EDUCATION IN THE CITY OF DETROIT

The Impact of Parental Involvement on Academic Performance

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AUTHOR'S NOTES

I was drawn to this specific project because of the conversations I had with friends, family members, classmates and professors with respect to inner city education. There were certain repetitive themes in those conversations such as lack of funding and resources, lack of quality facilities and the inability to attract and properly pay the best and brightest educators which stayed with me. I would always concede that what they were saying was true. However, I would always get an uncomfortable feeling in my stomach because I always felt that an important topic was being left out of the conversation. The topic to which I am referring is the influence parents have over their child's academic performance. In my opinion, parents are able to positively impact their child's academic performance solely through their attitude, just through the implicit and explicit messages they give.

I feel so strongly about this issue because while I was growing up, I attended both public and private schools which were located in both the inner city as well as the suburbs. In each school there was the usual distribution of academic performance. There were a group of students who excelled. The majority of the student fell into the passing to pretty good performance range. There were also the group of students who did not focus on education and as a result they mostly failed academically.

No matter the type of institution or where it was located there were a few consistent trends. One, the students who performed at the top of the class had parents who were regularly visible in the school. The students who performed in the middle of the class had parents who were fairly visible. I hardly ever saw the parents of the students who failed. Now, readers may be wondering if the parents of the top performing students visible because their children excelled or did the children excel because their parents were visible. I cannot claim to know which came

first in each case. What I can say is that the top performing students had the most visible parents. This was the case at each and every school I attended whether public or private whether urban or suburban.

My experiences allowed me to arrive at the conclusion that when it comes down to it, parental influence is what actually makes the difference with how successful a child is academically. Now, of course there are cases that do not fall under this description. However, on average, I believe that what I have concluded is in fact true. There is no question that resources, adequate facilities and dedicated teachers make it easier for students to perform well academically. But, I will always have the feeling that parents have the power to determine their child's educational destiny. The aim of this project is not to indict or blame the parents of the inner city. My goal is to empower parents. I want parents to know that they are not helpless. I want parents to know that even if nothing ever changes outside of the home, if they want it, they can completely change the course of their child's life and destiny.

ABSTRACT

This thesis uses school-level data from the city of Detroit from 2011 primarily to study the relationship between parental involvement and academic achievement, along with the relationships between charters schools, per pupil spending, parental resources, teacher efficacy, student/teacher ratio and academic achievement. In the analysis, I used linear regression to establish levels of association and levels of statistical significance. The dependent variable for this analysis was academic achievement measured by math and reading standardized test scores. I utilized two separate models, one for the reading scores and one for the math scores. I coded each school depending on whether or not it was a charter school. Charter schools were coded as "1" while public schools were coded as "0." It was determined that parental involvement was significantly associated with academic performance on both the reading and math models. Also on both reading and math models, the level of parental resources was significantly associated to academic achievement. Per pupil spending, teacher efficacy and student/teacher ratio were all found not to have a statistically significant association to academic achievement. The sample I used was overwhelmingly African American. The average African American population of a Detroit public school is 88%. Therefore, I was unable to determine if race is associated with academic performance.

INTRODUCTION

The quality of American education has been a regularly discussed in politics for roughly thirty years. One sub-topic has been the disparity between the educational opportunity provided to African-Americans and Caucasians as well as the disparity which exists between the poor and the affluent. Racial segregation was, at one time, the law in the United States. According to (McLoyd, 1998), although racial segregation is no longer the law, through other, equally effective means, the same conditions created by segregation have been maintained in the contemporary United States.

The inequality of education was initially addressed by the Supreme Court of the United States in the groundbreaking case of *Brown v. The Board of Education of Topeka* in 1954. (Edmund, 2013) The Court controversially ruled unanimously in favor of Brown, which provided legislation prohibiting segregation in public schools. However, the full enforcement of that ruling took more than a decade. One of the most frequently discussed reasons it was so difficult to enforce the Supreme Court ruling was due to the massive resistance by White southerners. One of the motivating factors for this resistance was White, southern parents not wanting their children in school with African-American children for fear of the presumed eventual prevalence of interracial marriage. (Sullivan, 2009)

On April 9, 1965, as a part of then President Johnson's "War on Poverty," the Elementary and Secondary Education Act (ESEA) was passed. (Edmund, 2013) The aim of this piece of legislation was to provide funds from federal government to provide aid to low-income student. This piece of legislation also led to the initiation of education programs such as Title I. Also in 1965, a preschool education programs call Head-Start began for children of low-income families.

The goal was to provide low-income families with the opportunity to allow their children to receive early exposure to formal education. (Edmund, 2013)

In 1974, in the case of *Lau v. Nichols*, the US Supreme Court ruled that the San Francisco School District's failure to provide English language instruction to Chinese-American students with Limited English Proficiency (LEP) was a direct violation of the Civil Rights Act of 1964. (Edmund, 2013) The ruling in this case led to the passage of the Equal Education Opportunities Act requiring schools to take any needed action to combat barriers preventing equal protection. In 1982, in the case *Plyer v. Doe*, the Supreme Court ruled that the Texas state law permitting the denial of public education to undocumented school-aged children violated the Equal Protection Clause of the Fourteenth Amendment. (Edmund, 2013) Texas state officials argued that undocumented residents were "out of the state's jurisdiction," and thus, could not claim protections under the Fourteenth Amendment. The court found no distinction between undocumented resident who entered the country lawfully and those who entered unlawfully.

On September 30, 1996, President Bill Clinton signed the Illegal Immigration Reform and Immigrants Responsibility Act into law. (Edmund, 2013) This legislation prohibits states from providing higher education benefits based on state residency to undocumented immigrants unless those benefits were made available to any U.S. citizen. The No Child Left Behind Act, passed by Congress in 2002, required that states ensure that in twelve years from the start date that all public school receiving federal funding ensure that each student be proficient in math, reading and language arts. (Edmund, 2013) Compliance with the stipulations would be measured by the results of state-wide state administered examinations. This created some controversy, however, when it was suggested that teachers may be focusing solely on preparing students for

standardized tests rather than ensuring that they are acquiring academic skills and are comfortable with application.

In 2009, the American Reinvestment and Recovery Act provided more than \$90 million for education as a part of the \$4.35 billion Race to the Top initiative. (Edmund, 2013) The Race to the Top is a program targeted at education reform in grades K through 12. In 2011, Alabama becomes the first state to "require public schools check the immigration status" of its students. Although the law does not require that schools deny enrollment based on immigration status, opponents contend that the law is a violation of the Constitution based on the *Plyer v. Doe* ruling. (Edmund, 2013)

Education reform remains one of the most neglected political and social issues in the United States. More specifically, what seems to be even more neglected than reform for the overall education system is the level at which the task of improving the efficacy of the inner-city education system is neglected. The most recent presidential debates may have called into question the level at which education is neglected. Each candidate touched on the deficiencies of the education system and how they were committed to its improvement.

However, in comparison to the attention given to other topics such as the state of the economy, gender equality and foreign policy, it seemed that education reform was not a primary focus of either candidate's campaign. Given that politicians address those issues which are salient to their constituency, the lack of emphasis placed on education reform by the candidates suggests that education reform may not be a national concern. Therefore, if education reform as a whole is not a national concern, then it may be safe to infer that inner city education reform is also not a national attention.

While in comparison to other political issues, education reform was not given a significant amount of attention, the main problem was not the "lack of attention." The main issue was the vagueness with which the candidates responded to questions regarding exactly how they plan to reform education. In the final presidential debate, October 23, 2012, President Obama briefly touched on education but focused on higher education. When former Governor Romney got the opportunity to respond, he shifted the conversation to the topic of "small businesses." Occurrences such as these as well as the disparity with which White and Black students and additionally poor and affluent students perform academically is why I was initially compelled to conduct a project which investigated what factor actually contributes most to inner city academic performance.

It is my contention that only through a proper investigation can there be a proper diagnosis. With a proper diagnosis, efforts to improve inner city education and student performance can be appropriately targeted. A proper diagnosis will also prevent efforts and funds from being wasted on any attempt to address those factors which were previously believed to be most contributing to the inefficacy of inner city school systems and to the below average student performance.

Several factors point to the salience of improving inner city education which is measured by the academic performance of its students. One such factor is that by significantly improving the inner city education, the minority community, over time, should be equipped to lead more independent lives. If realized, this should reduce the need for government programs usually thought to be exclusively designated for member of the inner city community, such as Aid for Dependent Children (AFDC). As a result, local, state and federal government would likely gain more fiscal flexibility and would be able to allocate financial resources elsewhere. If the

deficiencies of the inner city education system are addressed and reduced, subsequent generations would presumably benefit both socially and economically.

Additionally, a compelling reason to address the problems regarding inner city education is that it would contribute to inner city voters becoming more politically informed. Due to the importance of understanding the political system and the power yielded through the voting process to garner proper political representation, the citizens most likely to be politically misrepresented reside in low income, predominantly minority communities where the residents, on average, are poorly educated. If the higher academic performance is achieved in the inner city, urban residents should possess the knowledge needed in order to acquire the appropriate attention from their elected officials. By determining the factor which contributes most to academic achievement and by ensuring that citizens have the opportunity to become more politically aware ensures the highest level of democracy.

Moreover, it would bolster the United States' "equal opportunity" image by effectively treating the factor which contributes most to urban academic performance. As long as there remains a group of American citizens who are denied equal education opportunity, the United States' international image could suffer even more than it has in recent years. If the academic achievement gap persists, the international community may view the leaders of the United States as hypocritical as they present the United States as a pure, equal and fair democracy when there is still a group of citizens suffering from both racism and classism

Despite education reform receive little attention relative to other political issues, the U.S. government has attempted to address the inefficacy of urban school districts. The No Child Left Behind Act was enacted to guarantee disadvantaged students the opportunity to utilize necessary resources and to raise their academic performance to a satisfactory level. (Edmund, 2013)

However, after 12 years, this major piece of education reform legislation has failed by its own standards. The goal was to have every single student in the United States perform proficiently in all academic areas. The nation as a whole has not met the standards set forth. Also, the students who perform the worst academically remain concentrated in the inner city.

The No Child Left Behind Act, suggested by the lack of progress, has turned out to be ineffective. More specifically, it also cultivated a culture of "teaching to the test." The phrase "teaching to the test" is a phrase used to describe the phenomenon of educators, at every level, teaching students how to pass standardized test instead of actually teaching students how to retain and utilize academic skills. Researchers investigating academic achievement utilize these tests scores due to their availability and the tests uniformity which lessens the possibility for bias. Grades and graduation rates have several variables associated such as school standards, grading systems and level of curriculum, which reduces their value in a statistical analysis.

According to the National Center for Education Statistics (NCES), in 2011, 4% of Detroit eighth graders were proficient in math and 7% were proficiency in reading. Both scores rank last among the major urban school districts in the United States. The city of Detroit recently published that it graduated 67.5% of its student. (DetroitK12.org, 2012) However, it seems that the graduation rate of an institution lends very little to prove the efficacy of that institution as it pertains to learning as opposed to simply fulfilling a particular school's set of requirements. Graduation rates in comparison to other indicators of school or district efficacy may not be a particularly strong indicator as to the level at which students are actually learning academic skills.

Academic performance in the inner-city is lower than in suburban communities. The factors usually presented as the most significant contributors to academic performance and the

achievement gap are socioeconomic status, teacher efficacy, and school resources. The purpose of this project is to challenge those theories most offered to explain what most significantly impact academic performance. This project provides evidence supporting the notion that it would be most efficient to focus on improving the level of parental involvement in order to raise academic performance. By providing evidence which suggests that academic performance is not solely determined by socioeconomic status, school resources or teacher efficacy, but rather, mainly impacted by parental involvement, it should convince parents that they possess far more influence regarding their children's academic performances than previously believed.

In this thesis, I argue that the factor which has the most impact on inner city academic performances is parental involvement. This is not to suggest no other factor makes a contribution. I argue that while considering all potential factors which influence urban academic performance, parental involvement is the factor which contributes most to academic performance according to the result of the statistical analysis associated with this thesis. I argue that as goes the level of parental involvement so goes the level of academic performance.

Additionally, I will provide a detailed introduction and explanation of each alternative theory offered to identify the most contributing factor to academic performance. I will then provide my theory as to what factor most impact academic achievement in the city of Detroit. I will highlight each scholar's position as well as their rationale. Further, I will provide a detail description of the methodology I used in this statistical analysis and my rationale for doing such. After, I will then offer my hypothesis along with what led me in that direction. Finally, I will present and discuss my results and conclude with the implications of my results as well as suggestions for subsequent research efforts.

