2020

Socioeconomic Status and Academic Achievement

Tricia M. Richmond
Bethel University

Recommended Citation

SOCIOECONOMIC STATUS AND ACADEMIC ACHIEVEMENT

A MASTER'S THESIS

SUBMITTED TO THE FACULTY

OF BETHEL UNIVERSITY

BY

TRICIA RICHMOND

IN PARTIAL FULFILLMENT OF THE REQUIREMENTS

FOR THE DEGREE OF

MASTER OF ARTS IN EDUCATION

DECEMBER 2020

BETHEL UNIVERSITY

SOCIOECONOMIC STATUS AND ACADEMIC ACHIEVEMENT

Tricia Richmond

DECEMBER 2020

APPROVED

Thesis Advisor: Nathan Elliott, M.A.

Program Director: Katie Bonawitz, Ed. D.

Acknowledgements

I have so many people to thank for helping me finish this journey. I would like to thank my amazing daughters for understanding how much time I needed to put into this. They were so great about giving me time and space to complete my work and help me when I was feeling overwhelmed. Thanks to my parents for always believing in me and encouraging me to be myself. Thanks to all of my friends that supported me during a big life change. Thanks to my Aunts and Uncles that encouraged me to go back to school and supported me along the way.

I would also like to say a very special thank you to Dr. Peggy McCormick. She was so supportive throughout my time at Bethel. She also knew when things were not going great and would send me a text to see how I was doing. Thanks to Nathan and Lisa for supporting and guiding me through this process.

Abstract

The number of school-aged children living below the poverty line continues to increase in the United States. This group of children are at a serious disadvantage in school and with their development. Children that grow up in a family with a low-Socioeconomic status, tend to have lower levels of academic achievement. There are factors within the school environment and outside of the school environment that play a key role in the development and achievement levels of school-aged children. Schools and teachers need to be trained to work with these students. School may be the only support system some children have and they need to feel welcome at school. Support at home and school are an important part of development. There are governmental programs in place to make sure all children have a right to an equal education, but they are not working effectively. Schools and communities should provide more intervention services to help disadvantaged children.

Table of Contents

CHAPTER I: INTRODUCTION

Throughout this literature review, families' socioeconomic status was determined by parental income, education, and/or if students qualified for either free or reduced-price lunches. According to the United States Department of Agriculture, Food and Nutrition Services website (2020), a family of four qualifies for free lunch if their annual income is less than $33, 475 and to qualify for reduced-price lunches their income needs to be less than $47, 638. Children living in poverty are living at a disadvantage already and now may have to worry about where they are going to get their next meal, which can lead to a lack of engagement at school. When people think about education, they do not necessarily think about how poverty and lack of food affect academic achievement.

Teachers need to: find effective ways of getting low-income students engaged in class, be more empathetic with struggling students, and take time to get to know their students so they can better understand their backgrounds (Jensen, 2013). Achievement has been linked to a student's engagement level. Highly engaged students tend to want to be in school and have lower levels of absences. Teachers need to be persistent in their motivation to teach students who have past academic records that show they have not made a lot of progress in raising their academic scores (Barbarin & Aikens, 2015). Teachers need to believe that all students have the ability to learn and be successful in school. It is human nature to compare people to similar people and have a lower expectation for them, based on an assumption. Schools that are in low-income areas tend to have teachers with less experience and a higher rate of teacher turnover. The school's physical characteristics can lead to children not feeling safe, getting sick more, or not feeling welcome.

Definition of Terms

Socioeconomic Status (SES) is determined not only by income but also includes occupation and education level. It is a classification of a family for example middle-class, upper-class, poor, and wealthy. *Socioeconomic disadvantage* refers to living in poverty and having limited opportunities due to a lack of income. *Academic Achievement* refers to being successful in school and being able to reach your goals in school. *Adolescence* is the stage of development between the ages of 13 and 19. *Self-Efficacy* refers to how a person believes they can do something. *Subsidized housing* is a governmental program giving vouchers to be used for rent to low-income families.

Theoretical Framework

Many aspects should be looked at and studied to understand how low-SES affects academic achievement. There is a lot of data supporting the theory of academic achievement for children living in poverty being lower than children living in affluent neighborhoods. This is the case in a majority of cases, but there are some success stories too. So much of the research is generalized into stereotypes of families living in low-income neighborhoods. To understand the many factors that contribute to academic achievement, people need to be more aware of what factors are more influential for children. This study looked at the home environment, the neighborhood environment, and the school environment. The home environment looked at family dynamics, structure, beliefs, rules, family time, and support. The neighborhood environment looked at factors such as the physical condition of the houses, access to resources, cultural support, and neighborhood cohesion levels. The school environment included the location of the school, quality of teachers, funding (due to low test scores and lack of taxes),

and feeling of belonging and safety. School funding was based on the level of improvement in test scores as a school (United States Department of Education, n.d.). This is hurting schools in low-income neighborhoods because they have a large population of students living in poverty. These particular schools are losing programs, quality teachers, and keeping the school condition safe.

There are a couple of government policies created to help provide more equity for disadvantaged students in education. President George W. Bush signed the No Child Left Behind (NCLB) Act into law in 2002 (United States Department of Education, n.d.). This act was put in place to give all students the right to have an equal and fair education. All schools are required to give standardized testing to all students in third through eighth grade (United States Department of Education, n.d.). Schools are then held accountable to ensure all students meet or exceed the standards in math and reading. Test scores are then used to determine funding (United States Department of Education, n.d.). Every Student Succeeds Act (ESSA) was signed into law by President Barrack Obama in 2015 (United States Department of Education, n.d.). This was to replace the NCLB act. Unlike NCLB, schools were able to set their own goals based on achievement levels and how to close the achievement gap (United States Department of Education, n.d.). ESSA identified low achieving schools and then made sure the school made an improvement plan (United States Department of Education, n.d.). Davis (2019) stated that even with ESSA in place, low-income students are still scoring lower in academics.

Rationale

The concept of educational inequality needs to be given more attention. The number of families living in poverty is growing in this country. According to the United States Department

of Agriculture Food and Nutrition Services (2019), children receiving free or reduced-price lunches made of 74.1% of lunches served in the school year of 2019. The majority of the studies reviewed in this thesis used the free or reduced-price lunch qualification to identify children from low-Socioeconomic Status (SES) families. Not all families have access to the same resources. Lack of resources such as affordable preschool puts children at a disadvantage going into Kindergarten. Children from low-income families begin kindergarten at a lower academic level than their peers from affluent homes. Low-income neighborhoods lack early intervention services, access to public transportation, libraries, grocery stores, parks, health care, and the list goes on. Without access to early interventions, learning disabilities may not be identified at an early age and it can impact the academic achievement level for some students. Families living in a low-income neighborhood may not have parenting support or parenting classes, this can also affect the support for helping their children with homework at home. The physical condition of the school, lack of qualified teachers, and lack of rigorous classes offered all play a role in the children's academic achievement ability. How can the achievement gap get closed if there is educational inequality present?

Purpose of my Research

As a mother and teacher, I am very concerned about the rising number of children affected by poverty. Over the last ten years, I have worked with many students who have struggled with finding somewhere to live, something to eat, or finishing their homework. It breaks my heart to think that students are out there worrying about basic needs and then being degraded because their grades are suffering. I wanted to learn more about what areas of a student's life have the most ramifications on their academic achievement. Is it their home

environment or their school environment or is it a combination of both? There is a lot of research that shows the link between family structure and low-SES. I do not believe that a child should be judged on whether they have both parents at home or just one loving parent. I wanted to look at the school environment and how teachers can help change the way children view their ability to be successful in school. I also have great empathy for children living in poverty because they did not put themselves there or want to live that way. I remember growing up poor and losing our house. I had the love of my family to keep me motivated and supportive teachers. I want to make sure that I provide a safe and welcoming place for all students regardless of socioeconomic status.

Research Question

As a special education teacher, I tend to see children suffering from large amounts of trauma. I have always worked in schools that have a large percentage of children receiving free or reduced-priced lunches. What can teachers do to help this population of students to be more successful at school? What role does a teacher play in the educational development of a student that has been at a disadvantage from any early age? Can a teacher be helpful just by being a support system for the child and family? I used the literature in this thesis to understand the correlation is between socioeconomic status and academic achievement. What is the relationship between socioeconomic status and academic achievement in primary and secondary aged students?

CHAPTER II: LITERATURE REVIEW

Literature Search Procedures

To locate the literature used in this thesis, searches of the Academic Search Premier, Bethel University Library, EBSCO MegaFILE, ERIC, Sage Journals Open Access Journals were conducted from materials from the years of 2001 – 2020. This list was narrowed down by using journals and publications that focused on students from low-income families, low-income neighborhoods, attendance, the quality of staff/school, and how these aspects affect a student's academic achievement. Keywords that were used in the search included "poverty and academic achievement," "socioeconomic status and academic success," "teacher perspectives of low-income students," "school success in low-income areas," and "after school support in low-income communities." This chapter will review the literature on how living in poverty affects academic achievement in three sections in this order: Socioeconomic Status and the Achievement Gap; Family and Neighborhood Factors; and Adequacy of the School System.

Socioeconomic Status and the Achievement Gap

Gordan and Cui (2016) studied the effects of race on academic achievement in low-income areas and hypothesized that community poverty has a negative correlation to academic achievement, black students have a lower rate of academic achievement and the racial gap is significantly higher in low poverty areas. Gordan and Cui (2016) studied middle and high school students that lived in the same area. Students in the study were black and white students (the ratio of white to black students was 75% to 25%), over half of the students were female (Gordan & Cui, 2016). The study did not indicate whether the study started with an even amount and only got results turned in from a certain amount. The participants were chosen by

a self-report of if they identified as white or black (Gordan & Cui, 2016). The study had students

self-report on how feel their economic status affects their ability to be successful in the learning

environment. Gordan and Cui (2016) compared the aspects of academic achievement,

Socioeconomic Status (SES), and race. To identify academic achievement, Gordan and Cui

(2016) used the Grade Point Averages (GPA) of the students in the areas of math, science,

language arts, and social studies. The SES was determined based on U.S. Census data from the

year 1990 and race was determined from the questionnaires answered by the students (Gordan

& Cui, 2016).

