of “not meeting expectations” or “partially meeting expectations.” Students in this class typically read at a seventh grade reading level or below at the time of enrollment. The 2018-2019 NJSLA assessment data were used as a point of entry into the class because the 2019-2020 NJSLA assessments were canceled in response to the COVID-19 pandemic. Unlike other electives such as art, band, or psychology, students do not voluntarily elect to be in this class; they are recommended to participate by the high school English supervisor after their student achievement data are reviewed. Students are then scheduled by their designated high school guidance counselor, who receives the referral list from the supervisor. Students cannot opt out of this program. As prior school-level data are used to determine entry into the program, transfer students and students new to the district in tenth grade are not eligible to participate in this course. Some, but not all, students who participated in this program also participated in this course in the ninth grade (Survey of Young Adult Literature I). In addition, some students in the comparison group participated in this program during the ninth grade, but did not in the tenth grade. The flow chart in Figure 2 describes the student selection process for both courses.
The students in the comparison group (n = 74) demonstrated academic achievement within the same performance range as the treatment group, but did not participate because they were involved in other programs, such as career-based academies or English as a Second Language. The career-based academy is an academic program that students can apply for prior to the start of their tenth grade year. Students who elect to apply for this program must take career-based electives in their schedule that would limit their availability to participate in other programs, such as the Survey of Young Adult Literature II.

Likewise, some students in the comparison group were recommended for the reading intervention course, but ultimately did not participate because they were classified as current ELLs and were enrolled in English as a Second Language, limiting the availability of free space they had within their individual schedules. It should be noted that the treatment group was still composed of former ELLs, although they were no longer classified as such. These students had
recently exited the program as a result of their years in the country or their prior ACCESS scores. Prior academic achievement was comparable between former ELs and current ELs at the time of scheduling.

Finally, the comparison group was also composed of students who were recommended to the course, but could not participate as they were behind in credits from their freshman year and needed to retake classes they had failed to remain on-track for graduation. This indicated that some struggling students did not have access to the treatment.

Given the conditions described above, general conclusions can be drawn about differences between students who were in the treatment group and the comparison group, particularly regarding student engagement. For instance, students in the comparison group were more likely to be enrolled in a career-based academy. Because career-based academy students volunteer to apply and participate in their designated academy, fundamental differences may exist in overall motivation and engagement. This is important to consider because there is an association between student engagement and academic, social, and emotional learning outcomes (Klem & Connell, 2004). These differences may have an impact on academic achievement and reading self-perception, the outcome variables under investigation.

In addition, students in the treatment group were more likely to be former ELLs, while students in the comparison group were more likely to be current ELLs. This distinction did not yield sizable differences in previous student achievement levels at the time of scheduling.

Although this study focused on the evaluation of students who participated in the Survey of Young Adult Literature II, the population and sample for this research were extended to include all students who were recommended to participate in the Survey of Young Adult Literature I during their freshman year. This inclusion was to understand the effects of the
program in prior school years when the COVID-19 pandemic could not impede possible results. Therefore, the population also included 126 students who were recommended to participate in the freshman program during the 2018-2019 school year and 114 students who were recommended to the freshman program in the 2019-2020 school year. The goals and activities of both the freshman intervention program and sophomore intervention program are identical. The distinction of “I” and “II” allows students to receive academic credit for the course for two consecutive years.

**Independent Variables**

The main independent variable for both research questions was students’ participation in a culturally relevant reading intervention program. Other variables were also used to control for the dependent variable and offer possible explanations for any variance in the outcome variables. This included race, gender, free and reduced lunch status, special education status, English Language Learner classification, previous participation in reading intervention at the ninth grade level, and participation in career academies. Motivation could not be used as a control variable as no preexisting data were available for ninth grade students, a limitation within this study. The independent variables in the data are described below:

- **Program Participation:** Binary categorical variable indicating whether students participated in the tenth grade reading intervention program (0 means no, 1 means yes).
- **Race:** Nominal categorical variable for the students’ identified race; options include Hispanic and Black (with Black as the reference group).
- **Gender:** The gender of the student, indicated as female or male (with female as the reference group).
• **Free and Reduced Lunch Status:** Categorical variable indicating if students received free or reduced lunch or were not eligible for either free or reduced lunch as a measure of socioeconomic status. More than 85% of students included in this study were eligible for either free or reduced lunch, reflecting trends at the district level.

• **Special Education Status:** A binary categorical variable indicating if the student was classified as participating in Special Education (0 means no, 1 means yes).

• **English Language Learner Status:** A binary categorical variable indicating if the student was currently classified as an English Language Learner (0 means no, 1 means yes).

• **Previous Participation in Reading Intervention:** A binary categorical variable indicating whether students previously participated in the ninth grade reading intervention program, Survey of Young Adult Literature I (0 means no, 1 means yes).

• **Career Academy Participation:** A binary categorical variable indicating whether students were enrolled in a Career Academy at the start of 2020-2021 school year (0 means no, 1 means yes).

• **Prior Grade-Level Equivalent:** The students’ prior grade-level equivalency score on the STAR reading assessment; scores range from 0 to 12.9. This was included as a continuous control variable as it enabled me to draw comparisons between students with similar scores prior to the intervention.

**Dependent Variables**

The dependent variable for Research Question 1 was academic achievement, as measured by students’ scaled score growth and their student growth percentile score. The dependent variable for Research Question 2 was the reader self-perception score. These were intentionally
selected as outcome variables as I intended to assess the program’s theory of action to determine if culturally relevant reading intervention promotes academic achievement and increases self-perception in reading, as noted in the review of literature. All dependent variables were treated as continuous variables. The dependent variables in this data are described below.

- **Scaled Score Growth:** The students’ scaled score growth, which is measured by subtracting students’ Fall scaled score from their Winter scaled score. Possible scaled score ranges from 0-1400, so negative values were expected if students showed decline between test administrations.

- **Student Growth Percentile:** Students’ growth percentile when compared to other students at similar ability levels nationwide. Values range from 1-99, whereas 35-65 reflects adequate growth.

- **Reader Self-Perception Score:** Students’ self-perception in reading score. Values range from 46-230 and subcomponent scores range from 16-80, 9-45, 9-45, and 12-60.

**Instrumentation**

The data contained within this study were collected using two primary data sources: the Enterprise Standardized Test for the Assessment of Reading (STAR™) and the Reader Self-Perception Scale 2 (RSPS2).

**STAR Assessment**

The STAR assessment is the district’s chosen tool to screen students routinely for their reading achievement levels. STAR assessments are nationally recognized computer-adaptive tests that are administered three times throughout the school year per the district’s pacing guides and assessments calendars (Fall, Winter, and Spring). The data from these assessments are stored
on the district’s data collection software and were shared with me by district administration. As a computer-adaptive test, the STAR assessment continually adjusts the difficulty of each student’s test by choosing each test question based on the student’s previous response. If the student answers a question correctly, the difficulty level of the next item is increased. If the student misses a question, the difficulty level is decreased. The assessment takes approximately 20 minutes for a student to complete and includes 34 items. The reading domains assessed include analyzing literary text, word skills and knowledge, analyzing argument and evaluating text, comprehension strategies and constructing meaning, and understanding author’s craft (Renaissance Learning, 2015).

In Grades K-12, students receive a scaled score that ranges from 0-1400. The scaled score is a norm-criterion score that shows how a student’s test performance compares with that of other students nationally. According to the STAR Reading technical manual (2020), “scaled scores are also useful for comparing student performance across grade levels” because the same range is used for all students (p. 30). Other norm criterion-referenced scores, such as student growth percentile and grade level equivalency, are derived from the scaled score. The scaled score is obtained from the difficulty of questions students answer correctly and the number of correct responses. It should be noted that many factors can affect a student’s score, and participation in this program is not the only predictor of their achievement on this assessment.

Another measure used to denote growth includes the student growth percentile (SGP) score. The SGP rate calculates student growth when compared to other students nationwide at the same Lexile level. An SGP score is calculated based on the previous two assessments a student has taken. A score of 35-65 is the recommended SGP rate for a student showing adequate
growth (Renaissance Learning, 2020). To capture these data, I utilized the SGP scores following the Winter testing administration.

The U.S. Department of Education’s National Center on Intensive Intervention Progress Monitoring (Renaissance Learning, 2020, p. 27) continues to rate the STAR assessment as highly valid and reliable for both its screening and progress monitoring capabilities. Renaissance Learning (2020) described that the STAR Reading assessment is calculated using a method referred to as generic reliability and a retest reliability to show consistency of scores across multiple administrations of the assessment to the same students. Cronbach’s alpha scores were recorded as 0.95 for internal consistency and 0.91 for consistency on retest (Renaissance Learning, 2020). Renaissance Learning (2020) asserted that the test is also highly valid, indicating that the content on the assessment is aligned to curriculum standards at the state and national levels. Other measures such as “cumulative evidence of criterion-related validity, convergent and discriminant validity evidence, and demonstrated accuracy of screening and diagnostic classifications” (p. 27) further strengthen validity claims.