LITERATURE REVIEW

PER PUPIL SPENDING

One factor which impact academic performance, to a certain degree, is the amount financial resources a school has at its disposal, and more specifically, the amount a school spends per pupil each year. The amount of money a school spends on each student per year may be used to indicate the quality and quantity of learning tools provided to each student by the school. Such tools include but are not limited to the most accurate and up to date textbooks, computers with internet access, up to date classroom projectors, the number of volumes in the school's library, textbooks, etc.

The thought is that the level at which an institution provides its students with essential learning tools directly impacts the level at which the students will perform academically. In the case of Detroit, proponents of this theory may claim that students in Detroit perform poorly because the city's educational resources are lacking. Further, if Detroit was somehow able to purchase more effective and modern educational equipment, the academic performance of Detroit's students would improve.

A school's budgetary capability in a major city usually is an indication of whether or not academic performance is a priority. Several theories offer what may facilitate the lack of resources in urban school districts. The scholars I have reviewed seem to agree that there is a financial problem in urban school districts and that it negatively affects student academic performance. However, it appears that these scholars differ in their opinions on what may contribute the most to the financial distress in urban school districts.

(Reyes and Rodriguez, 2004) point to the structure in which funds are allocated to individual schools or, *funding formulas*, as one main reason urban schools lack proper funding.

There are three main examples of unfair funding formulas. The first is weighted distribution of funds. Weighted distribution is when a district assigns funds based off the estimated cost of properly educating a student. In certain districts, the extra cost for educating a student with special needs is paid for by government funding. In such districts, student transportation and general accommodations to ensure a normal educational experience are all considered. In those cases, due to the extra cost, a special needs student is counted twice in the budget. Counting a student twice occupies funding intended for another student. It is likely this affect occurs mostly in the inner city where there are minimal private resources, which forces the government to take on the cost. (Reyes and Rodriguez, 2004

The second formula is the allocation of funds being determined by property taxes. This sort of fund distribution method is problematic due to affluent neighborhoods producing more property tax revenue than relatively poor communities. If inner city schools are the schools need more assistance than suburban schools, then a funds allocation system primarily based on property taxes places inner city schools at a permanent disadvantage. (Reyes and Rodriguez, 2004) For example, there are less home owners in the inner city than there are in the suburbs. Also, the property in the inner city is worth less than the property in the suburbs. Due to the facts, using property taxes to determine how much funding a school receives perpetuates the class divide in education. (Reyes and Rodriguez, 2004)

The third formula is state funding based on school attendance. This method uses a school's rate of attendance to determine the level of funding the school receives. This creates difficulty in ensuring equality amongst school districts in that there are stark differences in suburban and inner city school attendance. (Reyes and Rodriguez, 2004) First, inner city students are more than suburban student likely to have parents whose jobs do not provide

adequate medical insurance. This fact contributes to inner city students being subjected to improper medical treatment. In turn, this may cause urban students to miss more school than suburban students. Second, there is a higher rate of truancy among inner city students than among suburban students. (Reyes and Rodriguez, 2004) Therefore, allocating funds based on school attendance not fair to inner city students who regularly attend school and to those students who are not privy to proper health insurance. (Reyes and Rodriguez, 2004)

(Reyes and Rodriguez 2004) are emphasizing that the inequality regarding school resources is mainly a structural issue. The funding allocation methods of state and local governments place inner city schools at a clear disadvantage in comparison to suburban schools. Furthermore, when schools are essentially discriminated against with respect to school funding it severely restricts the ability of the teachers and administrators from creating an atmosphere most conducive to cultivating an effective learning environment. (Reyes and Rodriguez, 2004) Therefore, it is reasonable to conclude that the lack of school funding in the inner city due to allocation structures contributes to low academic performance of inner city students.

The work of (Condron, Roscigno 2003) furthers the argument given by the Reyes and Rodriguez which highlight structural flaws in school funding allocation. They point out the reasons why certain policies are adopted and the effects of a seemingly unjust fund allocation practices. (Condron, Roscigno 2003) point out that the policies adopted by local governments and local school boards are purposely structured in a specific way to benefit the children of those constituents who suburban residents, who also turn out to be more politically active. The most politically active and influential constituents are usually White and residents of the suburbs. (Condron, Roscigno 2003

Also, certain school districts require schools to apply for additional funding. School boards often implement specific application processes for discretionary funds which must be followed by school if they desire access. (Condron, Roscigno 2003) In the case of the Columbus School District in Ohio, there was found to be some bias in the decision making for discretionary funds. (Condron, Roscigno 2003) "Poorer schools are simply less organizationally and bureaucratically equipped to formulate, let alone submit proposals for extra funds, particularly if they are overwhelmed with their day-to-day functioning and the more general maintenance of order. Furthermore, school boards may be more apt to reject proposals by poorer, minority schools, given that such schools are receiving extra allocations in the form of federal Title I funds (Legislation focused on improving the academic achievement of disadvantaged schools through equal funding)." (Condron, Roscigno 2003)

Inequality in funding has a negative impact on a district's ability to pay instructional costs. Instructional costs include teacher's salaries, books, media, etc. In Columbus, Sixty percent of a school's overall budget is earmarked for Instructional costs. The major portion of the instructional budget is teacher's salaries. (Condron, Roscigno 2003) The analysis of teachers' credentials in relation to schools' racial and class composition suggested that the most highly credentialed teachers are not randomly distributed within a district, but are concentrated in high-SES, white schools with, arguably, higher per-pupil expenditures. (Condron, Roscigno 2003) It was determined that the most qualified teachers were attracted to the schools with more tangible resources such as computers, books and the availability of teachers' aides.

The idea is that not only does lack of resources and educational equipment contribute to the low academic performance, but the same factors contribute to the inability to attract the best and the brightest teachers. The inability to attract the best educators also contributes to low academic performances. (Condron, Roscigno 2003) Condron and Roscigno point not only to relatively low earning potential, but also the lack of resources such as educational material and teachers' aides as disincentives for prospective educators to accept positions in struggling schools districts. As a result, inner city schools are left with less capable teachers or teachers who are less invested in educating inner city students. This drastically lowers the efficacy and quality of inner city education. (Condron, Roscigno 2003)

An additional effect of unequal funding for schools is the effect poor facilities have on the minds of students. (Condron, Roscigno 2003) found in their analysis that poor academic performance was linked to the students' lack of self-worth due to old, inadequate, outdated and unsafe facilities and materials. When students are subjected to subpar school facilities, they are less likely to fully engage in their education. The reason this occurs is because students associate the quality of the school they attend with their self-worth. (Condron, Roscigno 2003) The reason behind poor academic performances in the inner city, it seems has little to do with the cognitive ability, but more to do with the lack of student self-worth as a result of their poor academic environment relative to the academic environment provided in the suburbs. (Condron, Roscigno 2003)

(Greenwald, Hedges and Maine, 1996) conducted a longitudinal analysis in an effort to determine the level of impact the availability of school resources has on academic achievement. Their findings support the aforementioned arguments in that they found that the availability of resources has a significant impact on academic achievement. The most significant finding was that in addition to the availability of resources having a significant impact on academic achievement, the number of students in the class room also seemed to influence the level of academic performance. This finding supports the idea that student/teacher ratio is a significant

and largely ignored factor in determining *how* school finances impact academic performance rather than simply establishing that school finances *do* impact academic performance.

(Greenwald, Hedges and Maine, 1996) They found that the lower the size of the class, the higher was the academic achievement of the class. This finding also says something else. It says that while the experience, ability and education of a teacher are important, the number of teachers in a given school is also important to reaching a satisfactory level of academic achievement.

In addition to class size, (Greenwald, Hedges and Maine, 1996) found that the size of the school influences academic performance. It was found that smaller schools had higher levels of academic achievement than larger schools. This finding suggests that students respond better to a more personalized academic environment. In addition to the positive response to teachers being able to provide more personalized attention, students also respond well to the perception that the administration and school staff are also more available. (Greenwald, Hedges and Maine, 1996) Although it is not likely that districts will begin to build additional schools in order to improve student satisfaction, administrators may look into considering making themselves more visible and available to the student body. (Greenwald, Hedges and Maine, 1996)

(Vaught, 2008) looks at race based disparities amongst school districts, and the notion that "Whiteness" is used as property. "Conceptually, this explains the collapse of Whiteness with exclusively enjoyed rights to freedom, privilege, and expectation, undergirded by the singular ability to draw advantage from these owned rights." (Vaught, 2008) Vaught interviews school officials, parents and students. Vaught's study looks at the Jericho School District in which 60% of the student body is made up of students of color and 80% of the certified staff is Caucasian.

In the Jericho School District, there is a large achievement gap between Caucasian and African-American students. On a ninth grade standardized test, 51% of Blacks while only 9.8% of Caucasian performed below standard. (Vaught, 2008) Additionally, 92% of African-American students failed the math portion of the test. (Vaught, 2008) The gap also includes racial differences in GPA, enrollment in honors, graduation rates, SAT scores, and disciplinary action, including suspension and expulsion rates for African-American and Samoan students tripling that for Caucasian students. (Vaught, 2008)

(Vaught, 2008) highlights the fund allocation system within the school district as evidence to suggest a racial motive to perpetuate the disproportionate rates of underachievement among African-American. The allocation system stipulated that federal funding for disadvantaged schools and students, once received by the school district, was distributed according to the educational expenses of any student who was bilingual, eligible for free/reduced lunch or apart of the special education program. (Vaught, 2008) The district distributed funds based on that criterion regardless of whether or not a school was actually in need of additional funding. The same amount of money was distributed whether a student attended to an "advantaged" school or a "disadvantaged" school. (Vaught, 2008) If district do not send money to schools which do not need it, districts will have that much more to provide funds to school which do need it.

By this school district essentially withholding funds from disadvantaged, mostly African-American schools and enhance the budget of privileged, mostly Caucasian schools, it was clear that the behavior was racially motivated. According to (Vaught, 2008) there was an instance where a predominantly Caucasian, suburban and privileged school received an extra \$277 thousand in additional funding in a school year. This particular school was equipped with award

winning facilities and the best teachers and was in no way in need of any additional funds. If the function of a school district and its fund allocation strategy is to address the needs of its schools, then that \$277 thousand was essentially wasted and could have been used to improve a lesser institution.

The aforementioned observations of Vaught are clear examples which provide evidence to her "Whiteness being used as property" theory. These occurrences also show that this school district was most likely catering to the Caucasian members of the community. (Vaught, 2008) If there are underperforming schools, federal funds sent to improve the situation needs to arrive at the intended destination. If federal dollars never reach disadvantaged schools, it will remain difficult for those schools to acquire the necessary tools in which to properly educate their students.

The current academic literature which focuses on school budgets and the allocation of funds as a significant contributor to academic achievement highlight the specificities under the school resource umbrella to describe how the distribution of resources and the decisions made involving those resources affect academic achievement. The main problem with the theories offered in the literature is that they suggest if the disparities in funding were alleviated then the academic performance gap would close. However, this does not seem to be the case. I argue that while funding disparities are absolutely part of the problem, they do not account for all or even the majority of why academic performance in urban areas is lower than that of suburban areas.

Further, the ways funding allocation systems are structured are out of the immediate control of normal citizens. Although it is plausible that, over time, fund allocation systems may be deemed unfair and eventually changed, the prospects of normal citizens force the immediate

change of funding allocation systems are minimal. I argue that the level at which parents are directly involved in their child's education and the attitude they have toward their child's education is in their immediate control and will also have a greater impact on their child's academic performance.

PARENTAL RESOURCES

There is also a theory offered which attributes academic performance to the financial resources or socioeconomic status (SES) of parents. According to this theory, the SES of a parent directly and significantly impacts the academic performance of students. The rationale s that the academic performance of a student is impacted by their parents SES involves the self-worth and self-confidence of a student as well as the academic resources made available to the student. The student may feel as though the amount of money their family has is a clear indicator of how much they are worth. A student's level of self-worth and self-confidence may be associated with their level of academic performance. Additionally, parents who are economically disadvantaged are not able to provide certain educational tools such as home internet access, and if needed, private tutoring sessions. Although not completely necessary, those tools are likely to enhance a student's academic performance.

A parent's ability to acquire financial resources hinges on several factors. One is the parent's level of education. According to the Georgetown University Center for Education and the Workforce, those holding bachelor's degrees earn about \$2.27 million over their lifetime, while those with Master's, doctoral, and professional degrees earn \$2.67 million, \$3.25 million, and \$3.65 million, respectively. Further, those with bachelor's degrees, no matter the field, earn vastly more than counterparts with some college (\$1.55 million in lifetime earnings) or a high school diploma (\$1.30 million lifetime).

