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**CHARTER SCHOOLS IN NASSAU COUNTY, NEW YORK: A
COMPARISON OF CHARTER AND TRADITIONAL PUBLIC
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CHARTER SCHOOLS IN NASSAU COUNTY, NEW YORK:
A COMPARISON OF CHARTER AND TRADITIONAL PUBLIC SCHOOLS

A dissertation submitted in partial fulfillment
of the requirements for the degree of
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by
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ABSTRACT

CHARTER SCHOOLS IN NASSAU COUNTY, NEW YORK:

A COMPARISON OF CHARTER AND TRADITIONAL PUBLIC SCHOOLS

Tyshawn Scarlett

The purpose of this study was to evaluate the efficacy of traditional public schools versus charter schools in serving low socioeconomic (low SES) communities in Nassau County. Results from the New York State Standardized Exams (Math and ELA) were used as a comparative measure between both school types serving high need students in that county.

Data were collected from 2,250 eighth-graders enrolled in three (3) charter schools and six (6) public schools in Nassau County, NY in 2018-2019, and an Independent Samples t-test was employed to effect analysis. Results indicate that students in these charter schools outperformed public school students in terms of overall performance in math and ELA combined, $t(16) = -3.517, p \leq .003$, the mean difference in scores being 16.42 points. Specifically, math scores within the charter schools ($M = 609.67$) were higher than those within the public school setting ($M = 586.00$) and were statistically significant, $t(7) = -3.137, p \leq .016$. ELA scores approached significance, $t(7) = -2.129, p \leq .071$, based on a mean charter school score of $M = 605.33$ and a mean public school score of $M = 596.17$.

Overall, this study provides empirical evidence on the effectiveness of charter schools to inform best practices for educating high-need students in Nassau County.

DEDICATION

I want to take this time to dedicate this study to my beloved mother, Ms. Christina Hayes. The world lost a great human being in 2021, and I, a great mother! Mom, you will be missed forever! I love you!

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I would like to thank my wife, Mrs. Trenena Scarlett; my beloved grandfather, Mr. Albert Hayes; my grandmother, Mrs. Lena Hayes; and my siblings: Taniesha Goulbourne, Tasheanna Stewart, and Stacy Scarlett for their unwavering support as I journey through life. Additionally, I would like to thank the entire wrestling community, my dissertation committee, and the St. John's University School of Education for helping me persist in achieving my academic goals.

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CHAPTER 1: INTRODUCTION

The United States has struggled to improve public education for more than two decades (CEP, 2020). NCES (1997) report notes that the problems in public education must be addressed as there are up to 30 percent of high school freshmen who do not obtain a high school diploma. In 2002, the United States Congress passed the “No Child Left Behind” (NCLB) Act to ensure the academic success of every child within the United States (U.S. Congress, 2002). The purpose of NCLB was to close the achievement gap and ensure education equality for all students regardless of socio-economic status, ethnicity, and gender (U.S. Congress, 2015). The signed act mandated that all students were to obtain a level of proficiency on their state standardized assessment by 2014. Reformers of education also believed that the achievement gap could close by demanding school accountability and offering parents and students educational choices. The objective of offering educational choice was to provide an alternative option to parents and students residing in low performing school districts based on standardized assessment (Roberts, 2012). And charter schools essentially represent that alternative option for parents and students in low performing traditional public school districts (Bifulco et al., 2007; Buddin & Zimmer, 2005).

The shift from traditional public schools to charter schools is substantiated by compelling reasons (Kaplan & Owings, 2014). For one, living in a competitive world, students are expected to seek high academic achievement that will equip them with skills and competencies for a better competitive advantage in the future. Additionally, parents and key stakeholders in education are expected to steer up the process by enabling student placement and selection in institutions that promote such growth.

Charter schools in the United States began in 1992 in St Paul, Minnesota. People wanted a new form of public school operating outside the boundaries of traditional public school regulations (Hill & Lake, 2017) and serving as laboratories for education innovations. Charter schools were therefore established by converting pre-existing public school entities and establishing brand new facilities to fulfill their mission and vision. Charter schools in New York City started operating between 2000-2001. Currently, there are 450 charter schools, with 350 functional in New York City. In particular, Nassau County has three public charter schools included as part of this study; they are the top-scoring charter schools in New York (NYSED, 2020).

Three different agencies provide management and licensing of New York City charter schools: the Education Management Organization (EMO), the Community Grown Organization (CGO), and the Charter Management Organization (CMO). CGOs and CMOs are mainly nonprofit, while EMOs are for-profit. CGOs consist of faith-based organizations - a collaboration of teacher-parent groups or other organizations that provide social services to local communities. The population distribution of students in charter schools is as follows: 49% of the students attend CGOs, 29% attend CMOs, and 20% attend EMOs (Hemphill et al., 2016).

Several debates on whether the charters would actually benefit minorities led to the establishment of charter schools in many states with a focus on serving all populations across the United States. To reduce selection bias when enrolling students, schools randomly pick students by a lottery method. However, reports suggest that some charter schools have been “cream-skimming” students in charter schools which involves selecting high performing students for admission, thus raising concerns regarding bias

and discrimination. Despite reports on the cream-skimming activities of charter schools, other reports analyzing achievement gaps between public schools and charter schools state no significant difference in academic achievement between the two types of schools (Cohodes, 2018). Additionally, there is no substantial evidence that charter schools record better educational benefits compared to their public school counterparts. However, several studies suggest that charters in urban and low-income neighborhoods can improve student test scores (Cohodes, 2018).

Charter schools are mainly located in socially and economically disadvantaged neighborhoods, with the largest population of the students being Hispanics and Blacks. For instance, according to the United States Census Bureau of 2010, only 17.1% of adults in NYC neighborhoods housing charter schools had a college degree. Additionally, 57.1% of households in those neighborhoods were headed by single parents. The Census Bureau of 2010 showed the median income of families with children in charter schools in Nassau County to be \$28,947.00 compared to \$43,018.00 for families with children in traditional schools. This disparity impacts academic achievement because it determines parents' ability to purchase learning materials for their children attending charter schools. The availability of learning resource centers with relevant study materials in such neighborhoods may also factor in.

In addition to household income, charter school mission statements can also be an important predictor of academic achievement. The mission of charter schools vary depending on their primary focus. They are curriculum-driven, child-centered based on student demographics, and heavily inclined toward academic excellence (Berends et al., 2017). Many resources are therefore allocated to areas that foster such academic growths.

This includes hiring more teachers, investing in teaching and learning materials, and scheduling weekend classes (Kaplan & Owings, 2014).

School policies governing charter schools vary from those of the traditional schools, which are run by strict state policies. Since charter schools are independent, they exercise a high level of governance surrounding internal student evaluations, the number of school days and learning hours, curriculum development, and the school year's length. For example, the vast majority of charter schools in New York City have 90 or more hours per day allocated to learning math at the elementary level. In comparison, the traditional public schools allocate 60-75 hours for math exercises daily, depending on the grade. Since most charter schools serve the disadvantaged population, they tailor their policies to benefit the community being served and to meet the expectations of those in authority.

Math and English language curricula are not dominant in New York City charter schools although a significant percentage of students experience Saxon math (39%) and everyday math (30%) (Zacher-Pandya, 2015.) This is contrary to traditional schools that outline math and reading among the main subjects in their curriculum. Evaluating how these differences may influence achievement in standardized state tests is of importance.

Statement of the Problem

For more than two decades, the United States public education system has struggled to improve (Walk, 2004). The National Academies Press (2003) notes that the American education system has failed to provide educational programs to support students' engagement with learning activities associated with high standards of learning. The No Child Left Behind Act passed by the United States Congress in 2002 was created

to ensure academic achievement for every child. The Act gave birth to alternative academic programs, i.e. charter schools providing educational choice for families attending low performing schools. Education choice is an attempt to help close the achievement gap. Many researchers have attempted to determine the effectiveness of charter schools versus traditional public schools based on standardized academic assessment. But research findings comparing the academic achievement of charter schools with that of traditional public schools have produced mixed results (Cohodes, 2018). While some researchers argue that the performance of charter schools is better than that of public schools, other studies contradict that argument. And the extent to which academic performance at charter schools differ from neighboring public schools (based on state standardized assessments) is not known in Nassau County, New York. When both types of schools are compared over a period of time, there is a lot of inconsistency. Thus, there is a need for more research to clarify this.

Rationale

Tyack and Cuban (1995) argue that the improvement of education and our society started with public school reform. This education reform movement aimed to provide well-rounded schooling that would compete with the world (Sahin et al., 2017). Charter schools joined the movement to reform education and to provide alternative choices to families in low performing schools. The hope was to provide an alternative education that would yield better outcomes for all students, regardless of ethnic and socioeconomic status. But the charter school movement has been highly criticized for a variety of reasons, including performance in comparison to public schools. While some researchers argue that charter schools perform better, others contradict that argument. Moreover,

there is limited research on the effectiveness of charter schools in Nassau County. Due to the rapid growth of charter schools in that county, it is necessary to examine whether charter schools outperform traditional public schools. This quantitative study will examine the 2018-2019, 8th grade New York State Standardized Mathematics and English Language Arts (ELA) exams of high need traditional public and charter schools in Nassau County, New York. This examination will provide more clarity on the effectiveness of charter schools versus public schools based on New York State Standardized exams in said county.

School Enrollment and Performance

Over the past 15 years, charter schools have increased student enrollment by an average of 4 % every year, while traditional schools have been experiencing a growth rate of 1% every year. Even though the district school population remains higher (National Alliance for Public Charter Schools, 2016), with the rising number of charter schools, it is expected that charter schools will enable healthy competition with their traditional counterparts, hence improving the academic achievement of students in both categories. Additionally, according to a report released in 2019 by the National Center for Education Statistics, charter school enrollment for the 2016-2017 academic year was as follows: 33% Hispanic, 32% White, and 26% Black. Comparative figures for traditional public schools were 46% White, 43% Black, and 11% Hispanic (National Alliance for Public Charter Schools, 2016). The existing demographics may have been a direct result of choice as White students prefer traditional schools over charter schools. Still, this variation in student demographics may have an impact on achievement in language assessment tests. Achievement data also indicate that Black students in traditional public

schools have smaller annual academic learning gains in math and reading than the average White student in those schools. However, Black charter school students show similar learning growth to White public school students in math and reading (CREDO, 2019).