**The Reader Self-Perception Scale 2**

The Reader Self-Perception Scale 2 (RSPS2) (Henk et al., 2012) is designed for students in Grades 7 to 10 and is intended to illuminate “factors that influence students’ reading attitudes and behaviors.” Based on Bandura’s (1977, 1982) theory of self-efficacy, the questionnaire elicits information from students about their ability to perform in reading and the effect this perception has on their engagement with reading. The assessment measures four dimensions of self-perception and includes 16 items for progress, 9 items for observational comparison, 9 items for social feedback, and 12 items for physiological states. The definitions of these subcomponents, as defined by Bandura (1977, 1982) and as used in this scale, are as follows.
• **Progress** - a broad category that includes past success, amount of effort necessary, the need for assistance, patterns of progress, task difficulty, task persistence, and belief in the effectiveness of instruction.

• **Observational Comparison** - how students think their reading ability compares to the abilities of classmates.

• **Social Feedback** - direct and indirect input that students receive from teachers, peers, and family members.

• **Physiological States** - internal feelings that students experience while reading.

The RSPS2 has primarily been used as a measure in program evaluations, case studies, and other ethnographic research (e.g., Adunyarittigun, 2015; Cho, 2020; Hedges & Gable, 2016; Melnick et al., 2009). This 5-point Likert scale survey was administered to students at the end of the semester via Qualtrics; responses ranged from strongly disagree (1) to strongly agree (5) (Melnick et al., 2009). Possible overall scores range from 46-230 and subcomponent scores range from 16-80 (performance), 9-45 (observational comparison), 9-45 (social feedback), and 12-60 (physiological state).

The RSPS2 is an extension of the Reader Self-Perception Scale (RSPS) developed by Henk and Melnick in 1992 that was intended for students in Grades 4 through 6 (Henk & Melnick, 1992, 1995). To establish the RSPS2 as a valid instrument, items from the original RSPS were included and new items were then added that matched the components of good readers, as identified by students in Grades 7 through 9 during probed interview sessions. Additional validity and reliability analyses were conducted using a pilot survey of the instrument with students in Grades 7 through 10 (n = 3,031). To round out the responses, the original 66 items were analyzed by graduate students of reading across two universities. Items were then
categorized into one of the four dimensions noted above. Items with a confidence ranking of 2.5 (on a scale of 1 to 3) were retained. Principal components analysis and internal consistency reliability estimates guided the interpretation of the data and ultimately determined the composition of the final instrument. The principal components analysis yielded factors (i.e., scales), which were then subjected to an analysis of the internal consistency reliabilities for each of the four scales. Cronbach’s alpha scores range from .88 to .95 for each of the four scales. This process resulted in a final 46-response survey (Melnick et al., 2009).

**Data Collection Procedures**

I was granted permission from the school district (see Appendix A) and Institutional Review Board (IRB) at Seton Hall University (see Appendix B) to conduct this study and access archived student achievement data (see Appendix A). All student achievement data used for this study were secondary data that were already available at the school level. The school district data coordinator provided demographic and achievement data to me using students’ ID numbers. The Reading Self-Perception Survey was administered via Qualtrics to all tenth grade students enrolled in English II. Individual results of this survey were not shared or seen by teachers or building administration. Demographic information was matched with student achievement data and reading self-perception data, which I de-identified and then uploaded to the SPSS software. Each of the variables was labeled and coded.

To explain potential results that occurred as a result of hybrid learning, I also interviewed the three instructors of the course to gain insight into how the program was modified in response to the COVID-19 pandemic. The purpose of these interviews was to obtain information that was unlikely to be revealed in the quantitative data, particularly for the 2020-2021 school year. These interviews were semi-structured and hosted over Zoom using a secure link. In these interviews,
teachers revealed their own challenges with instructing this course concurrently. An obstacle in using this mode of delivery included creating a climate for reading and cultivating teacher-student and student-student relationships. Teachers also revealed the difficulty in anecdotally observing students’ reading behaviors and providing individual feedback during virtual instruction days.

Another theme revealed in these interviews related to student challenges. Teachers expressed that many students struggled to stay organized during virtual instruction days because of their difficulty in navigating multiple online platforms, including Google Suite and digital readers. In addition, they felt students were more reluctant to engage in critical conversations online. They hypothesized that this was due to a disconnection to their peers and/or content, or possibly because they were in their homes with parents or siblings nearby. Another difficulty with implementation included the use of e-readers or digital books; students indicated they had difficulty reading online and preferred using hard copies. An additional obstacle included a high rate of absenteeism as students did not consistently log in during virtual instruction days.

**Data Analysis**

The results of the RSPS2 were analyzed to determine students’ self-perception in reading while the STAR assessment provided information regarding students’ academic growth in reading. Descriptive statistics were provided for each assessment to include the mean score and standard deviation.

This study relied on quantitative methods and used a regression model to analyze differences (if any) in students’ reading growth and students’ reader self-perception as a result of the intervention. A multiple regression model was employed to determine whether the performance difference between the means of treatment group and comparison group was
statistically significant. This study controlled for prior academic achievement and other
demographic variables, as previously described.

Regression models for dependent and independent variables for each research question
were analyzed, as indicated below.

**Research Question 1:** What is the association of culturally relevant reading intervention
with student reading achievement as measured by the STAR reading assessment?

**Independent Variables:**
- Program Participation
- Race
- Gender
- Free and Reduced Lunch Status
- Special Education Status
- English Language Learner Status
- Prior Grade-Level Equivalent Score
- Previous Participation in Reading Intervention*
- Career Academy Participation*

**Dependent Variables:**
- Scaled Score Growth in Reading
- Student Growth Percentile

*Only applies to 2020-2021 sample.

**Research Question 2:** What is the association of culturally relevant reading intervention
with student reading self-perception as measured by the Reader Self-Perception Scale 2?
Independent Variables:

- Program Participation
- Race
- Gender
- Free and Reduced Lunch Status
- Special Education Status
- English Language Learner Status
- Prior Grade-Level Equivalent Score
- Previous Participation in Reading Intervention*
- Career Academy Participation*

*Only applies to 2020-2021 sample.

Dependent Variables:

- Reader Self-Perception Score

Limitations

A significant limitation in this study was the use of only posttest data to assess students’ reading self-perception at the end of the program. Because a pretest was not administered, it was difficult to determine the magnitude of the outcome and whether the outcomes were due to the program or some other cause. In addition, a posttest did not account for starting point differences among the two groups. A pretest was not administered as I was not granted permission from the IRB committee to conduct this research until after the program had already commenced. These conditions did not apply to student achievement data as I used secondary data that had already been collected at the district level.
As previously noted, motivation could not be used as a control variable as there were no preexisting data available for ninth grade students in this area. This was important to consider as motivation helps to illuminate fundamental differences between students in the treatment group and the comparison group. For instance, it may reveal which students are more likely to enroll in a career academy or remain on track for graduation. Motivation is also an important factor in considering students’ self-perception and self-efficacy (Wigfield & Guthrie, 2000).

Aside from motivation, there may possibly be differences between students in the treatment group and comparison group such as ELL classification and special education status.

Another limitation in this study pertained to the timing in which this study was conducted. As data were collected from September 2020 to March 2021, students participated in this program via a hybrid schedule in response to the social distancing guidelines that resulted from the COVID-19 pandemic. Although the fidelity of this program was upheld by modifying its context to reflect a hybrid environment, it is important to mention that variables beyond my knowledge could not be accounted for in this study, which may have undoubtedly affected student achievement and students’ self-perception in reading. To understand the ways in which the program was modified to reflect a hybrid learning environment, I interviewed three teachers who taught this course so I could see to what extent the COVID-19 pandemic affected this program. This provided me with additional insight and aided in the analysis of the results that were revealed in the data. As previously noted, I also analyzed and compared historic student achievement data for all students recommended to participate in the Survey of Young Adult Literature I during the 2018-2019 and 2019-2020 school years to evaluate the program prior to the onset of COVID-19.
Finally, as this study was not truly experimental, there may have been alternate explanations that cannot be explained by the treatment or intervention.

**Summary**

This chapter described the data methods used in assessing the relationship among students’ participation in a culturally relevant reader intervention program, their self-perception as readers, and their academic achievement. Program context, research design, research questions, sample population, and instrumentation were presented. This chapter also discussed the data collection process and the data analysis plan for the information obtained. The presentation of these data in Chapter IV addresses each research question. Student demographic variables are also presented to hold for any variations. A summary and discussion of the findings, along with conclusions, implications for practice, and recommendations for future research, are presented in Chapter V.
CHAPTER IV

RESULTS

Introduction

The purpose of this quantitative study was to understand the possible effects that participation in a culturally relevant reading intervention program had on students’ reading growth and reading self-perception when compared to students who did not participate in the program but demonstrated similar prior academic achievement. This chapter presents a detailed presentation of the data and concludes with a summary of the findings as related to each research question.