According to the U.S. Department of Education, National Center for Education Statistics (2012) in 2010, African-Americans obtained 10.9% of the Associates degrees earned, while Caucasians earned 73.7%. African-American obtained 9% of the Bachelor's degrees earned, while Caucasians earned 77.5%. African-Americans obtained 9% of the Master's degrees earned, while Caucasians earned 77.9%. African-Americans obtained 6.6% of the Professional and Doctorate degrees earned, while Caucasians earned 79.9%. African-Americans make-up 12.8% of the population, meaning they are underrepresented at every level of higher education. Additionally, the disparity between the percentage of degrees earned between Caucasians and African-Americans is massive. Given the statistics, it is safe to assert that there are far less resources available to students in urban, predominantly African-American communities than in suburban, predominantly Caucasian communities.

(Sirin 2005) conducted a research review of the academic literature on socioeconomic status (SES) and academic achievement published between 1990 and 2000. The sample included 101,157 students, 6,871 schools, and 128 school districts gathered from 74 independent samples. It was found that there was a strong relationship between SES of the family and academic achievement and an even stronger relationship between SES of the school and academic achievement. Additionally, it was found that the magnitude of the relationship between SES and academic achievement was contingent upon several factors including methodological characteristics such as type of SES measure, and student characteristics such as the student's grade level, minority status, and the location of the student's school. (Sirin 2005)

(Sirin 2005) found that that there is a stark difference between the relationship level of school/neighborhood SES and academic achievement and familial SES and academic achievement. Further, it was determined that there were some problems with utilizing the

traditional measures of SES. Most often, researchers look at indicators such as level of education, income, and occupation in order to determine one's SES. (Sirin 2005) When researchers find it difficult to obtain such information, they often resort to utilizing the percentage of students eligible for free/reduced lunch. (Sirin 2005) points out that using such method could be problematic due to such indicators usually have a very weak correlation to academic performance as grade level rises.

Additionally, (Sirin 2005) discovered that the relationship between SES and academic performance was not as strong for African-American students as it was for Caucasian students. This finding may be due to the level of familiarity African-American students has with functioning despite living in impoverished conditions. More often than not, even affluent African-Americans have family members or associates from childhood with a low SES. Also, within predominantly African American neighborhoods, it seems that everyone is struggling financially, so there may be no significant level of separation between a child who is considered well off economically and one is considered to be struggling financially.

(Sirin, 2005) had two additional concerns when conducting this analysis. The first concern is from whom are researcher gathering their SES data. (Sirin, 2005) found that when SES data was gathered from students, the relationship between SES and academic performance was weaker than when SES data was gathered from parents. (Sirin, 2005) suggests that if we are to assume that parents are more of an authority on SES than are students, researchers should limit their gathering of SES data to parents. The second concern is that SES had a weaker relationship with academic performance for urban students than for suburban students. This disparity is similar to the disparity found between African-American students and Caucasian

students. This suggests that urban students are more comfortable dealing with a restricted income than suburban students. (Sirin, 2005)

(Cladas and Bankston, 1997) focuses on the affect that the SES of peers has on an individual's academic performance. (Cladas and Bankston, 1997) found that individual family *poverty* status, which is measured by the student's eligibility for the free/reduced lunch program does have a slight independent effect on academic performance. A child who is eligible for free/reduced lunch has a slightly lower academic performance than a child who is ineligible. However, an individual's family *social* status, which is measured by a parent's occupation and education level, has a stronger effect than individual poverty status has on achievement. A student who has a low familial social status is more likely to underperform academically than students who have a low familial poverty status.

(Cladas and Bankston, 1997) also determined the effects race and SES has on academic performance are virtually indistinguishable. They point out, however, that their finding pertains only to the state of Louisiana as they have not conducted extensive research in any other state. Nevertheless, in Louisiana, one's SES is so closely related to one's race. On average, African Americans are more likely to be impoverished than Whites. (Cladas and Bankston, 1997) Therefore, for the purposes of their analysis, it was concluded that separating the two factors was statistically insignificant.

(Cladas and Bankston, 1997) found that a student who has a a low SES and is in a school with classmates of a high SES, then peer SES has a positive an significant effect on that particular student's academic performance. However, if there is a student with a high SES who is in a school with classmates of a low SES, then peer SES will have a negative a significant impact on that particular student's academic achievement. (Cladas and Bankston, 1997) The

controversy stems from the racial makeup of schools in Louisiana and that the findings are suggesting that African-American students would benefit from going to school with a majority Caucasian student body while it would not be advantageous for a Caucasian student to attend a school with a majority Black student body. While the implications are disturbing, the findings are more than likely valid.

(White, 1982) conducted a meta-analysis of over 200 studies looking at the relation between socioeconomic status and academic performance. Results indicated that when SES is defined as income, education, and/or occupation of household heads and uses the individual for the unit of analysis, the correlation between SES and academic achievement is weak (r = .22). (White, 1982) found that typically, when aggregated units of analysis were used, the correlation between SES and academic performance increases (r = .73). (White, 1982) found that home atmosphere was sometimes misused in incorporating that measurement into SES. The grade level of the student, the type of SES measure and the year in which the data was collected were found to be significant factors in determining the correlation between SES and academic achievement. (White, 1982)

Also, (White, 1982) found that there are both implications as well as problems associated with his finding that the relationship between SES and academic achievement is more significant when using aggregated units of analysis than when using the individual student as the unit of analysis. One implication is that students are more affected by the SES of their classmates than they are by the SES of their individual families. This suggests that students behave according to the signals they are receiving from their peers, or rather the accepted social norms established by the social group. (White, 1982) It appears that it can also be concluded that a student's familial

financial status has little to do with academic performance. It appears that students conform to the conditions which are imposed by their classmates.

(White, 1982) also found that as a student ages the effect aggregated SES had on academic achievement reduces. This implies that students are either becoming more comfortable with the collective SES level of their school as they age or the salience of academic performance for students drop as they age. Students may be using these alternative methods of determining self-worth as they age, if the salience of academic achievement drops. Such methods include popularity, physical or athletic prowess or street toughness. (McLoyd, 1999) Finally, (White, 1982) suggests that future research should be conducted by using more specific definitions of SES rather than traditional definitions such as parents' income, educational attainment, or occupational level. The more effective definitions of SES are family income, occupation of the head of the home school resources, expenditure per pupil, or home atmosphere.

(Battle and Lewis, 2002) examined the longitudinal effect that race and socioeconomic status has on the academic performance of the 12th grade year and the two years immediately after the 12th grade. (Battle and Lewis, 2002) utilized data from the first, third and fourth waves of the National Education Longitudinal Study conducted by the National Center for Education Statistics. This study had two stages. In the first stage, there were 815 public schools, 237 private schools analyzed. In the second stage, there were 26,435 students randomly selected, while 24,599 students ultimately participated. The study began in 1988, the subjects' eighth grade year. Follow studies were conducted in 1990, the subjects' sophomore year in high school, in 1992, the subjects' senior year in high school, and concluded in 1994, two years after the subjects graduated from high school.

(Battle and Lewis, 2002) found that in 12th grade, African Americans did not perform as well as their Caucasian counterparts. However, two years later, the results were reversed, as African Americans two years into college, performed better than their Caucasian counterparts. This may be the result of the African American student population significantly shrinking from high school to college. Therefore, it would seem that the majority of African American students who attend college were the elite students in their respective high schools. Conversely, the majority of Caucasian college students may have been average performers in high school. So, given the makeup of the African American and Caucasian college populations, it is logical that, on average, African Americans college students outperform Caucasian college students.

It was also found that socioeconomic status is three times more powerful in predicting academic performance than is race. (Battle and Lewis, 2002) However, when only analyzing the two years after college, only Caucasian students receive a boost in academic performance from a change in socioeconomic status. (Battle and Lewis, 2002) This suggests that the type of family a student comes from has more of an impact on the ability to perform for a Caucasian student than for an African American student. This result may derive from the possibility that African Americans may be more comfortable with impoverished conditions. It may be the case that there is less self-perceived stigma attached to a poor African American student than there is to a poor Caucasian student. Also, it may be more widely expected and accepted that African American students are more likely to come from a financially disadvantaged background.

The current academic literature which focuses on socioeconomic status as a major contributor to academic achievement has offered that finding a correlation to SES and academic achievement absent the incorporation of additional and salient factors such as race as well as school location may yield deceptive results. The main issue with the academic literature on the

impact of SES on academic performance is that it suggests that as goes the income gap so goes academic performance. If this were the case the vast majority of economically disadvantaged students would not excel academically.

Moreover, the vast majority of economically advantaged student would excel academically. The two notions are simply untrue. Yes, it is more difficult to excel academically when dealing with economic disadvantage versus economic privilege. However, I argue that regardless of socioeconomic status, a parent's level of involvement in their child's education can overcome the disadvantages associated with a low SES. Further, the disparity in academic performance between African Americans and Caucasian are found across all socioeconomic levels. This suggests more a cultural disparity rather than simply resulting from economic disparities. (McLoyd, 1998)

TEACHER EFFICACY

An additional theory as to what impacts academic performance is the theory of teacher efficacy. This theory is connected to the aforementioned theories in that its premises are based in teacher efficacy being dictated by a school's budget and the school's ability to pay teachers properly. This theory similarly concludes that the level of teacher efficacy impacts academic performance. If one subscribes to the idea that the highest paid teachers are the best and brightest teachers and also the most effective teachers, then one would argue that if a district such as Detroit, cannot afford the best and brightest educators, then that district will most likely have poor student performance due to poor teacher efficacy. Further, within a struggling district it is more likely that the teachers employed, on average, are less experienced than those found in more effective districts. Furthermore, if this is true, there should be a statistically significant relationship between teacher salaries and academic performance.

(Jacob, 2007) researched the challenges facing urban schools with regard to staffing effective teachers. Jacob examined what criteria are used to determine teacher efficacy as well as the hiring practices of urban school districts and what urban school districts can do to attract and retain the most qualified and presumably the most effective teachers. (Jacob, 2007) also looks at what teachers are doing to improve their skills as educators. The statistics used in this examination are of the 2003–04 Schools and Staffing Survey and were drawn from National Center for Education Statistics. Data for 2003 was obtained from the National Assessment of Education Progress (NAEP). Crime rate data for 2004 were drawn from the Uniform Crime Reports produced by the Federal Bureau of Investigation. Poverty and employment rates were obtained from the 2000 Census.

(Jacob, 2007) asserts that one significant issue plaguing inner city schools is the dilemma of staffing schools with enough qualified teachers. He goes on to offer that the demand for qualified teachers willing to teach in urban areas is far greater than the supply. As a result, urban districts are forced to hire uncertified or unqualified teachers, employ long-term substitute teachers or allow severe overcrowding in their classrooms. (Jacob, 2007) Teacher shortages for urban areas leads to the population of teachers being much less experienced and qualified than teachers in suburban school districts. Furthermore, most of the vacancies in urban school districts were found to be in math and science which are two subjects directly related to the current and ever-changing American job market. (Jacob, 2007) It was found that qualified teachers are unwilling to accept positions offered by inner city schools because of the perceived danger, lack of resources, overcrowding, but mainly because of the inner city district's inability to offer competitive salaries. (Jacob, 2007)

It was concluded that while qualified teachers start out their career at both urban and suburban schools, they are more likely to change schools or leave the profession altogether when beginning their careers with inner city districts. (Jacob, 2007) This again points to the inner city school district's inability to properly pay qualified teachers. As teachers become more experienced, they desire to earn a salary reflective of their qualifications and experience. Also, it may be true that after a teacher experiences an inner city school district, he or she may be turned off to the profession entirely.