The study took into consideration the family dynamic of the students. The study found

that the students were more likely to have great success in education if they had both parents

living with them. Another factor that the study included was the educational level of the

parents (Gordan & Cui, 2016). The socialization levels of the students were also considered in

the study. Students that have good social skills and communication skills are more likely to ask

for help when they need it than students that lack the ability to communicate (Gordan & Cui,

2016). Low-income students reported lower academic achievement than students not from a

low-income area. Another factor that came up in the study was the lack of cohesion in low-

income neighborhoods, lack of cohesion causes more stress in low-income areas (Gordan & Cui,

2016). Gordan and Cui (2016) concluded that the study should have considered the concept of

racial socialization and indicated a need for programs to help students with academics in high

poverty neighborhoods.

There have been a lot of research studies about children living in poverty having low test

scores in reading due to external factors. Hentges et al. (2019) researched the math

achievement levels of children living in poverty by looking at their beliefs. The study included

1,536 students enrolled in grades 5th, 7th, and 9th attending one of three school districts in a

large metropolitan area (Hentges et al., 2019). Schools did not allow the study to ask the

students directly about their families' income, so they used the schools' percentage of students

that qualified for free or reduced lunches (Hentges et al., 2019). Based on the student sample,

52% of the students qualified for free or reduced lunches (Hentges et al., 2019). The study took

into consideration the perceived cost of gaining a higher achievement level (Hentges et al.,

2019). For the sake of the study, Hentges et al. (2019) described the cost perception as what

the student must give up to get to the successful end of a task. Students were given surveys to

answer during their math classes. The survey asked the students to state their perceived cost of

learning math in a scale ranking their effort in math (too high – too low), how the perceived

they would need to use math outside of the classroom, what is their interest level in math, and

what do they believe their math ability to be (Hentges et al., 2019). Academic achievement was

evaluated based on report cards and put into percentages (Hentges et al., 2019). The study

took into consideration other external factors such as race, gender, parent involvement, and

support at school (Hentges et al., 2019).

Findings in the study showed that economically disadvantaged students had higher

perceptions of the cost of learning math, but their perceptions did not have any effect on the

usefulness, interest, or perceived ability of math (Hentges et al., 2019). Low academic

achievement levels were due to the higher cost perception of low-income students. Children

growing up in poverty have a hard time looking at long-term results, partially due to the

uncertainties of their future, and make choices based on instant results. Children may also get

their perceptions from their parents, parents may not have the means to afford college and will not promote college with their children (Hentges et al., 2019).

Academic achievement can be dependent on both school and home factors. Singh (2015) discovered that in addition to household income, teacher quality is a major factor in determining academic achievement levels. Singh (2015) studied schools in Hawaii, specifically looking at the achievement levels of students in the third grade, then using that number to determine if achievement was higher or lower. Students were followed from third-grade to ninth-grade (Singh, 2015). The study revolved around the SES impact on math standardized test scores for fifth-graders, eighth-graders, and tenth-graders. Student's third-grade scores for were used for a baseline to make comparisons. Socioeconomic status was determined by the number of children that qualified for free or reduced priced lunches in each school. Students from low-SES have more obstacles to overcome to get to a higher achievement level and have fewer opportunities to help them increase their achievement level (Singh, 2015). The study concluded that students should be looked at as individuals when test scores are considered, due to individual attributes having more of an effect than school characteristics (Singh, 2015). Singh (2015) discovered that students' SES has an increasing effect on academics as the student progresses in school. School poverty levels were only a related factor in elementary school, there was no significant evidence to show it was a related factor in secondary education environments. Conclusions from the study determined the importance of early intervention for children living with low-SES. Schools should identify students that need more support and offer additional help for these students both during school hours and after school is over (Singh, 2015).

Attendance

Academic achievement and attendance have a strong relationship. The two aspects are interchangeable, meaning that absenteeism can lead to a decrease in academic achievement and a decrease in academic achievement can lead to more absences. One of the biggest factors in regards to absenteeism in socioeconomically challenged families is due to residential mobility (Ready, 2010). Residential mobility refers to frequently moving to different homes, possibly due to eviction and loss of employment. Children from low-income families that move around frequently tend to have more absences at a younger age, which can have a negative effect on their academic levels (Ready, 2010). Children growing up in poverty benefit more from attending school to improve academic achievement (Ready, 2010). There are two types of absences; legitimate (sickness, death of a family member, medical appointment, etc.) and illegitimate (a refusal to attend school, defiant behaviors, etc.), younger children do not usually fall into the illegitimate category by their choice (Ready, 2010). Ready (2010) set out to understand; the relationship between absences and social class, what role do absences play in academic development, and does the level of academic achievement depends on attendance. Data for this study was taken from 1,000 schools with kindergarten programs, 24 students were chosen from each school (Ready, 2010). Test scores for math and literacy areas were studied for the students in Kindergarten and first grade, the scores were checked at two different points each year (Ready, 2010).

Ready (2010) found that children living in poverty were statistically more likely to miss more school per month. Ready (2010) found there is a strong relationship between SES and attendance rates. Family and environmental factors also play a role in absenteeism among low-

income students. Family and environmental factors that influence the absenteeism in low-income families are; adult composition within the home, lack of medical care (making illness more prevalent), children with teenage parents, parental behaviors, and also exposure to environmental pollution or toxins (Ready, 2010). Low-income families consisting of single-parent families and families that do not speak English as their first language were found to have 36 percent of kindergarten and first-grade students as having poor (missing more than 10 days of school per year) attendance levels (Ready, 2010). The research found that absences contribute to the loss of academic knowledge. When absenteeism and lower SES are looked at together, it is found that negative outcomes in the area of literacy at a rate of 40 percent higher than children living with a higher SES (Ready, 2010). Children from a low SES showed positive benefits from being in school. Children labeled as low-SES, are prone to benefit from being in school, tend to have persistent absences (Ready, 2010). In the area of math, children from low SES with attendance issues did not show any difference academically than children from higher SES with attendance issues (Ready, 2010). If schools want to increase their academic achievement levels, they need to find a way to increase attendance (Ready, 2010).

Adequacy of the School System

The achievement gap is significant when looking at socioeconomic status. The government has passed educational laws to help decrease the gap, but the gap continues to increase. According to Fram et al. (2007), the achievement gap is a social justice issue. Fram et al. (2007) discussed the importance of creating more opportunities for children born into families living with low-income in order to try to create more of an equal society. When it comes to the education system in the United States, there does not seem to be equality for all

children in terms of opportunities and resources (Fram et al., 2007). Knowing that there is an

achievement gap, wanted to focus on finding where the gap is coming from (Fram et al., 2007).

Fram et al. (2007) studied 3,501 children in kindergarten through first grade living in the South.

The study looked at both school and home variables. Reading levels were assessed at two

points in Kindergarten and first grade to check for growth (Fram et al., 2007). Fram et al. (2007)

wanted to concentrate their finding on school and classroom factors, so they needed to

account for family variables. The variables they accounted for included parental education

level, SES, single-parent households, teenage parents, and residential choices. Teacher surveys

were used for information within the classroom. The classroom factors took into account

teacher qualifications, direct teaching time, and group time (Fram et al., 2007). The school

variables taken into consideration were school location (rural or urban), enrollment percentage

of minority students, and the percentage of children qualifying for free or reduced-price

lunches (Fram et al., 2007). Fram et al. (2007) found schools consisting of the majority of the

student living in poverty do not offer the same opportunities as a school with a low population

of students living in poverty, these schools lack high-quality teachers, mentors, safe classroom

conditions, and more choices in challenging classes. Low-income students tend to have family

factors such as the education level of the mother, a single-parent household, and having

teenage mothers that along with school factors lead to low levels of academic achievement

(Fram et al., 2007). Children that attend schools with high proportions of ethnic minority

student and students receiving free or reduced-price lunches show smaller gains in the area of

reading (Fram et al., 2007). An association between having a high number of peers falling below

grade-level reading levels showed lower gains in reading levels (Fram et al., 2007). Teachers can

make changes by incorporating mixed-ability workgroups in the classroom, which will give them peers to get help from and will be forced to work towards higher expectations (Fram et al., 2007). One surprising conclusion from the study showed that race was not a significant factor in any of the areas (Fram et al., 2007).

Additionally, Fram et al. (2007) found a link to the family environment that was significant in the study. Fram et al. (2007), identified that children born to teen mothers were a significant factor in the area of socioeconomic status and academic achievement. Teen mothers may lack the resources and funds to live in an area with a high-quality school, and they may also lack the knowledge to support their children in academics, they may also spend less time parenting and interacting with their children (Fram et al., 2007). There is some belief that teen mothers chose to be moms and that they are influenced by the lived experience of being a product of a teen mom (Fram et al., 2007). This study was conducted in the south, where it is common for young people to have children early (Fram et al., 2007). Many factors can be linked to the teen pregnancy rate being so high in low-income areas, including not having access to quality health care, birth control, religious beliefs, and abortion laws (Fram et al., 2007).

Cross et al. (2017) researched how high-ability students living in poverty, viewed the barriers they had to face and how it was affecting their academic achievement. The study compared the effects of both low- and high-income students who were involved in high enrichment programs in schools (Cross et al., 2017). Participants in the study were middle school students that were enrolled in an enrichment program. Cross et al. (2017) included 45 students from low-income families and 36 students from higher-income families. Students were interviewed and asked about which barriers got in their way to a positive academic

achievement level (Cross et al., 2017). The student dropout rate was also considered in the study. Is the perception of the barriers related to academic success different based on SES? The study looked at how students perceived themselves in the area of academics, socialization with their peers, and support level from peers at school (Cross et al., 2017). Cross et al. (2017) took into consideration how social awkwardness plays a role in academic achievement and within the school environment. The research indicated that lower-achieving students were more comfortable in social situations than higher-achieving students (Cross et al., 2017). All students grow differently in different areas of development. Gaining social skills can be just as important as getting high academic scores. Most studies about high ability students and income do not take into consideration the social part of their education. The main factors taken into consideration are the areas of inclusion in the programs and how students are identified for the programs (Cross et al., 2017).

