The Impact of Social Support, School Connectedness, and Community Organization on Academic Achievement Among Black & Hispanic Adolescents in an Urban Low-Income School District

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THE IMPACT OF SOCIAL SUPPORT, SCHOOL CONNECTEDNESS, AND COMMUNITY ORGANIZATION ON ACADEMIC ACHIEVEMENT AMONG BLACK & HISPANIC ADOLESCENTS IN AN URBAN LOW-INCOME SCHOOL DISTRICT

A DISSERTATION

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of the requirements
for the degree of Doctor of Philosophy

by

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DISSERTATION APPROVAL

We hereby approve the Dissertation

THE IMPACT OF SOCIAL SUPPORT, SCHOOL CONNECTEDNESS, AND COMMUNITY ORGANIZATION ON ACADEMIC ACHIEVEMENT AMONG BLACK & HISPANIC ADOLESCENTS IN AN URBAN LOW-INCOME SCHOOL DISTRICT

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Abstract

THE IMPACT OF SOCIAL SUPPORT, SCHOOL CONNECTEDNESS, AND COMMUNITY ORGANIZATION ON ACADEMIC ACHIEVEMENT AMONG BLACK & HISPANIC ADOLESCENTS IN AN URBAN LOW-INCOME SCHOOL DISTRICT

by Stephanie M. Compasso

The disparities in education disproportionately facing Black and Hispanic adolescents, particularly those who attend low-income urban school districts, have far too often been examined through a deficit-based lens, in comparison to White middle-class adolescents. Such comparisons can overlook the cultural strengths of low-income Black and Hispanic adolescents and create a biased interpretation of educational and developmental research. Grounded in the Social Development Model and the Convoy Model of Social Networks, this study examines the interactions of parental support, peer support, school connectedness, and community organization as sources of strength, influencing academic achievement for low-income Black and Hispanic adolescents through a culturally sensitive, strength-based lens. Utilizing data collected from the Communities that Care (CTC) Youth Survey, influences of social support for Black ($N = 78$) and Hispanic ($N = 228$) adolescents were evaluated separately. Results revealed a direct effect of parental support, a partial effect of peer support, and a mediating effect of school connectedness on academic achievement. To allow for cultural strengths to be highlighted, findings from this study support the importance of examining academic achievement for low-income Black and Hispanic adolescents as separate and distinct without comparison to a White, middle-class control group. Implications for practice, policy, and future research are discussed.

Keywords: social support, Black and Hispanic adolescents, academic achievement, urban schools
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Dedication

For my grandmother, Geraldine Compasso, the strongest woman I know. It is what it is.
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Chapter 1: Introduction

Educational attainment in the United States is on the rise with national graduation rates at an all-time high of 84 percent (National Center for Education Statistics [NCES], 2018). However, when critically examining this data, the differences between who is and is not successful becomes apparent. Black and Hispanic adolescents, particularly those from lower-class families, often underperform academically when compared to their White, middle-class counterparts (NCES, 2018). Unfortunately, this comparison between groups is unequal, yet it is often the most common practice amongst educational researchers (Davis-Kean & Sexton, 2009; Desimone & Long, 2010). Approaching low-income minority students from a deficit lens automatically creates an uneven playing field in which comparisons are often unfairly made.

While examining the current research on minority youth, it is apparent that they oftentimes fair worse than their White middle-class counterparts. Yet, it is often the case that minority youth, particularly those from low-income urban school districts, face a multitude of barriers, most of which are outside of their control, to achieve academic success. Future research should consider these factors when examining academic achievement for low-income Black and Hispanic adolescents. Numerous factors—including poverty, stereotypes, peer pressure, and racism—create an environment in which academic achievement frequently becomes unattainable.

Students of color, who are often unfairly lumped into one minority category, disproportionately perform poorer on standardized tests, have lower graduation rates, and are less likely to be rated positively by teachers as compared to their White counterparts (Alliance for Excellent Education, 2010; Downey & Pribesh, 2004; Monrad, 2007; NCES, 2018; Orfield, Losen, Wald, & Swanson, 2004; Stearns & Glennie, 2006; Syed, Azmitia & Cooper, 2011).
Previous research has found that underlying systematic inequalities within education often produce environments that put low-income Black and Hispanic adolescents at risk for negative outcomes (Caldas & Cornigans, 2015; Moon & Singh, 2015). Literature defines at-risk individuals as those who perform behaviors such as high-risk sexual intimacy, gang violence, and illicit drug use that put them at-risk for negative socioemotional outcomes. For example, a student who engages in violent behaviors is at higher risk of being expelled from school than a student who does not engage in these forms of self-destructive acts (Chung-Do, Goebert, Hamagani, Chang, & Hishinuma, 2017). It is important to note however, that the environment in which an individual lives, works, or attends school can put him or her at-risk as well (Fitzgerald, Miles, & Ledbetter, 2019; Orfield et al., 2004; Resnick & Burt, 1996). An example of this would be students attending an urban school district being at a higher risk of dropping out of high school due to a lack of resources and support (Orfield et al., 2004). For the purpose of this study, an at-risk individual will be defined as someone who performs behaviors or lives or attends school in an environment that puts him or her in danger of poorer academic outcomes. This definition was drawn from a review of previous literature on at-risk youth and adolescents, including a meta-analysis, and examination of the factors that often lead to negative outcomes (Benner, Boyle, & Bakhtiari, 2017; Benner, Boyle, & Sadler, 2016; Chung-Do et al., 2017; Fitzgerald et al., 2019; Kelly et al., 2012; Lambert et al., 2014; Lansford, Dodge, Pettit, & Bates, 2016; Lardier, Barrios, Garcia-Reid, & Reid, 2018; Lee & Breen, 2007; Maslowsky et al., 2015; Mouratidis & Sideridis, 2009; Olsson, 2009; Orfield et al., 2004; Rasalingam, Clench-Aas, & Raanaas, 2017; Resnick & Burt, 1996; Stadler, Feifel, Rohrmann, Vermeiren, & Poutska, 2010; Stearns & Glennie, 2006; Syed et al., 2011; Zaff, Dolan, Gunning, Anderson, Anderson, McDermott, & Sedaca, 2017).
Some of the factors that put Black and Hispanic low-income students at risk of poorer academic outcomes include teacher biases, lack of parental education, negative peer influence, and community disorganization. Yet, these are just some of the barriers that minority youth in low-income urban school districts disproportionately face every day (Benner et al., 2016; Benner et al., 2017; Downey & Pribesh, 2004; Kelly et al., 2012; Lardier et al., 2018; Syed et al., 2011). All students often lack the social capital to be successful without support from outside resources. Social capital refers to the resources that are accessible through relationships that provide individuals with the power to create change (Coleman, 1988). Relationships with parents, peers, teachers, and community members can help to build social capital for adolescents by providing them with support, knowledge, and tangible resources that promote academic success. However, creating supportive relationships is not always easy to do. In three separate studies, McKown & Weinstein (2008) evaluated academic expectation ratings of teachers in urban elementary school classrooms. The authors found that teachers had higher academic expectations for White students than Black and Hispanic students, which accounted for a statistically significant portion of the year-end achievement gap.

Furthermore, low-income Black and Hispanic adolescents often have parents who are unable to advocate on their behalf due to mistrust within the education system, lack of educational awareness, and a shortage of time (Benner et al., 2016; Benner et al., 2017; Lad & Braganza, 2013; Syed et al., 2011). Lacking a sense of parental support, low-income adolescents often turn to friends within their urban community to develop a sense of belonging (Mouratidis & Sideridis, 2009). In communities where there is high disorganization and lack of positive activities, negative peer groups that could often include gangs, sometimes become the secure base in which adolescents attach (Brittian, 2012).
Involvement in negative social networks can hinder pro-social behaviors (Catalano & Hawkins, 1996), but positive social support can help to alleviate some of the stressors that high school students face and promote positive academic outcomes. Support can be from parents, peers, schools, or within the community and can be presented in a variety of ways. Socioeconomic status (SES), levels of education, and racial/ethnic and cultural identities can determine what types of support are available, how much support can be given, and where the support needs to come from. Support can be critical for low-income Black and Hispanic adolescents who are facing disproportionately lower academic achievement than their middle-class White counterparts. To begin unpacking the issues surrounding a deficit lens approach, it is critical to examine the racial disparities that exist between Black, Hispanic, and White students in the United States. Unfortunately, current research disproportionately compares students by race without considering the economic or cultural differences between and within racial and ethnic groups (Davis-Kean & Sexton, 2009; Desimone & Long, 2010). While viewing educational disparities through this lens provides biased and skewed findings, it does highlight the larger systematic (frequently negative) view of low-income Black and Hispanic adolescents. One goal of this dissertation is to examine low-income Black and Hispanic adolescents as separate from their middle-class White counterparts. Yet, exploring the long-term consequences of poor academic achievement for low-income Black and Hispanic students, especially as compared to middle-class White students, shows how necessary it is to close the achievement gap and prepare low-income Black and Hispanic adolescents for future success. To do this, life in low-income urban communities should be examined to discuss the ability or inability to access supports for academic achievement.
Educational Attainment Trends

Since it was first measured in 2010, national graduation rates have steadily increased. National graduation rates are at an all-time high of 84% in the United States compared to 78% in 2010 (NCES, 2018). However, upon closer examination of the data, the achievement gap is wide and the outlook for minority, low-income youth is far more daunting. According to the most recent data release, in 2016, 76% of African American/Black students graduated high school. In the same year, 79% of Hispanic students graduated high school. This is a stark contrast to the 88% of White students who graduated high school in the same year (NCES, 2018). Even with improvement in graduation rates, academic achievement amongst low-income Black and Hispanic youth is still substantially lower than that of their White counterparts.

Academic achievement can be measured in a variety of ways, including standardized testing, course grades, teacher ratings, and grade point average (GPA); however, there are several issues when considering the measurement of academic achievement. Prior research has found that standardized testing and teacher ratings are both unfair ways of measuring academic achievement for Black and Hispanic students due to the inherent bias of academic testing and teacher perception of academic ability (Auwater & Aurguete, 2008; McKown & Weinstein, 2008; Ready & Wright, 2011; Rodriguez, 2008; Syed et al., 2011). When examining data on academic achievement, it is important to note that there is often a misuse of quantitative data to justify educational policies that disproportionately benefit middle-class White adolescents as opposed to low-income Black and Hispanic adolescents. In their examination of college enrollment data, Perez Huber, Velez, and Solorzano (2018) found that a study published by the Pew Research Center in 2013 made misleading claims regarding the growth of Hispanic college enrollment. This study failed to account for the large population growth of Hispanic individuals,
and upon further review of data, Perez et al. (2018) found that these claims were incorrect and that Hispanic adolescents were still enrolling into college at a disproportionately lower rate than their White counterparts. It is critical for researchers be transparent in their examination of people of color to avoid perpetuating a systematic injustice to typically marginalized individuals.

For this study, self-reported GPA will be used as the measurement for academic achievement. GPA is a measurement tool used by secondary schools to assess overall academic performance and determine eligibility for higher-level courses such as Advanced Placement (AP). Post-secondary institutions often use GPA as a screening tool for admissions as it is often viewed as a strong predictor of college GPA and performance (Bahr et al., 2019; Hodara & Lewis, 2017; Kurlaender & Cohen, 2019). GPA typically runs on a four-point scale where A=4; B=3; C=2; D=1; and F=0 (Merritt, 2019). In their meta-analysis of literature on the use of self-reported GPA, Kuncel, Crede, and Thomas (2005) found that self-reports of grades were generally accurate reflections of actual grades for students with a higher GPA. When utilizing self-reported GPA as a variable for lower performing students, however, they tended to inflate their self-reports. Yet, regardless of performance levels, Kuncel et al. (2005) found that self-reported grades (inflated or not) often predict outcomes that are similar to actual grades. In a more recent study, Sutton, Langenkamp, Muller, and Schiller (2018) came to a similar conclusion, finding that students of any academic ability often inflated their grades, yet self-reported grades were still significantly correlated with actual grades. Additionally, when looking across racial/ethnic and gender subgroups, there was no statistically significant difference, meaning that all students inflated their grades (Sutton et al., 2018). Therefore, as highlighted by previous research, the outcome of self-reported GPA should be aligned with the other variables
being examined in this study—such as parental support, peer support, school connectedness, and community organization—and not be biased towards any specific subgroup.

Unfortunately, regardless of the way in which academic achievement is measured, the outcome is often the same. Black and Hispanic adolescents, particularly those who are low income, are frequently underperforming academically when compared to their White, middle-class counterparts. To begin to untangle biases that are often placed upon low-income Black and Hispanic adolescents, this chapter introduces the academic achievement gap between White, middle-class adolescents and low-income Black and Hispanic adolescents. As previously noted, a common practice in research has been to use middle-class White adolescents as the group to which low-income Black and Hispanic adolescents are compared (Davis-Kean & Sexton, 2009; Desimone & Long, 2010). While this comparison is not equitable, it is important to review this literature to discuss where disparities may lie. First and foremost, this study acknowledges disparities within academic achievement due to underlying systematic biases. This chapter discusses the disproportionate levels of academic achievement for Black and Hispanic adolescents as compared to White adolescents, highlighting the intersection of race, socioeconomic status, and environment in relation to their GPAs, standardized test scores, and overall graduation rates. Next, the chapter highlights the sources of social support that may be available for low-income Black and Hispanic adolescents. Environmental factors that help or hinder academic success associated with low-income, urban communities are also described. Lastly, the implications of social support are discussed, highlighting the protective factors that are often overlooked for Black and Hispanic adolescents living in low-income, urban communities.
Before discussing the disparities in the United States educational system, it is important to highlight the populations of people who are being represented in this study. The U.S. Census Bureau (2018) has defined racial identification. While the terms Black and African American are considered to be the same under the U.S. Census Bureau (2018) stating, “a person having origins in any of the Black racial groups of Africa,” it is important to note that not all Black individuals identify as African American. In fact, Afro-Caribbean is slowly becoming as prevalent as African American in response to racial identity. Therefore, for the purpose of this study, the term “Black” will be used to be inclusive of any individual who identifies with that race.