It is also assumed that standardized exams equalize students irrespective of social-economic or racial background. For New York charter schools, however, student performance in state standardized tests is lower than that of traditional public schools. Further, a 2011 study conducted by the Education Research Centre (ERC) evaluating the performance of charter schools and public schools from 2009-2010 showed that charter schools did better than traditional public schools. However, research reveals that for reading and math, traditional public schools performed better at lower grades while charter schools performed better in upper classes (Stuit & Smith, 2010). Moreover, comparative research on achievement in traditional public schools versus that of charter schools has produced mixed results (Cohodes, 2018) - a clear indicator of the need to carry out more intensive studies.

From another vantage point, achievement in state standardized tests directly influences-achievement in international examinations. Research conducted by the Economic Policy Institute suggests that students who perform well in state-mandated studies have a higher probability of passing international examinations than their counterparts. When federal data were used to compare achievement in PISA tests, the U.S. recorded lower performance than other post-industrial countries such as Germany, France, and Canada (Biashara, 2017). In the wake of emerging economic leadership, the

United States needs to close the achievement gap among Black and Hispanic students to improve students' ability to perform at international levels.

Traditionally, state tests are used in improving schools and advising policy makers and stakeholders in the education sector. The No Child Left Behind Act states that every child must take standardized state tests to indicate proficiency. Schools are therefore held accountable for the consequences of underperforming in such trials. Poor performance is detrimental to federal-state funding and the prosperity of schools (Horwitz, 2018). The declining trend on academic achievement in state tests, then, may be perceived as a negative indicator of the quality of education offered in charter schools (Malkus, 2016). Consequences may include retaining licenses to operate or even total shutdown. Such outcomes may hinder potential job opportunities and livelihood loss which would be harmful to the families that rely on the operation of charter schools for their livelihood (Carnoy & Rothstein, 2013). And since most charter schools serve minorities, poor performance may also shatter the aspirations of children in marginalized regions, and the poverty level in such communities may continue spiking.

A survey on the effectiveness of charter schools and traditional public schools on academic performance (National Bureau of Economic Research, 2013) notes that, while controlling for differences in population, charter schools are not outperforming the high need public schools; however, a good number of the charters do better than the average traditional public school (Dennis et al., 2015). Data from polls indicate that, increasingly, charter schools are gaining support from stakeholders and the public, particularly if these trends continue to show a positive impact on students' academic achievement. Additionally, the results of state-mandated exams may be a significant determinant in

securing employment for teachers and curriculum developers. And the results may also directly impact students' decisions in future career choice.

Research indicates, too, that among all variables under the school's control, the transformational power of the teacher is the most potent influence on student academic achievement. According to a study carried out in Massachusetts, the majority of teachers who participated in the study felt that standardized tests were used to test their level of competency. Twenty percent of the interviewed respondents strongly agreed that student achievement was influenced by teachers with all other school-related variables under control. Yet teachers' qualifications and experience in charter schools are lower compared to their counterparts in traditional public schools (Texas Center for Educational Research, 2003). This translates to achievement in students' assessment tests being an indication of teacher competency, skills, and knowledge; teaching habits; learning environment; and learners' concept mastery. Researchers have also found that teacher attrition rate is higher in charter schools (31.1%) than in traditional public schools (11-14%) (Winters, 2015). Thus, there is also a need to carry out more research to investigate how teachers' characteristics impact academic achievement.

Studies suggest that most teachers who relocate to charter schools from traditional public schools are underqualified (Wang, Jialing, 2019). This is problematic as students who join charter schools have a lower achievement level than those who join traditional public schools. In fact, some charter schools target dropouts from low-income families based on the school's mission and program design (Wang, Jialing, 2019). A random field trial study found that the probability of Black students applying to New York City charter schools was higher than that of Hispanic or ELL students and that these students recorded

low performance at entry compared to those joining traditional public schools. Therefore, students with lower intellectual abilities are more likely to be in charter schools. When analyzing the possible causes of variation in academic achievement in charter schools, the racial and cultural background of its students are paramount. Uttermann (2017) found that students who enrolled in charter schools through the lottery were Hispanics (45%) and Blacks (40%). And only English language learners experienced gains in English Language Arts (ELA). In other categories, Hispanics and Blacks classified as living in poverty showed no significant improvements (CREDO, 2019).

The community served by the two division of schools is significant to this study; thus, a more robust comparison should be made between their students and within similar familial and community environments in order to identify existing differences. Failure to address the quality of performance in standardized tests between charter and public schools poses a short-term and long-term adverse effect, not only at state level but nationally as well. The public image of the two divisions of schools will be affected. Additionally, resource allocations in the form of school funding would be deemed a waste if high academic achievement is not realized on national and international levels. Community growth and development would also be thwarted as underqualified graduates would be less equipped with skills that are vital to improving economic and social standards.

According to Hoxby and Murarka (2009), charter schools in New York City outsmart the traditional communal learning institutions in assessment scores; that is, the average scores in a charter are higher than those of a traditional public school. The variance in academic performance and presentations between the traditional communal school and

the charter school in New York City significantly points out the massive difference in school quality and student learning in both charter and traditional communal schools. However, studies and research have extrapolated and pinpointed that not all the charter learning institutions in New York City are significant in providing quality education. About half of the charter learning institutions or schools in New York City are more effective than traditional communal or public schools. However, a small number of charter schools are correlated with negative impacts on student outcomes (Brewer & Ahn, 2017).

In terms of resources, traditional public schools receive more resources per student than what the charter schools receive per student. This has raised an unanswered question of whether the difference in resource allocation affects school quality and effectiveness. According to Knight and Toenjes (2020), the difference in the allocation of the resources doesn't affect the quality and the effectiveness of a given school. To date, charter school resources are less compared to the resources allocated to the traditional public schools; yet at least a half of the charters outshine most of the traditional public schools with respect to student achievement (grades).

It is assumed that charter schools systematically remove students who seem to be challenging to educate and retain the more astute students. However, academic research literature posits that this is not the case. Brewer and Ahn (2017) argue that students in charter learning institutions are less likely to depart, and traditional public school students are more likely to leave, particularly after experiencing demographic changes and differences. However, according to Winters et al. (2015), students in charter schools are capable of leaving their school for another school in a different district or city just like students from traditional public schools. Winters et al. (2015) compared and contrasted

the mobility of students either registered in a charter learning institution or a traditional public learning institution and deduced that about 70% of students who were originally registered in a charter school remained in that school. However, in the traditional public school, only 56% of the students remained at the school in which they were originally enrolled. Moreover, Winters et al. (2017) extrapolated that the attrition rate of students between charter and traditional schools was similar. Still, the attrition rate in charter schools was slightly lower than that associated with traditional public schools in New York City (Winters et al., 2017).

Purpose of the Study

There have been more than three K-12 charter schools established in the last ten years in Nassau County, New York. Thus, the motivation behind this study stems from the rapid growth of charter schools in Nassau County in the last decade, which warrants a comparison of the efficacy of the two public school systems (traditional public schools and charter schools). This study, then, will investigate the difference in academic achievement between charter schools and traditional public schools in Nassau County. An evaluation of the performance of traditional public schools versus charter schools will help to determine which academic system is most effective in serving low socioeconomic (low SES) communities in Nassau County. The study will use the 8th Grade New York State Standardized Exams (Math and ELA) as a measure of comparison between the two school types serving high need students (low SES) in said county.

Theoretical Frameworks

The phenomenon and emergence of charter schools is tied to many reasons (Mehan & Chang, 2011). One of the claims made is that public schools fail to provide

equal opportunity to all students in education (Godsey, 2015), thus the rationale for charter school initiatives supported by the belief that competition between charter schools and traditional public schools will elicit success from failing traditional public schools (Mehan & Chang, 2011). The option of charter schools is considered a reliable alternative for public education (Hart & Burr, 1996). Rapid growth of charter schools has led to more studies comparing the performance of charter schools to public schools. The research assumption is that charter schools give teachers responsibility and control over learning institutes, and learners take responsibility for their habits and their learning which would yield success. The longitudinal analyses look at the inefficiency of American traditional public schools, while exploring self-governing control and dysfunction as the main causative agents for failure within the traditional public school system.

Charter school proponents hope that the new combination of accountability and autonomy will produce advanced study programs in comparison to local public substitutes, leading to better academic performances in charter schools. The research will look at the logic of the school efficiency theory as it pertains to charter schools. If charter school students outperform their peers in the traditional public school environment on State standardized exams, charter schools will argue their effectiveness with respect to student learning and career preparation (Harris , 2020).

Social Inequality Theory

Researchers argue that school choice is the privatization of education (Lubienski, 2006). Privatization heightens differences in education without taking into consideration educational goals and leaves learning institutions in an undesirable state. Ashby (2011)

states that segregation of schools is a major concern in American schools, greatly affecting student performance. Segregation entrenches positive or negative characteristics within schools like teacher expectations, academic climate, resources, and such. Thus, Black students discriminated against due to their skin color and relegated to inferior academic conditions - including reduced rigor, low expectations, and more - perform poorly when compared to their White classmates (Brown & Aliffi, 2020). On the other hand, students who enroll in affluent schools with a myriad of high-quality resources and support ultimately reap the benefits of excellent academic qualifications.

Social Inequality Theory arguments, then, are based on on the idea of consequences related to a student's performance due to social-economic stratification, religion, and racial seclusion. The theory posits that the learning institution has little impact on a student's development, depending on their origins. According to Brown-Aliffi (2020), the differences in race are bound to widen the performance gaps between White students and minority students and among students from affluent and low-income families. The racial make-up of the student body is essential in predicting students who pass assessment tests in reading and math texts as the racial balance of schools pointedly influences success rates.

Market Competition Theory

Researchers argue that institutional settings in education are crucial. Furthermore, bureaucracy and unswerving democracy in traditional public schools have altered innovation and delayed educational progress. Fox and Buchanan (2017) argue, then, that there is a need to restructure traditional schools by embracing market-like competition to enable equal competition with charter schools.