In this analysis, (Jacob, 2007) questions the automatic association of high efficacy applied to those teachers who are the most qualified on paper or more experienced. Certain characteristics of teachers previously believed to indicate efficacy have little to no relationship to academic achievement. (Jacob, 2007) "Certified teachers are not consistently more effective than uncertified teachers, older teachers are not more effective than younger teachers, and teachers with advanced degrees are not more effective than those without such degrees." (Jacob, 2007) However, there are two exceptions to this finding. One, students of first or second year teachers, on average, perform worse than students of a more experienced teacher. After the second year, it seems that years of experience has very little effect on academic achievement. (Jacob, 2007) Two, some teachers who perform higher on certification exams or have graduated from more competitive universities produce larger performance gains for their students. However, due to the limitations of the research which examine this issue, the findings should be considered suggestive rather than definitive. (Jacob, 2007)

(Jacob, 2007) arrived at three conclusions. One, staffing urban schools with effective teachers is a problem much too large to be solved if policymakers and educators are focused on unproductive battles over differing philosophies. Two, Professional development, performance

incentives, or other policies to improve the effectiveness of the existing workforce are important complements to recruitment and retention policies. Third, districts need to improve their human resource operations which contribute to urban districts not being able to make offers to prospective teachers until late July or August. By that time, most of the top teaching candidates have accepted positions elsewhere. Finally, it is imperative to consider revamping the teacher tenure policies of urban school districts. Although it may be difficult to dismiss teachers who have tenure, it is easier to dismiss ineffective teachers than attempting to predict how effective new teacher are going to be in the future.

(Munoz and Chang, 2007) found that teaching practices and teaching strategies have been shown to have more of a relationship to academic performance than teacher qualifications or credentials. Teacher practices such as higher level questioning and engaging classroom discussions are two examples of effective teacher characteristics. However, the quality of teaching practices have been determined to depend in part on the students' prior achievement level, the skill with which a teacher applies the strategies, and on contextual factors. In this regard, instructional strategies are only tools and not quick-fix solutions for improving the teaching and learning processes. (Munoz and Chang, 2007)

(Munoz and Chang, 2007) concluded that although their study yielded no significant relationship between teacher characteristics and student academic performance, the possible reasons for such results need to be addressed. One, although a prospective teacher may have performed well in their university's education program, that teacher may have not been adequately prepared by the program. For example, it may be the case that universities have prepared teachers with content information, but have not provided the needed pedagogical skills for making content meaningful to students and forming relationships with students that can serve

as the foundation for learning. (Munoz and Chang, 2007) The second reason for such results is that new teachers may not be receiving the proper support when transitioning from college to the classroom. This occurrence may be slowing down the development of beginning teachers and negatively impacting their level of efficacy. (Munoz and Chang, 2007)

(Buddin and Zamarro, 2009) conducted a longitudinal study looking at the licensing test scores of prospective teachers and the effects the ability of the prospects indicated by those scores may have on student academic performance. (Buddin and Zamarro, 2009) address three key questions in their analysis. The first looks at the possible variance of teacher quality across classrooms and schools. Further, is it that students are performing better consistently with the same teachers or are certain teachers concentrated in classrooms or school with high performing students. The second looks at whether traditional measures of teacher quality such as experience and educational preparation are appropriate to use when predicting classroom outcomes. The third looks at whether or not the results on the California state teaching license exam translate to teaching success and student academic performance.

(Buddin and Zamarro, 2009) point to the adverse effects that a profession's self-regulation through employing licensure exams. One effect is that a licensure examination process raises the cost of applying for a position and lengthens the time for an applicant to begin work in the profession. These are disincentives to enter the profession and the likely dissuade probable gems from entering the field. If the exams themselves are discouraging some of the best potential applicants from applying then the tests are lowering the quality of the applicant pool which ultimately lowers the quality of teaching. Another factor is the fact that licensure exams are usually applied to professions where measuring the quality of performance is difficult. Salaries are set to average market quality of services when the quality of services is difficult to

measure. High-quality providers switch to other occupations or reduce the quality of their services to match the quality of low-quality providers. (Buddin and Zamarro, 2009)

(Buddin and Zamarro, 2009) found that high-quality teachers are not concentrated in a few schools or in a few classrooms. This finding undermines the argument that suggests teachers who are consistently evaluated favorably may be products of the characteristics of their pupils. It was also found that the experience of a teacher has a significant impact on the performance of the students. (Buddin and Zamarro, 2009) Teacher salaries are usually used to identify the experience of a teacher. This finding indicates that utilizing teacher salaries as an indication of teacher efficacy is appropriate. It was also found that female teachers are better received by students than are male teachers, but teachers with master's degrees or PhDs do not fare better in the classroom than teachers without advanced degrees. (Buddin and Zamarro, 2009)

(Buddin and Zamarro, 2009) determined that the race of a teacher is more impactful on student achievement in math than in reading. Students with an Asian/Pacific Islander teacher do better in reading than with a White non-Hispanic teacher. Black and Hispanic reading teachers are not significantly different than white non-Hispanic teachers. In math, the differences are larger. Black math teachers have classroom scores about 0.7 percentage points lower than white non-Hispanic teachers. Hispanic and Asian/Pacific Islander math teachers have scores 0.4 and 1.3 percentage points higher than non-Hispanic teachers. It was also determined that state licensure exams results have little effect on student achievement. (Buddin and Zamarro, 2009)

(Grissom and Strunk, 2011) focused on determining the efficacy of school districts that use a front load system of rewarding teachers with experienced based raises as opposed to a back load system rewards for longevity. Those in opposition of the back load system contend that teachers who receive their largest raises at the beginning of their career perform better in the

classroom than those teachers who are of the opposite system. Both the back load and front load systems are under the experience based teacher compensation practice which many support over performance based teacher compensation which rewards teachers when student improve their standardized test scores. This analysis focuses on determining which experienced based compensation system, front loading or back loading is more effective. (Grissom and Strunk, 2011) hypothesize that frontloading is most effective system for teacher compensation at ensuring maximum performance in the classroom.

(Grissom and Strunk, 2011) found that back loading is negatively associated with the proportion of students reaching the proficiency benchmark but that this relationship is consistent across the elementary, middle, and high school grades. Furthermore, schools in districts with greater relative experience premiums for veteran teachers (i.e., those with greater back loading of their salary schedules) have more students who score below the basic benchmark on both math and reading assessments. (Grissom and Strunk, 2011) One of the main reasons for front loading teacher raises is that it is more economically efficient as there are fewer new teachers than there are veteran teachers. Also, it would garner better results for the district because new teachers who receive sizeable raises early in their careers as opposed to later in their careers would be even more subconsciously obligated to ensure that their positions remain secure. Veteran teachers of the back loading system usually have tenure and are less motivated to perform. Therefore, given that front loading is not only more economically efficient, but also garners better results in terms of academic achievement, it should be attractive to policymakers. (Grissom and Strunk, 2011)

The current academic literature covering teacher efficacy is relatively uniform. The main point offered by scholars is that the traditional measures of teacher efficacy such as student's

standardized test scores, average GPA of students or teacher experience may need adjusting. (Munoz and Chang, 2007) This is due to the possibility that with respect to standardized test scores and GPA, teachers may be the beneficiaries of a very talented, capable and productive student bodies, while other teachers may be subjected to less talented, capable and productive student bodies. Scholars are in agreement that there are more accurate strategies to determine teacher efficacy such as the prestige of their undergraduate institution, the rigor of their undergraduate program, their ability to attain advanced degrees as well as their scores on state licensing exams.

However, it was found the most efficient way to determine teacher efficacy is through determining the "value added" to the class by the teacher. (Buddin and Zamarro, 2009) Studies which attempt to assess the value added by a teacher, first determine how the class performs academically prior to the teacher's arrival, then the researchers determine the level of academic performance after the class has had the same teacher for an extended period of time. The difference, if positive, is the value the teacher added to the class. The measurement of academic performance, in this case, would be student grades, not standardized test scores. Further, researchers have found that the efficacy of teaching practices, methods and behavior is far more telling of teacher efficacy than teacher qualifications.

The academic literature on the impact teacher efficacy has on academic performance offers plausible arguments. But, as with the rest of the literature presenting alternate theories, this portion of literature continues the attempt to connect academic performance primarily with a factor rooted in finance. This suggests that if struggling school districts would simply investigate the credentials of teacher applicants properly, hire qualified teachers more quickly, and pay teachers competitive wages, the achievement gap between African-American and

Caucasians would close. However, the racial academic performance gap is found across all socioeconomic levels. (Jencks and Phillips, 1998) I argue that teachers and administrators perform to the level at which the parents demand. Therefore, if urban parents were consistently as involved in their child's education as suburban parents, and yes, if African-American parents were consistently as involved in their child's education as Caucasian parents, the academic performance gap would eventually close.

PARENTAL INVOLVEMENT

Parental involvement is also offered as what primarily influences academic performance. The idea is that the more parents inject themselves into the academic lives of their children, the better those children will perform academically. Children may be aware of the investments their parents are making regarding their education as well as the attitude of their parents toward their education. If a child perceives that their parents do not care about their education, even if they actually do, the feelings of the child may manifest through a poor academic performance.

Conversely, if the child is aware of their parents publicly displaying a genuine interest in their education, the child may then be bound by the value placed on their education to perform at the highest level possible.

One assertion is that whether or not parents are involved, the child is more likely to follow what the parent has done with his/her life rather than act on the messages parents wish to convey. A child is more likely to attend college if their parent or parents attended college.

(McLoyd, 1998) This lends to the theory that children will imitate what they see their parents doing rather than abide by their parents instructions.

Further, those parents who reside in the inner city and are of a low socioeconomic status have a more difficult time showing their children that performing well academically is important.

The reasons why include, on average, there being more children in a poor household than a well-off household, making it difficult to attend to each child. Also, finances are lacking in such a way that inner-city parents are more likely to work multiple jobs than are suburban parents, making it even more difficult to focus on demonstrating an interest in their child's education. (McLoyd, 1998)

(Fan and Chen, 2001) conducted a meta-analysis of previous research on the relationship between parental involvement and academic achievement. It was found that the relationship between parental involvement and academic achievement was small to moderate and practically meaningful. (Fan and Chen, 2001) Further analysis showed that the parental expectations for a student's academic achievement have stronger relationship with academic performance than does parental home supervision. In addition, the relationship is stronger for both when academic achievement is represented by a global indicator (e.g., GPA) than by a subject-specific indicator (e.g., math grade). (Fan and Chen, 2001)

(Fan and Chen, 2001) utilized several hundred studies they found in the ERIC and PSYCHLIT databases and only those studies which reported their own empirical findings were retained. Since it was required that all studies used be studies that reported their own empirical findings, the final number of studies utilized was twenty-five. Ninety-seven correlation coefficients were found pertaining to the relationship between parental involvement and academic achievement. However, it was determined that the definitions of parental involvement and academic achievement varied greatly across the twenty-five studies. To address this problem, coding was used in which the definitions were grouped into broader categories.

According to (Fan and Chen, 2001), although it is intuitive that parental involvement has a positive relationship with academic achievement, the correlation coefficients collected were

inconsistent. The multi-faceted nature of parental involvement and the different measurements of academic achievement have both contributed to the inconsistencies. (Fan and Chen, 2001) Due to the inconsistent findings, (Fan and Chen, 2001) ascertained that he relationship between socioeconomic status and parental involvement is worth investigating. It is widely believed, and also supported empirically to some degree, that SES and parental involvement are positively related. If SES does indeed influence parental involvement, then it is very likely that the observed relationship between parental involvement and students' academic achievement in this meta-analysis reflects, to some degree, the relationship between SES and students' academic achievement. (Fan and Chen, 2001)

(Jeynes, 2005) conducted a meta-analysis which focuses on the relationship between parental involvement as well as its sub-categories and the academic achievement of urban elementary students. (Jeynes, 2005) sought to determine exactly which type of parental involvement most affected urban student academic achievement. Further, the aim of the project was to determine whether or not school sponsored parental involvement programs positively affected urban student academic achievement. Finally, the analysis focused on determining if the relationship between parental involvement and urban student academic achievement held across racial and gender lines.

It was found that the relationship between parental involvement and urban elementary student achievement held for overall measures and for specific components of parental involvement. Also, parental involvement is associated with higher achievements of students of racial minority and across gender lines. Statistically significant results emerged consistently across the various kinds of academic measures. The effect sizes of parental involvement in

general were quite similar for the studies that used sophisticated controls, such as race, SES, and gender, and those that did not. (Jeynes, 2005)

In the secondary set of analyses that adjusted for the average quality rating of the study, the effect sizes were slightly greater than when no quality adjustments were made. For all the analyses combined, the effect size of parental involvement programs sanctioned by schools was .27. For those studies in which no sophisticated controls were used, the effect size was .31. (Jeynes, 2005) Parental expectations yielded the largest effect sizes of the specific aspects of parental involvement. For all the analyses combined, the regression coefficient for overall achievement was .58. Whether the mother and/or the father read with the child was also an important predictor of academic outcomes, for all studies combined the regression coefficients were .42. (Jeynes, 2005)

Communication between the father and/or mother and children also had an effect size of about one fourth of a standard deviation. The effect for other measures was the highest of the achievement variables at .28. (Jeynes, 2005) The effect sizes for checking homework manifested an entirely different pattern of results than the other facets of parental involvement. The effect sizes for checking homework were .08 for overall academic outcomes and standardized tests.