The final part of the study took into consideration the school environment. The school environment included the relationships the students had with the teachers, the ability to be involved in non-academic areas within the school, the ability to gain autonomy, and the support system in place (Cross et al., 2017). The study showed that high-level students that have a great sense of autonomy were more motivated to be successful. Cross et al. (2017) discovered when a student had more support, they were more likely to be successful in the high achievement classes. The perception of the individual student was a big factor in how academically successful they were. Cross et al. (2017) found that students with high levels of self-confidence will be more likely to take on more difficult tasks and set higher goals for themselves.

The concept of educational inequality needs to be considered by schools and teachers. Berman et al. (2018) stated, a school's conditions affect the academic achievement of students and can also affect the health of students and teachers. The effects can also contribute to long-term learning abilities (Berman et al., 2018). Frequent absences and decreased academic achievement are affiliated with deteriorating building conditions, safety concerns, and the location of schools. According to Berman et al. (2018), chronic absences refer to missing more than 20 days of school in a 90-day period of time. The main objective of this study was to determine if a school's physical and environmental conditions affect academic performance (Berman et al., 2018). The study group consisted of students from grade three to grade eight attending 149 schools in the Baltimore school district (Berman et al., 2018). Factors that were looked at as a part of this study were: standardized test scores, school environment and characteristics, school climate (safety, relationships, teaching, leadership, and environment), and neighborhood characteristics (Berman et al., 2018).

Research has shown that chemical exposure and toxin within a school have led to lower academic achievement and more absences (Berman et al., 2018). The feeling of being unsafe and unsupportive leads to lower academic scores and increased absenteeism (Berman et al., 2018). Berman et al., (2018) identified many factors within the school that led to an increase in absences such as poor air quality leading to sickness, increasing poverty surrounding the school, level of safety while at school, and crime around the school. An increase in absenteeism will in turn lead to a diminished academic achievement level. Berman et al., (2018) were able to identify the quality of the school based on the Facilities Condition Index (FCI). The school quality breakdown put only three schools were considered "good condition," twenty-two schools fell

into the category of "average condition," one hundred and twenty-two schools fell into the category of "poor or worse conditions," and forty schools were scored as needing replacement (Berman et al., 2018). The study indicated that students with better attendance and better school conditions, lead to higher achievement levels (Berman et al., 2018). Berman et al., (2018) found that academic achievement varied in schools that had more students eligible for free or reduced lunches. Students that did not feel their school was safe tended to have a higher rate of absences, which leads to lower academics (Berman et al., 2018).One interesting result of the study showed that air quality led to a high rate of absenteeism, but did not show any relationship to academic achievement (Berman et al., 2018). Some neighborhood factors that contribute to lower achievement are; community crime, feeling safe walking to and from school, poverty, and community violence (Berman et al., 2018).

One in five children in the United States is considered to be living in poverty (Davis, 2019). With the economy being down, more people are living in poverty and that amounts to more low-income neighborhoods and more low-income students attending the same school (Davis, 2019). When a school is located in a predominately low-income area, standardized test scores are identified as an entire school and not just as individuals. Test scores can be damaging to a student's emotional self-esteem and can also damage a school's credibility by being labeled as failing. Davis (2019) researched how academic achievement differs based on SES. Academic achievement was measured by standardized testing results for middle school children in North Carolina for the years of 2014 and 2017 (Davis, 2019). Standardized testing is a requirement in most states. President Obama signed the Every Student Succeeds Act (ESSA) in 2015. This was to take the place of No Child Left Behind. Every Student Succeeds Act [ESSA} (n.d.) states, "the

purpose of this title is to provide all children significant opportunity to receive a fair, equitable, and high-quality education, and to close educational achievement gaps" (para. 2). Many factors can be identified as having a negative effect on test scores at low-income schools. School environmental factors are: low- quality teachers (less experience, and lack of training), larger class sizes containing a majority of students from low SES and having lower academic abilities and lack of teacher-student relationships (Davis, 2019). This study broke down the economic disadvantage of student academic achievement levels based on the percentage of students in the school that qualified for free or reduced lunches and also by grade level (Davis, 2019). Schools that are located in a high poverty area tend to perform at a lower level than schools located in an affluent area. There are many aspects to consider when looking at the adequacy of schools, such as building conditions, location, school climate, teacher experience, and classes offered. Effective teacher training could also play a role in academic achievement. Teachers are not prepared to work in areas with high levels of poverty (Davis, 2019). Schools and teacher training programs need to give teachers more training on how to work with children that have or are experiencing trauma (Davis, 2019).

According to the study by Davis (2019), children from low-income families have a chance that is double the rate of children in other socioeconomic classes to have learning difficulties and they tend to enter high school significantly behind their peers from higher SES. The study found that academic achievement in the areas of reading and math showed a significant difference for all grade levels of middle school (Davis, 2019). The results of the study showed that schools that had higher percentages of students that qualified for free or reduced lunch had lower scores on standardized tests as a school (Davis, 2019). Davis (2019) concluded that

there is a negative relationship between SES and academic achievement. The study found that the scores for the groups from the same SES did not change from 2014 and 2017, indicating that there have not been any improvements in schools with high poverty levels (Davis, 2019). Even with the ESSA in place, low-income children are still scoring lower in academics. The data is still showing that SES and academic achievement are still related. When a school is located in a predominately low-income area, standardized test scores are identified as an entire school and not just as individuals. Test scores can be damaging to a student's emotional self-esteem and can also damage a school's credibility by being labeled as failing (Davis, 2019). There are so many damaging aspects for schools that show low test scores as an entire school. According to Davis (2019), schools that score low on standardized testing as a school risk losing highly qualified teachers, accreditation, and possibly damaging their reputation. The achievement gap continues to exist even with programs put in place to help economically disadvantaged children.

Schools can promote increased academic success for children living in low-SES families. Williams et al. (2018) surveyed children living in a family with low-SES but high academic achievement levels and asked them what they felt schools could do to help improve academic achievement. The criteria that needed to be met for the children interviewed in this study included: the student had in the seventh grade, having shown academic success, eligibility for free or reduced lunch, and proof that they are living in a low-income household based on the yearly income (Williams et al., 2018). The students offered their perspective on what schools could integrate based on three specific areas: create a culture of hope, develop networks, and creating parent-school collusion (Williams et al., 2018). The students had many positive

suggestions to create a better "culture of hope" in the school for all students regardless of their SES. Children that do not have a positive outlook on their future tend to lose interest and lack the motivation to be successful in school (Williams et al., 2018).

Students determined three approaches that will help students to have hope in their future and school as being: establish high expectations, encourage a growth mindset, and promote student aspirations (Williams et al., 2018). Teachers should not just talk about having high expectations; they should also represent the same expectations for themselves. "Students must believe they can achieve before they will risk trying. Teachers have to understand that, high expectations, is something you do, not just say" (Williams et al., 2018, p. 228). Teachers should provide a positive pathway for students when determining expectations and make the student aware they believe in them (Williams et al., 2018). Teachers need to challenge their preconceived perception of the success of low-SES students to promote a growth mindset (Williams et al., 2018). Williams et al. (2018) stated, "you can't raise expectations without also raising your beliefs about students' ability to succeed in school" (p. 228). Teachers should encourage and challenge students to have high aspirations for themselves (Williams et al., 2018). Students need to know why they should care about their education, how will it help them in the future to possibly get out of poverty and be successful (Williams et al., 2018). Teaching students about what life after high school could look like and investigate possible options can help students see where their aspirations can take them and motivate them to keep working towards their goals (Williams et al., 2018). It is hard for a young adult to see how the idea of spending money on an education is going to be a benefit to them. They need to see

an immediate reward for their actions in order to want to do it. Young adults view it as spending money versus making money issue.

Developing positive relationships with both teachers and peers will give students the connection and sense of belonging needs to be successful at school. Students need to feel valued by their teachers and peers for them to want to be at school and be successful (Williams et al., 2018). One of the suggestions from the students was to provide more peer mentoring while at school (Williams et al., 2018). Not all students will participate in peer networking groups unless the teacher "intentionally" creates groups for students to be a part of (Williams et al., 2018). Being a part of a peer group is shown to increase the understanding of other cultures for all students involved (Williams et al., 2018). Next, teachers need to check their biases towards students from cultures other than theirs because in a majority of low-income areas teacher-student cultures are different (Williams et al., 2018). Students suggested there are a couple of ways to encourage cultural awareness: one way is to get to know students by something other than their academic lives, and the second one is to get to know and understand your own culture (Williams et al., 2018). Put yourself in their shoes; you can't understand what they are going through if you don't try to understand it.

Schools need to create more parent-school collaborations. This can be done by helping parents to become more involved in the school and to create connections to other parents (Williams et al., 2018). Parents are educated enough to be able to find the resources they need to get help in the community or to check on their student's grades, etc. (Williams et al., 2018). A parent may not be able to understand test scores, how to communicate with parents, and what to ask when needing support. Increasing parent involvement will give parents help in areas they

are struggling to understand (Williams et al., 2018). Schools can also set up parent support

groups, so a parent can talk with other parents to get and give suggestions to (Williams et al.,

2018). There may be someone else dealing with the same crisis or issue, and this will give

parents more resources and help when they cannot find the necessary resources (Williams et

al., 2018). A student in the study stated, "schools should provide support for parents that help

them share information, ideas, and problem-solving strategies with each other" (Williams et al.,

2018, p. 229).