The most convincing and influential arguments about charter schools are the market options and the competitive outcomes that align with the Market Competition Theory. The market competition approach supports providing parents and students with options to introduce competition into the public school system. This would then encourage productivity within the education sector by way of imposed threats from charter schools to procure, from public schools, both the students and the monetary resources allocated for the latter. The expectation is that charter schools will impact the traditional public school system, and in so doing, other schools will respond accordingly to the market competition. The theory points out the markets and the competitive pressure necessary to achieve and maintain consumers, generate effectiveness, stimulate innovation, engage families, and get rid of those not performing (Harris, 2020). The connection between charter schools and the overall theory of markets make the charter school concept appealing. If charter schools attract greater performing students from traditional public schools, traditional public schools would experience a decrease in enrollment. Also, if students in charter schools with study challenges are served better than in traditional public schools, then the performance of these learners would be increased.

Research questions

The researcher derived the following research question to test the hypothesis.

1. Rq: Is there a significant difference in academic achievement among 8th-grade students in high-need public schools vs. charter schools as measured by the New York State Standardized ELA exams?

H⁰: There is no significant difference in academic achievement among 8th-grade students in high-need public schools vs. charter schools as measured by the New York State Standardized ELA exams.

H¹: There is a significant difference in academic achievement among 8th-grade students in high-need public schools vs. charter schools as measured by the New York State Standardized ELA exams.

2. Rq: Is there a significant difference in academic achievement among 8th-grade students in high-need public schools vs. charter schools as measured by the New York State Standardized math exams?

H⁰: There is no significant difference in academic achievement among 8th-grade students in high-need public schools vs. charter schools as measured by the New York State Standardized math exams.

H¹: There is a significant difference in academic achievement among 8th-grade students in high-need public schools vs. charter schools as measured by the New York Standardized math exams.

Definition of Terms

Analysis of Variance (ANOVA) - This is a statistical method used in statistics in order to differentiate an experimental collective unpredictability found inside a data set in various fragments.

Charter Management Organization (CMO) - A nonprofit entity that manages two or more charter schools. CMOs often provide back office functions for charter schools to take advantage of economies of scale, but some also provide a wider range

of services, including hiring, professional development, data analysis, public relations, and advocacy.

Charter School - a school that is funded by the government although its operations are totally independent, including its systems and locations.

Community Growth Organization (CGO) - This is a not-for-profit community-based organization whose practices are intended to improve quality of life for low income and underserved communities.

Education Management Organization (EMO) – A for-profit entity that manages charter schools and performs similar functions as CMOs. EMOs generally charge a management fee for their services to charter schools.

Education Research Center (ERC) - This is a center for education excellence that is internationally recognized in education evaluation, assessment, and research.

English Language Arts (ELA) – ELA combines the study of English and language arts and consists of five basic categories: reading, writing, speaking, listening, and visual analysis.

New York State Education Department (NYSED) - (data.nysed.gov) – An organization whose mission is to “raise the knowledge, skill, and opportunity of all the people in New York” (NYSED, 2018).

Performance Index Score (PIS) - PIS is the measure of achievement for every student on each formal test. The performance index score indicates the number of students that have attained the basic educational expectation.

Post hoc test - A test that is used after finding significant results in statistics in order to identify where the differences truly lie.

Probability Value (P-value) - This is the likelihood of obtaining end results of an arithmetical hypothesis test (Silvestri, 2018). This method of calculation hopes to illustrate the correctness of the null hypothesis.

Science Technology Engineering Mathematics - These are basic academic disciplines that are offered as basic subjects in educational institutions.

State-mandate - A legal obligation established by the state which requires a local government to deliver a specific activity or provide given services which are in line with minimum state standards

Traditional public schools (TPS) - These are schools that are teacher-centered and stress basic educational practices (Jefferson, 2004). They are mainly concerned with basic subjects such as mathematics, science, social studies, reading, and writing.

CHAPTER 2: LITERATURE REVIEW

The following review analyzes an existing body of literature on the movement of charter schools. It is a body of knowledge contributing to a comparative study of school achievement and progress in charter schools and traditional public schools in Nassau County, New York. The comparative information evaluates the effectiveness of the teaching practices used in Nassau County charter schools that perform better than traditional public schools in the area. In addition, the review of literature will explore the history of charter schools in the United States of America, the history of public schools in the United States of America, the success of charter schools, the the success of traditional public schools in low socioeconomic areas, types of charter schools, the organizational structure of charter schools, the academic structure of charter school, the difference between charter and traditional public schools, socioeconomic factors affecting charter and public schools, and a description of the nature of the literature and summary of the literature review.

Historically, parents and guardians in the United States have had the privilege of selecting among several types of academic institutions to educate their children. These choices include magnet schools, public schools, parochial schools, nonsectarian private schools, and the recent, publicly funded charter schools. But public schools are the most accessed due to their “open enrollment” status and financial affordability even in the face of questionable performance. Still, Karaim (2017) points out that if the Market Competition Theory Model were to be applied to public schools, then performance within traditional public schools would significantly improve due to increased competition with the publicly funded charter schools, which are driven by stellar academics. According to the theory,

market competition would stimulate productivity within the education sector, particularly in the face of consistent, positive test results. Yet Schul (2019) did not see any evidence to support that this competition impacts traditional school performance, as explained by student achievement on standardized tests. With potentiality for the expansion of charter schools due to federal funding in Nassau County, increased questions abound on charter schools' academic performance on standardized tests compared to that of traditional public schools. Prior to engaging in an assessment, however, it is crucial to understand how charter schools work.

The increased popularity of charter schools has led to great polarization in educators, parents, and policymakers. Unlike private schools or religiously associated institutions that demand payment of tuition, charter schools are publicly funded. Statutorily, academic achievement in traditional Nassau County public schools is determined by performance on state-mandated tests. These test results ultimately dictate where charter schools will then be situated. The state also initiates other charter schools in districts where traditional public schools have had low-performance levels. A recent study conducted by Schul (2019) indicates that most parents are contented with their children's charter school education. This contentment concurs with the upturn of charter schools nationwide (Goldring & Cravens, 2017). However, the incremental increase of charter schools has not answered whether this particular school choice leads to improvements in academic achievement for students. In fact, when analyzing achievement data from Nassau County, New York, Blazer (2010) found no significant positive performance impacts of charter schools when compared to those of traditional public schools. Since research on

charter school selections in Nassau County indicates no improvement, this raises issues with respect to the advantages of charter schools in other states.

Charter Schools: Organization, Structure, & Impact on Student Performance

The federal Elementary and Secondary Education Act of 1965 necessitates all learners in every state to be examined yearly in their math studies. Charter schools are public schools operated independently and can be quickly closed if students are not performing up to standard. Leaders at charter schools are given authority over staffing, budgeting, curriculum, and other programs to achieve their learners' individual needs. The school's primary goal is to accomplish the expected standards in return for elasticity in its education method. Statistics indicate that New York City Charter Schools record better test scores than the city's traditional public schools. The disparity in their performances can be attributed to various factors like differences among the students and instruction quality (Brandsman & Sibthorp, 2020).

In a study carried out by Sleeter and Carmona (2017), students in charter schools rarely leave their schools for other schools in the city when compared to students in traditional public schools. A study illustrating student enrollment shows that after enrolling, about 64% of the students in a charter school stayed in that school for four years, unlike 56% of students who enrolled in traditional public schools. Tell (2016) noted that charter schools differ from private and public schools in the United States, but they have a considerable effect on the enrollment criteria of private and public schools as they control the differences in demographic, social, and economic environments in every district.

More than 8% of charter elementary students and 11 % of their middle and high school students relocate from private schools. Charter schools provide families with an opportunity to decide which school best suits their children’s educational needs. Instructors opt to form and work in schools to control the study environment for the learners and themselves directly. Charter schools hire teachers who are certified—as those who work in traditional public schools—but can also hire experts with substantial experience who are not necessarily credentialed. Also, charter management sponsors schools that have the learners’ interests at heart. Management observes the schools to assess their success. Additionally, management is in charge of the schools’ operations and academic honor and have the right to close any school that doesn't meet standards.

Weiler and Vogel (2015) indicate that several charter schools emphasize the basics, including writing, reading, and traditional school subjects with problematic areas. Some schools have music programs or unique arts and some resemble traditional schools in serving a particular community. The main reason for charter schools' existence is to ensure that all children can easily access quality education. Therefore, with this freedom, charters put in place excellent standards that they must meet to remain relevant.

On the contrary, so many traditional district schools remain in operation, and their poor performance is not considered. Charter schools put positive pressure on the traditional public school system by meeting teacher, student, and parent needs. They offer exciting and sustainable education in a general and personal manner. Charter schools mostly define their hard work as an association resulting from public schools that were poorly managed. Several charter schools were established by the association of parents and leaders in the local community who craved a more prominent role in shaping school

quality, as is the case in Nassau County. At the beginning of every school year, most charter schools start by requesting willing parents to sign an agreement to stand with the school in supporting them and their children's learning.

Targeting charter schools around Nassau County, Fryer (2011) studied the student data on enrollment and achievement from the years 2002-2010, including the rates of proficiency in reading and math, White enrollment percentage, performance index scores, disadvantaged enrollment percentage, the ratio of pupil to teacher, the instructional objectives of each pupil, and the type of schools. The research also explored if traditional public schools improved their performance due to added competition from nearby charter schools. The contingent variables were proficient on advanced scores for third- and sixth-grade reading and math exams and the Performance Index Scores (PIS) for every institution. However, Fryer (2011) was more interested in invalidity, which posed a query on whether the performance in traditional public schools was due to the competition caused by charter schools or if it was a result of federal legislation. Charter institutions do not open just anywhere, Charters are established in communities where traditional public schools have failed to meet federal and state mandated standards. Blazer (2010) concluded that traditional public schools showed an improvement, which might have been caused by the risk of losing enrollment from various charter school competition and changing federal mandates.

Analysis by the Center for Research on Education Outcomes (CREDO) asserts the educational success of charter schools, especially with the investigations of 2009 and 2013. CREDO (2013) reports that, while the achievements of charter schools and public schools are almost the same, poor students going to charter schools record better

performance. In Nassau County specifically, charter schools played a significant role in decreasing the achievement gap for minority students. The study reports that poor Black students who enroll in charter schools were afforded an extra 29 days of reading and studying and an extra 36 days of math over the course of an academic year when compared to those in traditional public schools. Urban Black students made significant strides. For them, being enrolled in a charter school meant a 33% increase in their test scores, particularly in small urban areas. The average student in charter schools also experiences an improvement in his/her math grades, unlike in other schools.