For all achievement measures combined the effect size for parenting style was .31. (Jeynes, 2005)

The current academic literature highlighting parental involvement as a significant contributor to academic performance offers that researching exactly how parental involvement impacts academic performance can be difficult. This difficulty stems from there being several ways in which to measure both parental involvement and academic performance. Additionally, the majority of the previous research focusing on parental involvement is qualitative consisting

mainly of interviews of parents, students and teachers. Qualitative studies are more susceptible to response bias than are quantitative studies and therefore, the use of qualitative studies is less useful for the purposes of attaining unbiased results.

Parental involvement is measured by how many hours a parent spends helping their child complete homework, how often the parents volunteers at their child's school, how frequently the parents meets with the child's teacher, and how many educationally related activities, outside of the child's normal curriculum, are shared between the parent and the child, among others.

(James, 2012) Academic achievement is measured by scores on state administered standardized test as well as GPA or traditional grades received from their day-to-day school curriculum.

(James, 2012) Since there are various ways in which to measure both parental involvement and academic achievement, researchers seeking to discover the true relationship between the two had to devise a method of coding each type of measurement in order to account for the variance.

CHARTER SCHOOLS

One method offered to combat the dilemma of low academic performance in urban school districts is adoption charter schools. Charter schools are schools which receive both state and private funding, and although part of the public school system, are granted a certain level of autonomy and flexibility with regards to running the institution. (Beuchler, 1997) Charter schools are appealing to parents because they are "schools of choice" which enable parents to enroll their children regardless of residence. (Beuchler, 1997) This is in conflict with the district restrictions imposed by traditional public schools. Additionally, parents are possible attracted to charter schools because such schools are usually founded by teachers, corporations, philanthropists or universities with the intent to provide superior education to that which is offered by local public schools. Finally, parents may be drawn to charter schools because these

schools are held accountable to produce well educated students by their charter or governing body all but ensuring that students are receiving the best possible education.

(Winters, 2010) focused on the relationship between the percentage of students who exit public schools and enter charter schools with the academic achievement of the students who remain in those same public schools. Longitudinal student level data from the New York City Department of Education was used. Data from over 1100 schools and over 1 million total observations was included. The data set contained math and language arts scores of students in grades three through eight from the 2005-2006 and the 2008-2009 school years. (Winters, 2010) used the longitudinal data to identify those students who were enrolled in public school one year and a charter school the next.

It was found that the model which accounted for the school-fixed effect or a student-school spell effect both a found that the relationship between charter school competition and the math proficiency of the remaining students was insignificant. However, the model which adds a student-fixed effect found a significant positive relationship between the percentage of students who left public school for a charter school and the math proficiency of the remaining students. (Winters, 2010) But, when assessing the significance of the same relationship while focusing on particular student characteristics, there are slightly different developments. It was determined that Hispanic students benefit the most from charter competition, while the performances of White students were hurt by charter competition. Further, it was determined that only the students in the top quartile actually benefitted from charter competition. (Winters, 2010)

In assessing the language arts performance of the remaining students, it was discovered that both African American students and Hispanic students benefitted from charter competition.

(Winters, 2010) The relationship between the percentage of students who opted for charter

schools and the language arts performance of White students, while positive, was not statistically significant. Also, nothing was found to suggest that, while assessing language arts scores, that one quartile of students benefitted from charter competition significantly more than others.

This research provides evidence which indicates that the existence of charter schools do not harm the academic performances of the students who are left in the traditional public school system. In fact, it seems that not only are the academic performances of students not harmed by the existence of charter schools, it may be the case that the academic performances of public school students are slightly improved by the existence of charter schools. This implies that public school officials and teachers may be reacting to the possibility of more parents opting to enroll their children in charter schools. If such a trend were to persist, this would severely hinder the value of traditional public schools and place the jobs of those they employ in jeopardy.

(Berends et al., 2010) focused on the relationship between the instructional conditions of charter schools and students mathematical achievement. The data used for this analysis was collected from the Northwest Evaluation Association which is a partner with the National Center on School Choice. NWEA provides student assessments in mathematics, reading and language arts covering more than 4 million students and 36 million test records from about 8,200 schools in over 2,000 districts. (Berends et al., 2010) utilized data from 2002-2003 to 2005-2006.

For the project, the dependent variable was "Year gain in mathematics score." The "Year gain in mathematics score" is the math achievement score computed from tests administered from spring 2005 and spring 2006. The student level variables include a continuous variable measured the time elapsed (in weeks) between test administrations in spring 2005 and spring 2006. Also, race/ethnicity dummy variables (black, Hispanic, and other, with white as the

reference group) were included. Finally, dummy variables indicated the student's grade level to account for the use of grade level as a stratification variable. (Berends et al., 2010)

With regard to the academic achievement of both public and charter schools, (Berends et al., 2010) found no statistically significant evidence to suggest, at least in their mathematical performance, that one type of school out performs the other. However, it was determined that students in a school which placed an emphasis on academic achievement outperformed students who were not. Also, (Berends et al., 2010) found that their innovation measure was associated negatively with academic gains. This implies that placing an emphasis on academic achievement and not innovation should not be the sole focus of a school district.

(Carlson et al., 2010) focused on the relationship between charter school authorizers and student achievement. The analysis was performed by using a 10-year panel dataset from the state of Minnesota. Minnesota allows four types of charter school authorizers which include local school boards, postsecondary institutions, non-profit organizations and the Minnesota Department of Education. The aim was to determine which authorizer of charter schools produces the best academic results or to determine that there is no difference as to the efficacy of each body's authorization strategy.

Data on student achievement in Minnesota public schools published by the Minnesota

Department of Education was used. The Department of Education provides reports on a number
of standardized tests. In this analysis, grade-within-school-level data from Series I and Series II
of the Minnesota Comprehensive Assessments (MCA) was used. Also, demographic
characteristics from each school used provided by the Minnesota Department of Education was
utilized. Specifically, the dataset contained school-level measures of enrollment, racial
composition, gender composition, the percentage of students receiving free and reduced-price

lunch, the percentage of students who are English Language Learners (ELL), and the percentage of students receiving special education services.

(Carlson et al., 2010) determined that there is no difference in terms of the level of efficacy of the four types of charter school authorizers used in this analysis. The difference between the authorizer with the highest level of conditional achievement and the authorizer with lowest level of conditional achievement was just 1/10 the standard deviation. Within each authorizing body, there is nearly equal variance (Carlson, Leslie, Lavery and Witte, 2010). However, it was found that with respect to between-school variance, it is clear that there is more variability in achievement across schools authorized by nonprofit institutions than there is across schools authorized by other institutions. In addition, when examining the within-school variance estimates reveals that, conditional on the contents of the model, schools authorized by universities exhibit more within-school variance than schools authorized by the three other types of authorizing institutions. (Carlson, Leslie, Lavery and Witte, 2010)

The current academic literature focusing on efficacy and necessity of charter schools uniformly offers no statistically significant evidence which suggest that charter schools as a whole facilitate higher levels of academic performance than do public schools. Further, the scholarship also provides evidence towards the existence of charter schools not harming the academic performance of students who attend public schools. In fact, the evidence suggests that the existence of charter schools may be causing the academic performance of students who attend public schools to ascend. This implies that the competition between charter and public schools provides a better all-around product for the consumer or the parents.

Charter schools are different from private, parochial or Catholic school in that there are no tuitions costs in order to attend. This aspect allows for charter school to theoretically be

available to any student. The accessibility of charter schools creates stout competition for public school, especially public schools which, by the parents' estimation, fail to properly educate its students. So, in order to combat the attraction to charter education, public school officials and teachers are forced to increase their efficacy.

When analyzing any disparity between the academic performance of public school students and charter school students, one must take into account that often, students self-select into charter schools. Meaning, students who perform well academically may elect to attend a charter school due to the perception that charter schools provide a superior education to public schools. Therefore, in cases where charter schools academically outperform local public schools, it may be due to the talented student body and not necessarily the charter school's level of efficacy.

The Coleman Report

In 1966, Professor James S. Coleman conducted the Equality of Educational Opportunity study. Prof. Coleman presented to congress that he found that poor African American students performed better academically when attending middle class integrated schools. (Heller, 1969)

Further, it was found that while there was a racial gap with respect to academic achievement, the components of predominantly Caucasian and predominantly African American schools were essentially the same. There were no significant difference found between teachers' training, teachers' salaries, and curriculum. (Heller, 1969) But, African American students were found to be a few years behind Caucasian students academically. These findings were attributed to familial factors such as the level of education obtained by parents, level of household income, and the occupations of parents. This study is known as one the largest social science research

projects in the history of the United States as it tested 570,000 students, 60,000 teachers in over 4,000 schools. (Heller, 1969)

(Kane and Singleton, 1996) note that during the time of the Coleman Report, 1966, racial segregation was ramped throughout the United States, however, since then racial segregation of American schools has significantly declined. Given this fact coupled with Coleman's finding that poor African American students perform better academically in middle class integrated schools, the racial achievement gap should be closing. But, it is not closing. According to (Jencks and Phillips, 1998), across each level of socioeconomic status, when the status of Caucasians and African Americans are equal, Caucasian students academically outperform African American students.

According to (Steele, 1995), African American students were found to respond negatively to an academic environment which is occupied predominantly by Caucasian students. The theory of "Stereotype Threat" offers that when African Americans are in the presence of Caucasians and are knowingly engaging in an intellectual tasks, they perform worse than if they were not informed that the tasks were intellectual or if they were not in the presence of Caucasians. (Steele, 1995) This finding refutes the findings in the Coleman Report and others alike.

(Ravitch, 1981) examined the second of Prof. Coleman's reports regarding educational equality. It was found that Coleman is now offering that the quality of the school does in fact make a difference with respect to academic performance. According to Coleman, private schools are better than private schools at producing students who perform well academically. (Ravitch, 1981) Coleman attributes better cognitive outcomes, safer school environments, and smaller class sizes to the quality of private schools being superior to the quality of public

schools. (Ravitch, 1981) However, Coleman may have overlooked a few pertinent possibilities. The first is that the characteristics of private schools may be the result of the type of parents private school encounter.

Furthermore, a parent who sends their child to private school may be more likely to be invested in their child's education and may be better able to afford tuition and uniforms. In addition, small class sizes may be due to the fact that private schools reach capacity fairly easily in comparison to public schools. Finally, not only do parents elect to enroll their children into private schools, indicating more of a commitment to their child's education, but of the applicant pool, private schools select whom they wish to admit. Essentially, it appears that the student pool is filtered twice it becomes the student body of private schools.

THEORY/HYPOTHESIS

There are several factors which contribute to the academic performance of students.

Factors such as the financial well-being of the family, the financial well-being of the school and district, as well as the financial well-being of peers are all factors which influence academic achievement. In addition, the education level of parents as well as the experience, ability and teaching methods of educators also significantly influences academic achievement. Further, the support a student receives from parents, teachers and administrators, as well as the neighborhood environment contributes to the academic success of students. But, it is my contention that the level at which a parent is directly involved with a student's education is the factor that contributed most to academic achievement.

There are several types of parental involvement, as indicated in the academic literature. There is the level at which parents spend time with students discussing the student' academic future. There is the level at which the parent assists the student with their homework and checks the homework. There is the level at which parents take students on educational trips or a have intellectually stimulating conversations with students. Also, there is the level at parents provide personal tutors or extra educational materials, such as computer or encyclopedias for the student. Additionally, there is the level at which parents volunteer at the student's school to assist at school function. But, it is my contention that the level at which a parents attend regularly scheduled meeting at the student's school with the student's teacher(s). I am not referring to a meeting requested by the teacher to address a student's disciplinary issue. I am specifically referring to regularly scheduled parent/teacher conference meetings.

The difference between parent/teacher conference attendance and the other forms of parental involvement is that parent/teacher conference attendance indicates a parent's

commitment to establishing a relationship between the parent and the school regarding the academic success of the student. Further, it is a clear and public display of this commitment.

Some of the other forms of parental involvement are not publically displayed, but rather, privately displayed. It is my contention that privately displayed involvement, while effective, is less effective than publically displayed parental involvement. Also, the difference between volunteering for school functions and attending regularly scheduled parent/teacher conferences is that the former, while demonstrating support for the student, is not specifically related to academic success, but rather is more geared toward social development. The latter, however, is geared specifically toward the academic success of the student. I contend that the theory of Publically Displayed Academic Parental Involvement is the strongest indicator of the academic success of the student.