While the definition of Hispanic or Latino(a) is considered to be an ethnic identity—not a racial identity—according to the U.S. Census Bureau (2018), it is important to note that not all individuals who identify as Hispanic/Latino(a) identify with a racial label (Haney Lopez, 1997). Race is often considered a social construct; however, using the terminology of race allows Hispanic/Latino(a) scholars to draw attention from society to highlight the concerns of a group of people who are facing oppression based on the socially constructed concept of race. While examining the injustices facing the Hispanic/Latino(a) population, scholars should be aware of the cultural and historical differences, as well as the vastly diverse experiences of Hispanic/Latino(a) people across nationalities (Haney Lopez, 1997). Hispanic as a racial group is not being used to diminish these ethnic characteristics, but to build a population of people large enough that society finds value in examining the injustices. In the United States, individuals who identify as Hispanic or Latino(a) are “a person of Cuban, Mexican, Puerto Rican, South or Central American, or other Spanish culture or origin regardless of race.” Although the terms Hispanic and Latino(a) are used interchangeably by the U.S. Census Bureau (2018), the broader
term Hispanic will be used for this study to avoid excluding individuals who do not identify with a Latino(a) background.

Both Black and Hispanic cultures are vastly different from White culture, yet many scholars fail to consider Blacks and Hispanics as separate populations of people and often examine them as one minority group (Zaff et al., 2017). To fully delve into the complexities of each culture, the sections below outline the distinct and unique circumstances for Black and Hispanic adolescents, specifically those who are low-income, within the United States education system.

**Low-Income, Black Adolescents**

Due to a multitude of reasons, including lack of support, Black youth often have lower levels of academic achievement than non-minority adolescents. GPA trends reported by the U.S. Department of Education (DOE) (n.d.) showed an increase in academic achievement for all high school graduates between 1990 through 2009, but White students were consistently outperforming Black students. In 1990, Black students had an average 2.21 GPA for core classes (English, Math, Science, and Social Studies), while their White counterparts had an average 2.7 GPA. In 2009, Black students had an average 2.47 GPA, which is a 0.26-point increase. White students, however, showed an increase of 0.39 points with an average of a 3.09 GPA (U.S. DOE, n.d.). GPA scores for non-core courses (fine arts, language, and computer courses) were also lower for Black students than White students in 2009 with an average 2.82 GPA and 3.22 GPA, respectively (U.S. DOE, n.d.).

While standardized tests are not computed in the overall GPA, performance on these exams are often important for enrollment into higher level courses such as AP courses. Reading, Science, and Mathematics (Math) standardized testing from 2015-2017 highlighted the gap in
academic performance. According to the National Assessment of Educational Progress (NAEP), the average Reading scores for Black 4th, 8th, and 12th grade students were 26-29 points lower than the average scores of White students. Math assessments proved to be even more compelling with a 25-33 point difference between Black and White students. Science, however, had the most profound difference with a 35-point gap between Black and White 12th grade students. Additionally, when controlling for number of absences, scores were still lower for Black students (NCES, 2018).

It can be critical for students to score high enough to qualify for enrollment into AP courses. These courses are typically offered to high school students so that they can earn college credits prior to high school graduation. The rigor of these courses is considered to be college-level; therefore, students are held to higher academic standards and grades are often weighted, meaning that additional points can be added to a student’s GPA. Hansen and Sonnert (2019) found that students in AP courses were receiving twice the amount of bonus points towards their GPA than academically necessary. These increased and unnecessary points disproportionately inflated the GPA scores for White students, as they make up the majority of AP course enrollment. In 2013, only 23% of Black students were enrolled in at least one AP course compared to 40% of White students (NCES, 2018).

Lower GPAs and lack of AP courses can hinder a student’s enrollment into college. In 2016, only 36% of Black high school graduates were enrolled in college as compared to 42% of White students. Out of the total undergraduate student enrollment for 2016, only 14% of the enrollees were Black. Additionally, only 21% of Black students who enrolled in a baccalaureate college program in 2010 received their degree within four years, whereas 45% of White students completed their degree within four years (NCES, 2018).
Low-Income Hispanic Adolescents

Hispanic youth fair slightly better than Black youth; however, they are still far below their comparable White counterparts in GPA scores, both Reading and Math achievement, and college enrollment. According to the U.S. DOE trends report (n.d.), in 1990 Hispanic students had an average 2.37 GPA for core classes, 0.33 points less than their White counterparts. In the most recent study in 2009, Hispanic students showed a 0.23-point increase with an average 2.60 GPA score. Hispanic students had the lowest level of increase in the GPA scores with Black students increasing by 0.26 points and White students increasing by 0.39 points (U.S. DOE, n.d.). Additionally, Hispanic students underperformed in non-core courses with an average 3.03 GPA score (U.S. DOE, n.d.).

In terms of standardized testing, from 2015-2017, Hispanic youth from fourth, eighth, and twelfth grades scored significantly lower on the Reading and Math NAEP than White youth. With scores averaging about 20 points less than White students and 12 points less than the national average, Hispanic youth were underperforming on Reading and Math assessments. Even controlling for absences, White students still outperformed Hispanic students (NCES, 2018).

Hispanic students often perceive their teachers to have lower educational aspirations for them after high school (Cheng & Starks, 2002). Lower levels of AP course enrollment and college enrollment support this theory. During the 2016 school year, only 34% of Hispanic high school students took at least one AP course, with only 10% taking a Science AP course. For Black students, lower GPA scores and AP participation can hinder students’ likelihood of enrolling into college. In 2016, 39% of Hispanic high school graduates aged 18-24 years enrolled in college, an increase from 22% in 2000. However, out of the entire undergraduate student enrollment for 2016, only 19% of the population was Hispanic, with the majority being female.
For those students enrolling in a four-year baccalaureate program, only 32% graduated within the first four years compared to 45% of White enrollees (NCES, 2018).

Overall, research continuously measures Black and Hispanic adolescents from a deficit lens. While Black and Hispanic adolescents might not perform as well on standardized tests, research shows that these tests are culturally insensitive (Storey, 2018; Syed et al., 2011). Utilizing this Westernized, Anglocentric way of assessing students does not account for other areas of achievement that Black and Hispanic students may excel in. Additionally, standardized testing does not account for environmental factors that may influence an individual’s ability to perform well academically. In addition to racial/ethnic disparities, adolescents who are low income and attend schools in urban communities face multiple layers of discrimination. The combination of numerous factors, while not additive, increased the risk of negative outcomes (May, 2015). These students often disproportionately face outcomes that are typically below the national standard. More specifically, the interaction between racial, socioeconomic, and environmental factors often place unfair barriers between Black and Hispanic adolescents and their academic success.

**Intersection of Race, Socioeconomic Status, and Environment**

School profiles over the last two decades have shown that segregation still exists at large in the American education system. Nationally, White students are still enrolled in schools where the majority of students (around 75 percent) are White. Hispanic students are enrolled in schools where 57% of the population is Hispanic, with Black students accounting for another large portion of the school population (Orfield, Frankenberg, Ee, & Kuscera, 2014). These “minority-majority” schools have had the highest levels of poverty, with Black and Hispanic students attending schools where over 70% of students live in poverty and 75% of students were eligible
for free or reduced lunch prices (Logan & Burdick-Will, 2016; Orfield et al., 2014). Black and Hispanic students typically attended schools that were racially homogeneous, poorer, and lower performing on standardized tests (Logan & Burdick-Will, 2016).

While the most recent “Nation’s Report Card” (Nord et al., 2011) does not specifically discuss GPAs due to the varying nature in which they are calculated, there is a clear delineation between the academic success of low-income, minority youth and their middle- to upper-class, White counterparts, highlighting the unfair comparison that current research perpetuates. Schools that have a minority-majority population, with the majority of the population made up of minority (Black and Hispanic) students, have had graduation rates 20% lower than the national average. Urban school districts had the lowest graduation rates and districts with high participation in free/reduced lunch programs have been falling short as well (Orfield et al., 2004).

Schools with the highest levels of poverty, where at least 76% of the population was eligible for free or reduced lunch, had the lowest scores for both Reading and Math as assessed by the NAEP. Math scores in 8th and 12th grade have a 40- and 32- point difference, respectively, between low poverty and high poverty schools. Reading scores in 8th and 12th grade had a 31- and 35- point difference, respectively, between low poverty and high poverty schools (NCES, 2018). In 2015, 45% of Black and Hispanic students attended a school with a high poverty level, whereas only 7% and 8%, respectively, attended a school with a low poverty level. In comparison, only 8% of White students attended a high poverty school and 28% attended a low poverty school. Additionally, 40% of the schools located in an urban city are considered to be high poverty (NCES, 2018).
Outcomes Based on Educational Attainment

The consequences of poor academic achievement can be detrimental for adolescents well into their future. Students who perform poorer academically are less likely to graduate, which often leads to disproportionately worse outcomes than their high school graduate counterparts. Adolescents who drop out of high school are four times more likely to face negative consequences, including lower income, higher incarceration rates, poorer physical and mental health, and higher levels of illicit drug use (Alliance for Excellent Education, 2010; DeBaum & Roc, 2013; Lansford et al., 2016; Maynard, Salas-Wright, & Vaughn, 2015; Monrad, 2007). Students who drop out of high school are 3.5 times more likely to end up in jail. This outcome is even more likely for those who are Black and Hispanic. More than half of the inmates in jail do not have a high school diploma. Based on their analysis of the 2009 FBI Uniform Crime Report, DeBaum and Roc (2013) proposed that if graduation rates in urban, low-income high schools increased even just slightly, the number of inmates in jail would decrease drastically.

Crime rates for high school dropouts are higher, mostly due to higher rates of illicit drug use among this population (Maynard et al., 2015). Individuals who drop out of high school will earn approximately $250,000 less in their lifetime than high school graduates and be more reliant upon government assistance programs (Alliance for Excellent Education, 2010). In addition to lower income and higher incarceration rates, mental health outcomes are also a concern for high school dropouts, as reports of well-being have been lower and there has been an increased risk of depression and suicidality (Lansford et al., 2016; Maynard et al., 2015).

Low-Income Urban Communities in the United States

Literature across multiple disciplines discussed the interaction between a person’s environment and overall well-being. A person’s environment interacts with their well-being and health
(Olumide et al., 2014), life satisfaction (Parker et al., 2018), and feelings of connectedness (Forenza, Lardier, Reid, Garcia-Reid, & Bermea, 2019), as well as the availability and access to positive supports (Garcia-Reid, Hamme Peterson, & Reid, 2015; Garcia-Reid, Reid, & Peterson 2005; Kahn & Antonucci, 1980). Being that the community in which a person lives can influence both an individual level and a systemic level (i.e. school funding), it plays an important role in the academic success of adolescents. Adolescents in low-income urban communities were less likely to trust their local law enforcement; more likely to be exposed to drugs, alcohol, and violence; and have higher levels of poverty—making them feel less connected to their community (Forenza et al., 2019; Parker et al., 2018).

In 2018, the Pew Research Center produced a report outlining the differences among urban, suburban, and rural communities (Parker et al., 2018). Utilizing the National Center for Health Statistics (NCHS) data systems’ update of the rural-urban Chartbook (Meit et al., 2014), urban communities had higher population levels in more concentrated areas. Most urban communities were either within or right outside of a metropolitan county, such as New York City, where there are 250,000 to 1 million people residing in one county (Meit et al., 2014). The majority of residents living in urban communities were minorities with only 44% of the population being White. Since 2000, immigrants were the fastest growing population in urban areas, accounting for 38% of the population influx (Parker et al., 2018).

With minorities, including immigrants, being the majority residents in urban areas, it is important to examine the environments in which they reside, including the community level supports. Not surprisingly, the data paints a picture full of despair and lack of resources for urban residents. While urban areas have had a reported poverty rate of 17%, the majority of residents (68%) reported that they did not have enough income to live a fulfilled life (Parker et al., 2018).
Additionally, adolescents under the age of 18 living in urban neighborhoods had the highest poverty rate at 22 percent (Bishaw & Posey, 2016).

The major issues reported by residents in urban areas underscore the lack of support in these communities (Lardier et al., 2018; Lardier, MacDonnell, Barrios, Garcia-Reid, & Reid, 2017; Parker et al., 2018). Fifty percent of residents reported affordable housing as the number one problem facing urban residents. Second is drug addiction, with 50% of residents having reported it as a major problem. Third to be reported is poverty at forty-one percent. Also, within the top eight reported problems were crime, availability of jobs, and quality of k-12 public schools (Parker et al., 2018). In their qualitative study, Forenza et al. (2019) found that both adolescents and adults living in an urban area reported high levels of violence and drug use within their communities. The study participants also highlighted that the more they were exposed to these factors, the more normalized they became.