This study utilized students’ scaled scores and student growth percentile (SGP) on the Enterprise Standardized Test for the Assessment of Reading (STAR™) as a measure of reading achievement. Students’ scaled scores at the start and end of the semester were compared and analyzed, in addition to their SGP scores. The Reader Self-Perception Scale 2 (RSPS2) was administered at the end of the semester to assess how students in the intervention program felt about their reading abilities, compared with their peers who did not participate in the program.

A review of the existing literature guided the development of the following two research questions:

- What is the association of culturally relevant reading intervention on students’ reading achievement as measured by the STAR reading assessment?
- What is the association of culturally relevant reading intervention on students’ reading self-perception as measured by the Reader Self-Perception Scale?
Data Overview

Achievement and student survey data were collected from 46 students who participated in the tenth grade culturally relevant reading intervention program entitled Survey of Young Adult Literature II during the 2020-2021 school year and from 74 students who did not participate but demonstrated similar prior levels of reading achievement. Achievement data were also collected from students who were recommended to participate in the ninth grade program, Survey of Young Adult Literature I, during the 2018-2019 and 2019-2020 school years. Data were provided for the following fields: grade-level equivalency prior to entering the program, scaled score change, student growth percentile, reading self-perception score (overall and by subdomain), program participation, gender, race, free and reduced lunch eligibility status (as a measure of socioeconomic status), and English Language Learner (ELL) status. Prior program participation and academy program participation were also included as predictors in the 2020-2021 models as they were only associated with the tenth grade sample.

Twenty-three students with missing STAR assessment data and/or reading self-perception scores were excluded from this sample for analysis, of which 10 students were in the treatment group and 13 students were in the comparison group during the 2020-2021 school year. Differences for students in the treatment and comparison groups are included in Table 1.

Some notable differences can be observed between the 46 students who participated in the Survey of Young Adult Literature II course and the 74 who did not. In the comparison group, 18% of students are current ELLs and 16% are students with disabilities. This population was not reflected in the treatment group for the 2020-2021 academic year because they received other interventions, as described in Chapter III. In addition, the comparison group had a higher percentage of females (59%), while the percentage of Latinx and Black students was comparable
between each subgroup. In terms of prior program participation, 15% of students in the treatment group participated in Young Adult Literature I, compared to 9% of students in the comparison group. Fifty-eight percent of students were recommended to participate in Young Adult Literature II, but ultimately were not enrolled as they voluntarily elected to participate in the career academies program.

Table 1. Descriptive Statistics for Students in Treatment Group and Comparison Group in Both YA1 and YA2

<table>
<thead>
<tr>
<th></th>
<th>2018-2019 (YA1) (N = 126)</th>
<th>2019-2020 (YA1) (N = 114)</th>
<th>2020-2021(YA2) (N = 120)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Treatment Group (N = 40)</td>
<td>Comparison Group (N = 86)</td>
<td>Treatment Group (N = 37)</td>
</tr>
<tr>
<td>English Learner</td>
<td>18%</td>
<td>7%</td>
<td>0%</td>
</tr>
<tr>
<td>SWD</td>
<td>2%</td>
<td>19%</td>
<td>3%</td>
</tr>
<tr>
<td>FRL Eligible</td>
<td>88%</td>
<td>91%</td>
<td>86%</td>
</tr>
<tr>
<td>Female</td>
<td>58%</td>
<td>43%</td>
<td>41%</td>
</tr>
<tr>
<td>Latinx</td>
<td>95%</td>
<td>93%</td>
<td>92%</td>
</tr>
<tr>
<td>Black</td>
<td>5%</td>
<td>7%</td>
<td>8%</td>
</tr>
<tr>
<td>YA1 Participants</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Academy Participants</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

The sample size also included 126 students for the 2018-2019 school year and 114 students for the 2019-2020 school year. In 2018-2019, 40 students were enrolled in Young Adult Literature I, while 37 were enrolled during 2019-2020. In reviewing the demographics for prior
academic years, some sizable differences exist. For instance, more ELLs were enrolled in Young Adult Literature I for the 2018-2019 school year (18%); however, this same year saw a higher percentage of students with disabilities in the comparison group (19%). More females also participated in the reading intervention program in 2018-2019 (58%); however, there was a lower percentage of female participants during 2019-2020 (41%). Differences between the treatment group and comparison group were comparable in 2019-2020; however, the comparison group consisted of a higher percentage of ELLs (7%).

**Overview of Student Reading Achievement Score**

Two outcome variables were included to assess students’ growth in reading: the change in scaled score and the SGP. The change in scaled score between the Fall and Winter administration of the STAR Reading assessment was analyzed and compared as a measure of reading growth. This was obtained by subtracting students’ Fall scaled score from their Winter scaled score. Students’ SGP scores also provided an additional lens to compare growth between the two groups in each academic year. SGP is a score that reflects student growth between test administrations when compared to that of academic peers nationwide. To account for starting differences between the treatment group and comparison group, students’ grade-level equivalent score (GLE) prior to the start of the program was also compared. GLE was included as a predictor in the regression models discussed later in this chapter.

Pearson correlation was used to examine the bivariate relationship between the scaled score change and student growth percentile for the 2018-2019, 2019-2020, and 2020-2021 school years. Using SPSS, positive correlation coefficients of .421, .855, and .689 were found, respectively. This indicated that the strength of the relationship between scaled score and SGP was moderate in 2018-2019 and 2020-2021. The strength of the coefficient for 2019-2020 was
strong. All three coefficients were positive, indicating that as one figure rose, the other tended to increase as well. In this instance, as scaled score increased, so did SGP, and vice versa.

Table 2. Descriptive Statistics of STAR Reading Achievement

<table>
<thead>
<tr>
<th></th>
<th>2018-2019 (YA1)</th>
<th>2019-2020 (YA1)</th>
<th>2020-2021 (YA2)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Treatment Group</td>
<td>Comparison Group</td>
<td>Treatment Group</td>
</tr>
<tr>
<td>Mean GLE Prior to Program</td>
<td>6.118 (1.152)</td>
<td>5.517 (0.801)</td>
<td>5.749 (0.666)</td>
</tr>
<tr>
<td>Mean Scaled Score Change</td>
<td>37.55 (165.758)</td>
<td>49.67 (122.320)</td>
<td>64.97 (154.161)</td>
</tr>
<tr>
<td>Mean SGP</td>
<td>48.92 (30.433)</td>
<td>45.91 (24.551)</td>
<td>55.76 (25.482)</td>
</tr>
</tbody>
</table>

*Standard deviation is in parentheses

**Grade-Level Equivalent (GLE)**

The mean GLE score for students in the YA2 treatment group was 4.963, with a standard deviation of 1.092, while the mean GLE recorded for the comparison group was 5.415, with a standard deviation of 0.912. This indicated that students in the treatment group, on average, entered the program reading just under a fifth grade reading level, while students in the comparison group began the program reading at nearly a mid-fifth grade level. Grade-level equivalencies were also provided for students enrolled in YA1 during their ninth grade year. In 2018-2019, the mean GLE for students receiving intervention was 6.118, with a standard deviation of 1.152, whereas the mean GLE for students in the comparison group was 5.517, with a standard deviation of 0.801. This indicated that, on average, students in the treatment group actually read approximately 6 months ahead of students in the comparison group; however, there was greater variability in the range of scores. In 2019-2020, the gap between the treatment group and the comparison group was significantly narrower; the mean GLE for the treatment group was
5.749, with a standard deviation of 0.666, whereas the mean GLE for the comparison group was 5.908, with a standard deviation of 0.641. Historic grade-level equivalency data for both years revealed that students in YA1 entered the program with higher reading scores than students in YA2, across both the treatment and comparison groups. This indicated that the gap between expected grade-level performance and actual grade-level performance was largest for students in YA2 who are expected to read at a level of 10.0 (in comparison to students in YA1 who should read in the 9.0 range). Figure 3 illustrates the distribution of grade-level equivalencies across both groups for each academic school year.

Figure 3. Histogram of Grade Level Equivalencies for Each School Year

![Histogram of Grade Level Equivalencies for Each School Year](image)

Scaled score. The change in scaled score from the Fall to Winter administration was provided as one measure of growth. As shown in Table 2, the most significant growth was observed during the 2019-2020 school year because mean gains of 64.97 and 75.29 were
recorded for the treatment and comparison groups, respectively. On the contrary, the smallest change in the mean scaled score was observed during the 2020-2021 school year; mean gains for the treatment and comparison groups were 20.46 and 22.77, respectively. Across all three school years, the mean scaled score change was higher for students in the comparison group. As observed in Figure 4, there was significant variability in scaled score change for each academic year, as students could either demonstrate gains or losses between each administration of the assessment.

Figure 4. *Histogram of Scaled Score Change for Each School Year*

Research Question 1

What is the association of culturally relevant reading intervention on students’ reading achievement as measured by the STAR reading assessment?