Charter schools have freedom in management and a more robust curriculum as compared to traditional public schools (Malloy, Wohlstetter, 2003). However, to record good performance, they must follow similar regulations to those of public schools. They are not as heavily assessed as public schools, which allows them to dedicate most of their time and resources to accomplishing their academic goals. According to Winer and Crimm (2015), most charter schools opt to concentrate on a particular field like performing arts, technology, or science. Therefore, learners who enroll in these schools have the freedom to opt for classes that best suit their interests and abilities. This results in learners who participate better in their studies with minimal pressure as they enjoy their lessons. Some charter schools permit students to select a major from the beginning of a school year for continued focus in college which helps improve a student's performance from the onset.

Most charter schools outperform public schools because they have fewer students than their traditional counterparts (Bettinger, 2005). Fewer students result in a smaller teacher to student ratio and more personalized learning which is significantly beneficial

to the learner (Canada, 2008). Close monitoring of the students enables teachers to learn their strong and weak points and correct or enhance them. By concentrating on each learner's needs, teachers ensure that he or she is getting a quality education and may seek help from the guardians or the parents to achieve desired results.

Most charter schools don't simply focus on student performance in the short-term, but they also focus acutely on preparing students for future citizenship. The teachers do not offer inactive education that emphasizes memorization and lecturing. Instead, they encourage project-based studies, providing the students with the chance to become managers of their studies and make use of the experiences gathered even in life after school. The academic rigor can enable even a hyperactive child to concentrate and produce good academic results. Traditional public schools, on the other hand, may not focus on students who cannot sit still and concentrate as they have many students who require attention. According to Vavrus (2015), charter schools encourage studying without harsh punishments when dealing with hyperactivity. They employ experiential teaching and other innovation as compared to public schools since they are more independent.

Public schools have many students lacking a sense of belonging to a community. Thus, it might be difficult for some students to socialize in such a setup. The ideas and feelings that they don't belong can make students detest school, translating to poor academic performance (Sleeter & Carmona, 2017). Charter schools have programs that encourage social behavior and help students achieve their educational goals. The significantly large population of students in public schools do not allow these schools to encourage close-knit communities. Yet research indicates that traditional public schools

have large numbers of students and significant diversity in ethnicity, religion, culture, etc. They have students who can exchange different ideas and abilities among themselves compared to those in charter schools. Canada (2018) observes that schools with large populations expose students to varying personalities enabling them to accept the differences in others with minimal or no judgment. This acceptance then prepares them for future opportunities involving potential travel to different countries where they will encounter different people when furthering their studies. This exposure helps them accommodate ideologies that differ from theirs, shaping them as informed citizens and building their confidence about their beliefs.

In New York, a charter school may be authorized by the State University of New York via Charter School Institute (CSI). Parents must choose between taking their children to preferred schools, depending on the locality and tuition. Critics of charter schools debate that charter schools discriminate against students. Most charter schools, however, promote diversity and boast a more varied student body as they are open to all students. On the other hand, traditional schools have less control since they must solicit participation from available neighborhood residents.

Across all the states in America, charter schools have emerged as worthy competitors to traditional public schools (Walberg, 2017). Consequently, they have grown tremendously since their initiation in the early '90s, developing and increasing from one school in 1992 to more than six thousand in 2016 and 2017 (NAPCS, 2017). In the last decade, the pupil admission rate in charter learning institutions across the United States has tripled, enrolling more than three million students to date (NAPCS, 2017). Based on findings, The National Alliance of Public Charter Schools recommended that leaders in

charter schools be given the freedom and the mandate to work in all possible ways to ensure that their students achieve their academic goals. The NAPCS deduced that charter schools would significantly improve in their academic activities if they worked closely together with traditional public schools.

Funded by the state government, traditional public schools, operate on an open admission platform (Higgins & Abowitz, 2011) and based on established laws and regulations applicable to all public schools across the country. Most traditional public schools in the United States are regarded as learning institutions where the governing laws and policies are the primary obligations of the state board of government, such as the local school board (Hess, 2004). Though traditional public schools are not viewed as profit-making institutions, they occasionally deal, and work closely with, teaching suppliers, bus providers, maintenance providers, and meal vendors for profit-making purposes. Moreover, the primary aim and interest of the traditional public school is to serve the public, and per the constitution, traditional public schools are obligated to teach American laws and policies to ensure that students become better citizens of society upon graduation (Hess, 2004).

The recognizable difference between the traditional public school and the charter school is based on several factors. These factors include - but are not limited to - enrollment numbers, student ethnicity, student socio-economic status, and school location (Brewer & Ahn, 2017) which vary depending on the type of school, and in Nassau County, are all correlated with student performance within and between schools. Difference in academic performance creates an achievement gap which leads to inequality in subsequent opportunities (Higgins & Abowitz, 2011).

Various scholars and researchers have attempted to assess whether charter school students outperform and accomplish more than public school students. But this assessment has been difficult to accomplish for several important reasons. First, charter schools vary from county to county. Also, the number of students admitted to the charter school is significantly less than the number of students admitted to traditional public schools (Brewer & Ahn, 2017). Nevertheless, parents across the United States have prioritized and chosen charter schools as the best learning institution for their children due to reduced safety concerns evident in charter schools. This fact was corroborated by a study carried out at the Wisconsin Institute for Law and Liberty evidencing that academic quality may not affect the variation in student enrollment but safety is significant for a school's growth and development. Furthermore, according to the EdChoice (2013), parents preeminently rank discipline and student safety above quality of education and learning environment as their priority when selecting an appropriate school for their children.

Because charter schools in the United States are viewed as safe for children, the perception of a quality education is automatic, which then leads to an increase in student enrollment at these schools and a decline in enrollment at public schools as was the case in New York City between 2007 to 2009 (Winter, 2012).

Types of Charter Schools

At least six different categories of charter schools exist in America and based on perspective, this number can go up to eight or even ten. This is because charter schools can be whatever the schools' owners want them to be, for they are not as regulated by the government as public schools are. This means that if a charter school owner wishes to

create an entirely new category in which only the school lies, it is entirely possible to do so and call it effective marketing.

The most commonly referred to, and recognized types of, charter schools are:

1. STEM: The primary focus here is on mathematics or science and these schools are generally referred to as STEM or STEAM schools. These schools are now branching out into the art of robotics and creating things in general (Bifulco & Ladd, 2006).

2. Project-Based: Schools that entice the designing eye of children and use visual tools over all other forms of learning fall under the category of project-based charter schools. These schools try to evoke the inner artist within children and get them to complete their work in the form of projects so as to better prepare them for secondary education and beyond (Bifulco & Ladd, 2006).

3. Language-Based: As the name suggests, these are the schools that focus predominantly on the learning of more than one language. These schools usually divide their educational material into English and other languages, which can differ from school to school, and they use this dual mode of instruction to get children interested in learning other languages (Bifulco & Ladd, 2006).

4. Place-Based: These are the types of schools that use certain locations as a tool to inspire children to get an education, such as creating a school within a museum (Bifulco & Ladd, 2006).

5. Montessori: Perhaps the most commonly known form of charter schools is the Montessori, where children are sent from a very young age as a preschool so that they may become accustomed to being away from home and working together with other children to achieve their tasks. These schools are a great way for parents to escape their share of

homeschooling and place the burden of teaching everything to their child from scratch on the shoulders of the Montessori teachers (Bifulco & Ladd, 2006).

6. Environmental Schools: These schools specialize in bringing children close to nature and letting them experience life through the environment. Such schools are often known for placing emphasis on learning about how to take care of the environment and the numerous environmental issues of today (Bifulco & Ladd, 2006).

Another form of unofficial charter schools that has come to light in the wake of the ongoing pandemic is Virtual charter schools, where, in order to maintain social distancing, children are taught from home through the use of various video conferencing tools, online testing tools, and online activities. All of the above-mentioned types of schools are found in one way or the other in the State of New York, where parents demand that the high-end price of tuition they are paying be worth something special, which is why chartered schools have developed the tendency to have "specialties" (Gill, 2006).

Ertas (2013) also classified charter institutions into three types: voluntary conversion, start-up, and forced conversion. And he advised that future scientists also organize the data of charter institutions into said categories. Prior to this point, research on charter schools had a narrow scope and often did not include a classification of charters by type. Yet these classifications help scientists know if the charter school emerged from an already existing traditional public school with infrastructure or if the institution is an entirely new charter.

Socioeconomic Factors Affecting Charter Schools

The admissions history of many American colleges provides sufficient evidence that the country has not precluded its socio-economic divide from entering its educational system. Many college students are not granted admission on the grounds of financial disparities, even when the schooling system of the country is divided in a way to ensure that socio-economic status does not play a role in keeping any child from attaining an education (Greene et al., 2006). Setting aside the level of education that children receive from private schools, the nation has failed to ensure equity in the quality of education offered in the public sector.

In the United States, neither charter schools nor public schools have the right to deny a student entry; however, for public schools, the issue is that children from low socio-economic backgrounds are simply not socially or academically prepared to fit in and do well. The schooling system as a whole is focused on enrollment, rendering students' socio-emotional development of lesser priority, which leads to bullying and other issues for those less fortunate (Greene et. al, 2006).

Another contention is that charter schools intrinsically cultivate social and racial stratification. They are enhancements to the typical isolation found in state-funded schools. And because of insufficient variety in the existing diversity they accommodate, they are not better options than schools in a struggling district. (Greene, Forster, & Winters, 2006). States have affirmed that the presence of isolation in contracts is inconvenient to student learning and have consequently proposed racial adjusting rules (Bifulco & Ladd, 2006). Their thinking is that integrated schools: (1) have a positive

relationship to scholarly accomplishment; and (2) improve the probability for minority students to achieve success in the long term in society.

In the American educational system, there is a connection between racial stratification and socio-economic disparities. This truth is difficult to overlook. Be that as it may, racially isolated schools' simple presence doesn't straightforwardly correspond to helpless training. As a general public, they have been wired to accept that there is a racial unevenness; anything that is dominantly dark signifies mediocrity. Yet many charter schools are located in metropolitan areas where the population is majority-minority (Bifulco & Ladd, 2006).

Moreover, in the charter schools, the majority of admissions reflect students who belong to low-income households. Yet these schools wish to model private schools in their behavior and have therefore come up with policies that inhibit the ability of children with special needs to function properly with the rest of the school. More often than not, such children are faced with expulsion in the very beginning of their school year due to one policy issue or another (Roberts, 2012). Charter schools are also run independently. Still, irrespective of this independence, there is a need for each to be in synch with standards provided for that charter so that state funding can be secured. Public schools, however, need to follow all the laws and regulations of the state school board (Roberts, 2012).