In comparison, while suburban and rural residents also reported drug addiction and affordable housing as major issues (35% and 34% respectively for suburban; 46% and 36% respectively for rural), also at the top of their lists were issues with public transportation and condition of roads and bridges. Across all residential areas, Whites and Nonwhites reported different problems. Nonwhites reported every single major problem listed (availability of affordable housing, drug addiction, availability of jobs, traffic, poverty, crime, quality of k-12 school, racism, access to good doctors, access to high-speed internet, and access to grocery stores) as being more prevalent in their communities than Whites (Parker et al., 2018).

When it comes to quality of life, residents living in suburban and rural communities reported higher levels of life satisfaction than urban residents. Yet, when examining age differences, young adults (aged 18-29) living in urban areas reported higher levels of life
satisfaction. However, when education levels were assessed, those who were living in an urban area and had a high school diploma or less, or some college education, reported the lowest levels of life satisfaction (Parker et al., 2018). Community engagement for adolescents living in a low-income urban community can help to alleviate some of these negative feelings and promote feelings of support and hope for the future. Anderson, Bohnert, and Governale (2018) found that when low-income urban youth participated in events through local community centers or churches, they reported feeling safer within their community despite reporting high levels of violence and drug use.

Lastly, the Pew Research Center (2018) examined the relationships amongst people living in different types of communities. Individuals living in urban areas were less likely to know and trust their neighbors. Only 15% of young adults residing in urban neighborhoods reported knowing their neighbors. Additionally, only 39% of Nonwhites, compared to 56% of Nonwhites living in a non-urban area, trusted their neighbors. About half of residents living in an urban region reported having people they can turn to for support, whereas 58% of suburban residents reported the same. Eleven percent of urban residents reported feeling lonely or isolated (Parker et al., 2018).

Research specific to youth has found that low-income minority adolescents were less likely to partake in community activities. For example, Ream and Rumberger (2008) found that Mexican American students were less likely to be engaged in extracurricular activities. Additionally, Black students were less likely to be exposed to community contexts that allowed for positive community activities (Bellair & McNulty, 2005). Forenza et al. (2019) conducted qualitative focus groups with youth and adults from an urban community and found that each group reported high levels of drug use and violence in their community. Additionally, since they
were consistently being exposed to these negative situations, participants reported feeling that, while they did not support it, this had become a normalized part of their community’s culture. Additionally, adults and youth acknowledged the lack of youth programming that was available within the community. This culture of normalized drugs and violence was reported to stem from a high density of alcohol outlets in the area, reduced funding for youth programming, and inconsistent leadership within the community.

**Support for Academic Success**

Black and Hispanic youth from low income, urban schools face a multitude of barriers that hinder their academic success. Positive social support systems can help to alleviate some of these negative outcomes (Benner et al., 2016; Benner et al., 2017; Chung-Do et al., 2017; Kelly et al., 2012; Lambert et al., 2014; Lansford et al., 2016; Lee & Breen, 2007; Maslowsky et al., 2015; Mouratidis & Sideridis, 2009; Olsson, 2009; Rasalingam et al., 2017; Stadler et al., 2010; Stearns & Glennie, 2006; Zaff et al., 2017). Support can come in many forms and be available to youth in different settings, such as school, home, or community environments. Literature has highlighted four key areas of support that can help or hinder students’ academic achievement: parental, peer, community and school support. Having positive or negative support from each of these areas impacts youth in different ways making it critical to evaluate the outcomes of support based on multiple demographic factors.

In their seminal article on the convoy model of social support, Kahn and Antonucci (1980) propose that the role that support plays in an adolescent’s life and the way in which support is defined varies based on race, socioeconomic status (SES), and gender. The ability to provide support varies based on demographic factors as well. Parents from low-income families often have a harder time providing support, such as attendance at school events, due to the
necessity of work (Stacer & Perrucci, 2012). In general, families and adolescents from low-income, minority families have less social capital and, therefore, less ability to provide educational support (Caldas & Cornigans, 2015; Smith, Reinke, Herman, & Huang, 2019; Stacer & Perrucci, 2012).

A review of literature on academic success over the last 20 years highlighted the essential role of parents in their adolescent child’s academic success (Bean, Bush, McKenry, & Wilson, 2003; Benner et al., 2016; Benner et al., 2017; Caldas & Cornigans, 2015; Day & Dotterer, 2018; Fan & Chen, 2001; Hill & Tyson, 2009; Hill & Wang, 2015; Jeynes, 2005; Ogbu, 2003; Smith et al., 2019; Stacer & Perrucci, 2012). The types of support vary by race and SES (Bean et al., 2003; Caldas & Cornigans, 2015; Day & Dotterer, 2018; Zaff et al., 2017); nonetheless, parental support was found to be critical. For example, Black and Hispanic families were more likely to offer practical support (i.e. childcare) than financial or emotional support (Antonucci, Burditt, Sherman, & Trinh, 2011). However, this can be attributed to factors such as financial strain and cultural values.

In contrast, research also shows that peers can have a stronger influence on student behavior than parents, including school truancy and participating in delinquent behaviors (Kelly et al., 2012). Prior research supports the idea that adolescents want to “fit in” with their peers (Lee & Breen, 2007; Mouratidis & Sideridis, 2009). Peer acceptance can lead to both positive and negative outcomes for adolescents. Since students spend most of their day in school, surrounded by their peers, having a diverse and positive peer social network can lead to better adjustment over time (Rivas-Drake, Umana-Taylor, Shaefer, Medina, 2017).

It is at this crossroads where schools have the opportunity to step in and provide the support that students may be missing at home (Olsson, 2009; Zaff et al., 2017). Prior studies
have shown that disadvantaged students needed strong relationships with teachers to keep them engaged (Olsson, 2009). Teachers can provide critical pieces of support, including being someone to talk to about life’s problems, someone to confide in, and someone to go to when upset, nervous, or depressed (Antonucci & Akiyama, 1987; Zaff et al., 2017).

The third layer in these social support networks is the community in which an adolescent lives. Previous research on community support highlighted the positive interaction between involvement in community activities and overall well-being. Involvement in community activities—such as religious groups, extracurricular activities, and volunteering—provided adolescents with the opportunity to feel connected to their communities and have been linked to positive outcomes (Anderson et al., 2018; Bermea et al., 2018; Evans, 2007; Forenza et al., 2019; Jain & Cohen, 2013; Jennings, Parra-Medina, Hilfinger-Messias, & McLoughlin, 2006; Lardier et al., 2019a; Lardier, Herr, Barrios, Garcia-Reid, & Reid, 2019b). However, adolescents residing in low-income, urban communities often have not been afforded the opportunity to participate in community activities due to poverty, community disorganization, and access to negative influences such as alcohol, drugs, and gangs (Evans, 2007; Forenza et al., 2019; Lardier et al., 2019b; Parker et al., 2018).

Interaction of Social Support Systems

While it is well established that support can play a role in academic outcomes, there is no consensus amongst researchers as to the interaction between different levels of support (Zaff et al., 2017). The importance of parental, peer, school, and community support has been well-establish in literature (Benner et al., 2016; Benner et al., 2017; Chung-Do et al., 2017; Kelly et al., 2012; Lambert et al., 2014; Lansford et al., 2016; Lardier, 2018; Lardier et al., 2019a; Lee & Breen, 2007; Maslowsky et al., 2015; Mouratidis & Sideridis, 2009; Olsson, 2009; Rasalingam et
al., 2017; Stadler et al., 2010; Stearns & Glennie, 2006; Zaff et al., 2017), but the extent to which these variables impact each other has not been fully examined.

Prior research on parental and school support has shown a mediating effect of school connectedness for low-income Black and Hispanic adolescents (Benner et al., 2016; Benner et al., 2017; Lambert et al., 2014; Olsson, 2009; Zaff et al., 2017). Benner et al. (2017) found that when social support networks were disrupted, particularly during the transition from middle to high school, academic achievement was compromised. Students from low-income families were affected the most, but increased levels of school support were able to mediate the relationship between parental support and academic outcomes (Benner et al., 2017). Similarly, Olsson (2009) found that relationships with teachers were more critical for disadvantaged youth from low-income families than their middle-class counterparts because they act as a support system when parental support is low.

Additionally, research on the interaction between parental and peer support has shown mixed results with changes in the influence of both types of support as children age into adolescence. Kelly et al. (2012) found that the relationship 6th graders had with their parents was a strong mediator between peer drinking networks and school connectedness; however, at the 8th grade level, parental relationships did not have an influence. Therefore, as adolescents aged, peers had a stronger influence on school connectedness than parents (Kelly et al., 2012). Research has also found both parental and peer support to be a buffer for bullying in school (Rasalingam et al., 2017; Stadler et al., 2010). Negative peer interactions, such as bullying, can oftentimes lead to poorer academic outcomes due to the higher levels of mental and emotional problems that are correlated with being the victim of bullying. However, research has found contrasting results with some studies highlighting parental support as the key mediating factor.
(Stadler et al., 2010) and others finding positive peer networks to have a stronger influence
(Rasalingam et al., 2017).

Further examining the relationship between parental and school support, Benner et al. (2016) found that parental involvement in education had an impact on outcomes for adolescents beyond their years in high school. For disadvantaged youth, this involvement was even more beneficial than those students who were higher achieving and from higher SES families (Benner et al., 2016). Olsson (2009) discussed similar findings supporting the benefit of parental and school support for disadvantaged youth. However, unlike Benner et al. (2016), Olsson (2009) found teacher support to be more influential than parental support for disadvantaged youth.

Teacher support and peer support can help to promote school connectedness, lowering the risk of dropping out (Lee & Breen, 2007). Lee and Breen (2007) found that high school dropouts cited a lack of inclusion within the school environment as one of the main factors in their decision to drop out. While adolescents felt disconnected from the school faculty, they did state that they would miss their friends, yet having a close peer groups was not enough to keep them engaged in school. However, Mouratidis and Sideridis (2009) found that students who developed strong positive peer relationships felt more connected to the school. Students craved peer acceptance; while in some circumstances this could promote positive outcomes, when peer groups were negative, adolescents were at an increased risk of participating in anti-social behavior in order to fit in (Mouratidis & Sideridis, 2009).

More recently, Lardier et al. (2018b) examined the roles of multiple support networks— including family, community, and schools—on substance use among Hispanic urban youth showing an interaction among the varying levels of support. However, this literature is limited to only Hispanic youth and the outcome of academic achievement is not considered. Lardier et al.
(2019c) began to untangle the relationship between community, social support systems, and school belongingness and the impact on pro- and anti-social behaviors of urban adolescents of color. This a promising start towards the examination of social support systems, as it highlighted the importance of support on behavioral outcomes such as violence and substance use. Research has also found that anti-social behavior such as participating in fights can hinder school connectedness, in turn producing negative academic outcomes (Upton Patton, Woolley, & Hong, 2012); however, a direct link has not yet been examined in this current literature.

Ultimately, there is still no overarching research on the mediating or moderating effects of all four types of support. Additionally, while some studies consider the demographic differences in types of support, there is little research focused solely on the integration of all four levels of support among Black and Hispanic youth residing in low-income urban school districts. To highlight the importance of social support, this study focuses on four levels of support (parental, peer, school, and community) and the intersections between the support and academic achievement specific to urban, low-income Black and Hispanic adolescents.

Additionally, taking a deficit-based approach towards minority youth based on unfair comparisons between low-income Black and Hispanic adolescents and middle-class White adolescents perpetuates stereotypes and biases against low-income Black and Hispanic adolescents. This deficit approach proposes that low-income Black and Hispanic adolescents lack the necessary supportive resources to be successful in educational attainment, but there are multiple facets beyond the individual that make it difficult to receive the necessary support. For example, teacher biases distort how grades are reported. When looking at teacher ratings for literacy skills, Ready and Wright (2011) found that teachers rated Black and Hispanic students twice as likely to be weaker than their White peers at the start of the school year prior to any
academic testing with Hispanic students from immigrant families rated as the weakest group of students. Moreover, in classrooms with high ethnic diversity, teachers held higher expectations of White and Asian students, even when Black and Hispanic students had similar levels of academic achievement (McKown & Weinstein, 2008). Even when the teacher was Black, she still rated minority students as weaker than White students (Ready & Wright, 2011). Lastly, teachers perceived students from low SES as the least likely to be successful academically (Auwater & Aurguete, 2008; Ready & Wright, 2011).

As discussed throughout this chapter, studies typically, albeit unfairly, compare low-income urban minority adolescents to middle-class White counterparts, creating an unequal playing field from the start (Davis-Kean & Sexton, 2009; Desimone & Long, 2010). Sociodemographic and cultural differences are often not accounted for when making comparisons between multiple racial or ethnic groups. This dissertation takes a counter narrative by examining Black and Hispanic adolescents separate from their White counterparts versus comparison analyses to account for cultural nuances that often get overlooked in research. By filling this gap, this study will help researchers get a better understanding of how support influences academic outcomes on a cultural level. This study views the cultural aspects of Black and Hispanic adolescents’ lives as sources of strength, not barriers to education. Additionally, this study will highlight the disparities within the United States education system that permeate Black and Hispanic families and hinder access to support.

Examining both protective and risk factors through the theoretical lens of the social development model (SDM) will allow for the exploration of multiple levels of support—including parental, peer, school, and community—and the interaction among them and academic success for low-income Black and Hispanic adolescents attending school in an urban...
community. Additionally, using the convoy model of social networks as a theoretical framework, this dissertation will explore the cultural differences in support networks and what types of support may influence low-income Black and Hispanic adolescents attending high school in an urban community.