Teacher Perceptions, Expectations, and Relationships

Studies show that Student-Teacher relationships can play a large part in the success of a

student. Students need to feel welcome and safe at school. O'Connor and McCartney (2007)

studied the importance of relationships and how it relates to academic achievement. Student-

Teacher relationships are important in schools to promote a sense of belonging and can also be

considered a form of intervention (O'Connor & McCartney, 2007). O'Connor and McCartney

(2007) found that it is also important to understand the relationship that the student has at

home with a parent or guardian. To understand the process of relationships, we need to look

and all the relationships in the student's life. Behaviors also depend on student-teacher

relationships. Behavior and academics go together. There is evidence that children that have

behavior problems at school, tend to have lower achievement levels, due to losing educational

time (O'Connor & McCartney, 2007). O'Connor and McCartney (2007) studied how teacher-

student relationships are associated with academic achievement. The study included 880

children from preschool to third grade (O'Connor & McCartney, 2007).

Supportive parents play a large role in the academic success of their children. Children rely heavily on emotional support from their parents, particularly from their mother (O'Connor & McCartney, 2007). "High-quality maternal relationships buffer children from the effects of risk factors, such as poverty, for lower levels of achievement" (O'Connor & McCartney, 2007, p. 340). Trusting relationships provide safety and compassion. According to O'Connor and McCartney (2007), the parent-child relationship can be a secure attachment or an insecure attachment. Children that have insecure attachments with their parents have lower levels of academic success. This may be due to lack of support and more self-doubt (O'Connor & McCartney, 2007). Parental beliefs also contribute to their ability to form relationships with their children. Low-income parents have a higher level of stress, which can lead to a lack of sensitivity towards their children. (O'Connor & McCartney, 2007).

When a child feels supported at school and a sense of belonging, they are more likely to engage more in class. The study found that teacher-student relationships help to encourage the academic achievement of the student (O'Connor & McCartney, 2007). Strong teacher-student relationships affect the engagement level of the student; if a child has a positive relationship with the teacher, they will be more engaged in learning (O'Connor & McCartney, 2007). Increased engagement leads to more academic success (O'Connor & McCartney, 2007). Students are better at communicating in a class where they feel secure due to a relationship with the teacher (O'Connor & McCartney, 2007). In a study by O'Connor and McCartney (2007), the outcome showed that academic success is greater in environments that foster positive relationships between students and teachers. Teacher-student relationships are especially important for children that do not have a secure attachment to their mothers, indicating the

importance of positive teacher-student relationships at an early age to increase academic achievement. Teacher-students relationships vary depending on the age of the student and the focus of the teacher. O'Connor and McCartney (2007) described a reduction of quality of relationships from early childhood education to mid-elementary school ages. In the preschool years, the focus is on relationships and nurturing. When students get further along in their educational years, teachers are more focused on academics and instruction. According to O'Connor and McCartney (2007), the relationships between teachers and students reduce in quality as the students get older due to larger class sizes and a large number of students the teacher needs to interact with.

Teacher-student relationships not only affect academic outcomes, they also can change the behavioral aspect of a child in the school environment. Hamre and Pianta (2001) studied how teacher-student relationships can give some indication of future behavior issues in school and academic achievement. Providing students with positive interventions in school is a great intervention for future education levels. Hamre and Pianta (2001) studied 179 children from kindergarten to eighth grade to identify the effect of teacher-student relationships on academic achievement. Hamre and Pianta (2001) hypothesized children with high risks of failure may need positive teacher-student relationships more than other students. Today teachers have more roles than just providing academic instruction. According to Hamre and Pianta (2001), teachers are in charge of moderating relationships from student to student, demonstrating effective communication in different environments, supporting and regulating behaviors, providing an ear to listen, and much more (Hamre & Pianta, 2001). A teacher also needs to be able to have a balance when dealing with the behavior of students. If the student feels like the

teacher is too controlling, they may lose their positive feeling about school (Hamre & Pianta, 2001).

Positive school relationships can provide the stability a student needs during the school day. If a student does not have a positive relationship with anyone in their home, they can find that in school by forming a relationship with a teacher or staff person. Hamre and Pianta (2001) stated students who do not have any positive relationships with adults show higher levels of aggressive and hostile behavior. Student's ability to adjust to the classroom environment becomes easier when they have a positive relationship with a trusting adult. Positive relationships in school have been shown to increase school performance and motivate students to want to be more successful in all areas of their lives (Hamre & Pianta, 2001). Hamre and Pianta (2001) classified student-teacher relationships into three categories: conflict, closeness, and dependency. A relationship that was based on "conflict" was more likely to reflect negative feelings towards school and a decline in social behaviors. A relationship that was identified as "dependent" resulted in the possibility that the student could become withdrawn and combative. This may occur when the student is not with the desired teacher or when the teacher is busy with another student. A relationship based on "closeness" indicated students were able to adjust easier to school and had higher academic scores. Students who were able to form relationships based on "closeness" helped students to trust more, positive work habits, less conflict with others, increased adaptation skills, and academic success in future levels of education (Hamre & Pianta, 2001). The outcomes of this study had a strong correlation to behavior concerns in students. Students that had strong teacher-student relationships showed lower levels of behaviors in school, especially when the child develops relationships early in

their academic development (Hamre & Pianta, 2001). Results of the study showed that boys and girls benefitted differently in school based on teacher-student relationships (Hamre & Pianta, 2001). Hamre and Pianta (2001) found that children that had behavior issues in early development struggled to form positive relationships with the teacher, therefore they did not show improvement in behaviors later in their educational journey.

Expectations of Teachers and Parents Together

There have been a lot of research studies that look at how teacher expectations affect the academic achievement levels of low-income students. There have also been studies researching parental expectations for students living in low-income households. Mistry et al. (2009) conducted a study combining the expectations of parents and teachers. Children have two main environments in their youth lives; home and school. Mistry et al. (2009) hypothesized that the expectations of parents and teachers need to work together in order for children to be successful in school. The study included 426 children between the ages of six and sixteen at the beginning of the study (Mistry et al., 2009). Surveys and studies were used in the study, parent questionnaires were given to parents, and academics were evaluated based on class rank from the teacher (Mistry et al., 2009). The expectations of teachers and parents were studied for a three-year time span (Mistry et al., 2009). Mistry et al. (2009) researched the idea of how parent and teacher expectations influence each other.

Parents have different expectations depending on how they value education and what their educational level is. Parental expectations are sometimes developed by the information given to them from teachers and the grades their child attains (Mistry et al., 2009). Parents that have completed a lower education level see teachers as the authority in their child's education

and tend to base their expectations on the expectations of the teacher (Mistry et al., 2009).

Other factors that can change the expectations of both teachers and parents are parent

involvement and academic performance (Mistry et al., 2009). Mistry et al. (2009) conducted a

study based on teacher and parent expectations. The study used parent and teacher

questionnaires to gather information about expectations (if the students would attend college).

The student's academic achievement was decided by Grade Point Average (GPA). The study

showed that expectations for parents and teachers were influenced by the academic level of

the student (Mistry et al., 2009). One interesting result found from this study was that current

teacher's expectations were influenced by the expectation of a previous teacher that had the

student in their class at a different grade level (Mistry et al., 2009). The study showed that the

expectations of both the parent and the teacher together shaped the GPA of the student and

should be used in collaboration (Mistry et al., 2009). The study found that parent's expectations

did not impact the expectations of the teacher, but the expectations of teachers did impact the

expectations of parents (Mistry et al., 2009).

Environmental Factors

Neighborhood Exposure

Children that live in poverty have a greater chance of scoring lower on standardized

tests and in their academic classes. There is a lot of research-based on how neighborhoods and

family dynamics contribute to the academic achievement of school-aged children.

Neighborhood factors can contribute to academic achievement, development, and behavior

changes. Most studies have researched how neighborhood quality is influential in the early

stages of development. According to Anderson and Leventhal (2014), neighborhoods play a

different role in the lives of children during adolescence, due to how vulnerable this age group

is. In an effort to understand how neighborhoods affect academic achievement at different

stages of development, Anderson and Leventhal (2014) conducted a study at varying ages

during development. Anderson and Leventhal (2014) recommended using a longitudinal study

over three different developmental stages: early exposure (carry forward), adolescent

exposure, and cumulative exposure. Anderson and Leventhal (2014) set out to test the theory

about neighborhood factors having more influence on children during adolescence, due to

children having more freedom for involvement in social activities within the neighborhood and

being more independent. Anderson and Leventhal (2014) discussed the qualities of affluent

neighborhoods as having positive role models, higher-quality schools, and access to more

resources. In contrast to affluent neighborhoods, poverty-ridden neighborhoods lack unity as a

community, access to resources, and low-quality schools. Exposure to poverty had more effect

on mental health if exposed at a younger age (Anderson & Leventhal, 2014).

The first developmental stage that was studied was early childhood (ranging from birth

to 54 months). Previous research has shown that sustained exposure to poverty during the

developmental years of a child can lead to lower academic achievements. The second

developmental stage identified in the study was Adolescence (6th grade to 9th grade). According

to Anderson and Leventhal, previous studies have shown that in adolescence, children are given

more freedom. This freedom exposes them to more influence from their peers. The hypothesis

used for this developmental stage was based on how poverty would affect behaviors at this

level more than academic achievement (Anderson & Leventhal, 2014). The third component of

the study was the Cumulative Exposure Model. The Cumulative Exposure Model focused on

how continual exposure to poverty affects the academic achievement of adolescents (Anderson & Leventhal, 2014). There is also a difference in long time exposure depending on if the neighborhood exposure is positive or negative concluding that if the student is from an affluent neighborhood the exposure may be positive, but the exposure is negative if the student is living in an area with high poverty rates (Anderson & Leventhal, 2014). The study focused on the outcomes of achievement and behavioral concerns. Factors that influenced being labeled in the poverty group were based on the U.S Census, single-mother households, number of households below the poverty line, and the unemployment rate in the neighborhood (Anderson & Leventhal, 2014). The study found that the families that were living in poverty moved a lot and their income to needs ratio decreased. Just the opposite was found for the affluent families in the study (Anderson & Leventhal, 2014). Math achievement was positively correlated to affluent adolescence but did not have any substantial effect on adolescents living in poverty. (Anderson & Leventhal, 2014). Reading results only showed a slight indirect correlation to affluent neighborhoods and did not show any direct correlation for poverty-ridden neighborhoods during adolescence, although the indirect correlation is thought to be due to more access the books and reading resources (Anderson & Leventhal, 2014). There is also a concern that the study ended at age 15, but most children do not develop antisocial and aggressive behaviors until they turn 17 (Anderson & Leventhal, 2014). Results did not indicate any form of proof that any type of neighborhood factors produced any external behaviors and the only stages that had a slight indication of relation to internalizing behavior were in the affluent early childhood stage (Anderson & Leventhal, 2014).