For the first part of Research Question 1, students’ scaled score changes were analyzed to determine if any differences existed between the students who participated in the intervention
program and those who did not for each academic year. An Independent Samples $t$ Test was performed to see if there was evidence of a relationship between program participation and scaled score change for each school year. These findings indicated that no significant differences existed in average scaled score changes of students in the treatment group to students in the comparison group for the three academic school years ($p = 0.681$, $p = .721$, and $p = 0.935$, respectively). In all instances, I failed to reject the null hypothesis as the $p$ value indicated there was no evidence of a statistically significant difference between program participation and change in scaled score for each academic year.

Table 3. Multiple Regression Model for Reading Growth: Scaled Score Change

<table>
<thead>
<tr>
<th></th>
<th>Model 1a (18-19)</th>
<th>Model 1b (19-20)</th>
<th>Model 1c (20-21)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Program Participation</td>
<td>-.107 (.194)</td>
<td>-.49 (.206)</td>
<td>.048 (.260)</td>
</tr>
<tr>
<td>Gender: Male</td>
<td>-.335 (.173)**</td>
<td>-.193 (.192)</td>
<td>.054 (.204)</td>
</tr>
<tr>
<td>Race: Latinx</td>
<td>.384 (.309)</td>
<td>.357 (.321)</td>
<td>-.361 (.307)</td>
</tr>
<tr>
<td>Students with Disabilities</td>
<td>-.593 (.254)**</td>
<td>.492 (.514)</td>
<td>-.184 (.335)</td>
</tr>
<tr>
<td>English Learners</td>
<td>-.883 (.286)***</td>
<td>.277 (.479)</td>
<td>-.188 (.319)</td>
</tr>
<tr>
<td>Eligible for FRL</td>
<td>-.459 (.278)</td>
<td>.436 (.291)</td>
<td>.288 (.279)</td>
</tr>
<tr>
<td>Previous GLE Score</td>
<td>.056 (.094)</td>
<td>.149 (.150)</td>
<td>.010 (.099)</td>
</tr>
<tr>
<td>Previous Program Participation</td>
<td>--</td>
<td>--</td>
<td>-.409 (.300)</td>
</tr>
<tr>
<td>Career Academy Participation</td>
<td>--</td>
<td>--</td>
<td>.190 (.453)</td>
</tr>
<tr>
<td>[constant]</td>
<td>.104 (.691)</td>
<td>-1.494 (.939)</td>
<td>-.003 (.725)</td>
</tr>
<tr>
<td>N</td>
<td>126</td>
<td>114</td>
<td>120</td>
</tr>
<tr>
<td>R-squared</td>
<td>.182</td>
<td>.064</td>
<td>.047</td>
</tr>
</tbody>
</table>

Note: ***$p<0.01$, **$p<0.05$, *$p<0.10$, Standard errors are shown in the parentheses
Dependent variable: Model 1a: 18-19 Scaled Score Change, Model 1b: 19-20 Scaled Score Change, Model 1c: 20-21 Scaled Score Change

A multiple regression model was employed to isolate the effect of program participation while controlling for other predictors. The first model (model 1a) used participation in the ninth grade intervention program (Young Adult Literature I) as the independent variable of interest and gender, race, students with disabilities status, English Learner status, free and reduced lunch
eligibility, and previous GLE scores as other independent variables. Scaled score change for students enrolled in the program during the 2018-2019 school year was the dependent variable. The second model (model 1b) used the same independent and dependent variables, but was modified to include data from students who participated in Young Adult Literature I during the 2019-2020 school year. The third model (model 1c) focused on students who were enrolled in Young Adult Literature II during the 2020-2021 school year. While the same variables were employed, previous program participation and participation in career academies were also included in model 1c, as described in Chapter III.

**Model 1a (2018-2019).** Examining 2018-2019 data points, the $R^2$ value was .182, meaning that 18.2% of the variance in scaled score change can be explained by the independent variables in the model. The beta coefficients for the 2018-2019 analysis found three of the independent variables to be statistically significant: gender, students with disabilities classification, and English Learner status. Controlling for all other predictors in this model, gender was a significant predictor of scaled score change ($\beta = -.335$, $t = -1.932$, $p = .05$). Compared to females, males tended to score -.335 standard deviations lower. Holding all other predictors constant, student with disabilities classification was also a significant predictor of scaled score change in the 2018-2019 sample ($\beta = -.593$, $t = -1.977$, $p = .021$). This revealed that students with disabilities tended to score .593 standard deviations lower than their nondisabled peers. Finally, ELL status was a statistically significant predictor of scaled score change when controlling for other predictors in the model ($\beta = -.883$, $t = -3.085$, $p = .003$). This negative beta denoted that ELLs tended to score .883 standard deviations lower than non-ELLs.

**Model 1b (2019-2020).** Shifting to 2019-2020, the model summary revealed the $R^2$ value was .064, meaning that 6.4% of the variance in scaled score change can be explained by the
predictors in this model. The variable of interest in this study, program participation in Young Adult Literature I, had a p value of .812 in the 2019-2020 analysis and was not statistically significant. In examining other predictors in the model, I failed to reject the null hypothesis and concluded that the relationships were not statistically significant as there was not enough evidence to rule out the possibility of zero statistical relationship between the predictors in this model and scaled score change.

**Model 1c (2020-2021).** The 2020-2021 model summary denoted that the R² value was .047, meaning that only 4.7% of the variance in scaled score change can be explained by the predictors in this model. Neither the variable of interest, program participation in young adult literature II (p = .855), nor the other independent variables were determined to be statistically significant. Although previous participation in intervention (p = .173) and participation in the career academies (p = .433) were included among the predictors in this model, their p values were above the .05 threshold and therefore could not be determined as statistically significant. While program participation was not a statistically significant predictor of scaled score, a positive beta was only revealed for model 1c. Model 1c accounted for prior program participation and career academy participation, which may have influenced this result.

As observed in models 1a-1c, the R² value declined each school year. This indicated that less of the variance in scaled score change could be explained by the predictors in the model with each passing year.

**Student Growth Percentile (SGP).** Student growth percentile (SGP) was included as a second measure of reading achievement as it accounts for student growth when compared to peers at similar instructional level(s). The mean SGP for students in both the treatment and comparison groups was smallest in the 2020-2021 school year and largest in the 2019-2020
school year, as previously noted in Table 2. In all academic years, a narrow difference in SGP score was observed between the treatment and comparison groups. As shown below in Figure 5, the variability of student growth percentile scores was similar in each academic year.

Figure 5. Histogram of SGP for Each School Year

For the second part of Research Question 1, students’ SGP scores were also analyzed to determine if any differences existed among students in the treatment and comparison groups. An additional Independent Samples t Test was conducted to see if there was evidence of a relationship between program participation and SGP. Across all three academic school years, these findings indicated that no significant differences existed in the mean SGP of students in the treatment group to students in the comparison group (p = 0.554, p = .824, and p = 0.773, respectively). In all instances, I failed to reject the null hypothesis as the p values indicated there
was no evidence of a statistically significant difference between program participation and mean
SGP for each academic year.

Table 4. *Multiple Regression Model for Reading Growth: SGP*

<table>
<thead>
<tr>
<th></th>
<th>Model 2a (18-19)</th>
<th>Model 2b (19-20)</th>
<th>Model 2c (20-21)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Program Participation</td>
<td>.069 (.187)</td>
<td>-1.1 (.205)</td>
<td>.221 (.258)</td>
</tr>
<tr>
<td>Gender: Male</td>
<td>-.605 (.167)***</td>
<td>-.296 (.191)*</td>
<td>.236 (.202)</td>
</tr>
<tr>
<td>Race: Hispanic</td>
<td>.409 (.298)</td>
<td>.253 (.319)</td>
<td>-.246 (.305)</td>
</tr>
<tr>
<td>Students with Disabilities</td>
<td>-.687 (.244)***</td>
<td>.106 (.512)</td>
<td>-.153 (.333)</td>
</tr>
<tr>
<td>English Learners</td>
<td>-.689 (.276)**</td>
<td>-.235 (.477)</td>
<td>-.007 (.316)</td>
</tr>
<tr>
<td>Eligible for FRL</td>
<td>.249 (.267)</td>
<td>.686 (.290)</td>
<td>-.001 (.277)</td>
</tr>
<tr>
<td>Previous GLE Score</td>
<td>.141 (.090)*</td>
<td>-.062 (.150)</td>
<td>.105 (.099)</td>
</tr>
<tr>
<td>Previous Program Participation</td>
<td>--</td>
<td>--</td>
<td>-.256 (.298)</td>
</tr>
<tr>
<td>Career Academy Participation</td>
<td>--</td>
<td>--</td>
<td>.315 (.211)</td>
</tr>
<tr>
<td>[constant]</td>
<td>-.974 (.666)</td>
<td>-.308 (.935)</td>
<td>-.603 (.720)</td>
</tr>
<tr>
<td>N</td>
<td>126</td>
<td>114</td>
<td>120</td>
</tr>
<tr>
<td>R-squared</td>
<td>.241</td>
<td>.072</td>
<td>.061</td>
</tr>
</tbody>
</table>

Note: ***p < 0.01, **p < 0.05, *p < 0.10, Standard errors are shown in the parentheses.
Dependent variable: Model 2a: 18-19 SGP; Model 2b: 19-20 SGP; Model 2c: 20-21 SGP

To examine the relationship between program participation and SGP, while accounting
for possible confounding variables, I utilized multiple regression. Students’ SGP served as the
dependent variable, while the independent variables from models 1a-1c were included in the
SGP analysis. A regression analysis was run for the 2018-2019, 2019-2020, and 2020-2021
school years.