This dissertation will (a) examine the impact of parental and peer support (separately) on academic achievement for low-income Black and Hispanic adolescents residing in an urban community in New Jersey; (b) examine the mediating influence of school connectedness between parental and peer support and academic achievement for low-income Black and Hispanic adolescents residing in an urban community in New Jersey; (c) examine the mediating influence of community organization between parental and peer support and academic achievement for low-income Black and Hispanic adolescents residing in an urban community in New Jersey. All assessments will occur separately for both Black and Hispanic adolescents as to account for the cultural differences among social support and academic achievement.
Chapter 2: Theoretical Framework and Literature Review

Development models, such as the bioecological theory of human development and attachment theories, are widely used as theoretical frameworks by social science and educational researchers due their consideration of the context in which adolescents develop (Tudge, Mokrova, Hatfield, & Karnik, 2009; Tudge et al., 2016). While the interactions within environments can be critical to development, a more in-depth view of pro- and anti-social development is typically examined using risk and resiliency models (Catalano & Hawkins, 1996). Risk and resiliency frameworks are historically used in research to develop prevention initiatives as they allow the researcher to examine factors that put youth and adolescents at a higher risk for anti-social behaviors (Catalano & Hawkins, 1996). However, much of this research takes on a deficit lens and does not consider the social networks that can be a protective factor for at-risk adolescents (Zaff et al., 2017). Models that highlight the strength of social support focus on the types of social bonds that are necessary for positive growth and development, including academic achievement. Taken together, risk and resiliency models and social support models focus on the risk and protective factors available to disadvantaged youth through the relationships they build. The next section will introduce the theoretical framework of this study by defining and examining the risk and resiliency model, SDM (Catalano & Hawkins, 1996), and the social support model, the convoy model of social networks (Kahn & Antonucci, 1980). Through this theoretical lens, a review of literature on the prevention factors associated with social support for low-income Black and Hispanic adolescents will be discussed. Lastly, this chapter will conclude with the research questions that have guided this study.
Social Developmental Model for Delinquent Behaviors

Catalano and Hawkins (1996) proposed the social development model (SDM) as a theory of antisocial behavior. Many developmental theories focus on the process of development for prosocial behaviors, but it is important to be aware of antisocial development for prevention work. Since antisocial behavior develops primarily in adolescence and early onset of delinquent behavior (i.e. drug use) predicts chronic delinquency in later life, it is necessary to have a theory of general processes in which prosocial and antisocial behaviors can be predicted and understood (Catalano & Hawkins, 1996).

Based in the criminology field, SDM found its grounding in Control Theory, Social Learning Theory, and Differential Association Theory and highlighted the causal elements in the onset of delinquent and conforming behaviors (Control Theory), processes by which behaviors are reinforced or diminished (Social Learning Theory), and parallel, but separate pathways for behavior development (Differential Association Theory) (Catalano & Hawkins, 1996). The key tenets of SDM created a coherent model with the inclusion of delinquency and drug use, developmental perspectives with models being aligned with developmental periods, and risk and protective factors (Catalano & Hawkins, 1996).

As with all developmental theories, SDM accounts for reciprocal effects; development occurs over the life course through shared social interactions (Catalano & Hawkins, 1996). These interactions occur through transactional relationships where behaviors are developed due to relationships, not solely on the individual, based on repetitive social interactions (Catalano & Hawkins, 1996). For Black and Hispanic adolescents, cultural awareness from teachers often helps to create bonds and promote a mutually respectful relationship. Garret, Antrop-Gonzalez, and Velez (2010) found that Hispanic students reported feeling more support from teachers when
they were able to connect with students on a personal level where both participants felt a sense of caring in the relationship. Hawley McWhirter, Valez, and Caban (2013) expanded on Garret et al.’s (2010) findings and found that these relationships were most beneficial when both the teacher and students were of the same ethnic background because they were able to understand cultural values. Neseth, Savage, and Navarro (2009) previously reported a similar finding in their study on Mexican-American students in an urban school district. Through interviews with four high-achieving Black males in an urban school district, Thompson and Davis (2013) found support for transactional relationships that go beyond the two individuals engaged in that relationship. Black male students reported the drive to mentor peers when their teachers became mentors to them, expanding the behaviors learned through this relationship beyond the individual interactions.

In addition to transactional relationships, developmental models account for transformational behavior; different behaviors are expected to occur during specific periods of development and the influence that social agents have during these periods are different. Binge drinking behaviors would be one example of this. Stevens-Watkins and Reynolds (2010) found that adolescents initially reported lower levels of binge drinking behaviors when they felt connected to their parents. However, as the participants aged and formed stronger bonds with peers, binge drinking occurrence increased if they had friends with higher binge drinking behaviors, regardless of family connectedness (Stevens-Watkins & Reynolds, 2010).

Additionally, SDM assumes that human beings seek out things that will fulfill their self-interests and that there is a societal consensus on what is normative behavior. Based on Social Learning Theory, Catalano and Hawkins (1996) proposed that adolescents behave in ways that provide the highest levels of satisfaction, but that it is limited by ability, opportunity, and
experience. The self-interest for an adolescent living in a low-income community might be to earn a sustainable wage. However, due to the lack of opportunity and positive work experience, and the availability of drugs, the adolescent may turn to illegal activities to earn money. While there is a consensus in society as to the “rules of the game” (Catalano & Hawkins, 1996) there is also variation in these rules among different populations of people. Low-income communities with higher crime rates may have a different view on society and therefore follow a different set of rules (Forenza et al., 2019).

Individuals begin forming patterns of behavior from a young age by viewing and interacting with members of their family, school, and community. SDM hypothesized four constructs in which children are socialized and learn patterns of behavior (Catalano & Hawkins, 1996). These processes include (1) the perception of opportunity to be involved with others; (2) the degree in which they are involved and interact with others; (3) having the skills necessary to participate; (4) and the reinforcements they receive from participation. Through these four processes, children form attachments to others, developing bonds that promote alignment with a group’s beliefs and values, as well as supporting the group’s actions (Catalano & Hawkins, 1996). Ultimately, these social bonds create power and control dynamics that affect behaviors in the present and future. Being a member of a social group or “unit” establishes a set of norms and values that an individual must conform to in order to belong (Catalano & Hawkins, 1996). For example, Voisin and Neilands (2010) found that risky peer norms, such as unprotected sex and earlier initiation of sexual activity, were negatively related to academic achievement. Therefore, as risky behavior became more normal amongst peers, academic achievement decreased.

As with risky sexual behaviors, any behavior that an adolescent exhibits can be either pro- or anti-social depending on the social bonds that students form. Bonds with delinquent
groups emerge when adolescents are denied the opportunity to participate in positive activities, which can often be due to a lack of skills or environmental barriers. A lack of participating in extracurricular activities (due to lack of school funding or general awareness of activities), for example, is linked to lower levels of academic achievement (Wang & Eccles, 2012). Additionally, if the benefits of negative behaviors outweigh the consequences, delinquent activities are more likely to be enacted. Lastly, when the child is enmeshed in an environment with individuals who also partake in delinquent behaviors, those behaviors are more likely to be replicated (Catalano & Hawkins, 1996). Wang and Eccles (2012) found that peer friendships became subgroups within the school environment and developed their own cultural rules that ran counter to the school rules. As peer support within an antisocial peer group increased, there was a reduction in school participation. This may be due to an increase in devious behaviors to fit in with the antisocial peer group.

By the time an adolescent is in high school, many of these delinquent behaviors and bonds have already been established; however, there is also an opportunity during this critical transition period to thwart negative social bonds and alleviate chronic delinquency. In their high school model of SDM, Catalano and Hawkins (1996) stressed the importance of positive social bonds within the school and community to promote prosocial behaviors. More recently, Lardier et al. (2019c) found that Black and Hispanic adolescents who had access to social support within their school and community reported less risky behavior and depressive symptoms and more sense of belonging within their community and school regardless of living in an urban, primarily low-income neighborhood.

The relationships that adolescents develop throughout their high school career, whether the relationships are with family, friends, teachers, or community members, oftentimes have an
impact on their academic success. It is through these relationships that social support networks are formed that can either help or hinder a student’s academic success via pro- or anti-social behavior development. The composition of social support networks can be critical to pro-social development. If an adolescent surrounds him or herself with positive support systems, he or she is at lower risk to develop negative behaviors (Lardier et al., 2019c). To highlight the key pieces of social support networks, the next section discusses the convoy model of social networks.

**Convoy Model of Social Networks**

Social support networks build resiliency, strength, and social capital for adolescents (Benner et al., 2016; Benner et al., 2017; Chung-Do et al., 2017; Kelly et al., 2012; Lambert et al., 2014; Lansford et al., 2016; Lardier, 2018; Lardier et al., 2019a; Lee & Breen, 2007; Maslowsky et al., 2015; Mouratidis & Sideridis, 2009; Olsson, 2009; Rasalingam et al., 2017; Stadler et al., 2010; Stearns & Glennie, 2006; Zaff et al., 2017). Kahn and Antonucci (1980) first proposed the convoy model of social networks to expand upon previous attachment theories that focused mainly on infants and children. Attachment theorists proposed that well-attached infants and children use their caregiver (usually parent) as a secure base in which they could safely explore and grow within the world around them (Ainsworth, 1973). Kahn and Antonucci (1980) proposed that this type of attachment can continue across the lifespan and relationships that are developed in adolescence and adulthood can act in the same manner, allowing the individual to continue exploring the world around them with less stress and more security. The convoy model of social networks gained recognition as a lifespan model in the area of aging adults and development; however, child and adolescent researchers have not fully adopted this theoretical framework (Levitt, 2005). Yet, the immersion of the convoy model of social networks with
SDM, while considering the contexts of race and ethnicity, can be a highly useful model for evaluating the way in which minority adolescents access support.

As with SDM, the convoy model of social networks proposes that social support is a bi-directional relationship. In an examination of teacher-student relationships, Jones Gast (2018) found that teachers favored high achieving, higher SES students and were impressed in their ability to ask for help and form a relationship with the teacher. The high achieving Black students also valued the relationship they had with the teacher and felt supported. Low achieving, low-income students were not provided with the same support and, therefore, had negative views of the teachers (Jones Gast, 2018). In both cases, the relationship between teacher and student was dependent upon a mutual understanding and respect, or lack thereof.

To clearly define the type of support that individuals often need, Kahn and Antonucci (1980) outlined five propositions within the convoy model. Through these propositions, Kahn and Antonucci suggested that the adequacy of support provided is dependent upon each individual and situation (i.e. race/ethnicity, gender, and SES), but that the individual also has influence over the level of support that they receive. Black male students, for example, reported a higher need for support from their teachers when there was negative peer support (Thompson & Davis, 2013). However, when peer support was present, Hispanic adolescents noted that their support provided the most guidance for post-secondary options when parents were unable to provide support (Carolan-Silva & Reyes, 2013). It is important to note that social support can mediate an individual’s well-being regardless of the individual and situation (Kahn & Antonucci, 1980).

There are two key tenets within the convoy model that shape the support that a person can receive: roles and convoys. The roles people play can determine the types of support that are
provided to individuals and can determine the closeness and impact they have. Aligned with SDM, the convoy model proposes that roles are not stagnant over the life course, but instead transform throughout development based on situation, need, and access. For example, during childhood, parental support typically has a stronger influence on behavior than peer support. However, as children reach adolescence and spend more time with friends, peer influence often becomes stronger and can even outweigh the parental influence (Amdouni, Paredes, Kribs, & Mubayi, 2017; Levitt, Guacci-Franco, & Levitt, 1993; Stevens-Watkins & Rostosky, 2010). In their study examining why high school students drop out, Amdouni et al. (2017) found that parental influence over choice of friends becomes lower as children age. By the time a student is failing in high school, peers have more influence over academic engagement than parents (Amdouni et al., 2017).

Convoys are the support systems that each individual person has access to throughout their life. Convoys consist of three concentric circles around the individual that each provide different levels of support. Convoys are permeable and ever changing based off the roles that people play in an individual’s life (Kahn & Antonucci, 1980). The composition of these convoys varies based on race, ethnicity, gender, and age. When applying the convoy model to Mexican families, Fuller-Iglesias and Antonucci (2015) found that individuals with less education had smaller social networks, which mostly consisted of family members. Additionally, women had larger social support networks consisting of friends, with adolescent women having had some of the largest networks (Fuller-Iglesias & Antonucci, 2015; Levitt et al., 1993). Overall, Mexican individuals had convoys that had strong ties to family and intergenerational support (Fuller-Iglesias & Antonucci, 2015). Black children and adolescents had a large amount of extended
family members in their social networks, with friend support being more predictive of well-being
(Levitt et al., 1993; Levitt, 2005).

In a preliminary analysis of the convoy model, social support, and well-being, Antonucci
and Akiyama (1987) found that that individuals who had high levels of close support reported
higher levels of well-being. The relationships within the innermost convoy provided the most
support, had higher frequency of contact, and provided multiple forms of support. Individuals in
the innermost convoy are typically family and close friends. These are the people who the
individual has the most frequent contact with and the people that provide the most support
(Antonucci & Akiyama, 1987). The innermost circle tends to remain the same regardless of
roles, which could be problematic for at-risk minority youth because they may not have parents
and family members who are able to fill these supportive roles. However, in the initial evaluation
of the convoy model for children and adolescents, Levitt et al. (1993) found that family networks
were more prominent for Black and Hispanic children than White children, but as they aged
friends began to replace some of these extended family members, such as cousins, aunts, and
uncles. Interestingly, for Black adolescents, peer support was more predictive of adolescent well-
being than parental support. This research, however, did not account for the socioeconomic
status of the adolescents’ families, which may alter these results. Current research has found
support for this finding by highlighting that adolescents who come from low-income, minority
families may not be able to fill their innermost convoy with parents and other family members
because they might not physically be available (Lad & Braganza, 2013; Maynard et al., 2015;
Olsson, 2009).