Whipple et al. (2010) studied how children being exposed to risk factors for a long period may acquire lower academic scores, a lower sense of emotion, and can have a negative effect on the physical wellbeing of the student living in poverty. Whipple et al. (2010) researched the relationship between neighborhood and school risk factors in determining academic achievement levels. Neighborhood poverty is determined by the number of households living at the poverty line or below the poverty line within the neighborhood block. In the year 2019, 10.5 million children under the age of 18 were living in poverty, which is a decrease from 15 million in the year 2009 (United States Census Bureau, 2020). Neighborhood factors take into consideration more than just poverty, and other factors including; parent education and the number of single-parent households (Whipple et al., 2010). The physical quality of a neighborhood was taken into consideration in this study Whipple et al. (2010). The study looked at certain physical aspects of the neighborhood including, the number of unoccupied structures, overcrowding within individual houses, and housing that required work (Whipple et al, 2010). The standardized test scores in math and language arts for third and fifth graders were obtained to gain an understanding of the relationship of academic success and SES (Whipple et al., 2010). The scores were then compared to the school locations, and the schools in lower SES tended to show lower scores in both areas (Whipple et al., 2010).

Whipple et al. (2010) discovered that lower test scores were found in students that attended schools with high-risk factors and schools located in high-risk area neighborhoods. When both risk factors are combined, the student is at a higher risk of having lower standardized test scores (Whipple et al., 2010). When independently reviewing the risk factors based on neighborhood or school, it was found that neighborhood factors affected student

achievement levels at a higher rate (Whipple et al., 2010). The conclusion of neighborhood risk

factors weighing more heavily on academic achievement, leads to outside influences that

cannot be controlled by school staff, playing more of a role in the development of children

(Whipple et al., 2010).

Poverty ridden neighborhoods lack many resources that could be used to increase

academic achievement. Iruka et al. (2017) researched the connection between the

neighborhood and home environment and how it affects academic and socioemotional

competencies. Iruka et al. (2017) took into consideration which services were accessible within

their neighborhood including; doctor's offices, libraries, gas stations, schools, parks, grocery

stores, access to public transportation, and freeway access. The study also included that trust

level within the neighborhood (Iruka et al., 2017). Iruka et al. (2017) followed 1292 families for

a three-year period to determine the amount of impact home environments have on academic

achievement. The survey consisted of surveys and home visits. Parents and child care providers

were given a survey to fill out to indicate the child's emotional and behavioral factors (Iruka et

al., 2017). To understand the child's cognitive ability, professionals video interactions between

parts and children (Iruka et al., 2017). Three profiles were assigned to families at the end of the

study; the profiles put the families into categories based on academic and socioemotional

factors studied (Iruka et al., 2017). The three categories were; Non-Compliant Average

Achiever, Unengaged Low Achiever, and Engaged High Achiever (Iruka et al., 2017).

In the category of Non-Compliant Average Achiever, only eight percent of children in the

study were placed in the group (Iruka et al., 2017). Characteristics of the Non-Compliant

Average Achiever group included; below-average compliance, persistence and enthusiasm, and

higher in the area of aggression during parent-child interaction times (Iruka et al., 2017). The

next category was the Unengaged Low Achiever group, of which 42 percent of the children in

the study fell into (Iruka et al., 2017). The children in the Unengaged Low Achiever group

showed below-average characteristics in aggression, persistence, and enthusiasm (Iruka et al.,

2017). The final group designated in the study was the Engaged High Achiever group, of which

fifty percent of the children were placed in based on observations (Iruka et al., 2017). The

characteristics that were consistent in the Engaged High Achiever group were; above average in

enthusiasm, compliance, and persistence and below average in aggression during parent-child

interaction times (Iruka et al., 2017). The study found factors that contributed to children being

placed in the Engaged High Achiever group were; home environment, and neighborhood

socialization (Iruka et al., 2017). One major result of the study showed that the more time a

child spends in daycare leads to a higher chance of being in the Non-Compliant Average

Achiever group (Iruka et al., 2017). The cohesion in a neighborhood can significantly affect a

child's development (Iruka et al., 2017). Neighborhood factors such as cohesion and trust in the

community were factors that increased the students functioning levels (Iruka et al., 2017).

Living in an affluent neighborhood versus a neighborhood in poverty has many different

contrasting qualities.

In the study by Iruka et al. (2017), it was concluded that there is a need for more

intervention programs for children and adults. Neighborhoods in poverty-ridden areas do not

have access to the proper early intervention services that are found in areas with less poverty.

These neighborhoods need to have more early intervention programs. Programs need to be

able to identify where these learning difficulties are stemming from and work to find ways to

increase self-efficacy for these young children (Iruka et al., 2017). Low-income neighborhoods

also need to incorporate interventions for parents to learn more positive parenting aspects

(Iruka et al., 2017). Living in a cohesive neighborhood was found to be a benefit to children and

may increase their chances of gaining higher functioning (Iruka et al., 2017).

When a neighborhood contains multiple families from the same culture or families that

have the same cultural beliefs, there is likely to be emphasis and influence on a person's self-

efficacy (Merolla, 2016). Low self-efficacy can lead to doubt in one's self and lower self-

confidence. Merolla (2016) stated that when a person is subject to the same attitudes

continually, those attitudes tend to stay with them. Low-income neighborhoods have so much

uncertainty towards individual self-efficacy and a decrease in self-confidence due to

unpredictable jobs with low wages. The inability to find a decent paying job or any job close to

their neighborhood makes it hard to get past the barriers keeping them in the low-income area

(Merolla, 2016). Children start to question if hard work is really worth it. Merrola (2016) studied

how neighborhood and cultural heterogeneity affect academic achievement and self-efficacy.

Participants in the study were 8,100 eighth grade students at the initial survey and tenth

graders at the end of the study (Merolla, 2016). Academic results were based on standardized

tests in the areas of math, science, reading, and history (Merolla, 2016). The other factor used

to determine the results of the study was based on student efficacy (Merolla, 2016). The

efficacy scale ranged from not having control of their lives to chance being the important factor

in life (Merolla, 2016).

Neighborhoods that have a stronger cultural heterogeneity in terms of beliefs about

college can have an impact on children forcing them to give up their dreams of going to college

because the norm for the neighborhood is not attending college (Merolla, 2016). Self-efficacy

serves as an antecedent for academic achievement. Merolla (2016) discusses how higher self-

efficacy leads to academic success and also helps to strengthen academic and social skills, as to

be prepared to deal with problems that arise. Students that lived in concentrated low-income

area tend to have more of a variety of cultural perspectives, which in turn shows more

differences in self-efficacy and lower academic achievement (Merolla, 2016). While studying

the effect self-efficacy plays in academic achievement or the idea of going to college after high

school, the term cultural heterogeneity needs to be addressed. Cultural heterogeneity is very

prevalent in low-income neighborhoods. Cultural heterogeneity has a negative influence on

academic achievement and can encourage students to dismiss their aspirations about college

(Merolla, 2016). Students that live in impoverished, low-income neighborhoods have poor

health, a smaller chance of graduating from high school, become victims of crime and are at a

greater chance of becoming a teen parent (Merolla, 2016).

Neighborhood poverty is negatively related to early development in children. McCoy et

al. (2015) studied how neighborhood quality and educational opportunities in impoverished

areas contribute to the early stages of development in children. The study focused on how the

quality of educational programs and impoverished neighborhoods affect the development of

young children (McCoy et al., 2015). The participants in the study included 1904 families with

children between the ages of two to five that attended the federally funded Head Start

program in 22 states (McCoy et al., 2015). According to the Minnesota Head Start Association

[MHSA] (n.d.), a family of four needs to have an annual income under $26,200 to qualify for

their preschool program. Other ways a family can qualify for Head Start are by receiving public

assistance, currently homeless, or if the child is in foster care (MHSA, n.d). By using the Head

Start program for this study, the parents predominately live below the poverty line. McCoy et

al. (2015) used cognitive tests to gather data about the children and gave surveys to the parents

and teachers. Monetary incentives were given to the parents and teachers for being a part of

the study (McCoy et al., 2015). The tests given to the children measured their vocabulary and

their mathematical skills (McCoy et al., 2015). Parent surveys were used to gain information

about their children's socioemotional functioning (McCoy et al., 2015). In order to rate the

classroom quality, trained professionals observed in the classroom looking at routines, spaces,

furnishings, structure, and interactions (McCoy et al., 2015). Direct and indirect factors in the

study, the multi-level structural equation modeling (MSEM) framework was used (McCoy et al.,

2015).

McCoy et al. (2015) found that there were many differences when comparing

neighborhood poverty and classroom quality. Results based on the classroom quality were;

higher positive interactions between teacher and student, and negative levels of interaction

were low (McCoy et al., 2015). The children showed an increase in literacy but did not show any

changes in behaviors (McCoy et al., 2015). The MSEM results showed the significance of SES

disadvantage for achievement levels, classroom quality, and negative teacher-student

interactions (McCoy et al., 2015). The study showed significant relationships with indirect

factors of low SES and classroom quality (McCoy et al., 2015). Students that experience more

negative interaction while at school developed more behavior problems (McCoy et al., 2015).