Another problem area surrounds compensation for teachers. It is a well known fact that secondary school teachers on a whole are among the most underpaid professionals in American society. Teachers are living hand to mouth due to limited funding directed at schools from public and private sources, whether the school is public

or charter. This leads to minimal pay which lowers the overall quality of education that children are getting since the teachers are not adequately motivated to do their jobs due to inadequate financial rewards.

Researchers Goldring and Cravens (2017) looked at various types of charter schools, and socioeconomic status was factored into the research because of the school location. The two authors explain the history of the African-American accomplishment gap and state that many Black families look to charter schools to solve this problem. Arsen and Ni (2012) also contend that parents of African-American students were not satisfied with traditional public school institutions, and this displeasure explains the reason for their charter attraction. Consequently, Almond (2012) conceptualized "The Black Charter School Effect" to illustrate that public charter schools attract and educate Black students. Of the various questions addressed was, "What are the practices of successful charter schools that best attend to more enormous proportions of Black students?" To answer this question, Karaim (2017) mentioned at least five best practices that comprise the features of charter schools: (a) a clear mission statement emphasizing academic excellence, (b) a high-expectations culture, (c) an atmosphere that best suits college students, (d) a keen emphasis on standardized tests as well as the utilization of consistent intimal assessments, and finally (e) extended school days and longer academic years.

The strategies mentioned above explain the reason why so many students have opted for charter schools. But the trouble of assessing performance is still a reality. Arsen and Ni (2012) affirm the issue. The authors state that regardless of the various studies that have been used to compare the performance between charter schools and traditional public

school students, the conclusion has not yet been made as to whether charter schools have been performing poorer, or much better, when compared to traditional public schools.

Another researcher, Day (2018), found that in about 20 out of 30 states, including Nassau County, Black students had been overrepresented in charter institutions compared to traditional public schools. Day (2018) inspired policymakers to consider the charters that successfully bridged the achievement gap among Black students. Additional research was to help investigate the considerable number of Black students enrolling in charter institutions and to analyze the student population's academic performance. Typically, when evaluating a school's quality, many researchers focus mostly on academic gains. Arsen and Ni (2012) notes that whenever segregation occurs with the charter school, introduction is compelled by family socioeconomic features, not ethnic or racial features of either of the families opting for these institutions or the schools by themselves.

With various types of educational institutions available to the Nassau County student population as a result of the county's inter-district option policy, Rotberg and Glazer (2018) used a Monte Carlo Simulation to analyze how these choices affected stratification along economic, academic, and ethnic/racial lines, both empirically and theoretically. They analyzed data between the years 2012-2016, including every student who attended public schools. The theoretical analysis showed that participant characteristics determined more massive stratification levels than participants' schooling options. Data obtained from the empirical analysis indicated that Nassau's inter-district option program increased socioeconomic stratification slightly, while racial stratification decreased. The magnitude of the decrease in racial stratification was large compared to the rise in socioeconomic stratification, though it was still small.

To further determine whether school options benefit students, Karaim (2017) analyzed a government database that listed the social and economic factors of all students. Karaim (2017) found that most of the parents chose schools where many pupils shared similar economic, racial, or lifestyle constructs. For instance, itinerant families selected schools that appeared to have a higher immigration rate. The researchers recommended further research on student preferences because those preferences influence school results and choice patterns.

Incorporating charter schools into society can be beneficial since charter schools create healthy competition for public schools, producing an environment where a quality education is the objective. However, some scholars believe that charter schools' existence in society prejudices the existence of non-charter public schools. For quite a long time, there has been an alliance and partnership among charter and traditional public school investors across all states in America; the query that remains unanswered is why is there a big difference in performance between charter and traditional school students (Ferreya & Kosenok, 2016). An additional question raised by Nassau County stakeholders is whether charter schools affect students' overall academic performance and achievement and whether it's a project worthy of investment. Through research carried out by the Center of Education Reform in 2012, it was extrapolated that charter schools' performance appears to be highly correlated with the caliber of their student body since these schools enroll students who are far more academically prepared than their public school counterparts.

Funding Sources and Impact

Charter schools are said to be contract schools; they are generally publicly funded and tuition-free (Tell, 2015). Most charter schools don't follow the state laws and

regulations, and they typically operate with a high degree of autonomy in terms of scheduling, curriculum, and programs. For a charter school to maintain and sustain its flexibility and autonomy, it is obligated to adhere to its charter's guidelines and policies. According to Telle (2015), the contracts in most charters are generally five years long. A charter school can be revoked and nullified from its charter if it fails to adhere to the charter's policies, standards, and guidelines.

Although the public supports charter schools financially, about 85 percent of charter schools are nonprofit (NAPCS, 2017). Based on student attendance and enrollment, charter institutions in America receive financial support from their local state. According to the Center for Education (2017), in the U.S., traditional public schools receive more funds than charter schools, with the average amount disbursed per student estimated at around \$11,000.00. In comparison, a charter school student commands an average of \$8,000.00. Yet charter schools in the United States administer almost the same tests used in non-charter traditional communal schools. Charter learning institutions are generally mission-oriented and test driven. Activities such as hiring new teachers, applying for grants, and shopping for vendors in the charter schools are controlled and managed by the charter management organization. Charter schools can differ from one to the other. Some charter schools are science and math-oriented, while others are art-oriented, to mention but a few. They are known for adjusting their curriculum to meet student needs by providing the students with more time for their competencies (Walberg, 2017). Teachers in charter schools have a voice, especially when it comes to the subject they teach. Generally, charter schools attract educators and families with a unique insight with respect to issues on

education, and for whom participation and involvement within the community are usually very high (Hess, 2004).

Characteristics of Students Attending Charter or Traditional Schools

Basing their arguments on their findings and observations, scholars and researchers have tried to note the difference between students attending charter schools and students attending traditional public schools in the United States. For instance, in New York City, students attending charter schools are expected to be majority minority. Their socioeconomic status is also significantly low when compared to students attending traditional public schools (Bifulco & Reback, 2014). And many receive free lunch, thus symbolizing a measure of poverty among charter school enrollees (Bifulco & Reback, 2014).

History of Charter Schools in New York

Charter schools are publicly funded but managed privately by independent groups; thus, they are tuition-free. The schools are autonomously run and have control over their spending plans, staffing, educational programs, and other activities. Also, they hold to similar scholarly responsibility measures as do conventional schools. Each sanction is administered by a Board of Trustees involved in the local area, business, and schooling pioneers (Sass, 2006). Despite their freedom, sanction schools and their Board's charters are considered responsible by the state for the performance of their students. In return for all of the opportunities and benefits that the charter schools get, officials are responsible for conveying educational outcomes in terms of academic results, and there should be sufficient local area demand for the schools to stay open.

Within the United States, the idea of charter schools originated in 1974 when Ray Budde, a World War II veteran and an educator at the University of Massachusetts Amherst, presented the idea of chartering. He suggested that states award contracts to make new, exploratory projects and offices at existing public schools and his ideas caught the attention of Albert Shanker, a long-term leader of the American Federation of Teachers. Although educator associations singularly restrict contracts today, Shanker turned into the development's first significant supporter. Writing in *The New York Times*, he expanded Budde's contention and proposed the foundation of freely financed, autonomously managed schools that would try different approaches to teach exactly 80% of understudies that he assessed traditional schools were not serving well (Sass, 2006). Thus, the charter school concept has been around since the early 70s, when the idea was first put forth for a school system based on the principle of "choice." At the time, some schools already existed following the model of charter schools; however, they were not officially labeled as charter schools. The idea at the time was to develop an autonomous system of schooling where participating schools were meant to operate as privately owned and run businesses and be exempt from many regulations that the public schools had to endure. This made such schools extremely popular for parents who could not send their children to regular schools (Sass, 2006).

Today, charter schools are public schools with self-governing local school boards funded by the state, the local community, and federal funds. According to Fountain (2015), the charter school mandate is via a 'charter' that acts as a contract between the charter school board of representatives and a representative of the chartering bodies. The charter schools emphasize advanced curricula and better instruction methods or other

progressive teaching approaches that distinguish them from traditional public schools. The first law permitting the establishment of charter schools was passed in 1991 in Minnesota. By the 2012-2013 academic years, charter schools had been established in 42 states, including the District of Columbia.

The United States Department of Education data show that, nationally, between the 1999-2000 and 2012-2013 school years, the number of charter schools increased from 1.7 to 6.2 percent, while the number of public charter schools grew by 306 percent (from 1500 to 6100). Fox and Buchanan (2017) argue that charter schools experience the same demographic variations among the students, just like traditional public schools. The number of Hispanic charter school learners increased from 20 to 29 percent as Asian/Pacific Islander learners increased from three to four percent. On the other hand, the number of White students went from 42 to 35 percent, while the number of Black students lessened from 38 to 34 percent. American Indian/Alaska Native learners decreased from two percent to one percent.

History of Traditional Schools in the United States

The concept of public education predates even the creation of the country since there are many signs of the first settlers creating schools for the teaching of puritan academia and studying the Bible, which can be claimed as being the primary start of public schooling in the country. However, it was in 1635 that the government decided that the money being paid by taxpayers would go into servicing the education of their own children. Thus, the concept of a free public school came to be, which is the earliest mention of public schooling in the country that can be found on official records (Sass, 2006).

In terms of New York City in particular, the history of education is far more complex than that. Since the opening of its first school, there has been a desire in the state to become home to fine schools, which, unfortunately, was not possible until the late 1700s. At this point, there was a substantial conflict in views between the Protestants and the Catholics who had settled here in large numbers and who believed that this free education system would bring with it many problematic protestant views of thought to their children (Sass, 2006). To combat this, for a long time, there was a public school system as well as a Catholic school system, both of which operated at the same time and were divided on severe internal religious issues (Sass, 2006).

In the last part of the 1990s, New York controlled the country's biggest state-funded educational system; more than 1,000,000 understudies went to more than 1,000 government-funded schools. Unionization of city educators started in 1916. Currently, the bargaining agent for the present-day staff is the American Federation of Teachers. Somewhat recently, in the twentieth century, the training turned into a circle of ceaseless controversies (Sass, 2006). The post-war mass migration of Whites to the suburbs emptied understudies out of state-funded schools and changed them into minority-overwhelmed establishments, the greater part of whose teachers were White and Jewish.