The middle circle is made up of close friends and those individuals with whom the
student has slightly less of a relationship (i.e. best friend, cousin, or teacher). This circle is
slightly more permeable than the innermost circle and allows for change based on the roles of each individual (Kahn & Antonucci, 1980). The outermost circle is the most permeable and allows for continuous change in roles. This convoy is made up of individuals who are easily replaced should roles change (i.e. acquaintance, neighbor, or co-worker). All levels of support are necessary for growth and development across the lifespan, and each member of the convoy plays a critical role (Kahn & Antonucci, 1980).

Granovetter’s (1973) seminal work on the theory of the strength of weak ties can help adolescents who might not have parental or close family support build capacity within their convoys and gain access to the support that they need. Weak ties are developed through bridges and connections between multiple people. The theory works as such: Person A and Person B are close friends. Person A and Person C are close friends. Person A introduces Person B and Person C to each other, forming a bridge and initially a weak tie because it might eventually be developed into a stronger tie. At first, these weak ties would be in the outermost convoy, but over time, would develop into stronger and more supportive relationships. Building weak ties with positive peers, teachers, and community members allow disadvantaged adolescents to increase their social capital. For example, in their qualitative study on low-income, high-achieving Hispanic students whose parents lacked knowledge on how to navigate the educational system, Carolan-Silva and Reyes (2013) found that peers within their classes often became an important source of information. These initial peer relationships began as a “weak tie” because they happened to be in the same class together, but over time became an integral part in their academic success. These Hispanic students reported that the relationships they formed with positive peers provided the support that was needed for their academic success (Carolan-Silva & Reyes, 2013). Additionally, building weak ties within the community by allowing adolescents to
participate in community events often fosters a sense of belonging (Anderson et al., 2018; Granovetter, 1973).

Implications of Social Support

To examine the relationship between varying levels of social support and academic outcomes for low-income Black and Hispanic adolescents attending an urban high school, both SDM and the convoy model will be used as the theoretical lens in which previous literature will be discussed. As a theoretical model, SDM provides an operationalized tool in which to examine the concepts of risk and protective factors, including social support. Social support will be examined in four layers: parental support, peer support, school connectedness, and community organization. Each of these concepts will be evaluated using the Communities That Care (CTC) Youth Survey as developed through the lens of SDM (Catalano & Hawkins, 1996). The CTC Youth Survey assesses 23 protective and 10 risk factors associated with pro- and anti-social behavior (Arthur et al., 2007). Chapter four will discuss in further detail the measurement tool itself.

While concepts within the convoy model have been evaluated in previous research, for the purpose of this study, this model will be highlighted as a theoretical framework to provide further conceptual understanding of the four layers of support. The focus of this study is to examine support as a protective factor, not accounting for the quantity of support (i.e. how many friends are in the innermost convoy), but the quality of support (i.e. my parents ask if my homework is done). Therefore, the concepts of the convoy model are not being measured in this study through quantitative methods, but discussed to further enhance the discourse around the importance of close social support and the roles that parents, peers, schools, and communities
play in the academic success of low-income Black and Hispanic adolescents attending an urban high school.

The next section discusses the concepts of parental support, peer support, school connectedness, and community organization as they relate to low-income Black and Hispanic adolescents. Previous research has often focused on Black and Hispanic youth as one minority group, not considering strong cultural differences. Examining Black and Hispanic populations as one group may alter findings and reinforce misconceptions about minority groups. Social support and academic success look very different for Black and Hispanic youth. To provide an in-depth review of literature for both populations of people, each level of support (parental, peer, school, and community) is examined first through the lens of the SDM and convoy model. A discussion on common threads among marginalized populations and a more in-depth review of literature on support specific to both Black and Hispanic low-income adolescents are addressed. Additionally, barriers to support for Black and Hispanic populations are discussed. Lastly, analysis for this study will be cognizant of the cultural differences discussed in this section and will be done separately for both populations.

**Parental Support**

Prior research has shown that parental support can help promote well-being and academic success for adolescents (Benner et al., 2016; Garcia-Reid et al., 2015; Garcia-Reid et al., 2005; Lambert et al., 2014; Maslowsky et al., 2015; Olsson, 2009; Rasalingam et al., 2017; Stadler et al., 2010; Stearns & Glennie, 2006; Zaff et al., 2017). In their review of literature, Zaff et al. (2017) found several underlying factors that promoted positive school engagement and academic achievement. Parents who were more involved in their child’s academic career tended to stress the importance of education and promote academic achievement. Parental support can take on
varying forms and be as simple as having regular meals together (Lambert et al., 2014) or as involved as attending school meetings and events (Zaff et al., 2017). Parents can act as a mediator between peer-victimization (i.e. bullying) and maladjustment, as well as engagers in school events to help promote continued enrollment (Benner et al., 2016; Rasalingam et al., 2017; Stadler, 2010; Zaff et al., 2017). Maslowsky et al. (2015) found that parental support lowered alcohol and marijuana use, conduct problems, and depressive symptoms for at-risk African American adolescents.

Typically, parents are found in the innermost convoy of social support and provide high levels of support ranging from being a caregiver when the adolescent is ill to being someone to talk to when they are feeling upset or discouraged (Antonucci & Akiyama, 1987; Fuller-Igelsias, Webster, & Antonucci, 2013). As outlined by Kahn and Antonucci (1980) in the initial propositions within the convoy model, types of support can vary based on the individual’s characteristics and needs. For disadvantaged students (low SES/high risk), the most successful form of support often came from physical attendance (Benner et al., 2016; Zaff et al., 2017). Physical attendance means that a parent shows support by attending a school event or activity. Advantaged students (high SES/low risk) needed more engaged parents who had high expectations for academic success (Benner et al., 2016). These parents were involved in course selection, college applications, extracurricular activities, etc.

**Low-income Black Adolescents.** Being that parents are typically found in the innermost convoy, the role that parents play for low-income Black adolescents is considered stagnant over time, meaning the relationship that is formed in adolescence can influence long-term outcomes. In a qualitative study, African American male adolescents cited parental support as a factor in overcoming challenges in school (Moon & Singh, 2015), yet each participant also mentioned
how lucky they were to have supportive parents in their lives as they know not all young, Black
men do. Many of the participants in the study did not have a positive male role model in their
lives, with most of them being from single-parent, mother-only households. Those who did not
have parental support cited it as a critical need to help them to improve academically. As
highlighted by most of the adolescents in this study, having no support at home made it difficult
to find worth in education. However, when parental support was present, adolescents saw them
as a defense against a discriminatory school system where they were perceived to be lost causes
(Moon & Singh, 2015).

Parental support also motivated low-income urban adolescents to participate in organized
activities, leading to positive youth development and higher levels of engagement in school.
Parental support may act as a buffer against negative peer and school influences whereas family
conflict was linked to negative outcomes for youth (Eisman, Stoddard, Bauermeister, Caldwell,
& Zimmerman, 2016). In the case where African American youth were already participating in
delinquent behaviors that can affect academic outcomes, involving the parent in intervention
programming established a relationship between the parent and the school, helping to reconnect
the adolescent with the school community (Carswell, Hanlon, O’Grady, Watts, & Pothong,
2009). As proposed by both the SDM and convoy model, this bi-directional and transactional
relationship between parents and schools can help to reinforce positive behaviors for adolescents.

There have been mixed findings on the implication of SES for Black adolescents. One
would hypothesize that the intersection of race and SES would increase the barriers that a low-
income Black youth would face, making SES a risk factor to be examined through the SDM.
Battle, Alderman-Swain, and Tyner (2005) examined this intersection and found that a lower
SES and attending a school with higher levels of free lunch program participants had a negative
correlation with academic achievement for Black high school students. Yet, parental control and cultural capital (measured as parental rules about homework and how much interaction with art, music, or dance outside of the classroom, respectively) were also positively correlated with academic performance. Smith, Schneider, and Ruck (2005) found that parental support was a strong predictor of academic performance regardless of SES. Additionally, in a mixed-methods study of over 800 African American adolescents in an urban school district, Sanders (1998) found that parental support, teacher perception, and community involvement were positively correlated with academic achievement after accounting for demographic variables, including SES. This supports the hypothesis that parental support may act as a mediator against negative variables and a possible protective factor to be examined through the SDM.

The variable of SES may, however, have an indirect effect on parental support. For adolescents from low-income, minority families, parents may not be able to provide physical levels of support. Parents in low-income families often have lower educational levels, work multiple jobs, and face a multitude of barriers that hinder them from being able to provide the necessary support (Benner et al., 2016; Olsson, 2009). While parents in these situations may be less likely to provide physical support, involvement of any kind is still seen as beneficial. Providing their children with clothing, food, emotional support, and discourse around future goals and dreams are some of the ways that parents can show informal support (Williams & Awe Agahe Portman, 2012).

Cultural differences, lack of education, higher levels of poverty, and differences in parenting styles are some of the factors that contribute to the lower levels of parental educational support in Black families (Bean et al., 2003; Caldas & Cornigas, 2015; Day & Dotterer, 2018; Jeynes, 2005; Ogbu, 2003). In a study conducted by Stormont, Herman, Reinke, David, and Goel
(2013), teachers rated families of lower income, with the vast majority being Black, as less comfortable to work with. A cultural divide is created within the education system where 82% of teachers are White compared to 51% of all students (U.S. DOE, 2016) and hold negative perceptions of Black students (Basch, 2011; Chung-Do et al., 2017; Downey & Pribesh, 2004; Syed et al., 2011). Institutional racism compounds the issue, making it difficult for Black students and their families to trust and connect with school officials, creating an environment that deters school engagement (Auerbach, 2007; Garcia Coll et al., 1996; Hill & Torres, 2010; Yull, Blitz, Thompson, and Murray, 2014). Stacer & Perrucci (2012) found that Black parents were more likely to show increased levels of school engagement when they felt as though the schools were giving them opportunities to participate and making an effort to include them.

In a review of Black, Hispanic, White, and immigrant young adults, Halliday Hardie & Seltzer (2016) found that Black and Hispanic youth were less likely to live with both biological parents, had the highest levels of poverty, and had parents with the lowest level of education, marking them as the most disadvantaged populations. Financial strain can produce barriers for low-income parents, creating time constraints, less flexibility in scheduling, and higher levels of stress. While SES may play a role, Ogbu (2003) found that, even when controlling for SES, middle-class Black parents were still less engaged in their child’s education than their White counterparts. Black students were less likely to discuss their education with their parents than White students. Black youth also reported the lowest levels of parental support compared to Hispanic, immigrant, and White youth (Halliday Hardie & Seltzer, 2016). Low levels of perceived support may hinder the relationship between Black youth and their parents.

**Low-income Hispanic Adolescents.** The cultural aspect of *familismo* puts family at the center of a Hispanic adolescent’s life. Family, particularly parents, is most present in the
innermost convoy for Hispanic individuals (Fuller-Iglesias & Antonucci, 2015). Familismo is the expectation from Hispanic families that the family will always come first and that strong family ties are important for prosperity. Additionally, in Hispanic culture, parents are often the rule makers and have authority over the family. Hispanic parents also tend to have more rules than non-Hispanic parents and demonstrate stronger control over their children, which can lead to less anti-social behavioral outcomes (Halgunseth, Ispa, & Rudy, 2006).

Hispanic parents place great emphasis on their child’s education and they want to be involved; however, their definition of academic involvement is skewed from the mainstream definition (Smith, Stern, & Shatrova, 2008; Zarate, 2008). In a qualitative study, Zarate (2008) found that Hispanic parents listed more involvement with general life activities than school involvement. In this study school involvement, as stated by teachers, included attendance at school events or helping with homework whereas parents defined school involvement as having awareness of their child’s life and building trust with their child. The disconnect between the Hispanic cultural belief in educacion (Arbelo Marrero, 2016) and the mainstream education culture created a lack of understanding between the schools and parents (Smith et al., 2008). Hispanic parents were often reluctant to talk to teachers or administrators due to the cultural value of respeto (Arbelo Marrero, 2016) or respect for authority, language barriers, and a general sense of inequality (Smith et al., 2008).

Research has stressed the importance of educacion for Hispanic families (Arbelo Marrero, 2016; Cabrera, Lopez, & Saenz, 2012; Garrett et al., 2010). Education, seen as a partnership between academic education and cultural life lessons, is a core value amongst Hispanic families. There is a consensus among families that it is the parent’s duty to provide education on relationship building, culture, and developing a sense of responsibility within their
child (Arbelo Marrero, 2016). In a qualitative study on academically high-achieving, low-income Mexican students (half being first generation American), parents were cited as the most important influence on the decision to go to college, even though all parents had a high school education or below; therefore, despite lacking knowledge on college enrollment, they provided the necessary support and motivation for their children that was critical to their success (Carolan-Silva & Reyes, 2013). Beginning at a young age, through the transactional parent-child relationship, adolescents subconsciously absorb information about values and norms within their family (Catalano & Hawkins, 1996). For example, students cited that their parents’ values, strong educational communication from a young age, and their own qualities of determination and hard work influenced their academic goals. Additionally, watching their parents struggle financially, educationally, and linguistically drove them to want better for themselves (Carolan-Silva & Reyes, 2013).