Classroom quality varied depending on the surrounding neighborhood for each Head Start

location (McCoy et al., 2015).

Family Structure

Family dynamics have also been proven to play a role in the level of academic achievement for children living in poverty. Parental education and single-parent households are also an important factor when looking at poverty and academic achievement. Family "investments" within a low-income family, can positively influence child development and success in academics (Longo et al., 2017). Longo et al. (2017) indicated that parents provide resources investments and behavioral investments. When referring to resource investments, they looked at income, resources, and materials (Longo et al., 2017). Behavioral investments include support, love, and direction (Longo et al., 2017). This study compared low-SES families to other low-SES families, this concept will investigate more positive parenting aspects within the same SES. To understand and investigate "investments" from parents and how the family dynamics work, Longo et al. (2017) focused on five developmental domains: safety and sustenance, structure, stimulation, surveillance, and socio-emotional support. The five domains were studied at different ages, to see if different domains are more or less effective at different developmental stages (Longo et al., 2017). Safety and Sustenance refer to the parents providing the necessities for brain development and protection from physical harm. Safety and Sustenance only had a significant effect during the developmental stage up to 54 months, no significant effect was found in fifth-grade or at age 15 (Longo et al., 2017). Structure refers to the family mealtime, activities (including help with homework, teaching life skills, and being involved in the school), and maternal beliefs about raising a child. The Structure domain had a negative effect on academics in the area of structure at age 54 months. No effect was found in regards to the other two sections within Structure (Longo et al., 2017). Structure domain was

shown to have a negative effect on achievement at age fifth-grade and 15, one positive effect

at the fifth-grade check-in was due to family dinner time (Longo et al., 2017). The Surveillance

domain refers to monitoring the location and activities of their children. Surveillance was not

studied for the early developmental stage and did not show an effect on achievement in fifth-

grade (Longo et al., 2017). Negative predictors were present at age 15 in the surveillance

domain within both externalizing and internalizing behaviors (Longo et al., 2017). A result of the

study indicated that surveillance could lead to less risky behaviors in adolescence (Longo et al.,

2017).   The stimulation domain refers to parent-child interactions, educational supplies at

home, and activities outside the house (Longo et al., 2017). Positive effects on achievement

were significant during all three developmental stages (Longo et al., 2017). The final domain of

socioemotional support refers to how parents deal with emotions through positive parenting,

emotional regulation, coping skills, and providing security (Longo et al., 2017). The only

developmental stage that showed any effect from socioemotional support was at age 15 (Longo

et al., 2017). The study indicated the importance of investments at a variety of developmental

stages for children (Longo et al., 2017). The outcome of this study goes right along with

previous research about the importance of structure and routines at home to increase

academic achievement and decrease behaviors.

Parent Involvement in the School

Lechuga-Pena et al. (2019) researched how the types of housing for low-income families

determine their level of involvement in their nine-year-old child's school. Lechuga-Pena et al.

(2019) asked parents to fill out a survey based on their involvement in school activities and the

type of housing they lived in. Two types of housing that were compared in this survey were

subsidized housing and living in public housing (Lechuga-Pena et al., 2019). Parents were also

asked to self-report information about their level of education and the race they identified as

(Lechuga-Pena et al., 2019). The parents were asked about how often they participated in six

different types of events or meetings at the school. Parent involvement areas were: attending an

open house at the school, went to a parent-teacher conference, went to a parent-child activity

night, volunteered in the classroom, attending a Parent Teacher Organization (PTO) meeting, and

visiting the classroom (Lechuga-Pena et al., 2019). Parents that lived in public housing were

more likely to be involved in one or more of the activities or events than the parents that lived in

subsidized housing. Two particular areas that did not show a significant effect of parent

involvement based on the type of living arrangements were visiting their child's classroom and

attending a parent-child activity night (Lechuga-Pena et al., 2019). Parents living in public

housing communities were more likely to be involved in the other four areas (Lechuga-Pena et

al., 2019).

     Lechuga-Pena et al. (2019) considered how the race and education level of the parent

played a role in the level of involvement in the school. Black and Latino parents from low-

income areas were more likely to be involved in school activities than white parents (Lechuga-

Pena et al., 2019). Previous studies indicated that Latino parents were less likely to be involved

in their child's education anywhere but in the home. Stereotypes indicated that the language

barrier was keeping Latino parents from getting involved at their child's school. This study

shows an opposite outcome from what is previously known (Lechuga-Pena et al., 2019). Parents

that were healthier and had more education were more likely to be involved in the school

activities or events (Lechuga-Pena et al., 2019). Families that live in subsidized housing tend to

move more often and work longer hours, which can be a barrier to involvement in the school due

to not being able to establish rapport and trust with the new school (Lechuga-Pena et al., 2019). Past studies have shown that schools that are in low-income areas do not spend a lot of time encouraging parent involvement.

Higher academic achievement is obtained at a younger age based on how involved a family is within the school (Dearing et al., 2006). Dearing et al. (2006) stated that parent involvement does not just include volunteering in the school. Parental involvement is also considered as helping their children with homework at home, attending conferences and other activities at school, communicating with teachers, and also communicating with other parents. There have been many studies conducted about how parent involvement can help increase academic achievement for students. There are also many different ways to define academic achievement and parent involvement. The differences in definitions, make it hard to understand if parent involvement helps to increase academic achievement. Dearing et al. (2006) conducted a study of low-income families from kindergarten to fifth grade. Dearing et al. (2006) used data for this study from information collected by the Comprehensive Child Development Program (CCDP) and the School Transition Study (STS). The study included 329 students in Kindergarten and followed until fifth grade (Dearing et al., 2006). The study mainly used the variable of literacy levels and family involvement. Parents reported their level of participation in the school through a questionnaire. The study found that the results varied based not only on parent involvement but on maternal education level. Dearing et al. (2006) found that the level of involvement and literacy achievement levels were indicative of maternal education levels. Students that had mothers with a higher level of education tended to have more parental involvement in the education of their child. An important result of the study

showed that children whose mothers had a lower education level but spent a lot of time involved in their child's education displayed a higher level of academic achievement in literacy (Dearing et al., 2006). Other benefits of having a parent volunteer in the classroom, is the building of relationships. Not only does the parent-teacher and student-teacher relationship grow, the parent and child can also improve their relationship. Parent involvement in the education process tends to decrease once a student leaves elementary school.

The definitions of academic achievement and parent involvement can vary and change the outcomes of the study. The study by Fan and Chen (2001) included the definitions of parent involvement and academic achievement in terms of specifically what they were looking for. There were four aspects of parent involvement identified in this study; parent-child communication, home supervision, educational aspirations for their children, and school contact and participation (Fan & Chen, 2001). Academic achievement was measured in two forms; overall Grades (GPA), and test scores. As with similar research studies on parent involvement and academic achievement, this study also found parent involvement has a positive impact on student achievement. Fan and Chen (2001) were able to break down the components of involvement to identify the exact part of involvement that was more beneficial than other aspects. This article did a great job of breaking down the different factors and analysis of achievement results. The study focused on the overall achievement academically rather than breaking it down into subject areas. Fan and Chen (2001) found that comparing GPA over an academic time was a "better indicator" for showing growth in academics. The study focused on four specific areas of parent involvement, which allowed the study to break down the different aspects and how they relate to the change in academic achievement. The

results showed that the weakest areas related to academic achievement came from the aspect of parent supervision at home and the strongest aspect in the area of parents' expectations and aspirations for the children in the area of academics (Fan & Chen, 2001). After the completion of the study, there was some speculation on what factors could have played a role in why some aspects of the parent involvement area were not very effective. Fan and Chen (2001) speculated that the idea of parent supervision being a negative aspect could be due to parents already supervising because the student has difficulty with academics, causing the students to react negatively to their parents' house rules and structure. There can also be some challenges as to how a parent's rules and home structure can be included in parent involvement related to academics. One major conclusion made from this study was making sure to pay closer attention to the definitions of what is wanting to be researched and proven.

Teachers tend to have some preconceived perceptions of the ability level of students that come from a household living in poverty. Do students living in poverty have a lesser chance of getting good test scores, "good" grades, and being successful in life? When studying the aspects of socioeconomic status affecting grades and test scores, it is important to also look at how teachers perceive these students and how that perception affects the way they teach to this population of students. Auwarter and Aruguete (2008) conducted a study to see if teacher perceptions of students changed based on socioeconomic status (SES) and gender. To check the validity of teacher perceptions, Auwarter and Arguete (2008) created a survey to give teachers based on gender and SES of students. The study insisted of 106 teachers from a rural school district in Missouri (Auwarter & Arguete, 2008). The teachers were given information on students included their gender, behaviors, academic struggles, and the jobs of their parents.

The categories of the fictional students were classified into four groups: high-SES girl, low-SES

girl, high-SES boy, and low-SES boy (Auwarter & Arguete, 2008). Teachers were asked to fill out

a survey about the student, stating if they need more academic help, expectations, personal

characteristics, believability, and the SES of the student. The results of the study were mostly

predictable. Boys from perceived high-SES were rated higher than boys from low-SES, but it was

the opposite for girls based on SES (Auwarter & Arguete, 2008). Teacher perspectives of

children from low SES indicate that they do not feel they will benefit from their instruction and

do not have promising futures (Auwarter & Arguete, 2008). Perceptions of teachers based on

SES leads to teachers feeling they are not teaching effectively and then that can lead to a low

efficacy (Auwarter & Arguete, 2008). Students from low SES are very vulnerable to teacher

perceptions and the possibility to have the same chances as their middle to high-class peers.