After compiling and analyzing the Detroit School District's data, my hypothesis is the percentage of parents who attend parent/teacher conferences will be at least as strongly associated to academic performance as the percentage of students eligible for free reduced lunch. If not equal, I predict that the association between the percentage of students eligible for free/reduced lunch and academic achievement will be only slightly stronger than the association between the percentage of parents who attend parent teacher conferences and academic achievement.

I also predict that the racial make-up of each school will have a weak association to academic achievement due to the likelihood of each school being predominantly African-American. I hypothesize that the student/teacher ratio will have a strong association to academic achievement due to the presumption that the Detroit public schools are understaffed. It is also my prediction that charter schools, on average will outperform public school in both math and

reading due to smaller class sizes and the presumption that parents who send their children to charter schools are more likely to be heavily involved in the student's academic career.

It is my prediction that the per pupil spending of each school will have a weak association to academic performance, due to the presumption that there will not be a significant amount of variance from school to school with regard to the amount each school spends on each student.

Further, I predict that the average teacher salary will have a weak association to academic performance, due to the presumption that the pay scale within one school district is uniform and therefore, should not provide any indication towards the level of teacher efficacy.

Finally, I predict that the model designated for the reading standardized test scores will show that academic performance is more associated to the percentage of parents who attend parent/teacher conferences than the model designated for the math standardized test scores. The reason I believe this will be the case is the thought that it is a bit easier for parents to teach their children to read than it is for parents to teach their children math. Further, it is more likely that parents will be able to keep up with reading assignment as their children get older than it is for parents to adapt to the math assignments their children will receive as they advance.

METHODS/DATA

Conceptualization

When determining which variables to incorporate, it was important to select variables which were able to be measured numerically and continuously. It was decided that for this analysis, the *dependent variable would be academic achievement*. The independent variables which were chosen include parental resources, school resources, teacher efficacy and parental involvement. It was also decided to include the racial demographics of each school. In addition, it was decided to incorporate the student/teacher ratio of each school.

In order to properly measure the variables, proxies were selected that were thought to appropriately and accurately represent and allow the proper measurement of each variable. Math and reading standardized test scores were selected as proxies in which to indicate academic performance due to those indicators being reliable in capturing the academic ability of students. Standardized tests are given to every student throughout the state, allowing for a student's ability level to be determined based on one universal test of basic skills. The standardized test administered to students in grades three through eight is the Michigan Educational Assessment Program examination (MEAP). The standardized test administered to students in grades nine through eleven is the Michigan Merit Examination (MME).

An alternate indicator for academic performance such as "graduation rates" was not chosen. Graduation rates of Detroit schools were not used due to there being presumed variance of graduation standards depending on the institution. It was determined that it may be less challenging for a student to graduate from certain schools than others. This possibility rendered graduation rates unreliable as to fairly determining the true academic ability of all Detroit's students.

As a proxy for school resources, it was determined to use each school's per pupil annual budget. The per pupil annual budgets are the most sound indicators of each school's commitment and ability to provide students with the essential tools needed in which to succeed academically. It is necessary to use per pupil annual budgets rather than overall annual budgets because larger schools will usually have larger budgets than smaller schools, thus, overall annual budgets are useless in determining what the school is actually doing for its students. Essentially, an overall annual budget simply indicates the size of the institution, not the level at which it invests in its students. However, per pupil annual budgets indicate exactly how much a school spends per student regardless of school size.

Parental resources were measured by using the percentage of students eligible for a school's free/reduced lunch program. The idea is that the higher the percentage of students eligible for the program, the lower the average income is for the school's parents. The ideal proxy for parental resources would obviously be the average salary of parents for a particular school. Although there is data available indicating the average annual income of an entire city or congressional district, the main problem with using average income as the proxy for parental resources is that data on the average income of parents for *each school* is not readily available. Moreover, the percentage of students eligible for free/reduced lunch is easily accessible on the Detroit Public Schools website and is a clear indicator of each school's economically disadvantaged population.

Teacher efficacy was measured using a number calculating 66.1% of the personal budget which is allocated for salaries and dividing that number by the number of teacher in each school as an indication of the average salary for teachers at each school. The numbers given in the data

set are not the actual average teacher salaries, but rather an indication as to how much a school spends on teachers and other school employees.

The rationale behind the decision was that given teachers' salaries increase overtime, the schools with the highest average salary for teachers should be the schools with the most experienced teachers. The schools with the most experienced teachers should also be most effective at extracting the best academic performance out of their students. This strategy was chosen over alternative indictors such as student or parent surveys again due to the element of possible response bias. By using the average salaries as a proxy for experience and implied efficacy, the truest results are ensured and skewed results are avoided.

As a proxy for parental involvement, it was determined that the best decision would be to use the percentage of parents who attend parent/teacher conferences. In Detroit, teachers are required to have parents sign in at every scheduled parent/teacher conference. For instance, if a teacher has thirty students and twenty parents attend, then 66% of the parents attended. The schools take the attendance rates provided by the teachers and send them to the district office. Each year, the Detroit Public School districts provides parent/teacher conference attendance rates for each school. The idea is that schools with the highest rate of attendance at parent/teacher conferences will also have the highest student performance. Again, using numbers rather than human responses all but guarantees that the findings will be true, reliable and not skewed in any way. The variables of racial demographic makeup of each school and student/teacher ratio did not require proxies.

To address the issue of charter school efficacy versus public school efficacy as well as charter school parental involvement versus public school parental involvement, it was decided to code each charter school with 1 and each public school with zero. This was done in an effort to

analyze any differences in the associations between the dependent and independent variables within the two subgroups. Any differences found would provide telling implications.

Data Collection

Each piece of data needed for the subsequent statistical test was available on the Detroit Public School website, DetroitK12.org. On the site, each school has a profile. On the profile page, there are sections which include a particular school's "Demographics," the "Annual Education Report" and the "Annual Education Report Letter." Under the demographics section, the number of students attending the school, the number of students within each racial group as well as the percentage of students eligible for the free/reduced lunch program and the student/teacher ratio was provided. Under the annual education report section, the percentage of students proficient in math and reading determined by the performance on the state standardized test was provided. Under the annual education report letter section, the percentage of parents who attended parent teacher conferences was provided.

Also on the website, within the "Financial Data and Reports" section, under the fiscal adopted budget, the annual operating budget of each school is provided. In order to get the proper entry needed for the analysis, each school's operating budget was divided by each school's total student population. The result was used to indicate the per pupil budget of each school. The personnel budget for each school is also located under the annual operating budget section. 65.1% of each school's personnel budget is allocated specifically for salaries and wages. So, in order to get the proper entry needed, the personnel budget was multiplied by .651 and that number was divided by the number of teachers in each school. The result was each school average teacher salary.

Test

Multivariate regression was used as the test to determine the correlation between the dependent variable, academic achievement and the independent variables, average teacher salary, parental involvement, percentage of student eligible for free/reduced lunch and annual per pupil spending of each school. It was decided to employ two separate models to test. In one model the dependent variable was the average reading performance and in the other model, the dependent variable was the average math performance. This was decided due to there being no way to unify both the reading and math scores without possibly skewing the results.

RESULTS

Reading Model

The adjusted R² of this model is .372 which means that the independent variables or predictors explain 37.2% of the variance in the reading scores of the schools. The percentage of parents who attended parent/teacher conferences was found to have the strong association to academic achievement. A 1% increase in parent/teacher conference attendance was associated with a .434% increase of reading proficiency for a school. This finding is significant at the .001 level. This finding is also consistent with my main hypothesis. The percentage of students eligible for free/reduced lunch was found to have a strong association to academic achievement. A 1% increase in the free/reduced lunch eligibility was associated with a .570% decrease in reading proficiency for a school. This finding is significant at the .001 level. This finding is also consistent with my hypothesis

Per pupil annual spending was found to have an interesting association to academic achievement. A 1% increase in per pupil annual spending was associated with a .001% decrease in reading proficiency. This finding was significant at the .02 level. This finding indicates that in Detroit, more spending results in less reading proficiency. This is contrary to my prediction and what is normally thought about per pupil spending. Student/teacher ratio was found to have a fair association with academic achievement. A 1% increase in student/teacher ratio was found to be associated with a .121% increase in reading proficiency. Although this finding is not consistent with my prediction, this finding is significant to the .764 level which means is has no statistical significance.

Charter schools were found to have a fair association to academic achievement. Charter schools were associated with a 3.872% increase in reading proficiency. This finding was

consistent with my prediction. This finding was significant at just the .264 level, rendering the result statistically insignificant. The results of the regression indicate that the association between the racial make-up of each school and academic achievement was statistically insignificant. This was due to the average African-American population in Detroit Public schools being 86.7%. Therefore, it seems that in Detroit, race is not associated to academic achievement.

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.639 ^a	.408	.372	14.96901%

ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
	Regression	12819.786	5	2563.957	11.443	.000 ^b
1	Residual	18597.909	83	224.071		
	Total	31417.695	88			

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.			
		В	Std. Error	Beta					
	(Constant)	70.987	15.777		4.499	.000			
	Charter School	3.872	3.446	.097	1.124	.264			
	Per Pupil Annual Budget	001	.001	205	-2.367	.020			
1	PTA attendance	.434	.073	.509	5.939	.000			
	Eligible Free/Reduced Lunch	570	.156	315	-3.645	.000			
	STRat	.121	.402	.026	.302	.764			
	Teacher_Salaries	0005	.000	088	893	.374			

Math Model

The adjusted R² of this model is .118 which means that the independent variables or predictors explain just 11.8% of the variance in the math scores of the schools. The percentage of parents who attended parent/teacher conferences was found to be positively associated with academic achievement. A 1% increase in parent/teacher conference attendance was associated with a .182% increase in math proficiency for a school. This finding was significant at the .004 level. This finding is consistent with my main hypothesis. The percentage of students eligible for free/reduced lunch was found to be positively associated with academic achievement. A 1% increase of the students eligible for free/reduced lunch was associated with a .166% decrease in math proficiency for a school. This finding was significant at the .213 level meaning it was statistically insignificant. This finding was consistent with my hypothesis.

Per pupil annual spending was found to be associated with academic achievement. A 1% increase in per pupil annual spending was associated with a .001% decrease in math proficiency for schools. This finding is identical to what was found in the reading scores model, however, this finding is significant at only the .216 level which is statistically insignificant.

Student/teacher ratio was found to be fairly associated academic achievement. A 1% increase in student/teacher ratio was associated with a .446% increase in math proficiency for schools. This finding is significant at the .192 level which means this finding is not statistically significant.

Charter schools were found to have a fair association with academic achievement.

Charter schools were associated with a 3.087% increase in math proficiency for schools. This finding is consistent with my hypothesis. However, this finding was significant at only the .292 level meaning the finding was statistically insignificant. As in the reading model, due to the average African-American population being 86.7% for the schools used in this analysis, there

was no statistically significant association between racial demographic and academic achievement.

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.410 ^a	.168	.118	12.63993%

$\textbf{ANOVA}^{\textbf{a}}$

Model		Sum of Squares	df	Mean Square	F	Sig.
	Regression	2682.140	5	536.428	3.358	.008 ^b
1	Residual	13260.730	83	159.768		
	Total	15942.870	88			

Coefficients^a

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.		
	В	Std. Error	Beta				
Charter School	3.087	2.910	.108	1.061	.292		
Per Pupil Annual Budget	001	.000	128	-1.245	.216		
PTA attendance	.182	.062	.299	2.940	.004		
Eligible Free/Reduced Lunch	166	.132	128	-1.255	.213		
STRat	.446	.339	.136	1.314	.192		
Teacher_Salaries	00047	.000	157	-1.425	.566		

DISCUSSION

The results of this analysis offer several telling implications. The first has to do with the evidence suggesting that the association between the racial makeup of each school and academic achievement is weak and statistically insignificant. This finding is the result of an extremely large African American population. Therefore, this analysis was unable to determine if race is associated with academic achievement.

The second implication stems from the finding that the student/teacher ratio is actually low for inner city school districts, just above the national average at 17.7/1. It has also been popular to claim that Detroit Public Schools and other like districts are struggling due to overcrowding. It is also usually asserted that inner city school districts are understaffed, which is the main reason for the overcrowding. The evidence suggests, at least in the case of Detroit, that this just is not the case. This finding also implies that there are other, atypical factors which are in fact significantly contributing to academic achievement.