Cabrera et al. (2012) also found that Hispanic adolescents from a low-income, border community in Texas had high aspirations to graduate and attend college at their parents’ insistence. However, unlike the high-achieving students from Carolan-Silva and Reyes’ (2013) study, despite having parental support, the graduation rates among these students and, furthermore, the college enrollment rates were low (Cabrera et al., 2012). Adolescents cited three major barriers to reaching their goals: (a) parents lacked the knowledge and education to help, (b) students relied on their parent’s to advocate for them at school, (c) students were pulled out of school and/or did not enroll in college due to financial constraints (Cabrera et al., 2012). Hispanic adolescents felt as though their voices were not heard by teachers, counselors, and administrators, placing their requests for advanced placement courses or college information squarely on the shoulders of uneducated parents (Cabrera et al., 2012). Lack of parental
education was one of the main reasons Hispanic parents were unable to provide educational support to their children (Lad & Braganza, 2013; Ramirez, Machida, Kline, & Huan, 2014; Simpkins, Price, & Garcia, 2015).

Having parental support often helps increase social capital for Hispanic adolescents (Benner et al., 2016; Garcia-Reid et al., 2005; Garcia-Reid et al., 2015). When parents provided support outside of the classroom, Hispanic adolescents’ academic achievement and ganas improves. Ganas refers to the inherent desire to succeed. This drive is typically instilled in Hispanic students at a very young age by their parents through familial conversations around getting good grades and the importance of an education (Cabrera et al., 2012). The cultural values of familismo and respeto emphasize the importance of family and respect for adults within the community. Respeto goes beyond the English version of respect and provides respect for roles within the family. Hispanic children are taught from a young age to not only respect elders, but to show respect for the relationship they have with members of their family (Halgunseth et al., 2006). For example, an adolescent would not contradict a mother’s rule even if a teacher tells the child otherwise. This would be done out of respect for the mother as an authority figure, regardless of which person the adolescent believes is correct. Family can be a source of strength and support for Hispanic youth and adolescents, especially when education is at the forefront of familial values. Yet, cultural beliefs can also highlight an obligation to the needs of the family (Arbelo Marrero, 2016; Carolan-Silva & Reyes, 2013).

Financial burdens and family responsibilities may pull a student out of school. Hispanic girls can be 10 percent more likely to withdraw from school due to pregnancies. Hispanic girls were more than three times as likely as black girls to withdraw due to marriage and more than 20 times as likely than White girls (Bradley & Renzulli, 2011; Stearns & Glennie, 2006). Cultural
traditions that serve as a source of strength and motivation may be a strong factor in Hispanic students being pulled out of high school. Even when education was promoted within the family, Latinx families had additional barriers of language, migration stress, and lack of educational awareness that hindered their ability to advocate for their children (Lad & Braganza, 2013). Again, this highlights the intersection of class, race, nativity, and education and the multiple layers of oppression that these families face (May, 2015).

**Peer Support**

Relationships are transformational and change throughout the life course (Catalano & Hawkins, 1996; Kahn & Antonucci, 1980). The roles that people play will also adjust as children transition into adolescents, regardless of race, ethnicity, gender, or SES (Kahn & Antonucci, 1980). As adolescents age, the drive to gain freedom becomes a source of tension between even the most supportive parents and their children. Strong peer relationships begin to develop and become more prominent in nature.

Spending most of their day amongst their peers, students reported that their relationships with peers weighed heavily on their level of school connectedness (Booker, 2004). Current research supports the idea that adolescents want to “fit in” with their peers (Lee & Breen, 2007; Mouratidis & Sideridis, 2009). Throughout adolescence, these peer relationships become more complex as both friendships and intimate partnerships develop (Brown & Larson, 2009). Since the formation of ethnic and racial identity is still occurring during this stage of development, adolescents are trying to figure out who they are by finding their place in groups and relationships (Rivas-Drake et al., 2017). Typically, peer friendships and group identities are developed out of similarities (Graham, Munniksma, & Juvonen, 2014). Even as young at 11 years old, Black and Latino children are more likely to report higher levels of friendship with
peers who shared the same sex, race, and interests, supporting the theory of homophily (Graham et al., 2014; Watling Neal, Neal, & Cappella, 2014). In their study on race and friendship, Rude and Herda (2010) found that same-race friendships had greater longevity than interracial friendships.

Since homophily plays a key role in friendship stability over time, it is important for adolescents to behave in a way which will allow them to fit in with their peers. Adolescents crave acceptance within a peer group to avoid bullying and create bonds that will protect them from negative situations (Lee & Breen, 2007; Mouratidis & Sideridis, 2009; Rasalingam et al., 2017). One of the key tenets within adolescent peer relationships is status within a peer group (Brown & Larson, 2009). This can lead to delinquent behaviors if that is the environment of the peer group (Mouratidis & Sideridis, 2009). In their qualitative research, Lee and Breen (2007) found that lack of peer acceptance played a role in high school students’ decision to drop out of school. Dropouts reported a lack of sense of belonging and cited situations where they felt excluded and not supported by their peers, making the decision to disengage from school easier.

Additionally, as students strive to fit in to their peer groups, they may begin partaking in more delinquent behaviors (Catalano & Hawkins, 1996; Mouratidis & Sideridis, 2009). Adolescents who interacted with peers who engaged in delinquent behaviors were less likely to be engaged in school and had poorer academic outcomes. Utilizing the Communities That Care Youth Survey, Kelly et al. (2012) found that when peers were consuming alcohol, adolescents were likely to consume alcohol regardless of parental support. Partaking in the consumption of alcohol increased a feeling of belonging to their social group but decreased their connection to school.
Yet, positive peer support can also help to alleviate negative experiences at school and promote positive academic outcomes. Peer-victimization during adolescence can hinder positive adjustment and promote a poor sense of well-being (Stadler et al., 2010). Having a positive peer support system can help mediate this relationship. Students who had a strong peer social network (typically found in the middle convoy) had better mental health outcomes and were less likely to disconnect from school (Rasalingam et al., 2017; Stadler et al., 2010). Mouratidis and Sideridis (2009) also found that the more positive peer engagement a student had, the more connected he or she felt with the school and, in turn, developed a better sense of well-being.

**Low-income Black adolescents.** For Black adolescents, friends are often the most predictive factor for well-being and most common type of support in the innermost convoy (Levitt et al., 1993; Levitt, 2005). Therefore, examining the types of friendships that are formed for Black adolescents can be critical to development. Based on their research, Jones, Mueller, Royal, Shim, & Hart (2013) found that low-income Black youth engaged in social relationships for three main reasons: social development, social demonstration-approach, or social demonstration-avoid. Low-income Black students formed social bonds out of the desire to form genuine, high-quality friendships, the need to fit in, or the fear of seeming inferior (Jones et al., 2013). Social demonstration-approach and -avoid were the two most critical peer relationships when viewing pro- and anti-social behaviors. As suggested by SDM, social bonds play to these power dynamics, making delinquent behavior necessary to either be “cool” or avoid being dismissed (Catalano & Hawkins, 1996; Wang & Eccles, 2012). An example would be an increased engagement in binge drinking activities when surrounded by friends who had high levels of binge drinking behaviors (Stevens-Watkins & Rostosky, 2010). Additionally, when adolescent Black males had friends who engaged in risky sexual behavior, their grade point
averages declined. For Black adolescent females, peer norms of early and risky sexual involvement were negatively associated with grade point averages (Voisin & Neilands, 2010).

Being labeled as “acting White” (i.e. being a high achiever) by peers is often a fear that Black adolescents disproportionately face due to racial discrimination from peers of their own race. When Black adolescents are accused of “acting White,” they are considered to be displaying Anglocentric behaviors including having good grades, speaking proper English, listening to certain music, and participating in predominantly White activities. Being labeled as “acting White” can endanger an adolescent’s ethnic identity and create social anxiety (Davis, Rowell, Stadulis, & Neal-Barnett, 2019; Neal-Barnett, Stadulis, Singer, Murray, & Demmings, 2010). In their mixed-methods study, Neal-Barnett et al. (2010) found that being accused of “acting White” has the most detrimental effect on Black adolescents compared to any other discriminatory statement creating high levels of social anxiety. To avoid facing discrimination, Smalls, White, Chavous, & Sellers (2007) found Black adolescents who were accused of “acting White” would form social demonstration-avoid based relationships and maintain lower academic engagement while portraying more behavioral problems within the school environment. Yet, research has highlighted that highly diverse schools, where African American adolescents were able to form friendships with students of other cultural backgrounds, including racial identities, actually benefitted a student academically (Goza & Ryabov, 2009; Lundy & Firebaugh, 2005; Ueno, 2009).

When examining the peer relationships that high and low achieving students developed, students who were failing most of their core classes reported more friendships with peers who placed a low value on education and felt as though it was a waste of their time (Amdouni et al., 2017). Interestingly, low-achieving, female African American students reported a higher need for
support from their peers than any other level of students (Clayton, 2017). The norms within a
group of peers weighed heavily on students’ academic motivation. Developing pro-social peer
relationships for high achieving students helped them to make positive decisions about their
educational future. In the short-term, peers with positive attitudes towards school kept each other
engaged. For long-term goals, such as attending college, peers helped to instill confidence in
one’s ability to be successful (Davis, Ajzen, Saunders, & Williams, 2002).

A qualitative study by Holland (2011) examined the influence of peers on the decision for
49 low-income Black students to pursue college. Participants reported that the norms within their
peer group were to go to college. They saw that not everyone in their school was motivated to
pursue their education, so they surrounded themselves with peers who were driven and had goals
that were aligned with theirs. Peers became models of academic achievement and, in order to fit
in with their social group, they held the same belief in the importance of education. Afrocentric
models of development have emphasized the cultural values of community connections to
provide a secure base for growth, unlike the individualistic culture in American mainstream
society. Support from peers can provide that secure base, but it is often difficult to maintain due
to the inconsistency of adolescent relationships, highlighting the importance of strong bonds for
developing pro- and anti-social behavior (Catalano & Hawkins, 1996; Quimby, Richards,
DeCarlo Santiago, Scott, & Puvar, 2017).

**Low-income Hispanic Adolescents.** While family often accounts for most of the support
in the innermost convoy for Hispanic adults, friends are typically found in the middle circle. As
relationships change throughout development (Catalano & Hawkins, 1996) and roles in the
middle convoy are transient (Kahn & Antonucci, 1980), the effect peers have on pro- and anti-
social behavior can become similar to or more influential than their family. Unlike their low-
income Black counterparts, low-income Hispanic students benefitted from maintaining a homogeneous peer group (Goza & Ryabov, 2009; Salerno & Reynolds, 2017; Ueno, 2009). Acculturation and assimilation into mainstream American culture is often a key barrier that Hispanic students face, regardless of immigration status. As Hispanic adolescents became more acculturated and developed adolescent friendships, their well-being increased but their academic performance typically decreased, highlighting the theoretical concept of the immigrant paradox (Benner et al., 2017; Garcia Coll & Kerivan Marks, 2012). Balancing the clash of two very different cultures, low-income Hispanic students became a target for peer victimization from both their Hispanic peers and White peers (Forster, Dyal, Baezconde-Garbanati, Chou, Soto, & Unger, 2013).

In school environments where Hispanic students are the minority, they often face unfair discrimination from their White counterparts. They were targeted as “illegals” regardless of immigration status and both teachers and peers held low expectations of their academic ability. Creating a homogeneous peer group in these environments promoted resiliency and spaces where discourse could occur without judgement (Salerno & Reynolds, 2017). In a majority White school, qualitative interviews with students in advanced placement classes spoke to the need for peers with similar experiences. Peers became the sole source of motivation and placed high expectations on each other to promote learning (Salerno & Reynolds, 2017). Additionally, while parents were found to be the key motivators for post-secondary education in low-income Hispanic families, peers became important sources of information to maintain motivation, highlighting the transition of relationships as adolescents age (Carolan-Silva & Reyes, 2013; Catalano & Hawkins, 1996; Kahn & Antonucci, 1980). Since many low-income Hispanic parents were disproportionately unable to advocate for their children as compared to their White
middle-class counterparts due to a variety of reasons and teachers often placed low expectations on Hispanic students, peers became the sole source of information about advanced placement courses, college search, and financial aid (Carolan-Silva & Reyes, 2013).

Prior research has shown that the interaction between peer influence and academic achievement for Hispanic adolescents is often mediated by parental interaction, regardless of the type of friends with whom adolescents associate (Carolan-Silva & Reyes, 2013; Forster et al., 2013). Espinoza, Gillen-O’Neel, Gonzales, and Fuligni (2014) found that peers, either achievement or deviant oriented, had the highest impact on adolescent behavior when there were high levels of peer support and low levels of parental support. Gonzalez, Cavanaugh, Taylor, Stein, and Mayton (2017) also had findings supporting Espinoza et al.’s (2014) previous literature, which found that being affiliated with achievement-oriented peers led to an increase in educational aspirations whereas affiliations with deviant oriented peers increased academic and behavioral problems. However, as with parental interaction, this was mediated by the level of support the individual receives. Once again, supporting the theory that strong bonds are important when evaluating the effect of social networks on pro- and anti-social behavior as presented by SDM (Catalano & Hawkins, 1996).