Schools need to use SES to create more interventions for children that do not have the same

advantages as other children. Some of the negative aspects of teachers having preconceived

expectations or assumptions about students based on SES are; they may not be as motivated to

teach this group of students, they may also not take as much time trying to teach new

information to this group of students and they may fail to increase self-efficacy in the students

(Auwarter & Aruguete, 2008). If teachers believe that a student is less capable of performing at

a high level, they may lessen their expectations for the student and not help the student

increase their academic achievement. Auwarter and Aruguete (2008) discussed how while

observing a kindergarten, the teacher grouped the student into low, average, and high

achievement groups after only spending eight days with the students. The groups were not

based on IQ scores, and they were placed based on SES. The perception of the teacher shows

that the expectations for achieving success are sometimes based on SES (Auwarter & Aruguete, 2008).

Low-SES Success

Not all low-SES students have low levels of achievement in their academics. Milne and Plourde (2006) investigated what home factors contributed to the academic success of low-SES students. There is a lot of data that shows how SES and academic achievement relates to one another. There is a lot of research showing all the factors that lead to academic failure within the low-SES community, but not a lot of research about what factors are prevalent in academic success for other students within the same community (Milne & Plourde, 2006). To identify the factors that were connected to academic success for some students labeled as being from a low-SES family, Milne and Plourde (2006) selected six high achieving students that qualified for free or reduced lunch. All of the children in the study attended the same school, the school had a rate of 52% of the student population qualified for free or reduced lunch (Milne & Plourde, 2006). Parents were interviewed about what they were doing at home to help their children, parents were not aware that they were chosen based on SES level. The study focused on four categories: educational resources, maternal education level, relationships, and what contributed to academic success (Milne & Plourde, 2006).

The results were separated into the four categories researched in the study. Under the category of educational resources, parents listed having books and writing materials available at home, having a scheduled time for homework, having a daily schedule, and parental homework help (Milne & Plourde, 2006). Maternal education varied among the families, all the families discussed how they believed that getting an education was important and that was

relayed to their children (Milne & Plourde, 2006). The family structure was different amongst

the families in the study, but all the families stated that they made spending time together a

priority (Milne & Plourde, 2006). Parents also discussed the importance of having a good

support system and making sure their children knew they could discuss anything with them

(Milne & Plourde, 2006). All of the students in the study attended pre-school for at least one

year before entering kindergarten (Milne & Plourde, 2006). Other factors that parents stated as

being important for their children to be successful in school were; setting boundaries about

what is expected out of them at school and to set a good example The family structure was

different amongst the families in the study, but all the families stated that they made spending

time to together a priority (Milne & Plourde, 2006). Parents also discussed the importance of

having a good support system and making sure their children knew they could discuss anything

with them (Milne & Plourde, 2006). "It is also obvious that all children truly can succeed in

school despite the amount of capital that their family might have" (Milne & Plourde, 2006, p.

191). This study indicates the importance of relationships, both at home and in school. Teachers

need to get to know their students, this will help them understand how much support they

need to be successful at school (Milne & Plourde, 2006).

The study concluded that there are still some factors that need to be addressed in low-

SES families (Milne & Plourde, 2006). Low-SES children with siblings may experience

overcrowding, which can lead to parents having to spend time with too many kids and not

enough quality one on one time with each child (Milne & Plourde, 2006). Parents that live with

low-SES have to work more which does not give them as much time to participate in engaging

conversations with their children, children that have engaging conversations with their parents

have better communication skills when talking to other adults (Milne & Plourde, 2006).

CHAPTER III: DISCUSSION AND SUMMARY

Summary of Literature

The factor of socioeconomic status continues to affect the achievement levels of school-aged children. Many factors can be identified as harming test scores at low-income schools. The common focus when identifying a student's socioeconomic status was based on if the student qualified for free or reduced-price lunch (Davis, 2019; Fram et al., 2007; Hentges et al., 2019; Milne & Plourde, 2006; Singh, 2015; Williams et al. 2018). There is a lot of evidence showing that children living in single-family homes tend to have lower academic scores (Anderson & Leventhal, 2014; Gordan & Cui, 2016; Longo et al., 2017; Ready, 2010; Fram et al., 2007).

One factor that was an obvious reason for low academic achievement was the concept of absenteeism. Children that attend school less often tend to have lower levels of success in school (Bernam et al., 2018; Ready, 2010). Children from a low-SES family benefit more from being in school. Ready (2010) found that when young children are absent from school it is not by their choice and more due to parents not sending them or finding it is important to send them to school. Families that are considered to be in a lower SES are more likely to have stability in their living arrangement, which makes them likely to move around more often and then miss school (Ready, 2010).

The school system plays a large role in the development of children. Not only does that include the curriculum, but also the condition of the building, the quality of teachers, and the programs offered outside of school hours. The condition of the building and the location of the school has an impact on the achievement level of students and also their feeling of safety (Berman et al., 2018; Cross et al., 2017; Davis, 2019; Fram et al., 2007; Williams et al., 2019).

Not all schools are the same, which leads to social justice issues and educational inequality.

Depending on the location of the school and the economic makeup of the students, there is

bias and unequal opportunity to resources for schools located in impoverished areas (Berman

et al., 2018; Fram et al., 2007; Iruka et al., 2017; Whipple et al., 2010). A child needs to feel safe

at school. If the building or neighborhood is not safe, they will not be able to concentrate on

academics with their anxiety being on high alert. School environmental factors are: low- quality

teachers (less experience, and lack of training), larger class sizes containing a majority of

students from low SES and having lower academic abilities and lack of teacher-student

relationships (Davis, 2019; Barbarin & Aikens, 2015). Low-income students in low-income

schools may not have access to more rigorous math classes (Davis, 2019; Murphy, 2019).

Schools need to have more interventions in place to shrink the achievement gap (Auwarter &

Auguete, 2008; Cross et al., 2017; Fram et al., 2007; Iruka et al., 2017 McCoy et al., 2015).

Teacher quality and relationships also showed to have a large impact on academic achievement

levels. Some of the aspects surrounding quality teachers were based on teacher training in the

area of working with students in poverty-ridden areas and kids that have experienced trauma,

teacher perceptions of children from low-SES, and the ability to form relationships with

students (Auwarter & Auguete, 2008; Cross et al., 2017; Davis, 2019; Dearing et al., 2006;

Hamre & Pianta, 2001; McCoy et al., 2015; Milne & Plourde, 2006; O'Connor & McCartney,

2007; Singh, 2015; Williams et al., 2018).

Neighborhoods have an equal part in the development of children and their academic

achievement ability. In the study by Davis (2019) the research showed the more people are

living in poverty, which leads to more low-income neighborhoods and more students from low-

SES families in the same school. Some of the neighborhood factors that lead to low academic success were lack of cohesion as a neighborhood, lack of resources nearby, lack of employment opportunities, the variety of cultures and beliefs in the neighborhood, and crime rates (Berman et al., 2018; Gordan & Cui, 2016; Iruka et al., 2017; Merolla, 2016). There was also a difference in neighborhood climate depending on if it was low-income housing or subsidized housing. The families that lived in low-income communities tended to be more involved in the school and have better relationships with the neighbors (Lechuga-Pena et al., 2019). Anderson and Leventhal, (2014) and Whipple et al. (2010) discovered that neighborhoods have more of an effect on adolescent-aged children, due to having more freedom, vulnerability, and peer influences.

The final factor that plays a role in the development and academic success level of students is based on family dynamics. As stated earlier, single-parent homes show a relationship to lower grades and test scores. Another main dynamic focused on the education level of the mother. Mothers with less education tend to not value education as much, lack the skills to support their children at home with school work and are less involved in school events (Lechuga-Pena et al., 2019; Longo et al., 2017; Milne & Plourde, 2006; Mistry et al., 2009; Whipple et al., 2010). Parents with lower levels of education tend to see teachers as an authority and look to their expectations to create their own (Mistry et al., 2009). Parent Involvement and the relationships between parent and child was determined to impact academic achievement also (Fan & Chen, 2001). Williams et al. (2018) found that schools that offered more parent groups had a better school-home relationship with low-income families, which led to an increase in academic achievement levels for their children. Positive factors at

home are supportive parents, trusting and positive relationships, feeling safe, and family investments (Hamre & Pianta, 2001; Longo et al., 2017; O'Connor & McCartney, 2007; Williams et al., 2018). Parent expectations have a positive impact on student achievement and also set boundaries for learning (Fan & Chen, 2001; Milne & Plourde, 2006).

Limitations of the Research

To locate the literature used in this thesis, I searched the Academic Search Premier, Bethel University Library, EBSCO MegaFILE, ERIC, Sage Journals Open Access Journals within the years of 2010 – 2020. I was able to narrow down my search by focusing on journals that looked at what factors both in school and at home contribute to academic achievement. The keywords that I used in the search included "poverty and academic achievement," "socioeconomic status and academic success," "teacher perspectives of low-income students," "school success in low-income areas," and "after school support in low-income communities."

After searching those parameters, I did not find enough information about the relationships the student has with teachers, parents, and peers. I changed the years that I searched from to 2000 – 2020, that allowed me to have more information on how relationships affect academic achievement. After finding numerous journals and research studies around my topic, I needed to narrow the search. I wanted to focus on research only from the United States, so I eliminated many articles from other countries. I decided that it would only be useful to analyze data from the United States because other countries have different beliefs and laws based on their educational systems.

When I first started researching journals, I wanted to find more information on some interventions that have been tried. I did not find a lot of information on this topic, so I had to

change the set-up of my research areas. I did find two articles that studied what factors

contributed to academic success for some low-SES students. I also hoped to find more

information based on family dynamics. I was only able to find minor pieces about family

dynamics. I thought that would be a big part of the research, most articles mentioned the

mother's education level and single-parent homes. I was interested in finding out how blended

families compared to single-parent households.

Implications for Future Research

In the future, it would be interesting to see how a student's academic achievement may

increase if a student's parents went back to school later in life. There are a lot of studies that

focus on maternal education levels and how it affects their child's academic levels (Dearing et

al., 2006; Lechuga-Pena et al., 2019; Longo, et al., 2017; Milne Plourde, 2006). It would be

interesting to see if there is growth in test scores and GPAs for students that have parents that

continue with their education. The scores could be impacted in a variety of ways. For example,

they may increase due to being able to study together or just by gaining motivation to be

successful like their parent. The scores may decline due to a lack of parent involvement with

homework help and from being home alone more.