The third implication derives from the math scores being so universally low that the results were largely insignificant for the purpose of running a regression. This finding implies that due to the shortage of qualified math teachers coupled with the fact that the teacher who are qualified to teach math are in demand even in suburban school districts, that such teachers may not being inclined to accept positions in districts like Detroit. Further, as indicated in the academic literature, teachers are inclined to avoid being employed by districts with minimal support for new teachers as well as a shortage of teaching supplies. Teachers are also attracted to teaching students who are thought to be more teachable or high achieving. The aforementioned may account for the uniformly low math scores of the students in Detroit.

The fourth implication is underscored by the finding that, in Detroit, charter schools do not perform better academically than public schools. In both the reading and the math models, results were found to be statistically insignificant. It seems that whenever there is mention of the possibility of a charter school being established in the inner city, citizens automatically assume that the charter school will be better for their children than the public school. As suggested in the literature, the existence of charter schools may not only have no impact public school academic performance, it may be the case that the existence of charter schools may positively influence public school academic performance. This implies that public school administrators and teachers may be beginning to making a concerted effort to improve upon teaching their teaching strategies. This finding also implies that charters schools may not be as effective or necessary as previously believed.

The fifth implication has to do with the finding lending no statistically significant evidence of there being a strong association between the average teacher salary and academic achievement. This finding may be the result of a uniform pay scale based on the principle of the district paying teachers according to the teacher's experience. Further, districts which are financially struggling, such as Detroit, are most likely unable to pay teachers competitive salaries. Such an occurrence may cause experienced teachers to seek jobs in other districts. This would leave the remaining pool of teacher relatively inexperienced which would lessen the variance of their collective salaries.

The sixth implication derives from the finding that per pupil spending of Detroit schools is negatively associated with academic achievement. This may be the result of there being a relatively consistent allocation of funding throughout the district of Detroit. When there is discussion regarding a school district which is failing academically, often is the case that the

assumption is that the school board or city government has somehow mismanaged the funds intended for schools and that is the reason behind the lack of academic achievement. In this analysis, the evidence suggests that even if the city of Detroit is mismanaging the funds intended for schools, this would not explain the lack of academic achievement in Detroit. This implies, as the aforementioned findings have, that there are atypical factors which significantly contribute to academic achievement.

The seventh implication stems from the finding that the percentage of students eligible for free/reduced lunch is strongly associated to academic achievement. This finding may be the result of the entire city of Detroit currently being in a financial crisis. It appears that parental SES does impact the academic achievement of students. This finding suggests that there are advantages to having parents who are college educated and able to provide students with the tools necessary for academic success. Further, this finding suggests that in order to close the racial and class academic achievement gap the racial and class income must be close first.

The eighth and final implication has to do with the finding that the percentage of parents who attend parent teacher conferences has a string association with academic achievement. As previously stated, when it is discovered that an entire district is failing to properly educate its students, typically the blame is targeted at city officials, school officials, teachers and finances. The evidence of this analysis suggests that a significantly contributing factor to academic achievement is parental involvement, specifically, publically displayed academically related parental involvement. The implication is that regardless of the behavior of city and school officials, regardless of teacher efficacy, regardless of whether a student was admitted to a charter school or not, and regardless of severely negative financial circumstances, parents still possess the power to significantly and positively impact their child's academic performance.

LIMITATIONS/SUGGESTIONS

The findings in this analysis are significant. However, the methods in which the analysis was conducted can be improved upon. First, this analysis was strictly quantitative and aimed solely at establishing the level of association between the dependent variable and independent variables. The evidence acquired is suggestive and does not prove anything. Second, as previously stated there are better ways to measure the variables that I chose to incorporate in this analysis. The proxies that I chose were the most readily available, which added to the feasibility of this project's completion. The different types of measurement for the variables should be taken into consideration when running any sort of statistical test if the aim is to acquire the absolute true measurements and results.

For example, there are several ways in which one can measure parental involvement. So, a researcher should find a way to accurately measure each type of parental involvement. If there is qualitative data which is accessible, a researcher needs to code appropriately in order to incorporate qualitative data with quantitative data. This process would need to be repeated for each independent variable as well as the dependent variable in order to produce the most reliable findings.

Third, there are some proxies which were limited in what information they were able to provide. For example, the decision to use standardized test scores to represent academic achievement is the result of that data being readily available and it being a continuous measurement which is essential to conduct a regression analysis. The strategy which garners the most telling results in terms of academic achievement would be a longitudinal study, tracking the year to year performance of a student, class or school in an actual scholastic environment.

Standardized tests are administered one day out of the year, and thus, should not be completely trusted to provide the absolute true ability of students.

Fourth, as also stated in the literature, there are significant issues with using the percentage of students eligible for free/reduced lunch as the indicator of the level at which parents have resources. One issue is that it may be the case that the qualifications to be eligible for free/reduced lunch for certain districts may not be very stringent or may vary from school to school or district to district. Further, a child's eligibility for free/reduced lunch is usually determined by the income of the primary caregiver(s). This may not take into account the income of a second parent who is not married to the first. Also, this may not take into account the income of other adults who live in the house. It may be the case that a significant portion of students eligible for free/reduced lunch are not financially disadvantaged to the extent that eligibility for the program would usually imply. To give a full picture of a parent's socioeconomic status, a researcher should incorporate the level of education, occupation, and income to debt ratio.

Finally, utilizing the average teacher salary to indicate teacher efficacy was not the strategy which would garner the most telling results. There are several more ways in which to determine the efficacy of a teacher. For example, as with academic achievement, a researcher should conduct a longitudinal study in which the grades of the student prior to the arrival of the teacher who is being evaluated are recorded. Then, after two or three years, the grades of the same group of student, provided they have had the same teacher for that time, are recorded. The difference between the first set of recording and the second set of recording can be interpreted as the teacher's efficacy.

Future researchers such focus on attempting to incorporate qualitative and quantitative data. Both forms of measurement are limited when utilized alone, but if both are used in conjunction, the results could be very strong. Furthermore, this analysis used data only from the city of Detroit. There are several cities comparable to Detroit in size and educational predicament which could be analyzed as well. Future researchers should aspire to incorporate as many cities as possible into their analyses. Also, a longitudinal study would almost certainly garner very telling and interesting results. Future researchers should consider this strategy to avoid analyzing a year that is not indicative of the actual characteristics of the area of study.

Future researchers should explore the alternative ways to measure the variables selected to be in this analysis. Further, researchers may consider attempting to determine the level of violent crime associated with neighborhood schools. There may be evidence to connect the level of violent crime with the academic achievement of the school it surrounds. Finally, it may be worth exploring the level at which the vitality of surrounding businesses is associated to academic achievement. There may be potential to establish a strong association when considering the two variables.

CONCLUSION

Although this analysis is restricted, it nevertheless provides evidence to suggest that parental involvement is associated to academic achievement as are parental resources.

Therefore, it is worth examining certain policies allocating funds to improve school facilities or to provide teacher and administrators with performance bonuses. It may be the case that such programs are wasteful and take funding away from programs which aid parents in being more available to their children.

In addition, based on findings similar to those found in this analysis, legislation could be passed requiring states to provide their own version of the head start program. It is widely accepted that underprivileged children who are exposed to head start, over time, perform better academically than underprivileged children who are not. So, instead of committing extremely large amounts of funds to programs and strategies which are seemingly ineffective, it may be more productive to direct funding towards programs which allow parents to influence their children more effectively.

Although it was determined by this analysis that parental involvement has a strong association with academic achievement, it does not provide exactly why the overall academic performance of Detroit Public Schools is so low. It may be the case that parents are not doing enough in order for their children to succeed academically. It may be the case that parents are doing all that they can, but the schools are falling short of their duties. It may also be the case that parents and school administrators are doing all they can but teachers are either unwilling to do the job properly or ill-prepared. In any case it is extremely important that the disparity in academic achievement within race and class be eliminated otherwise there will continue to be perpetual segregation in every part of American culture.

In Political Science, we study how the state is run politically. We study government as well as the voting behaviors of legislators and their constituents. We also study the process of how a bill becomes an actual law. Political Science is a social science. So, while it is important to observe the behaviors of voters and elected officials, it is equally important to study how the behaviors political scientists observe impact the citizens of this country. By paying close attention to the effects political behavior and attitudes have on citizens, it can be determined if the policies we have adopted have been useful, have been beneficial or have done the job they were intended to do.

This project examines what actually impacts academic performance. It has also provided evidence toward suggesting that the two main factors which impact academic performance are parental resources and parental involvement. American policy geared toward education reform has been school-centric. It has focused on improving school conditions, the quality of teachers, and the amount of resources in schools which were in need. While the motivation behind these endeavors was appropriate, it seems that in the city this project examined, Detroit, they were nevertheless ineffective.

In the city of Detroit, the average level of reading proficiency across their schools is 32.62% and the average level of math proficiency across their schools is 10.1%. Given those statistics along with the determination that parental resources and parental involvement are the factors which contribute the most to academic performance, it would seems that policy adopted in the future should aim to impact academic performance through assisting parents in their efforts to positively impact the academic performance of their children.

If the goal of the United States is to evolve into a society which truly ensures equal opportunity, the academic achievement gap between Caucasians and African Americans as well

as the academic achievement gap between the poor and the affluent must be properly addressed. If we continue to find evidence suggesting that level of parental involvement and the level of parental resources are what influence academic performance, then the policy we adopt should be geared toward facilitating an environment which would allow parents in struggling districts to be available to their children. As it stands, education reform is primarily focused on improving institution when the problem is related to the behavior and resources of the parents.

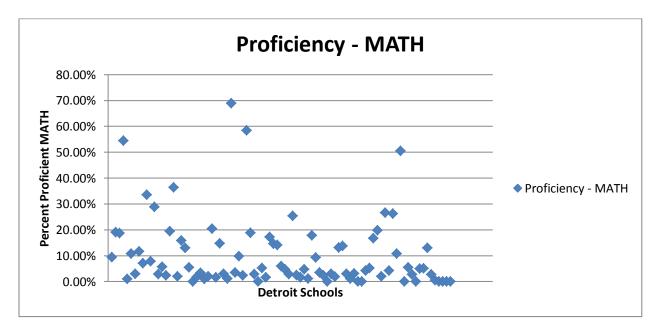
Appendix I

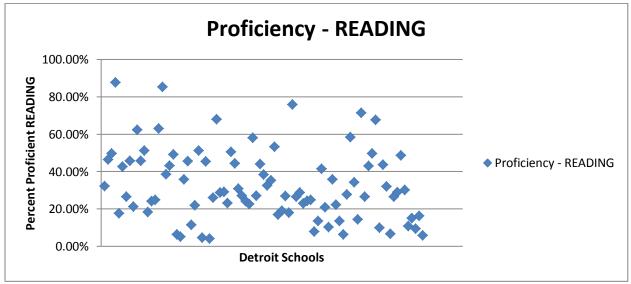
Description of Variables

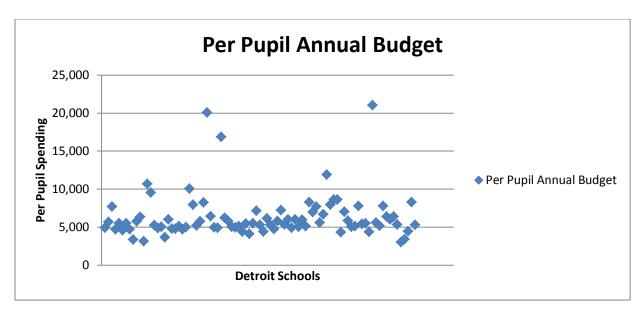
	N	Minimum	Maximum	Mean	Std. Deviation
Proficiency - MATH	89	0%	69%	10.1%	13.5%
Proficiency - READING	89	4.20%	87.60%	32.62%	18.9%
Per Pupil Annual Budget	89	\$3027	\$21020	\$6330.30	\$2934.60
Percent PTA attendance	89	3.30%	100.00%	29.8%	22.15%
Percent Eligible Free/Reduced Lunch	89	50.00%	98.20%	81.35%	10.44%
Student/Teacher Ratio	89	5.4	29.6	17.8	4.1
African American Students	89	2.8%	100.00%	86.71%	28.1%
Hispanic Students	89	0.00%	93.40%	9.5%	24.7%
Asian Students	89	0.00%	33.40%	0.9%	3.8%
Caucasian Students	89	0.00%	38.70%	2.48%	5.51%
Native American Students	89	0.00%	3.40%	0.41%	0.6%
Pacific Islander Students	89	0.00%	0.20%	0.003%	0.022%
Valid N	89				