During the 1960s, a progression of strikes and terrible racial encounters caused a jumble in the city, and in 1969, the state assembly partitioned the city into 32 regions. Hereafter, essential training was to be constrained by chosen administering sheets so instructive objectives could be set up by local communities. Each Board would choose its administrator, yet assets would be distributed by a chancellor of the whole educational system who was named by a civic, chairman-ruled Board of Education (Sass, 2006).

The inconvenient framework worked just irregularly, and by the 1990s, its disappointments were clear. In certain regions, allies of teachers' unions overwhelmed elections that were generally disregarded by electors. In others, alliances of minority occupants introduced helpless executives who made the schools vehicles for support and corruption. Pay levels declined compared with those of rural frameworks, racial isolation in schools was brought about by lodging designs, stratification in the economy expanded, and many tenured educators were blamed for disregarding the extraordinary necessities of minority understudies. Dropouts expanded, execution levels fell sharply, and violence in schools seemed unending. However, in 1999 administrators consented to give up their residency rights as a trade-off for bigger compensation increments which then led to better conditions (Sass, 2006). In spite of this shaky start, the state has now become home to some of the finest primary and secondary educational institutes. Not only has New York mastered sciences and research in the public schooling sphere, but it has also managed to incorporate the arts as a massive role player in the overall education landscape of the state.

Hemphill and Raschka (2016) point out that the concept of a public school was not realized until the land ordinance of 1785, which developed the means to raise funds for its establishment. But the idea of public schools was debated for centuries by policymakers and educationalists. By the 1840s, the majority of the schools in the states were operated by private individuals. Then, a committee was formed in 1893, and members suggested that all public schools should have general education. In the 1980s, coeducation arose, bringing about modern schools and additional room for essential public education. Nonetheless, traditional public education has always operated on a

course of expansion, a move that might have largely contributed to the low quality of education that characterizes public schools in New York and the United States at large. Further, in the 1980s and 1990s, the focus changed from the quality of education in public schools to school performance and how effectively the education funds were being utilized. Data on public schools indicate that public schools have several problems ranging from violence in schools to students not learning much by graduation time to disruptive classrooms. Students of public schools lack both the extrinsic and intrinsic motivation for studies, resulting in inadequate reading skills even after graduation.

Description of the Nature of the Literature

The literature reviewed in this paper follows many concerns in the minds of the audience regarding the country's education system. Charter schools have managed to create a reputation as being an alternative to traditional public schools. Therefore, there was a need for a divide even within the sphere of public education systems (Bifulco & Ladd, 2006).

The majority of the literature reviewed for this paper are peer-reviewed articles from respected journals that wished to analyze certain curiosities regarding the way charter schools and public schools are run in the country. Alternatively, many theses on the subject have been reviewed, using qualitative and quantitative methods to study which of the two systems of public education is better in terms of the students who study in both systems. Additionally, many tests and theories have been used and applied to children's academic performance, which have overall been very mixed. Some studies found that students in charter schools perform better on average, while others state a decline in student performance over consecutive years of education within the charter system (Roberts,

2012). This study aims to evaluate student achievement between public and charter schools in Nassau County, New York. Research gathered from the literature review and study will support which educational system in Nassau County, New York currently yields the best results based on test scores garnered between both school types.

Summary of the Literature Review

The existing literature on the subject of charter and public schools presents several positives and negatives due to the bifurcation of the country's public education system. While many people argue that the split that exists between the private and public sector is enough of an issue as it is and that the further splitting of public education will only create a divide in the people of the country, the fact cannot be denied that the public education system does not have the capacity to take on the number of annual admissions on its own (Roberts, 2012). This means that there is an actual need for both the private sector of education and the public segment of the industry.

This literature review hopes to highlight some of the ways the charter system of education plays its role in easing some of the burden placed on the public education system and the resultant positive and negative aspects that come from such a divide. As evidenced by the literature reviewed in this paper, there is no clear winner in terms of academic performance, and the results usually vary from place to place. Even within the state of New York, there is a divide in the research regarding the effect of school type on student academic performance (Roberts, 2012). So then, the question remains: which is better? And based on what factors? That is yet to be determined. We must survey additional variables and possibly even their interactions before concluding. Currently, the teaching staff is underpaid and over worked in either situation, and the students have to

deal with stress in one way or the other. However, the relaxed environment of charter schools promotes a higher level of innovation than public schools to the benefit of the child. This free-spirited approach to learning has a unique charm about it, which is evidenced only in the children who go to charter schools, as both private and traditional public schools have a way of imposing restrictions that can stifle creativity.

The literature review has indicated mixed results related to charter school efficiency and the query of whether these schools have been loyal to their initial mission and vision of offering improved public education. The Market Competition Theory Model has also suggested that charter schools will outperform traditional public schools; however, current research has not supported this academic performance theory across Nassau County. Besides, there are many inconsistencies in what is currently being studied, which relates to charter institutions. Topics vary from success findings to existing laws of the state, and the impact of race, socioeconomics, and school type. With these variations, it is not easy for researchers and policymakers to examine the achievement or failure of the charter school movement as a whole.

Given that charter school systems differ significantly from one state to another, one of the best ways to evaluate the movement's accomplishment is to evaluate every state individually. So more research is necessary to determine the rate of academic improvement characterized by these schools. Additional research is also required because of the rate at which charter schools are evolving, rapidly outdated current research and creating gaps that must be addressed. In fact, several sources have expressed concern about the inadequacy of the research of charter schools that is available today. Still, present day

studies are attempting to address these issues by measuring consistent variables to simplify future research at the state level.

CHAPTER 3: METHODOLOGY

Research Design

This non-experimental research study used existing data collected by The New York State Education Department (NYSED) to compare student performance between charter schools and traditional public schools in Nassau County, New York. Eighth-grade math and English Language Arts (ELA) test scores from NYS exams were used as a measure, with scores reflecting the 2018 - 2019 academic school year.

Description of the Data Source

Secondary data were downloaded from the New York State Education Department (NYSED) website, a publically available database. NYSED belongs to the state government of New York and has a mandate of providing supervision to all public schools in the state and standardization of all the examinations. The department also supervises other learning institutions, including universities, other higher learning institutions, and public libraries. Further, it gives licenses to different professions to operate in the various state districts.

The website data were obtained from the Student Information Repository System (SIRS) reported by different schools within districts in New York State. Once students sit for the standardized exams, teachers in the various schools mark them, and scores are aggregated and recorded on the students' report forms. The results are then recorded in the SIRS. Schools are given a deadline to report final year results for Mathematics and English Language Arts to the repository.

New York State Exam Validity

The State of New York's English Language Art (ELA) assessments for grades 3-8 consist of multiple choice and constructed responses (Pearson, 2008). The exams are administered within the testers' school district. The multiple choice portion of the exam is scored by the regional information centers and the constructed response items are scored by teachers (Pearson, 2008). New York State ensures that teachers apply the same rigorous scoring standards by providing evidence of internal reliability (Pearson, 2008). The State of New York conducts random annual scoring audits to ensure scoring standards are met. NYSED distributes training materials, sample book scoring, and testing rubrics to support teachers when scoring (Pearson, 2008). School districts also provide in-service training for teachers scoring the exams. Once the data are collected and scored by the regional centers and teachers, Pearson (Professional Company) conducts an audit to assure effectiveness and accuracy (Pearson, 2008). Pearson rescores the constructed response questions, matching them with the audit scores collected by NYSED. Both NYSED and Pearson assure reliability by conducting several analyses (Pearson, 2008). Items means are "calculated to provide a measure of the average agreement between local and audit scoring" (Pearson, 2008). An "intra-class correlation is computed between the local and audit scoring which provides an estimate of the reliability of scoring" (Pearson, 2008). A "weighted kappa statistic is computed to quantify the level of agreement and is evaluated by examining the consensus between the local and audit scoring percentage" (Pearson, 2008). A correlation analysis between the total scores resulting from local and audit scoring is computed to conclude the evaluation of the scoring reliability (Pearson, 2008).

Data Extraction and Cleaning

Data were extracted from the New York State Education Department (NYSED) website. In the database were data from all the counties in the state. Still, only data belonging to charter and traditional public schools in Nassau County were retrieved and used. Some observations in the database were also not available and were disregarded.

The NYSED database consisted of numerous variables that were irrelevant to this study. Consequently, data cleaning was done to ensure that only necessary variables were obtained and any inconsistencies corrected, which involved the removal of outliers that would otherwise have tainted the results. Among the variables available for review were the state-county name, student scores in English language arts and math, whether a school was charter or public and whether it was low need, the grade level of the students, the ethnicity of the students, their SES status, their classification as ELLs, disabled, or general education, and more. Only variables of importance were used.

Missing data

New York State collects data from the ELA and math exams for grades one through eight. This study focused on the test results from the ELA and math state examinations for the eighth grade. Students who opted out of testing affected the sample size from each school; consequently, school data represented only those students who tested within their grade levels. Schools with missing data in our analyses (e.g. missing math data) were handled utilizing listwise deletion, so only complete cases were considered. Reasons for missing data were unknown.

Data Analysis

Data were analyzed using Independent Samples *t*-Tests to assess the difference in math and ELA scores between public schools and charter schools in Nassau County.

Sample Participants

The sample population for this non-experimental research study consisted of 2,250 eighth-grade students enrolled in three (3) charter schools and six (6) public schools in Nassau County, New York in the 2018-2019 school year.

Student demographics

Data were collected on 2,250 students across both types of schools. Of that number, 53% were male, 44% were female, and 3% were unknown. Additionally, Blacks (964) constituted roughly 43% of the students representing both the charter and the public schools, Hispanics (1,016) – 45%, Asians (28) – (1%), Whites (55) – 2%, and those classified as multiracial (10) – .4%. Ethnic orientation for 177 students (8%) was unknown. The data also revealed that 1507 (67%) of the students were categorized as economically disadvantaged, 254 (11%) were ELL learners, and 207 (9%) were considered disabled. See Table 1 and Table 2.