Implications for Professional Application

Based on the information discussed in this literature review, some factors contribute to

the academic achievement levels of children living within a lower socioeconomic status. The

research shows that there are both in school and out of school factors that are related to

academic achievement. As an educator, I found the research to be very eye-opening. I

previously thought that children from low-SES have lower academic achievement due to their

home life. While this is true, there is also some effect caused by schools and teachers. I currently teach in a setting IV school for Emotional Behavior Disorder (EBD) teenagers. Stereotypically, EBD students are predominantly from minority backgrounds and tend to fall into the low-SES category.

One of the areas in education that I pride myself on, is being able to develop positive relationships with my students. I have always considered relationships to have a significant role in developing trust and increase the learning ability of teenagers. The articles that I researched for this review talked a lot about relationships and perceptions. I work hard at building trust and a sense of belonging with students. School may be the only safe place a student has and I want to make sure all students, regardless of how much money they have at home, feel welcome and accepted. The review also found the importance of having good communication and respect between teachers and parents. Mistry et al. (2009) found that parent's expectations did not impact the expectations of the teacher, but the expectations of teachers did impact the expectations of parents.

Another interesting conclusion in the review of the literature was how attendance was lower for children from low-SES families. When children miss many days of school, they fall behind and get lower grades. Sometimes this relates to the parental education level or the lack of being able to see the reward for spending so much time in school. Ready (2010) found that younger children that miss school often is not due to the child not wanting to go but rather because the parent didn't get them to school or didn't want them to go to school. Students that do not feel welcome or safe at school tend to miss school more often. Teachers that spend time

building relationships with their students can help to reduce the number of days absent to their students.

Conclusion

This literature review examined which factors were more predominant when comparing socioeconomic status to academic achievement. Children living with a low-socioeconomic status have many environmental factors affecting their ability to attain higher achievement levels in school. There are multiple areas in a child's life that need some interventions to help the child increase their test scores and grade point average. Schools need to focus on making sure that all children have the right to a judgment-free education and families need to invest time into helping their children improve their academic grades.

References

Anderson, S., Leventhal, T., & Duprere, V. (2014). Exposure to neighborhood affluence and

poverty in childhood and adolescence and academic achievement and behavior. *Applied*

Developmental Science, 18(3), 123-138. https://doi.org/10.1080/10888691.2014.924355

Auwarter, A. E., & Aruguete, M. S. (2008). Effects of student gender and socioeconomic status

on teacher perceptions. *Journal of Educational Research, 101*(4), 243-246.

https://doi.org/10.3200/JOER.101.4.243-246

Barbarin, O. A., & Aikens, N. (2015). Overcoming the educational disadvantages of poor

children: How much do teacher preparation, workload, and expectations matter.

American Journal of Orthopsychiatry, 85(2), 101-105. https://doi-

org.ezproxy.bethel.edu/10.1037/ort0000060.supp

Berman, J. D., McCormack, M. C., Koehler, K. A., Connolly, F., Clemons-Erby, D., Davis, M. F.,

Gummerson, C., Leaf, P. J., Jones, T. D., & Curriero, F. C. (2018). School environment

conditions and links to academic performance and absenteeism in urban, mid-Atlantic

public schools. *International Journal of Hygiene and Environmental Health, 221*(5), 800-

808. https://doi.org/10.1016/j.ijheh.2018.04.015

Cross, J. R., Frazier, A. D., Kim, M., & Cross, T. L. (2017). A comparison of perceptions

of barriers to academic success among high-ability students from high- and low-

income groups: exposing poverty of a different kind. *Gifted Child Quarterly, 62*(1),

111-129. http://dx.doi.org/10.1177/0016986217738050

Davis, L. D. (2019). Common core and the continued socioeconomic achievement gap: How can

we better prepare future teachers? *Journal of Education and Learning, 8*(6), 1-14.

https://doi.org/10.5539/jel.v8n6p1

Dearing, E., Kreider, H., Simpkins, S., & Weiss, H. (2006). Family involvement in school and low-

income children's literacy: Longitudinal associations between and within families. *Journal

of Educational Psychology, 98*(4), 653-664. https://doi.org/10.1037/0022-0663.98.4.653

Every Student Succeed Act (ESSA). (n. d.) *A comprehensive guide*.

http://everystudentsucceedsact.org

Fan, X., & Chen, M. (2001). Parental involvement and students' academic achievement: A meta-

analysis. *Educational Psychology Review, 13*, 1-22.

https://doi.org/10.1023/A:1009048817385

Food and Nutrition Services: United States Department of Agriculture. (2020). Child nutrition

programs: Income eligibility guidelines (July 1, 2019-June 30, 2020).

http://dx.doi.org/10.1037/ort0000060.sup

Fram, M. S., Miller-Crib, J. E., & Van Horn, L. (2007). Poverty, race, and the context of

achievement: Examining educational experiences of children in the U. S. south. *Social

Work, 52*(4), 309-319. https://doi.org/10.1093/sw/52.4.309

Gordon, M. S., & Cui, M. (2016). The intersection of race and community poverty and its

effects on adolescents' academic achievement. *Youth & Society,50*(7), 947-965.

http://dx.doi.org/10.1177/0044118x16646590

Hamre, B. K., & Pianta, R. C. (2001). Early teacher-child relationships and the trajectory of

children's school outcomes through eighth grade. *Child Development, 72*(2), 625-638.

https://doi.org/10.1111/1467-8624.00301

Hentges, R. F., Galla, B. M., & Wang, M. (2019). Economic disadvantage and math achievement:

The significance of perceived cost from an evolutionary perspective. *British Journal of*

Educational Psychology, 89(2), 343-358. https://doi.org/10.1111/bjep.12242

Iruka, I. U., De Marco, A., Garrett-Peters, P., & The Family Life Project Key Investigators. (2017).

Profiles of academic/socioemotional competence: Associations with parenting, home,

child care, and neighborhood. *Journal of Applied Developmental Psychology, 54*(11), 1-11.

https://doi.org/10.1016/j.appdev.2017.11.002

Jensen, E. (2013). *Engaging students with poverty in mind: Practical strategies for raising*

achievement. ASCD.

Lechuga-Pena, S., Becerra, D., Mitchell, F.M., Lopez, K., & Sangalang, C.C. (2019). Subsidized

housing and low-income mother's school-based parent involvement: Findings from

the fragile families and child wellbeing study wave five. *Child & Youth Care Forum, 48*(3),

323-338. http://doi-org.ezproxy.bethel/10.1007/s10566-018-9481-y

Longo, F., Lombardi, C. M., & Dearing, E. (2017). Family investments in low-income children's

achievement and socioemotional functioning. *Developmental Psychology, 53*(12), 2273-

2289. https://doi.org/10.1037/dev0000366

McCoy, D. C., Connors, M. C., Morris, P. A., Yoshiskawa, H., & Friedman-Krauss, A. H. (2015).

Neighborhood economic disadvantage and children's cognitive and social-emotional

development: Exploring Head Start classroom quality as a mediating mechanism. *Early Childhood Research Quarterly, 32*, 150-159. https://doi.org/10.1016/j.ecresq.2015.04.

Merolla, D. (2016). Self-efficacy and academic achievement: The role of neighborhood cultural context. *Sociological Perspectives, 6*0(2), 378-393. doi:10.1177/0731121416629993

Milne, A. & Plourde, L. A. (2006). Factors of a low-SES household: What aids Academic Achievement? Journal of Instructional Psychology, 33(3), 183-193.

Minnesota Head Start Association (n.d.). *Eligibility.* https://mnheadstart.org/

Mistry, R. S., White, E. S., Benner, A. D., & Huynh, V. W. (2009). A longitudinal study of the simultaneous influence of mothers' and teachers' educational expectations on low-income youth's academic achievement. *Journal of Youth and Adolescence, 38*(6), 826-838. https://doi.org/10.1007/s10964-008-9300-0

O'Connor, E., & McCartney, K. (2007). Examining teacher-child relationships and achievement as part of an ecological model of development. *American Educational Research Journal, 44*(2), 340-369. https://doi.org/10.3102/0002831207302172

Ready, D. D. (2010). Socioeconomic disadvantage, school attendance, and early cognitive development: The differential effects of school exposure. *Sociology of Education, 83*(4), 271-286. Doi: 10.1177/0038040710383520

Singh, M. (2015). Influence of socioeconomic disadvantages on mathematics achievement: A multilevel cohort analysis. *The Journal of Educational Research, 108*(5), 347-353. https://doi.org/10.1080/00220671.2014.899956

Slack, M., & Oken, A. (2014, January 10). *A child's course in life should be determined not by the zip code she is born in*. Obama White House.

https://obamawhitehouse.archives.gov/blog/2014/01/10/president-obama-child-s-

course-life-should-be-determined-not -zip-code-she-s-born

United States Census Bureau. (2020, September 15). Income and poverty in the united states:

2019. https://www.census.gov/library/publications/2020/demo/p60-270.html

United States Department of Agriculture Food and Nutrition Service. (2019). *Child and Nutrition

Tables: Fiscals years 1969-2019*. https://www.fns.usda.gov/pd/child-nutrition-tables

United States Department of Education. (n.d.). *Laws and Guidance Overview*.

https://www2.ed.gov/policy/landing.jhtml?src=pn

Whipple, S. S., Evans, G. W., Barry, R. L., & Maxwell, L. E. (2010). An ecological perspective on

cumulative school and neighborhood risk factors related to achievement. *Journal of

Applied Developmental Psychology, 31*(6), 422-427.

https://doi.org/10.1016/j.appdev.2010.07.002

Williams, J. M., Greenleaf, A. T., Barnes, E. F., & Scott, T. R. (2019). High-achieving, low-income

students' perspectives of how schools can promote the academic achievement of

students living in poverty. Improving Schools, 22(3), 224-236. doi:

10.1177/1365480218821501