**Model 2a (2018-2019).** The $R^2$ value in model was .241, meaning that 24.1% of the
variance in SGP scores can be explained by the independent variables in the model. The beta
coefficients for the 2018-2019 analysis found four of the independent variables to be statistically
significant: gender, students with disabilities classification, English learner status, and previous
GLE score. Controlling for all other predictors in this model, gender was a significant predictor
of SGP score ($\beta = -.605$, $t = -3.628$, $p = .001$). Compared to females, males tend to score -.605
standard deviations lower. Holding all other predictors constant, student with disabilities classification was also a significant predictor of SGP ($\beta = -0.687, t = -2.810, p = .006$). This revealed that students with disabilities tended to score .593 standard deviations lower than students without disabilities. ELL status was also a statistically significant predictor of SGP when controlling for other predictors in the model ($\beta = -0.689, t = -2.498, p = .014$). This denoted that ELLs tended to score -.689 standard deviations lower than non-ELLs. As illustrated in Table 4, these three predictors had a negative beta. Previous grade-level equivalent score was found to be a marginally statistically significant predictor at the $p \leq .10$ threshold ($\beta = .141, t = -1.563, p = .099$). This predictor indicated that for every 1 unit increase in grade-level equivalency score, SGP scores increased by .141 standard deviations. These results may not be as generalizable to the population compared to the other regression coefficients that were statistically significant at the $p \leq .05$ threshold because the $p$ value was higher. It should be noted that the same predictors were statistically significant in the model for 1a, 2018-2019 scaled score change, with the addition of grade-level equivalency in the SGP model.

**Model 2b (2019-2020).** The $R^2$ value in the 2019-2020 SGP model was .072, meaning that 7.2% of the variance in SGP scores can be explained by the predictors in this model. In this model, no predictors were statistically significant at the $\leq .05$ threshold; however, gender was marginally statistically significant at the $\leq .10$ threshold ($\beta = -.296, t = -1.552, p = .095$).

**Model 2c (2020-2021).** The model summary for 2020-2021 denoted the $R^2$ value was .061, meaning that only 6.1% of the variance in SGP can be explained by the predictors in this model. This model did not reveal any predictors to be statistically significant at the $\leq .05$ threshold or $\leq .10$ threshold. Although program participation was not a statistically significant predictor of SGP, a stronger coefficient was observed in model 2c than in models 2a and 2b. As
previously noted, the 2020-2021 models accounted for prior program participation and career academy participation, which may have influenced this result.

As observed in models 2a-2c, the $R^2$ value declined each school year. This indicated that less of the variance in SGP could be explained by the predictors in the model with each passing year. This trend was also reflected in models 1a-1c.

**Research Question 1 Summary**

Research Question 1 compared and analyzed the reading performance of students in the treatment groups and comparison groups for three academic school years. Two outcome variables were used to evaluate the impact of program participation while holding other variables constant: scaled score change (models 1a-1c) and SGP (models 2a-2c). In both model 1 and model 2, less of the variance in the outcome variables could be explained by the predictors in the model with each passing academic year. The following predictors were found to be statistically significant in each academic year.

- **2018-2019**
  - **Model 1a: Scaled Score Change.** male ($\beta = -.335$), students with disabilities ($\beta = -.593$), English learners ($\beta = -.883$)
  - **Model 2a: SGP.** male ($\beta = -.605$), students with disabilities ($\beta = -.687$), English learners ($\beta = -.689$). Grade-level equivalency denoted a positive beta at the ≤ .10 threshold ($\beta = -.141$).

- **2019-2020**
  - **Model 1b: Scaled Score Change.** No statistically significant predictors were observed in the model.
- **Model 2b: SGP.** Gender: male revealed a negative beta at the ≤ .10 threshold ($\beta = -.296$).

- **2020-2021**
  - **Model 1c.** Scaled Score Change: No statistically significant predictors were observed in the model.
  - **Model 2c:** SGP: No statistically significant predictors were observed in this model.

**Overview of Reader Self-Perception Scores**

The Reader Self-Perception Scale 2 (RSPS2) was administered to students who were recommended for or enrolled in Survey of Young Adult Literature II during the 2020-2021 school year. Across all domains, marginally higher scores were observed for students in the treatment group. Students in the treatment group had an overall mean score of 158.61 and a standard deviation of 19.258, whereas students in the comparison group had an overall mean score of 151.47 and a standard deviation of 24.778, as indicated in Table 5. The distribution of scores across both groups is displayed in Figure 6.

Pearson correlation was used to examine the bivariate relationship between scaled score change and reader self-perception score as well as SGP and reader-self-perception score for the 2020-2021 sample. Using SPSS, positive correlation coefficients of .175 and .212 were found, respectively. While these coefficients were both statistically significant at the ≤ .05, the strength each relationship was weak. Both coefficients were positive, indicating that as self-perception score rose, so did scaled score. This also applied to SGP.
### Table 5. Descriptive Statistics of Reading Self-Perception Survey (2020-2021 YA2)

<table>
<thead>
<tr>
<th></th>
<th>Treatment Group</th>
<th>Comparison Group</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean Progress Score</td>
<td>60.33 (8.318)</td>
<td>59.43 (7.373)</td>
</tr>
<tr>
<td>Mean Physiological State</td>
<td>40.15 (9.762)</td>
<td>39.49 (8.858)</td>
</tr>
<tr>
<td>Mean Observational Comparison</td>
<td>28.70 (3.915)</td>
<td>26.65 (4.953)</td>
</tr>
<tr>
<td>Mean Social. Feedback</td>
<td>28.96 (4.248)</td>
<td>27.32 (3.657)</td>
</tr>
<tr>
<td>Mean Overall Score</td>
<td>158.61 (19.258)</td>
<td>151.47 (24.778)</td>
</tr>
</tbody>
</table>

*standard deviation is in parentheses

### Figure 6. Histogram of Reading Self-Perception Scores (2020-2021)

A Cronbach’s Alpha test in SPSS statistics was used to assess the reliability of the items in each domain. The performance subscale consisted of 16 items (α = .930), the physiological subscale consisted of 12 items (α = .944), the observational comparison subscale consisted of 9 items (α = .919), and the social feedback subscale consisted of 9 items (α = .856). The scale was found to be highly reliable.
Table 6. *Reliability Statistics for the Reader Self-Perception Scale*

<table>
<thead>
<tr>
<th></th>
<th>Cronbach’s Alpha</th>
<th>N of Items</th>
<th>Valid Cases</th>
</tr>
</thead>
<tbody>
<tr>
<td>Performance</td>
<td>.930</td>
<td>16</td>
<td>114</td>
</tr>
<tr>
<td>Physiological State</td>
<td>.944</td>
<td>12</td>
<td>117</td>
</tr>
<tr>
<td>Observational Comparison</td>
<td>.919</td>
<td>9</td>
<td>115</td>
</tr>
<tr>
<td>Social Feedback</td>
<td>.858</td>
<td>9</td>
<td>117</td>
</tr>
<tr>
<td>All Items</td>
<td>.952</td>
<td>46</td>
<td>107</td>
</tr>
</tbody>
</table>

**Research Question 2**

What is the association of culturally relevant reading intervention with student reading self-perception as measured by the Reader Self-Perception Scale 2?

For Research Question 2, students’ reading self-perception scores were analyzed to determine if any differences existed between the students who participated in the Survey of Young Adult Literature II and those who did not. First, an Independent Samples t Test was performed to see if there was evidence of a relationship between program participation and students’ reading self-perception score. Based on the p value for the Levene’s test (p = .971), the equal variances assumption of the Independent Samples t Test was met, and the p value with ‘equal variances assumed’ was used to determine statistical significance. The difference between the two programs was not statistically significant because the p value was .099, which is greater than .05. I failed to reject the null hypothesis because there was a 9.9% chance that the difference occurred by chance alone. Based on the p value alone, there was no evidence of a statistically significant difference between program participation and the reading self-perception score.