**School Connectedness as a Mediator**

School culture, systemic norms, and general atmosphere of the school environment often influence student success, yet within this environment, relationships with teachers and other faculty members become a part of students’ social network and help to promote connectedness to education. Research has shown that when adolescents had positive role models and support in school, they were more engaged and reported higher levels of belongingness (Brewster & Bowen, 2004; Close & Solberg, 2008; Garrett et al., 2010). Students wanted to feel a sense of
belonging in their schools. In addition to feeling a lack of support from friends in school, adolescents in Lee and Breen’s (2007) qualitative study reported that their connection to school supports was low as well. They cited the lack of connection to their school as a factor in their decision to drop out. Students reported that their teachers did not care whether they did well or not and did not feel welcome in the school environment (Lee & Breen, 2007). For at-risk adolescents who may not receive parental support from home, school support can be critical (Olsson, 2009; Zaff et al., 2017). When students have weaker relationships with their parents, teachers can take on the parental role and provide the support that would typically be provided in the innermost convoy; therefore, for the purpose of this study, student-teacher relationships will be examined to evaluate school connectedness.

Prior research revealed that disadvantaged students needed strong relationships with teachers to keep them engaged (Olsson, 2009). The convoy model suggests that the type of support these students needed is different based on individual and situational factors (Kahn & Antonucci, 1980; Zaff et al., 2017). Students from low SES families needed to have relationships with teachers that went beyond the level of mutual respect. They needed teachers that were able to provide some, if not all, of the six levels of support found within the innermost convoy. These types of support included being someone to talk to about life’s problems, someone to confide in, and someone to go to when upset, nervous, or depressed (Antonucci & Akiyama, 1987; Zaff et al., 2017).

**Low-income Black Adolescents.** Positive teacher-student relationships often play a key role in the feeling of school connectedness and academic achievement for low-income Black students (Bear, Gaskins, Blank, & Chen, 2011; Corprew & Cunningham, 2012; Cunningham & Phillips Swanson, 2010; Thompson & Davis, 2013). The problem, however, is that teachers’
perceptions of Black students, particularly males, has been disproportionately less positive. Low-income Black males have been unfairly placed in special education programming more often than their middle-class White counterparts and perceived as “less than” White students both academically and behaviorally (Basch, 2011; Downey & Pribesh, 2004; Stearns & Glennie, 2006; Syed et al., 2011). Ironically, Chung-Do et al. (2017) found that, while low-income minority male students were commonly mislabeled as having behavioral issues, being connected to the school lessened some of that biased perception.

In an ethnographic study, Jones Gast (2018) examined the relationship between family SES, race, teacher biases, and academic performance. An interesting dialogue developed surrounding whose “fault” it is that low-performing Black students lack teacher support. High performing, higher SES students believed that it is the student’s duty to ask for help and those who were not performing well did not care enough to ask for help. Highlighting the literature on peer support, Black students held judgements within racial groups, fueling negative peer interactions. Contrary to aforementioned peer literature (ex. Smalls et al., 2007), the behavior of “acting White” became an advantage for high-achieving, high-SES students. Teachers reported favoring high-performing students regardless of race.

A qualitative study by Thompson and Davis (2013) also found that high-achieving Black students perceived that teachers held them to higher standards and motivated them to perform well academically. In a separate study, students in AP courses reported feeling supported by their teachers whereas students in non-advanced or honors level classes did not. Students who were underperforming academically perceived teachers’ expectations to be low and reported that school counselors did not provide them with information on how to advance academically (Martinez & Welton, 2014).
Both teachers and high-achieving students often believed it was the student’s role to seek teacher support (Jones Gast, 2018; Thompson & Davis, 2013). Lynn, Bacon, Totten, Bridges, and Jennings (2010) examined the beliefs that teachers held towards failing Black students and found that a colorblind mentality was shared by all teachers during focus group interviews, undermining the importance of race within the classroom. Eighty percent of interviewed teachers felt that students were unsuccessful due to a lack of commitment and drive to perform well (Lynn et al., 2010).

However, for low-performing, low-SES students the main source of academic frustration stemmed from the perception of biased teaching practices (Lynn et al., 2010). All students in this group highlighted racial discrimination from teachers as the main reason for their lack of school engagement. These students did not believe that teacher support was their “choice,” nor did they feel teachers would support them even if they reached out for help (Lynn et al., 2010). Students cited power as the teachers’ biggest weapon against low-income Black students and felt as though they had none due to the stereotypes that were being placed upon them (Lynn et al., 2010). The conflicting stories from high and low performing students from varying SES backgrounds began to highlight the intersection of race and SES. However, it should be noted that while high performing, high SES students reported higher levels of teacher support, it was still stated that students had to seek out that support for themselves and it was not inherently supplied to them (Jones Gast, 2018). High-achieving students had the ability to connect with teachers through a reciprocal relationship that fostered respect and further encouraged positive academic behaviors (Catalano & Hawkins, 1996). Additionally, through these interactions, teachers often become a main source of academic support, oftentimes leading to support outside of academia as well (Olsson, 2009). As teachers become more influential over the behavior of
students outside of the school environment, they take on the role of individuals typically found
within the middle and first convoy by becoming the person that can be confided in during
difficult times (Antonucci & Akiyama, 1987; Zaff et al., 2017).

However, for low-achieving students, biased grading practices such as rating Black and
Hispanic students lower in literacy skills than White students prior to the beginning of the school
year, regardless of ability (Ready & Wright, 2011) may hinder their academic success and make
it more difficult for them to move on to higher level AP courses. A study conducted by Harber et
al. (2012) examined the “positive feedback bias” that is hypothesized to undermine Black
students’ academic growth. The positive feedback bias was one way in which teachers placed
lower expectations on students of color. Harber et al. (2012) found support for previous research
when White teacher participants graded Black students’ essays better than their White
counterparts. Although this may initially seem like a positive result, (Black students are being
scored higher than White students) it is undermining Black students’ academic ability. Teachers
rated equivalent essays differently because they did not have high expectations of Black students
(Harber et al., 2012). Low expectations meant they did not hold Black students to the same high
standards as they do their White counterparts and, therefore, did not grade them based on the
same rigor.

Drawing from two separate pools of students, high achieving and low achieving, have
mixed the findings on school support for Black students. While we cannot draw a causal effect
from existing literature, it has highlighted a correlation between school support and high-
achieving students. Students who have been in more advanced courses typically reported higher
levels of teacher support, whereas students who were average or low-performing students often
reported discrimination and biased teaching practices (Jones Gast, 2018; Thompson & Davis,
It is difficult to say whether support is the force behind high-achieving students or if teachers have often favored high-achieving students due to biases towards students who are “acting White.”

**Low-income Hispanic Adolescents.** Teacher support may help to mediate the lack of parental educational knowledge for Hispanic students by building additional social networks, self-confidence, and motivation (Behnke, Gonzalez, & Coz, 2010; Garrett et al., 2010; Hawley McWhirter et al., 2013; Kahn & Antonucci, 1980; Neseth et al., 2009; Salerno & Reynolds, 2017). However, the type of support Hispanic students often require can be more distinct than their White counterparts. Teachers who are Hispanic or have an in-depth knowledge of Hispanic culture typically have had the greatest impact for Hispanic students (Behnke et al., 2010; Garrett et al., 2010; Hawley McWhirter et al., 2013; Neseth et al., 2009; Salerno & Reynolds, 2017). Hispanic teachers have reported being sought out for guidance and support by Hispanic students because they understand the cultural and linguistic aspect of learning. However, the benefits of ethnic teacher-student bonds are debated amongst educators with Hispanic educators often highlighting the importance of this support while their White counterparts believe it hinders the student’s learning process. White teachers reported that Hispanic teachers enabled Hispanic students and created barriers to assimilation into mainstream culture and hindered their English language acquisition (Salerno & Reynolds, 2017). Yet, the Immigrant Paradox has theorized that as students became more assimilated into White culture, well-being increased but academic performance decreased (Benner et al., 2017; Garcia Coll & Kerivan Marks, 2012).

In a qualitative study, Athanases and de Oliviera (2014) observed two teachers who purposely targeted Hispanic students to provide additional support given their history of low test scores. The teachers focused on scaffolding, a technique where teachers initially provided heavy
amounts of support to build up skills and self-confidence with the goal of transferring learning responsibility to the student once he developed belief in his academic ability (Athanases & de Oliveira, 2014). Based on the teachers’ reports, providing the additional levels of support helped to engage students in meaningful conversations within the academic setting but hindered their ability to think independently, meaning that the relationship did not become transactional or transformative, so no pro-social behaviors were learned. The teachers in this study reported that while the support they provided helped students advance slightly within the classroom, it would not prepare students for success after high school (Athanases & de Oliveira, 2014).

While these teachers believed that they did not prepare students for post-secondary success, research has shown that when teachers have instilled a sense of academic confidence through transactional relationships it often promoted engagement and higher levels of academic achievement (Brewster & Bowen, 2004; Close & Solber, 2008). Teacher support increased social capital for Hispanic adolescents by expanding social networks within the middle and innermost convoys for students who might have been lacking these resources at home or within the community. Close and Solberg (2008) found that Hispanic students who reported strong connections to teachers increased their intrinsic motivation to attend school and decreased levels of distress. Intrinsically motivated students have had higher levels of academic confidence and have performed better academically. In this case, teachers were able to form bi-directional relationships that promoted pro-social, academic behaviors (Catalano & Hawkins, 1996).

Hispanic students often cite the need for more school support to prevent dropping out. Almost 40% of students surveyed by Behnke et al. (2010) reported that schools needed to provide more Spanish speaking and culturally responsive staff, improved communication with teachers and counselors including more availability to seek out staff for support, and mentoring
from teachers who understood their culture. Holt, Bry, and Johnson (2008) examined the effectiveness of a five-month mentoring program that was delivered by school personnel. The mentoring program improved perceived teacher support, feelings of school belonging, and behavioral problems, but it did not impact academic performance. While initial findings did not show increased academic performance, longitudinal studies found that long term effects of mentoring and school bonding have had a positive effect on student grades (Hawkins, Guo, Hill, Batton-Pearson, & Abbott, 2001).

**Community Organization as a Mediator**

Hispanics and Blacks make up the majority of residents living in high poverty, urban areas (Parker et al., 2018; Simms, Fortuny, & Henderson, 2009). Urban communities disproportionately face higher levels of crime, violence, and drug and alcohol abuse (Forenza et al., 2019; Jain & Cohen, 2013; Lardier et al., 2019b). Community disorganization and violence often have detrimental effects on Black and Hispanic adolescents’ outcomes and may hinder their opportunities for community and academic engagement (Fitzgerald et al., 2019; Garcia-Reid, Hamme Peterson, Reid, & Peterson, 2013; Lardier et al., 2017; Upton Patton et al., 2012; Williams, Davis, Miller-Cribbs, Saunders, & Williams, 2002). Research revealed that youth stressed the importance of living in communities that provided resources for success, such as education and employment opportunities (Fitzgerald et al., 2019; Sanders, 1998; Williams & Awe Agahe Portman, 2012). In a qualitative study, Fitzgerald et al. (2019) found that low-income Black young adults who dropped out of high school cited a lack of safety within their community, disorganized schools that were full of gang violence, and poor role models as reasons for disconnecting from their education. Participants reported a desire for more supportive community members to motivate them and access to positive role models.
Exposure to community violence is disproportionately higher for Black youth living in poor, urban neighborhoods than White youth living in any type community (Margolin & Gordis, 2000). Those adolescents who were exposed to community violence and disorganization reported higher levels of both internalizing and externalizing behaviors, including high engagement in violence, leading to poorer academic outcomes (Foster, Kuperminc, & Price, 2004; Gorman-Smith, Henry, & Tolan, 2004; Ludwig & Warren, 2009; McGill et al., 2014; Schwartz & Gorman, 2003; Solberg, Calstrom, Howard, & Jones, 2007). Adolescents that were exposed to the highest levels of community violence became desensitized to the violence and have shown declines in internalizing problems over time, yet they had an increase in aggressive behaviors to adapt to their violent environments. However, adolescents who developed positive coping skills in reaction to becoming desensitized (i.e. not being involved in violent situations because they know they rarely turn out well as they have seen them so often [Kennedy and Ceballo, 2016]) showed less aggression over time. These coping skills towards aggressive behavior were developed through services provided by community agencies and early intervention programming (Kennedy & Ceballo, 2016).

Communities that are organized and harmonious typically provide a safe space for youth to grow and explore the world, even if they have been previously exposed to violence. In communities where violence is a regular occurrence, community members can build in programs and community organizations where adolescents can learn coping skills and build resiliency to break the cycle of violence (Jain & Cohen, 2013). Since violent communities tend to be areas of large and dense populations, there is an opportunity to tap into these large communities to build assets instead of risk factors. If schools, being a part of the larger community, become involved in organized community events, it helps to build school connectedness and promote pro-social
behaviors. Offering affordable after school programming through faith-based community agencies is one way to keep costs down in a disadvantaged community while promoting positive development (Jain & Cohen, 2013). Research has shown that students who felt connected to their school and received support from adults within their school community also felt hopeful about their future and had lower levels of psychological distress (Ludwig & Warren, 2009).

Youth facing multiple barriers to education such as poverty and lack of parental support, often turn to the community for mentors to build positive self-identity (Christens & Peterson, 2012). Qualitative interviews with average-achieving, low-income Black students living in an urban neighborhood highlighted the importance of developing a sense of belonging and social networks of support within the community (Orrock & Clark, 2018). Orrock and Clark (2018) found that Black adolescent males relied on community members to advocate for change on their behalf to make academic resources more accessible. Garrett et al., (2010) found similar themes throughout their interviews with high-achieving, low-income Hispanic males living in urban areas. High-achieving students found success through community engagement because it allowed them to build social networks that provided them with access to resources within the community.