Table 1

Enrollees by Gender and Subject

		<i>Female</i> <i>(44%)</i>	<i>Male</i> <i>(53%)</i>	<i>Total</i>
ELA	Charter	105	80	185
	Public	604	773	1377
Math	Charter	105	80	185
	Public	173	262	435
	Missing			68
			Total	2250

Table 2*Ethnicity of Enrollees*

	<i>ELA</i>	<i>Math</i>	<i>Total</i>
Black	642	322	964
Hispanic	744	272	1016
Asian/Pacific Isl	28	0	28
Whites	55	0	55
Multiracial	10	0	10
Missing			177
Total			2250

CHAPTER 4: RESULTS

To determine whether there was a significant difference in ELA and math performance between charter and public schools, Independent Samples t-Tests were used to analyze data pertaining to 2,250 8th-grade students across nine schools in Nassau County, New York, involving three charter schools and six public schools.

Table 3 below provides an overview of the descriptive statistics for student performance. ELA test scores in public schools reflected a mean score of 596.17, while ELA test scores in charter schools reflected a mean score of 605.33. Concurrently, test scores for math in public schools garnered a mean score 586.00 as opposed to 609.67 for charter schools. And from a comprehensive standpoint, the overall mean score for public schools was 591.08 compared to 607.50 for charter schools.

Table 3

Descriptive Statistics (Mean Scores by School Type)

	<i>Subject</i>	<i>Mean</i>	<i>SD</i>	<i>N</i>
Public	Math	586.00	11.17	6
	ELA	596.17	6.46	6
	Total	591.08	10.19	
Charter	Math	609.67	9.29	3
	ELA	605.33	5.03	3
	Total	607.50	7.09	

As indicated in Tables 4a and 4b below, of the 2,250 students who sat the 2018-2019 NYS ELA and math exams, students in charter schools outperformed public school students in terms of overall performance in math and ELA combined, $t(16) = -3.517, p \leq .003$. The mean number of scores acquired by charter school students ($M = 607.50$) was

higher than those obtained by non-charter school students ($M = 591.08$), the mean difference being 16.42 points. This difference in points ($M = 16.42$) yielded an effect size of $d = 1.75$ – considered a large effect (Cohen, 1988).

Table 4a

T-Test Analysis of Mean NYS Math and ELA Test Scores

<i>School Type</i>	<i>N</i>	<i>Mean</i>	<i>SD</i>	<i>Std. Error Mean</i>
Public	6	591.08	10.193	2.943
Charter	3	607.50	7.092	2.895

Table 4b

T-Test Analysis of Mean NYS Math and ELA Test Scores

		t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference
Mean Scale Score	Equal variances assumed	-3.517	16	.003	-16.417	4.668

More specifically, math scores within the charter schools ($M = 609.67$) were higher than those within the public school setting ($M = 586.00$) and were statistically significant, $t(7) = -3.137$, $p \leq .016$, which yielded a large effect size, $d = 2.21$ for the mean difference ($M = 23.67$).

ELA performance between charter and public schools resulted in near significance, $t(7) = -2.129$, $p \leq .071$ based on a mean charter school score of $M = 605.33$ and a mean public school score of $M = 596.17$.

CHAPTER 5: DISCUSSION

This non-experimental research study was conducted to determine whether there was a difference in performance between charter and public schools as measured by NYS test scores in ELA and math. To address the research questions, data were analyzed based on the records of 2,250 students enrolled in three charter schools and six public schools in Nassau County and who sat the NYS exams for the 2018-2019 school year. Results indicate that there was a statistically significant difference ($p \leq .003$) between the charter schools ($M = 607.50$) and the traditional public schools ($M = 591.08$) in terms of overall performance in math and English Language Arts.

In the past, studies have shown mixed performance results between traditional public schools and charter schools that may have given rise to the rash of charter school developments across the nation and resulting in a six percent increase in their student body yearly. Traditional public schools, on the other hand, pale in comparison with less establishments overall and reports of only a one percent increase in student enrollments in the same time frame. These studies also highlight a disparity in the performance of pupils in the two sets of schools, with different studies giving various reasons for the difference in performance, such as operational independence and student body.

The Center for Research on Education (CREDO) relates the success of charter schools to the fact that their student body consists of students from poor families who tend to work harder and therefore have a tendency to perform better than those from traditional schools (Cohodes, 2018). The extra days and hours these charter schools allot to these children in school give them an added advantage over their public school counterparts and may explain the success of the study's 8th-grade charter school students

despite the fact that 86% of them were economically disadvantaged (as opposed to 65.5% of the public school participants). Traditionally, a low socio-economic status (SES) has been touted by researchers as a major factor in the achievement gap (Lareau, 2003; Winkle-Wagner, 2010). Further, NCES (2015) data corroborate these statements, indicating that children of high SES groups continually surpass those in low SES ranks on standardized tests, particularly Blacks and Hispanics.

Charter schools also admit pupils of different races and ethnicities which promotes a more diverse and inclusive school atmosphere. Cultural and racial diversity have been shown to affect the performance of charter school students when compared to their public school counterparts who, as stated earlier, mainly fraternize with students from their local neighborhood. In many instances, neighborhood schools are confined by homogeneity; thus, the students have a lower competitive advantage when compared to students in constant contact with other students from various walks of life.

Cultural diversity is an important variable in this business of academic success because it can speak to the level of family involvement children are subjected to. Many cultures instill expectations from the very early stages of a child's existence and can make a tremendous difference in a his/her disposition to education and success, irrespective of race and SES level. In fact, Henderson and Berla (1994) assert that the family into which children are born is most often the best predictor of their academic and life success. For with adequate support, influence, and pressure, they will excel against all odds. In fact, a culturally diverse environment has been linked to gains in critical thinking, team collaboration, and leadership traits (Hurtado, 2001).

Cultural and racial diversity also promote an environment that heightens students' sense of community and belonging. Many students have difficulty adjusting to a new academic environment, but that difficulty decreases with adequate representation within the dominant culture which positively impacts academic success. Per Astin (1993) a student's peer group is the greatest source of influence on his/her growth and development in the academic environment. The greater the social interactions between students and their peers, the greater their ability to integrate and the greater their sense of belonging which positively impacts academic success. The charter school environment encourages this sense of community which ultimately helps students achieve their educational goals. Unfortunately, for this research study, much of the data under ethnicity was missing, making it difficult to assess any potential relationship between the overall ethnic composition at the schools and the realized academic success of the participating students. Further, although data supported that 54% of the entire charter population were Black and 22% were Hispanic, these categories were not further refined to indicate their cultural association (e.g. Caribbean, African, etc.). Data on multi-racial origins were negligible.

The success realized by this study's charter population also extended to the specific subject areas under investigation. Based on *t*-test results, the 2018-2019 math test scores from this population ($M = 609.67$) surpassed those obtained within the public school setting ($M = 586.00$) and were statistically significant ($p \leq .016$). Additionally, ELA test scores for said charter school population achieved near significant results, $t(7) = -2.129, p \leq .071$. Bettinger (2005) posits that most charter schools outperform public schools because they have fewer students than their traditional counterparts. Fewer

students result in a smaller teacher to student ratio and more personalized learning (Canada, 2008). Close monitoring of the students enables teachers to learn their strengths and weaknesses in order to correct and enhance them. Furthermore, teachers within charter schools encourage project-based studies, providing students with an opportunity to steward their own education and leverage their experiences beyond school.

In light of the research results, a comparison of the average number of students enrolled within the participating charter schools (980) with those in the public school setting (5,521) may offer some support for these researchers' claims on school size. Additionally, teacher to student ratios ranged from 12:1 to 17:1 with a mean of 14:1 for the charter schools versus 11:1 to 19:1, also with a mean of 14:1 for the public schools.

Positive research results could also be linked to the fact that two of the three charter schools represented utilized a project-based learning (PBL) curriculum while only one of the six public schools had adopted an inquiry-based learning (IBL) format that was recently implemented in 2018. In project-based learning, the project is the instrument used to teach the important knowledge and skills student need to learn; "the project contains and frames curriculum and instruction" (What is PBL?, n.d.). Both PBL and IBL allow students to take control of their own learning, pursuing topics that are of interest to them. In the process, students use critical- and creative-thinking skills and develop other necessary skills like collaboration, communication, and organization as they answer essential questions (IBL) and develop solutions to real-world problems (PBL) (What is PBL?, n.d.).

The superior performance achieved by the charter schools may also shine light on the issue of school resources and provide an answer to the longstanding question of

whether the difference in resource allocation in favor of public schools actually affects school quality and effectiveness. Although the government administers resources to charter schools to ensure their success, charter schools receive less but have their own set of regulations and deliver services and results in line with their own vision of the path and process to academic success. They are not constrained by policies and laws established by districts, and their academic system is quite different from that followed by traditional public schools (Hess, 2004). Knight and Toenjes (2020) posit that despite the difference in resource allocation, however, the academic quality and effectiveness of the schools are not compromised. And, to date, even with less resources, at least a half of all charters outperform traditional public schools where student achievement is concerned.

The management of charter schools is also believed to be a contributing factor in the performance of charter schools. Since they depend on funding from the state, tight regulations are in place for their formation and maintenance, and they must meet these regulations or risk withdrawal of financial support and subsequent school closure. Consequently, charter schools tend to place extra effort on the management of the institution. Better management is typically reflected in the level of discipline and subsequent academic performance of enrolled students as disciplined students allow teachers to focus more acutely on pedagogy. Research indicates that quality teachers help students increase their self-efficacy and self confidence (Ladson-Billings, 1995). Conversely, a teacher's ineffective teaching methods can have negative, long-standing effects on students, impeding their progress for years to come (Ladson-Billings, 2005). Self-efficacy is defined as one's perception of his or her ability to accomplish a task or

goal (Bandura, 1977) and is crucial to a child's success in school and beyond. Self-efficacy determines the extent to which a student meets adversity with effort. The greater the self-efficacy, the greater his or her persistence toward the task in the quest for ultimate success (Bandura, 1977).

A child's self-efficacy is affected by several factors, one of which is socioeconomic status (SES). Differences in SES or social class have been advanced by many as the major factor in the achievement gap (Lareau, 2003; Winkle-Wagner, 2010). Furthermore, these differences are not based on intellect but on membership in a privileged and prestigious family, caste, or class where membership is a type of "currency" (Ansalone, 2009) that allows members access to important people, places, and experiences that non-members (individuals of low SES) cannot. French Sociologist Pierre Bourdieu calls it *cultural capital* (Ansalone, 2009) - a lifestyle that distinguishes high SES individuals from other social classes and brings them subscription to "certain values, competencies...consumption preferences...and high-brow experiences like lectures and exhibits" (p. 65) from early childhood. These are the people we recognize as middle class, upper middle class, upper class, and an even newer category that Murray (2012) calls the "new" upper class.