A multiple regression model was employed to isolate the effect of program participation while holding other variables constant, including gender, race, students with disabilities status, English Learner status, eligibility for free and reduced lunch, previous program participation, career academy participation, and students’ prior reading grade-level equivalency score. The
results indicated that 14.5% of the variance in self-perception scores can be explained by the predictors in the model ($r^2 = .145$).

Table 7. *Multiple Regression Model for Reading Self-Perception Scores*

<table>
<thead>
<tr>
<th>Model 3 (Reading Self-Perception Score)</th>
<th>Program Participation</th>
<th>Gender: Male</th>
<th>Race: Hispanic</th>
<th>Students with Disabilities</th>
<th>English Learners</th>
<th>Eligible for FRL</th>
<th>Previous Program Participation</th>
<th>Career Academy Participation</th>
<th>Previous GLE Score</th>
<th>[constant]</th>
<th>N</th>
<th>R-squared</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>.571 (.246)**</td>
<td>.213 (.193)</td>
<td>-.078 (.290)</td>
<td>.247 (.317)</td>
<td>-.444 (.225)**</td>
<td>.263 (.283)</td>
<td>.261 (.238)</td>
<td>.158 (.094)*</td>
<td>-.853 (.662)</td>
<td>120</td>
<td>.145</td>
</tr>
</tbody>
</table>

Note: ***p < 0.01, **p < 0.05, *p < 0.10, Standard errors are shown in the parentheses. Dependent variable: Reading Self-Perception Score

The beta coefficients for this analysis found program participation and free and reduced lunch eligibility (as a measure of socioeconomic status) to be statistically significant at the $\leq .05$ threshold, while previous grade-level equivalent score was marginally significant at the $p \leq .10$ threshold. Controlling for all other predictors in this model, free and reduced lunch eligibility was a significant predictor of students’ reading self-perception scores ($\beta = -.444$, $t = -1.977$, $p = .05$). Students who were eligible for free and reduced lunch tended to score .444 standard deviations lower on the reading self-perception scale, compared to students who were not eligible. The predictor grade-level equivalency was not statistically significant at the $p \leq .05$ threshold, though it was statistically significant at the $p \leq .10$ threshold and thus may be considered a marginally significant predictor of reading self-perception scores ($\beta = .158$, $p = .105$).
t = -1.678, p = .096). This denoted a 9.6% chance that this effect occurred by chance alone. This predictor indicated that for every 1 unit increase in grade-level equivalency score, reading self-perception scores went up by .158 standard deviations. Since the $p$ value was slightly above .05, the results may not be as generalizable to the population, compared to the other regression coefficients that were statistically significant at the $p \leq .05$ threshold.

Holding all other predictors constant, students who participated in the culturally relevant reading intervention program tended to score .571 SD units higher on the reading self-perception scale than those students who did not participate in the program ($\beta = .571, t = -2.318, p = .022$). This indicated that the main independent variable of interest, program participation, was a statistically significant predictor of students’ reading self-perception scores. All other predictors in the model had $p$ values greater than .05, meaning there was a higher than 5% chance that they occurred by chance and could therefore not be determined as statistically significant. Although the Independent Samples $t$ Test did not reveal significant differences in reading self-perception scores between the treatment group and comparison group, the multiple regression analysis indicated that program participation was a significant predictor of reading self-perception scores when holding other variables constant. The size of the coefficient for program participation was particularly strong ($\beta = .571$). In this sample, participation was therefore a stronger predictor of self-perception score than free and reduced lunch status.

**Research Question 2 Summary**

The statistical analysis of program participation and students’ scores on the Reader Self-Perception scale yielded two predictors that were statistically significant at the $\leq .05$ threshold and one predictor that was marginally statistically significant at the $\leq .10$ threshold.
• ≤ .05 threshold
  o Free and reduced-price lunch eligibility (β = -.444)
  o Program Participation (β = .571)
• ≤ .10
  o Prior grade-level equivalency score (β = .158)
• The independent variable for free and reduced-price lunch eligibility was found to be a negative beta, indicating that students who were eligible for free and reduced lunch tended to score lower than their peers who were ineligible.
• Prior grade-level equivalency was found to be a positive beta, though this relationship was weaker at the ≤ .10 threshold. This indicated that as grade-level equivalency scores increased, a corresponding increase in students’ reading self-perception scores was to be expected.
• While the Independent Samples t Tests did not provide evidence of a difference in scores, the linear multiple regression analyses revealed that, when holding the independent variables constant, there was a statistically significant positive difference in reading self-perception scores for students enrolled in the culturally relevant reading intervention program.

Summary

Students’ scaled score changes between the Fall and Winter STAR assessment administrations were compared and analyzed, in addition to their SGP scores. I used student achievement data from 2018-2019, 2019-2020, and 2020-2021 to determine the impact of program participation on student reading outcomes. In each sample, there was no evidence to suggest that the program influenced students’ scaled score or SGP. The multiple regression
models revealed that gender (male), students with disabilities status, and ELL classifications were statistically significant predictors of both scaled score and SGP for the 2018-2019 sample only. These predictors all revealed a negative beta at the $\leq .05$ threshold. In the 2019-2020 data set, gender was found to be a moderately significant predictor of SGP; a negative beta was revealed at the $\leq .10$ threshold. There were no statistically significant predictors of either scaled score change of SGP for the 2020-2021 models.

The Reader Self-Perception Scale 2 was administered at the end of the semester to students who were either recommended for or enrolled in the reading intervention program during the 2020-2021 school year. While the Independent Samples $t$ Test did not reveal a statistically significant relationship between program participation and survey score, this relationship was statistically significant when other variables were held constant using the multiple regression model, denoting a positive beta. Therefore, there was evidence to suggest that students who participated in the program had higher reading self-perception scores than those who did not. Two other variables were found to be statistically significant predictors of reading self-perception scores, including free and reduced lunch status and previous grade-level equivalent, the latter of which was significant at the $\leq .10$ threshold. A negative beta was associated with students who were eligible for free and reduced lunch, while a positive beta was found for grade-level equivalent. This indicated that as students’ reading grade level increased, so did their positive feelings towards reading.

Chapter V discusses limitations, conclusions, and implications for educators and policymakers. Recommendations for future study are also outlined.
CHAPTER V
DISCUSSION

Purpose of the Study

The purpose of this study was to analyze the performance of students enrolled in a secondary reading intervention program in comparison to those who were not enrolled in order to understand the possible influence of a culturally relevant reading intervention program on students’ academic outcomes and self-perception as readers. This research contributes to the present body of knowledge about ways in which culturally responsive education may promote enhanced student outcomes for Latinx students. To assess the relationship between academic outcomes and program participation, reading data from 3 school years were used. In addition, the Reader Self-Perception Scale 2 was administered to students who were recommended for or enrolled in the course Survey of Young Adult Literature II during the 2020-2021 school year in order to analyze and compare possible differences in students’ reading self-perception scores.

The hallmark of culturally relevant pedagogy is a commitment to students’ academic achievement, cultural competence, and sociopolitical consciousness (Ladson-Billings, 1992, 1994, 1995, 2008, 2014). Several studies presented in the review of literature demonstrated the correlation between students’ academic outcomes, engagement, and agency when culturally relevant pedagogy was employed (Cabrera et al., 2014; Dee & Penner, 2017; Freeman & Freeman, 2004; Kanu, 2007). Despite these findings, quantitative evidence in the field is limited, and even fewer studies have measured changes in student outcomes by comparing culturally relevant programs with that of matched programs (Byrd, 2016). The research to date that has employed such methods has been mixed as a number of existing studies have not revealed statistical significance between culturally relevant programs and student outcomes (Bui & Fagan,
2013; Francosi, 2009). This study addressed these limitations by using pre- and posttests to measure changes in student outcomes as a result of a culturally relevant program for which participation was not elective. The program under investigation was deemed unique in its approach to supplemental reading instruction as it utilized a culturally relevant pedagogical framework and multicultural literature to promote engagement for struggling secondary readers.

**Interpretation of Results**

I employed multiple regression to answer the two research questions and used reading achievement scores and data from student survey response as the dependent variables. The independent variable of interest for this study was program participation in a culturally relevant reading intervention program. Other independent variables were also included in this analysis, namely gender, race, students with disabilities status, English Learner status, eligibility for free and reduced lunch, and students’ prior reading grade-level equivalency scores. Previous program participation and career academies participation were used as additional independent variables in the 2020-2021 sample to control for conditions that were unique to sophomores enrolled in Young Adult Literature II.

The first research question asked if participation in a culturally relevant reading intervention program had an impact on student achievement in reading, as measured by the difference in students’ scaled scores at the start and end of the semester and their student growth percentile. To assess this relationship, I compared and analyzed the performance of students who were enrolled in the course to those who were recommended for the course but did not enroll. Student achievement data were collected for three separate cohorts over 3 years as I hypothesized that the 2020-2021 school year alone was unlikely to yield statistically significant results due to the COVID-19 pandemic. Teachers of the program also expressed their own
challenges associated with instructing this class using a hybrid instruction model, as previously indicated in Chapter III.