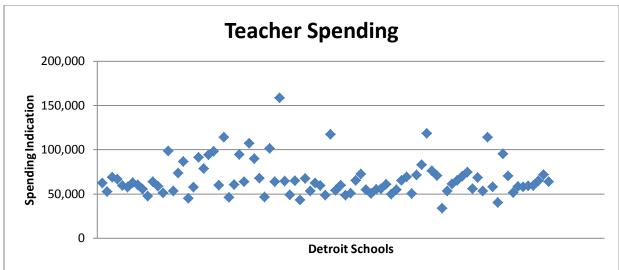
Appendix II

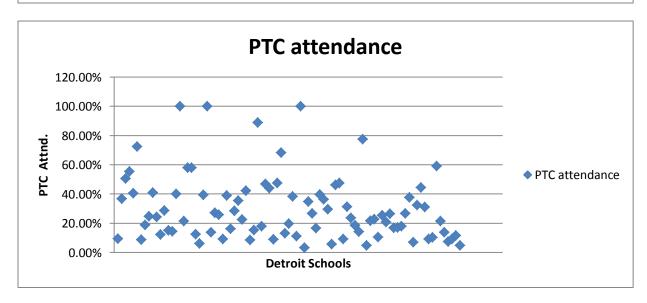
Distribution of Variables

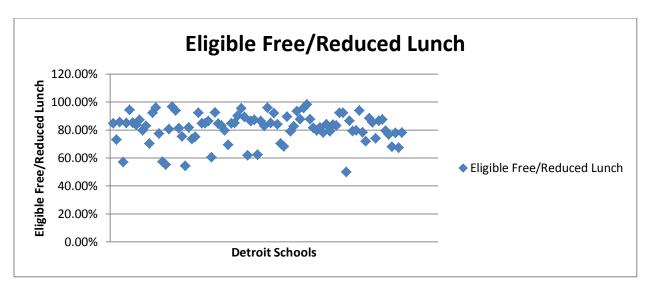


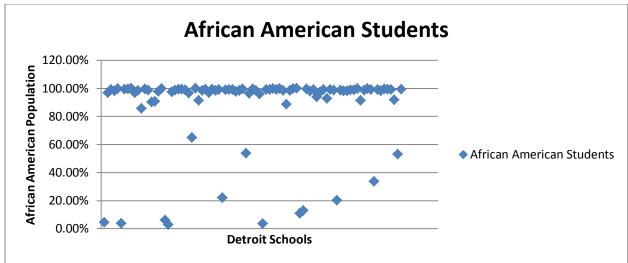


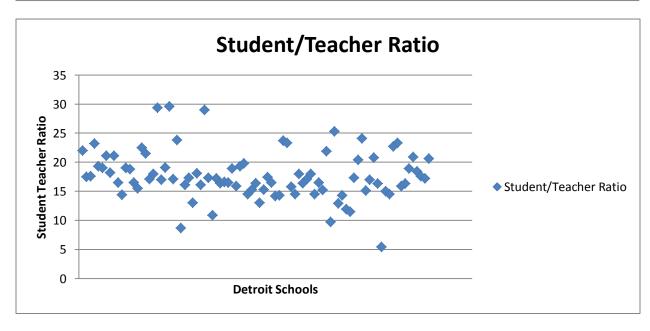


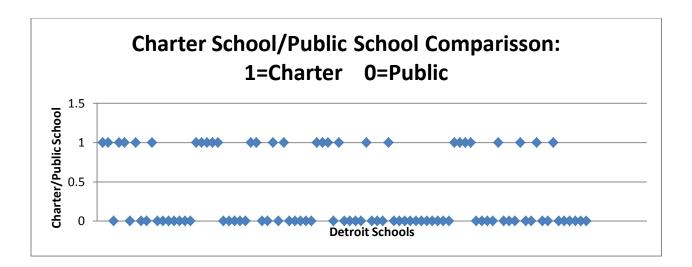






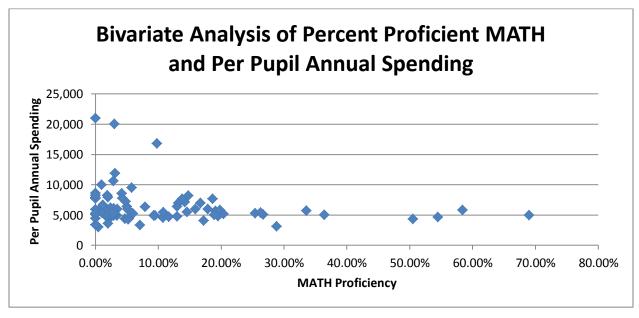


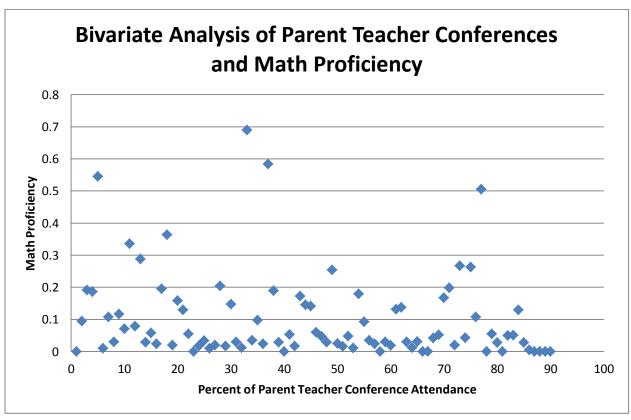


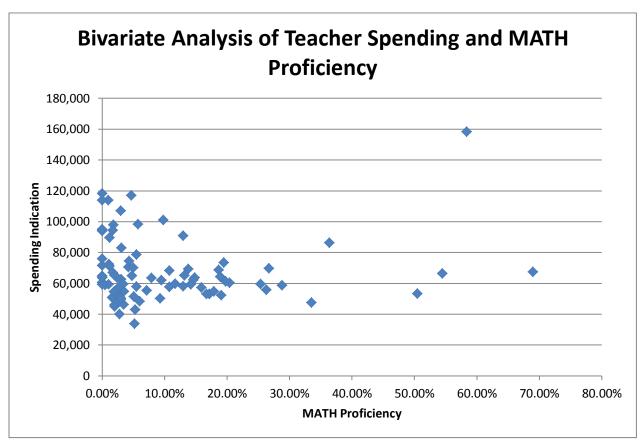


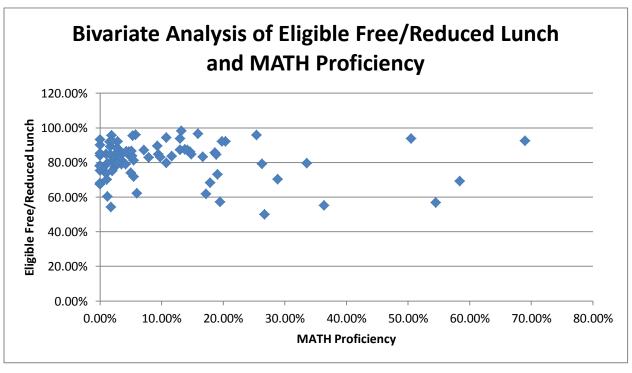
Appendix III

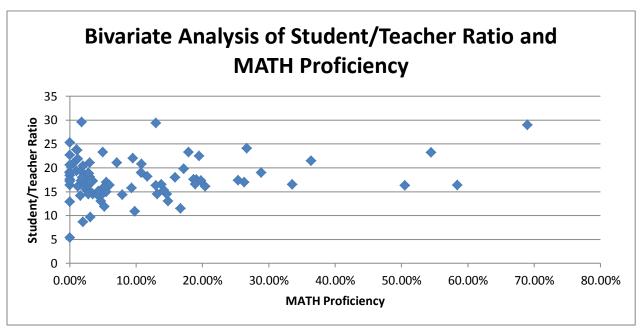
Bivariate Analyses

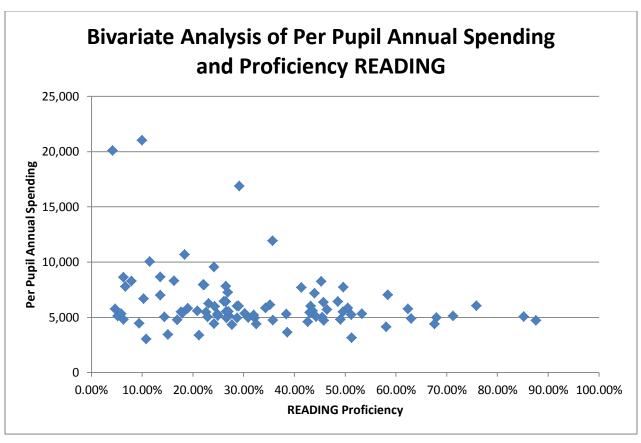


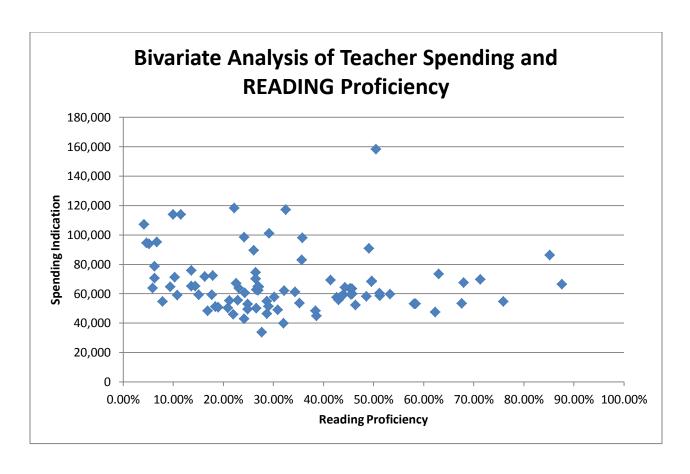


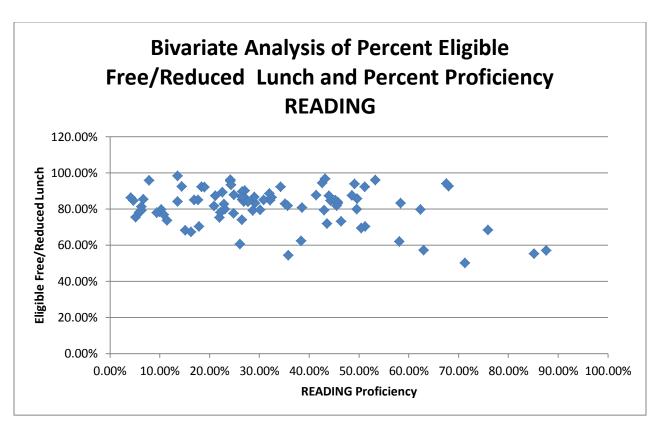


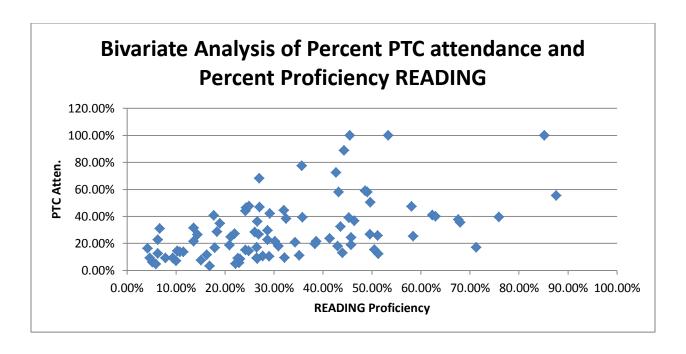


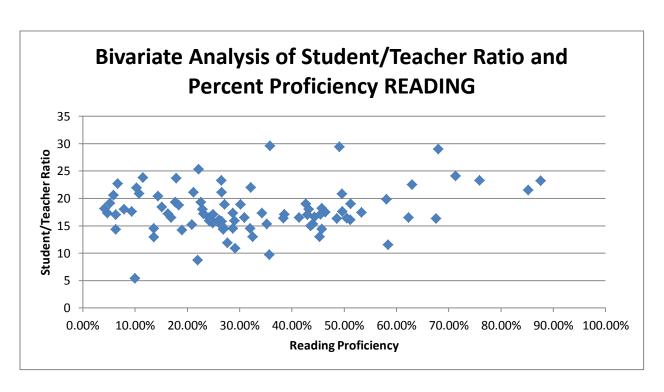












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