In his book, *Coming Apart: The State of White America, 1960-2010*, Murray (2012) dissected the upper middle class into categories, namely *the cognitive elite* or "mind workers" (p. 17), such as professors, attorneys, scientists, executives, journalists; *the educated class*—square and practical with middle class values, as well as the bohemians who defied convention; and *the creative class*—those who use their creativity in business, education, healthcare, law, etc. These individuals are highly selective, monitoring closely

what they and their children imbibe literally and figuratively, as well as to what extent, choosing edutaining materials and programs like National Public Radio's *Morning Edition*, PBS *NewsHour*, and *House* over popular selections. They are intelligent, accomplished, financially stable, and exposed, and that's part of their children's immediate inheritance. These "helicopter parents" (Murray, 2012, p. 40) obsess over their children's welfare in idiosyncratic ways from their children's infancy well into their teenage years when it is time for college. They are involved in every aspect of their children's educational experience and can afford additional assistance for the child if need be. Per Ansalone (2009), they volunteer in school, serve on committees, and maintain constant contact with school administration; consequently, they are admired and respected, and their children benefit from that alliance in that teachers have greater expectations for them and provide them with more attention and consideration than they would children of low SES.

Advantaged parents invest heavily in their children, "spend[ing] a greater portion of their income on educational games and learning resource materials" (Ansalone, 2009, p. 720) and lose sleep if their child's college is not in the top ten *U.S. News & World Report* rankings. Consequently, "79 percent of students at Tier 1 colleges as of the 1990s came from families in the top quartile of socioeconomic status..." (Murray, 2012, p. 59), giving credence to the notion that the socio-economic status of the family accounts for more of the variation in cognitive achievement scores than any other variable (Ansalone, 2009).

Advantaged families also possess *social capital*. They know the key players and they have access to them via networking opportunities because they all congregate in elite neighborhoods where the residents are of like education and income, and in many cases, completely insulated from the rest of society (Murray, 2012). Relationships foster, and

consideration is a natural byproduct as is bias against members of the lower class. President of Harvard University, Lawrence Summers declares: “Just three percent of students at the nation’s top 146 colleges come from families in the bottom socioeconomic quartile,” (cited in Ornstein, 2007, p. 81). This is approximately eight times fewer than could be expected, all things being equal, across socioeconomic quartiles!

Disadvantaged families simply cannot compete in these circumstances. They do not have enough of the physical capital and the social capital even if they have the intellectual capital. For one reason or another, they may dress differently, act differently, speak differently, and subscribe to a different culture; thus, they don’t receive as much respect, attention, or assistance from the influential people simply because they don’t have the prerequisite finesse. Parents are not as involved as they could be since they may be working more than one job and simply don’t have the time to invest the way they should. The situation is exacerbated in the case of a single-family home. And unfortunately, “a much larger proportion of working class than upper-middle-class children are raised in broken homes. All by itself, that difference has pervasive implications for the child’s socialization and for different social norms across classes” (Murray, 2012, p. 40). It isn’t that disadvantaged families do not value education as much as their advantaged counterparts. They do. But the odds are stacked against them since the most valued cultural capital is that which is exhibited by the dominant culture and children are often evaluated on how closely their family’s culture aligns with the more dominant one (Ansalone, 2009). Additionally, what they may not realize is “that schooling represents about 10 to 17 percent of the variance related to income...” (Ornstein, 2007, p. 26). That means that school isn’t a foolproof way to success, but education is. Thus, the importance of cultural and social

capital for they represent a type of education or educational tool that can open a variety of doors that simply showing up for school cannot, irrespective of its quality.

In this research study, there was a higher percentage of low-SES students enrolled in the charter schools (85%) than in the public schools (65%). No specific data were provided on what percentage of the low-SES groups were minority students. However, data revealed that nearly 90% of the enrollees across both school types were minority students, so we can conclude that a large portion of the low-SES students were also minorities (i.e. African-American and Hispanic descent). This information appears to support Goldring and Cravens' (2017) statement that Black families look to charter schools to solve the problem of the achievement gap. For all charter schools participating in this study focused heavily on academic excellence, and one or more supplemented academic rigor with a learning community, electives, extracurricular activities, a collaborative atmosphere for stakeholders, an inclusive culture, and a safe and secure learning environment. Their specific focus coincides with best practices associated with charter schools originally elevated by Karaim (2017) which includes 1) a clear mission statement emphasizing academic excellence, 2) a high-expectations culture, 3) an atmosphere that best suits college students, 4) a keen emphasis on standardized tests as well as the utilization of consistent intimal assessments, and 5) extended school days and longer academic years. The difference in math scores achieved by the charter school students speaks to the vast majority of charter schools in New York City allocating 15 to 30 more hours daily than their public school counterparts for student mastery of mathematic concepts. Since most charter schools serve the disadvantaged population, they tailor their policies to address the needs of the community being served.

Study Limitations

This study was limited to educational institutions located in Nassau County. A wider analysis consisting of more counties, more states, more schools, more grade levels, and/or even more academic disciplines should be done so as to gain a more accurate picture of overall student achievement within and between the two types of schools. This, in turn, will aid assessment concerning the difference in performance levels.

Recommendations for Future Research

A comparative analysis involving a greater number of schools and students representing both charter and traditional public schools would mean greater statistical power and better comparative results that could guide policymakers, funders, and parents in their efforts to support a particular school type. Further, a more comprehensive sample including ethnic information, cultural association, language proficiency and such would provide a more in-depth account of factors associated with school success. Generalizability to additional populations would also improve. Additionally, this study analyzed data pertaining to only one year (2019) of test results which may not be fully representative of the academic abilities and accomplishments of the students. A similar study can be conducted to assess the difference in test results over a longer term (e.g. 3 or 4 years) which may yield more accurate results.

Implications of Findings to the Field

All across America, charter schools have emerged as worthwhile competitors to traditional public schools (Walberg, 2017). Located in socially and economically disadvantaged neighborhoods, these charter schools appeal to families of low SES status (particularly Blacks and Hispanics) who are dissatisfied with public schools (Arsen & Ni,

2012), are victims of the achievement gap, and are looking for alternative paths to educating their children. Defined as the difference in overall performance based on test scores among different racial groups (Carpenter & Ramirez, 2006), the achievement gap has secured a variety of explanations, including race, culture, quality of schools, teacher quality, teacher expectations, student motivation, family support, negative stereotypes, and SES levels. History shows that the achievement gap can surface as early as the kindergarten years and persist throughout the postsecondary period (Fryer & Levitt, 2004) evidenced by disparities in graduation rates, unequal admittance for gifted and talented programs, and an overrepresentation in other programs like remedial programs. These disparities ultimately impact the number of minorities graduating from postsecondary education institutions as well as the rate at which they actually graduate. New data from the Education Data Initiative indicate that Black students in Bachelor's programs have a 5-year graduation rate of 40.5% and make up 11% of all college graduates, while Whites have a 5-year graduation rate of 62% and make up 60% of all college graduates. Hispanics reflect a 41.5% - 13% statistic (Hanson, 2021). Thus, the issue of the achievement gap is a national one, a critical one, and one that needs continuing focus.

The positive results of this research study may indicate the effectiveness of charter schools in their fight to close the long-standing achievement gap between minority and White students all across the nation. The statistically significant results obtained ($p \leq .003$) corroborate the findings of the aforementioned study conducted by The Center for Research on Education Outcomes (CREDO) in relation to the effectiveness of charter schools. CREDO (2013) found that charter schools were

instrumental in decreasing the achievement gap for minority students, affording them a 33% increase in their test scores. CREDO researchers attributed the students' success to the allocation of an extra 29 days of reading and studying and an extra 36 days of math over the course of the academic year when compared to the curricula of traditional public schools. A significant difference in math at the $p \leq .016$ level is quite encouraging, then, considering the value of a math as a key component of STEM education in today's rapidly globalizing society. A STEM curriculum (science, engineering, technology, and math) fosters higher-order thinking and prioritizes students gaining "liquid skills" to acquire jobs not yet conceptualized as well as a readiness for sustainable development (Taylor, 2016).

With ELA results approaching significance but not statistically significant, there is clearly a need for continued improvement involving literacy, particularly since research documents a general underachievement for Black boys in literacy in fourth, eighth and 12th grades (NCES, 2020) and alludes to an elevated risk for this group in reading and writing from the earliest stages of their academic careers (Matthews et al., 2010). A fundamental competency, then, literacy is vital, and early mastery plays an important role in determining those children likely to be academically successful (Matthews et al., 2010). Concentrated efforts are thus needed to secure the futures of children in minority populations via literacy and math competency and overall academic prowess.

With this in mind, governmental agencies should reconsider the quantity and quality of resources allocated to charter schools to support students of low SES status. Moreover, charter school officials may want to consider additional programs like STEAM or STEM enrichment as an added benefit for these students. Research on arts in education

affirms an increase in learning for students in high poverty urban classrooms in the areas of literacy, math, and art owing to the interdisciplinary value of STEAM (Cunnington et al., 2014). And early research studies investigating the impact of STEAM-based learning activities on minority and disadvantaged students confirm improved literacy and numeric abilities resulting from an increase in students' engagement levels (Taylor, 2016). Simultaneously, however, benchmarks should be established to gauge the success of these programs by way of continual assessment methods.

Policies should also be established to further empower these schools to address the blight of economic disadvantage on academic achievement at the secondary level as the latter impacts college enrollment and completion as well as graduate earning potential later in life. The quality of graduates has been a subject of vibrant discussion among many, particularly members of the business community, demanding greater efficacy on the part of institutions of higher learning in readying graduates for professional participation and economic contribution (Burke, 2002). In recent years, these graduates have inspired a number of books on their total inadequacy as well as their intractability and inability to take criticism in the workplace (Warner, 2010). Still, it takes an entire village to raise a child. Thus, the eradication of the achievement gap is a holistic, collaborative effort, involving policymakers, educational administrators, teachers, community organizations, and families who wish for equity and success to be an integral part of the fabric of minority communities within the U.S. and all over the globe.

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