In each school year, program participation was not a statistically significant predictor of students’ scaled score or SGP. In addition, a positive coefficient for scaled score and SGP was only revealed in the 2020-2021 models (β = .048, β = .221, respectively). The 2018-2019 multiple regression models revealed that gender: male (β = -.335), students with disabilities status (β = -.593), and English Learner classification (β = -.883) were statistically significant predictors of both scaled score and student growth percentile (β = -.605, b = -.687, b = -.689, respectively). These predictors all yielded a negative beta at the ≤ .05 threshold. These results indicated that males tended to score lower than females, and students with disabilities and English Learners tended to score lower than students in the general education program. For this same school year, prior grade-level equivalency showed a positive beta at the ≤ .10 threshold (β = .141) in predicting student growth percentile.

In 2019-2020, gender: male was found to be a moderately significant predictor of SGP (β = -.296) at the ≤ .10 threshold; however, no statistically significant predictors of either scaled score change or SGP for the 2019-2020 and 2020-2021 models were observed at the ≤ .05 threshold. The mean growth scores for both the treatment group (M = 20.46) and comparison group (M = 22.77) were smallest in the 2020-2021 school year. The mean scores for grade-level equivalency also indicated that students in the 2020-2021 sample demonstrated the largest achievement gap between mean grade-level performance and expected performance (10.0), indicating that tenth grade students across both groups were 4-5 years below grade level, as noted in Table 2. High standard deviations in scaled scores were also recorded for each group,
indicating that students’ scores tended to vary significantly from the mean, as illustrated in Figure 4.

The second research question used multiple regression to compare differences in reading self-perception scores for all students who were enrolled in or recommended for the tenth grade intervention program during the 2020-2021 school year, while holding other variables constant. The statistical analysis of program participation and reader self-perception revealed a negative beta ($\beta = -.444$) for free and reduced lunch eligibility and a marginally positive beta for prior grade-level equivalency score ($\beta = .158$) at the $\leq .10$ threshold. These results indicated that students who are eligible for free and reduced lunches tend to score lower than students who were found ineligible. In addition, the positive beta for grade-level equivalency revealed that as students reading levels increased, so did their positive associations with reading.

While the Independent Samples $t$ Test did not reveal a statistically significant relationship between program participation and survey score ($p = .099$), this relationship was statistically significant when other variables were held constant using the multiple regression model, denoting a positive beta with a sizable effect ($\beta = .571$, $p = .022$). Therefore, students who participated in the program tended to score higher than those in the comparison group. The mean for overall reading self-perception score and each subdomain score also showed that students in the treatment group scored higher than those who did not participate in the program, as denoted in Table 5. However, as a pretest was not administered, it was difficult to determine the magnitude of the outcome and whether the outcomes were due to the program or some other cause.
Implications of Results

While there is research to suggest that culturally relevant pedagogy and instruction promotes academic achievement, this study was unable to match that claim. Although program participation was not found to be a statistically significant predictor of students’ academic achievement in reading, the results showed that students in both the treatment group and comparison group (on average) demonstrated comparable SGP scores. This implies that the culturally relevant intervention, at the least, did not hinder students’ reading performance.

Although there is no evidence that participation in the program promoted growth in reading, some implications may still be extrapolated from the data. To begin, student motivation was not included as a variable in this study, so it is not possible to understand how this may have influenced achievement results. As noted in the review of literature, motivation is a common barrier for struggling adolescent readers and may hinder students from actively participating in activities that can improve their reading abilities (Kamil et al., 2008; Solis et al., 2014). This is an important consideration as motivation and engagement are favorably linked to growth in reading skills (Guthrie et al., 2012).

Many of the studies referenced in the literature showed favorable gains for students who voluntarily participated in supplemental programs. As this course was a mandatory requirement for students reading significantly below grade level, it was likely that some students were resistant to participating. Because agency is linked to adolescent learning (Alliance for Excellent Education, 2019), different results may have prevailed had students elected to participate. Moreover, if students who struggle academically are more likely to participate in this program, their impact is likely to be understated, as also observed in the limitations in Dee and Penner’s (2017) study.
A core tenet of the program under investigation is the belief that students will possess more desire to read if they are given access to engaging books that are relevant to their own lives. This belief resonated in the literature presented earlier (Fisher & Ivey, 2006; Guthrie, 2001; Guthrie & Klauda, 2014). There is also research to suggest that students perform better on standardized assessments of reading when culturally relevant texts are used (Ebe, 2010; Freeman & Freeman, 2004). However, in school and beyond, students will be expected to read material they may not find relevant or engaging. As Goodman (1982) noted, the tests that are used to assess reading proficiency are often not culturally relevant for the students who read them. Therefore, students must also learn to grapple with complex texts that may be out of their frame of reference. In addition, teachers must negotiate how to dually address critical content standards while employing culturally relevant pedagogy and practices. Culturally relevant pedagogy should not be oversimplified to include teaching students only in their frames of reference. Rather, Ladson-Billings’ belief propagates the idea that teachers must demands high levels of academic achievement and implement rigorous practices. As the program was ultimately unable to promote significant reading gains, there is a need to revisit the program’s theory and design.

Although program participation did not yield conclusions about academic growth, other independent variables were found to be statistically significant predictors of achievement and upheld past research findings. Gonzalez and Montaño (2008) observed that English learners must attend to decoding words and making meaning, which makes comprehension increasingly difficult and hinders reading progress. As English Language Learner status was found to have a statistically significant, negative relationship with students’ scaled score growth and SGP, this would support the findings of Gonzalez and Montaño. Students with disabilities were also a statistically significant predictor of reading achievement in the 2018-2019 sample. Abedi (2009)
found that students with disabilities typically score lower than non-classified students on tests of achievement. This was corroborated in the results of this study as a negative beta was revealed for students with disabilities. Finally, the problem of males who were disinterested in reading is not a new one. This was consistently confirmed in the results of the National Assessment of Educational Progress (NAEP), where females outperformed males in reading in Grades 4, 8, and 12, year after year. The findings in this study revealed that males tended to score lower than females in the 2018-2019 and 2019-2020 sample. This was reflected in trends of male reading performance nationwide.

For Research Question 2, I accepted the alternative hypothesis that there was evidence of a positive relationship between program participation and students’ reading self-perception. This supports the research presented in the review of literature that students will have a stronger sense of self if they see themselves represented in the literature used in the classroom (Bishop, 1990; Guthrie & Klauda, 2014; Naidoo & Vargas, 2011; Ramirez & Jimenez-Silva, 2015; Rosenblatt, 1995; Vasquez, 2005; Whitford, 2011). When students are presented with opportunities to read literature they can relate to, they will emerge with respect for their cultural identity (Naidoo & Vargas, 2011) and ethnic validation (Vasquez, 2005). This supports Ladson-Billings’ theoretical framework that culturally relevant pedagogy provides students with skills that help them to affirm and appreciate their culture.

Despite these findings, self-perception did not influence reading achievement, as previously discussed. This dispels previous research that adolescents with positive feelings towards reading are more likely to show enhanced reading and writing abilities (Carney, 2013; Spaulding & Lake, 1992; Wigfield & Guthrie, 2000). Rather, the findings of this study suggested that students’ reading self-perception cannot play a simple, causal role in academic achievement.
Because the interaction between self-perception and academic achievement is not direct, other contextual factors must be considered. Previous research in this field has shown that although self-perception and motivation have the potential to influence reading achievement positively, they declined over the school years, especially in adolescence, and they were related to socioeconomic status and gender (Smith et al., 2012). These findings were confirmed in this study, as students from lower socioeconomic backgrounds tended to score lower on self-perception and females outperformed males in measures of reading achievement. To understand these relationships fully, these issues may be examined jointly in a dataset at different intervals in time, including elementary school and adolescence. In light of these findings, it is possible that students who are weaker readers are not cognizant of their status, which may impede their progress and achievement in reading. Therefore, instruction must include ongoing formal and informal feedback to students that supports their development and gives them the exact tools they need to advance in their reading abilities.

A significant predictor of reading self-perception score included free and reduced lunch status, which revealed a negative beta. The research presented at the beginning of this study revealed that low socioeconomic households are far more likely to lack appropriate reading materials for children (Neuman & Celano, 2001). When students do not have sufficient opportunities to read, they may possess less desire to do so and may not view themselves as readers (Santoli & Wagner, 2004). Because free and reduced lunch status was used as a measure of socioeconomic status, this revealed that student from low-SES households had lower self-perception of their reading abilities and aptitudes towards reading, compared to students who were ineligible for free and reduced lunch. Despite this revelation, the strength of the coefficient
was weaker than that of program participation. This implied that program participation influenced reading self-perception even more than socioeconomic status did.

Prior grade-level achievement was a statistically significant predictor of students’ reading self-perception scores at the ≤ .10 threshold. This indicated that as students’ reading grade-level increased, so did their positive feelings towards reading. “The Matthew Effect” (Cunningham & Stanovich, 1998) suggested that the relationship between engagement and achievement is a reciprocal process. From these results, one can infer that students with stronger literacy skills may have a more positive relationship with reading and vice versa.

This study can extract certain implications for the school district under investigation. First and foremost, culturally relevant reading instruction was only explicitly demanded as a pedagogical approach in this intervention course, which students did not have access to until high school. To examine the full benefits of culturally relevant curriculum and instruction, these practices should be embraced beginning in students’ formative years of schooling and continue through high school. This type of instruction does not need to be limited to intervention courses, but should appear in all aspects of the curriculum, beyond just reading and humanities classes. In addition, the district may want to consider implementing a tool to measure changes in reading-perception attitude and enjoyment at different intervals in time. This would allow a more robust measure of evaluation because it could be examined jointly with changes in reading achievement. Because this intervention approach did not provide evidence that participation improved academic performance over the course of 3 school years, ongoing evaluation is needed to revise course goals and methodologies.
Limitations

This study examined the relationship between program participation and academic achievement across 3 school years; that is, I was unable to track reading scores longitudinally. Although growth was a dependent variable in each regression model, it only accounted for students’ reading scores at the start and end of the semester for each academic year. Therefore, the long-term effectiveness of the program, as measured by students’ reading achievement, cannot be considered.

Another limitation in this study was the use of only posttest data to assess students’ reading self-perception at the end of the program. Because a pretest was not administered, it was difficult to determine the magnitude of the outcome and whether the outcomes were due to the program or some other cause. Moreover, starting point differences among the two groups cannot be accounted for. In addition, the self-perception survey was only administered to students who participated in the program during the 2020-2021 school year. Although the data revealed program participation as a statistically significant predictor of reading self-perception, it was impossible to determine if the same results would have been found in prior academic years.

A third limitation of this study was that culturally pedagogy was determined from my point of view rather than from the students’ perspective. Although I used the Culturally Responsive Scorecard (Bryan-Gooden et al., 2019) to evaluate the program as part of this study, it was possible that students did not perceive the program this way, negating the program theory and relevance to Ladson-Billings’ theoretical framework. Because valuing student experience is a primary tenet of culturally relevant pedagogy, it is critical that future research also account for their perspectives (Gay & Howard, 2000).
Finally, it is very likely that the COVID-19 epidemic impeded students’ capacity for growth. Teachers needed to adapt instruction to fit a hybrid instructional model in which students were only physically in school half the time. Teachers of the program expressed the difficulty in executing this course online, revealing that students were less likely to engage in critical dialogue and showed some resistance to using e-books (as opposed to hard copies). Providing individualized student feedback was also challenging on virtual instruction days. This limited teachers’ capacity to observe reading behaviors anecdotally and tailor instruction accordingly. The mean averages of students’ scaled score changes validated the challenges of the 2020-2021 school year as gains were significantly smaller than in prior academic years.

**Recommendations for Future Research**

The program described in this study was unique to the research site. Implementing this instructional model in a different district may yield different results. In an effort to examine the topic of culturally relevant interventions at the secondary level, future research topics may be explored that either address the aforementioned limitations or recreate this study elsewhere. Additional studies could be conducted to:

- examine other school districts with a more heterogeneous student population;
- determine the longitudinal impact of the program effectiveness, tracking student achievement over time, particularly for students who were enrolled in both Young Adult Literature I and II;
- recreate this study when schools resume a traditional schedule;
- design a qualitative study to include teacher perceptions, student experiences, and classroom observations;
• replicate this study with younger students in need of intervention; and
• conduct a similar study with cultural identity awareness as the dependent variable.

**Recommendations for Policy and Practice**

The lack of evidence on the effectiveness of culturally relevant programs on academic achievement in this study should not stymie administrators, policymakers, and educators from adopting a culturally relevant pedagogical approach. In the wake of 2020’s racial injustices, many districts are looking towards ways they can promote dialogue about equity and social justice. Not surprisingly, educational resource companies have begun to market prepackaged curriculum and instructional materials as being “culturally relevant.” School districts should resist the temptation of marginalizing this effort to solely include the purchase of new resources. Rather, they should inventory their current practices and build collective understanding of what culturally responsive education is in order to determine the appropriate course of action, continually revising the curriculum as necessary. In addition, policymakers must continue to assess the state’s core content standards and objectively survey who is excluded from the curriculum so they can seek ways to promote inclusivity for all learners. This is an important consideration not only for students of color, but for White students as well.

The results of this study also include practical implications. For instance, the program under investigation provided evidence of supporting students’ positive self-perceptions; however, no evidence was found to suggest that it promoted academic achievement. Because the goal of this course was to increase students’ reading levels, routine program evaluation is essential to understand the ways in which a program is or is not working. Embedding evaluation within academic programs fosters continuous improvement by making information and data the basis on which the program operates. This type of evaluation enables educators to identify and
use better-quality practices more effectively to improve learning outcomes (Giancola, 2014). To do this, there is a need for collective understanding about the program’s theory of action and what culturally relevant pedagogy entails. Therefore, professional development about academic achievement and cultural competencies should be prioritized to equip educators with the skills necessary to apply a culturally relevant pedagogy within their classrooms. Culturally relevant teaching practices enable educators to reflect on how they see themselves and how they see others (Ladson-Billings, 2009). This necessitates the importance of establishing a school and community climate that supports reflective practice and critical dialogue.

Although much of the literature on culturally relevant teaching generally focuses on homogeneous, often Black classrooms (Morrison et al., 2008), this study was conducted with a predominantly Latinx population, providing implications for both practice and future research. As many of the students in this study were native Spanish speakers, there is a need for understanding the intersection of language, culture, and identity. Because “language is the symbolic representation of culture” (Harmon, 2012, p. 15), it is no surprise that one’s identity is intimately tied to one’s first language (Delpit & Dowdy, 2002). Providing teachers with explicit support in promoting success for Latinx students and native speakers of Spanish should be a priority. In addition, future research in the field may want to consider how culturally relevant teaching is enacted in a more diverse, heterogeneous environment.

**Conclusion**

As we emerge from the COVID-19 pandemic, there is opportunity to reassess how we approach our classrooms, how we think about our students, and how we deliver our instruction. Ladson-Billings, in an interview from August 2020 with Instruction Partners, revealed we must resist the urge to return to “normal” as our country begins to heal. “Going back to normal for the
kids who are most vulnerable is not a solution, because normal was where the problem was.”

While the program in this study did not provide evidence of improving academic achievement, we cannot accept this outcome as “normal.” We must continue to embrace a culturally relevant pedagogical approach that challenges us to provide students not only with the education they deserve, but also to which they are entitled.
REFERENCES


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Appendix A

Seton Hall University Institutional Review Board Approval

March 3, 2021
Jessica Urban
Seton Hall University
Re: 2021-176

Dear Ms. Urban,

The Research Ethics Committee of the Seton Hall University Institutional Review Board reviewed and approved your research proposal entitled, “A Quantitative Evaluation of a Culturally Relevant Reading Intervention Program on Academic Achievement and Reading Self-Perception in an Urban High School in New Jersey” as resubmitted. This memo serves as official notice of the aforementioned study’s approval as exempt. If your study has a consent form or letter of solicitation, they are included in this mailing for your use.

The Institutional Review Board approval of your research is valid for a one-year period from the date of this letter. During this time, any changes to the research protocol, informed consent form or study team must be reviewed and approved by the IRB prior to their implementation.

You will receive a communication from the Institutional Review Board at least 1 month prior to your expiration date requesting that you submit an Annual Progress Report to keep the study active, or a Final Review of Human Subjects Research form to close the study. In all future correspondence with the Institutional Review Board, please reference the ID# listed above.

Sincerely,

Mara Podvey, PhD, OTR
Associate Professor
Co-Chair, Institutional Review Board

Phyllis Hansell, EdD, RN, DNAP, FAAN
Professor
Co-Chair, Institutional Review Board

Office of the Institutional Review Board
Presidents Hall · 400 South Orange Avenue · South Orange, New Jersey 07079 · Tel: 973.275.4654 · Fax 973.275.2978 · www.shu.edu
WHAT GREAT MINDS CAN DO
Appendix B

School District Institutional Review Board Approval

Vivian C. Rodriguez, Ph.D.
Assistant Superintendent of Curriculum & Instruction

December 18, 2020

Ms. Jessica Urban

Dear Ms. Urban,

I am excited to endorse your proposal to research the secondary high school reading intervention program in High School. I am pleased that you have selected this timely topic to study that is of particular interest to the administration of the high school and the district office of the Public School District. Although this is not a requirement or condition, we hope that you will share the results of your study with us so that we may consider them in the planning and implementation of future programs in our district.

Sincerely,

Dr. Vivian Rodriguez

Vivian Rodriguez, Ph.D.
Assistant Superintendent of Curriculum and Instruction

VCR/mg