Students who have been less engaged in community service activities have been more likely to drop out of high school. Yet, minority adolescents from poor, urban communities have typically been afforded fewer opportunities to engage in positive community-level programming (Evans, 2007). For example, in a qualitative study (Forenza et al., 2019), youth reported feeling unease within their community and highlighted the culture of violence that permeated all aspects of their neighborhood. Large quantities of alcohol outlets, including those who sell to underage adolescents, promoted the abuse of drugs and alcohol. Not only did youth report feeling
unsupported within their own communities, they were also aware of the stereotypes that were placed on them by outsiders. Due to these stereotypes, even youth who were successful at navigating these communities and found support through the limited youth development programs doubted themselves (Forenza et al., 2019).

In a qualitative study on Hispanic and Black urban youth (Lardier et al., 2019b), participants reported being aware of the negative social conditions within their community. They reported gang activity and acknowledged the norms within their community that they must navigate, and sometimes ignore, in order to be successful. Reporting a lack of support within their community, youth were motivated to find a way out through education. They cited their educational goals and self-motivation as the way to find a future outside of their city. Yet, they were also aware of the challenge they faced on obtaining these future goals. They watched as older peers failed to navigate their educational pathways because there were no supports provided to them from their community. They saw that these same individuals eventually gave up and succumbed to the negative norms of the city, such as gang violence (Lardier et al., 2019b).

Low-income Hispanic youth reported the lowest levels of educational aspirations, as they believed that there were limitations placed on them due to high levels of racism and cultural differences within their communities (Jackson, Mendelsohn Kacanski, Rust, & Beck, 2006). Distrust of law enforcement within the community created a sense of isolation (Forenza et al., 2019) and disengaged low-income Hispanic youth from community support. However, when Hispanic youth built a Sense of Community (SOC) through social networks, the negative effects of perceived social disorganization were reduced (Lardier et al., 2019c).
When youth were provided with opportunities to engage in their communities, it helped to create positive identities, a sense of purpose, and positive social networks as found within the outermost convoy of the Convoy Model of Social Networks (Anderson et al., 2018; Garcia-Reid et al., 2013; Jennings et al., 2006; Kahn & Antonucci, 1980; Lardier, 2018). Community engagement programs that provided a nurturing environment allowed for meaningful participation and created opportunities for youth to share power with adults to affect the sociopolitical climate. These programs empowered youth to create change and become role models for peers (Jennings et al., 2006). Having a voice that is heard and understood by positive adults provided youth with a platform to create a community in which they were proud to be a part (Evans, 2007).

Fostering SOC has shown improvement in academic outcomes for adolescents (Garcia-Reid et al., 2013; Hughey, Peterson, Lowe, & Oprescu, 2008; Lardier et al., 2017; Peterson, Speer, & Peterson, 2011). SOC is developed when members feel a sense of belonging through shared experience and the belief that they can make a difference both within the group and the community (McMillan & Chavis, 1986). Adolescents and adults alike have highlighted the importance of community coalitions as they provide youth with positive role models within their community while creating a sense of support and motivation to reach future goals (Bermea et al., 2018; Forenza et al., 2019). Developing a sense of community fostered higher levels of school engagement and better well-being among low-income urban minority youth (Lardier et al., 2019c).

Overall, research has shown that all four levels of support can be critical in fostering academic achievement for low-income Black and Hispanic adolescents attending an urban high school. SMD and the convoy model both highlight the need to examine social support across all
levels, from individual relationships within a family to systemic support from within the community. To examine the interaction among the varying levels of support, each relationship level of support (parental and peer) will be assessed and each environmental level of support (school connectedness and community organization) will be assessed as a possible mediator between the interpersonal relationships and academic achievement. There are four research questions and 10 hypotheses that will guide this study.

**Research Questions**

R₁. Does parent support influence student academic achievement for low-income Black and Hispanic adolescents attending an urban high school?

H₁: There will be no change in academic achievement regardless of the level of parental support for low-income Black and Hispanic adolescents attending an urban high school.

H₂: Parental support will have a positive relationship with academic achievement for low-income Black and Hispanic adolescents attending an urban high school.

R₂. Does positive peer support influence student academic achievement for low-income Black and Hispanic adolescents attending an urban high school?

H₁: There will be no change in academic achievement for low-income Black and Hispanic adolescents attending an urban high school regardless of the level of positive peer support.

H₂: Positive peer support will have a positive relationship with academic achievement for low-income Black and Hispanic adolescents attending an urban high school.

R₃. Does school connectedness mediate the relationship between parental support,
positive peer support, and academic achievement for low-income Black and Hispanic adolescents attending an urban high school?

H₁: School connectedness does not mediate the impact of parental and peer support on student achievement for low-income Black and Hispanic adolescents attending an urban high school.

H₂: School connectedness mediates the impact of parental and peer support on student achievement for low-income Black and Hispanic adolescents attending an urban high school.

H₃: Low-income Black and Hispanic adolescents attending an urban high school with high levels of parental support, positive peer support, and school connectedness will have higher levels of academic achievement.

R₄: Does community organization mediate the relationship between parental support, positive peer support, and academic achievement for low-income Black and Hispanic adolescents attending an urban high school?

H₁: Community organization does not mediate the impact of parental and peer support on student achievement for low-income Black and Hispanic adolescents attending an urban high school.

H₂: Community organization mediates the impact of parental and peer support on student achievement for low-income Black and Hispanic adolescents attending an urban high school.

H₃: Low-income Black and Hispanic adolescents attending an urban high school with high levels of parental support, positive peer support, and community engagement will have higher levels of academic achievement.
Chapter 3: Research Design and Methods

Sample and Design

Data used for this study were collected in 2017 as a part of a larger scale, federally funded Drug Free Communities Grant Initiative, which promoted the design and implementation of environmental prevention strategies that targeted at-risk youth. Data were collected during a needs assessment for a northeastern urban school district in the United States to support the development of prevention programming in a high needs city. Project COPE (Communities Organizing for Prevention and Empowerment) began in 2003 with a focus on prevention programming for substance abuse and HIV among adolescents of color. Through this grant-funded program, a continuous bi-annual evaluation of needs is conducted in the community. The data for this study were collected as a part of the most recent needs assessment. A non-probability sampling accrued a response from 401 students in the largest high school in the district. Participants were in 9th through 12th grade and were recruited through their physical education and health classes. Every student needed to enroll in a physical education and health class as they are mandatory to graduate, therefore allowing all students equal opportunity to participate in the study. This created a sample that accurately represented the school district. Permission slips were sent home by the school district to collect parental consent and student assent. The original data collection was submitted and approved through the Institutional Review Board (IRB) and students who participated in the study submitted written consent forms from both themselves and their parents.

Community Profile

The northeastern community in which these data were collected was a midsized urban community in New Jersey, United States with approximately 148,000 residents, roughly 11,000
being between the ages of 15-19 years old (U.S. Census Bureau, 2017). In the most recent U.S.
Census Bureau report that accounted for this data (2017), this community was considered to be a
high-poverty, high-needs community with an estimated 29% of residents living below the
poverty line. With an average household income of $36,106, members of this community
averaged $40,000 less in income than the rest of New Jersey’s residents in 2018 (U.S. Census
Bureau, 2019). In 2017, educationally, 16.5% of residents had less than a high school diploma,
37.1% had at least a high school diploma, and 42.3% had some college with only 4.1% earning a
Bachelor’s degree or higher (U.S. Census Bureau, 2017). Currently, unemployment rates are
high, as well, with an average of 6.4% of residents unemployed (U.S. Census Bureau, 2019). The
majority of the community identified as being of minority racial status with 31.4% identifying as
African American/Black and 60.7% identifying as Hispanic/Latina(o) (U.S. Census Bureau,
2017). In addition to being a diverse community of color, dropout rates for this community’s
school district accounted for more than half (68%) of the dropouts in the entire county, which

School-District Profile

Over 28,000 students were enrolled in the 20 schools that make up this urban school
district in the 2017-2018 school year (N.J. DOE, 2019). The population of students was majority-
minority with only 5.2% of students identifying as White, whereas 21.9% identified as Black and
67.5% as Hispanic (N.J. DOE, 2019). Over three-quarters of the student body was considered
economically disadvantaged and receiving free or reduced lunch (76.6% and 75% respectively)
(N.J. DOE, 2018; N.J. DOE, 2019). Almost one-quarter of students were labeled as English
learners and nearly half of all students spoke Spanish in their homes (N.J. DOE, 2019).
Of the 20 schools, four schools served students in 9th through 12th grade. With an overall graduation rate of 84.8% in the 2017-2018 school year, the district fell below the state rate by six percentage points (N.J. DOE, 2019). While rates for Hispanic and Black students mirrored the overall graduation rate of the district, they were far below the rates of their White counterparts who were graduated at a rate of 92% (N.J. DOE, 2019). Students who were economically disadvantaged had the lowest graduation rate of 78.7 percent (N.J. DOE, 2019). Additionally, this school district had a dropout rate of 4.8%, which was four times higher than the state average (N.J. DOE, 2019).

In terms of academic achievement, those who did graduate were not prepared for post-secondary success. As a district, students did not meet the target set by ESSA accountability for the English Language Arts, Literacy section of the Partnership for Assessment of Readiness for College and Careers (PARCC) (N.J. DOE, 2019). The only subgroup of students who did in fact reach the benchmark was Asians (N.J. DOE, 2019). Students also scored significantly lower on the SATs with only 29% and 11% meeting the benchmarks for Reading and Math (respectively), meaning that they will not have a high chance of success in college (N.J. DOE, 2019).

Lastly, students showed high rates of chronic absenteeism, which could highlight a lack of school connectedness (N.J. DOE, 2019). Over one-quarter of the student population was absent for more than 10% of the school year with Black students having the highest rate at 34% and Hispanics coming in second with 25% (N.J. DOE, 2019). Students who were economically disadvantaged also had rates around 25%, more than double that of the state average (10.9 percent) (N.J. DOE, 2019).
Sample Demographics

As a part of the larger federally funded initiative in 2017, 401 participants were recruited through a nonprobability sampling of students in grades 9 through 12 from their physical education and health classes. Students were recruited from the largest high school in the district with about a 30% response rate. While this response rate may seem low, it can be attributed to approval for IRB human participant research as both parental consent and adolescent assent is necessary for participation in the study. The response rate for studies with adolescents requiring both parental consent and adolescent assent is typically lower when active parental consent is required (Doumas, Esp, & Hausheer, 2015).

The students in this study were representative of the school district’s population with the majority being of minority status. Roughly 57% of students identified as Hispanic/Latino(a), 20% as Black/African American, 5% as White non-Hispanic, 5% as Asian, and 8% as other, including Native American. The mean age of students at the time of data collection was 16.5 years old with 24% in 9th grade, 18% in 10th grade, 22% in 11th grade, and 35% in 12th grade. A fairly even split of male and female students who participated (45% and 54% respectively).

Measurement

Adolescents were administered the Communities That Care (CTC) Youth Survey which consisted of approximately 210 questions during a 50-minute health or physical education class period. The CTC Youth Survey is the central assessment used for the Communities That Care Program through which the data were collected (Arthur, Hawkins, Pollard, Catalano, & Baglioni, 2002; Corrigan, 2014; Feinberg, Ridenour, & Greenberg, 2007). The CTC Youth Survey was developed in 1995, measuring 23 risk factors and 10 protective factors through the SDM framework to assess and predict factors related to adolescent risk behaviors (Arthur et al., 2007).
This self-report survey has been proven to be a psychometrically sound measure, with high
validity and reliability, covering an extensive array of risk and protective factors in the domains
of community, school, family, peer and individual (Arthur et al., 2002; Arthur et al., 2007;
Horn, Arthur, Hawkins, & Catalano, 2005). The scale has been validated across five racial/ethnic
groups and two genders (Arthur et al., 2007; Glaser et al., 2005).

**Parental Support**

*Parental support* was assessed using 29 items adapted from the self-reported CTC Youth
Survey. Students were asked to indicate the support they receive from their parents through a
variety of questions. Questions were broken up into sections based on scales. Questions number
162 through 168 asked about parental beliefs about risky behaviors (i.e. *How wrong do your
parents feel it would be for you to smoke tobacco?*). Participants indicated their answers on a
Likert-type 4-point scale that ranged from *very wrong* to *not wrong at all*. Questions number 179
through 186 asked about family cohesion (i.e. *People in my family often insult or yell at each
other.*). Participants indicated their answer on a Likert-type 4-point scale that ranged from “**NO!”
” to “**YES!””. Questions number 187 and 188 asked about parental praise (i.e. *My parents notice
when I am doing a good job and let me know about it.*). Participants indicated their answer on a
Likert-type 4-point scale that ranged from “**Never or almost never**” to “**All the time.”” Questions
number 189 through 194 asked about parental closeness (i.e. *Do you feel very close to your
mother?*). Participants indicated their answer on a Likert-type 4-point scale that ranged from
“**NO!” to “**YES!””. Questions number 195 through 200 asked a variety of questions spanning all
other parental questioning sections (i.e. *If I had a personal problem, I could ask my mom or dad
Participants indicated their answer on a Likert-type 4-point scale that ranged from “NO!” to “YES!”.

**Peer Support**

*Peer support* was assessed using 24 items adapted from the self-reported CTC Youth Survey. Students were asked to indicate the support they receive from their peers through a variety of questions. Questions were broken up into sections based on scales. Questions number 24 through 34 asked about peer engagement in risky behaviors (i.e. *Think of your four best friends [the friends you feel closest to]. In the past year [12 months], how many of your best friends have used marijuana?*). Participants indicated their answers on a Likert-type 5-point scale that ranged from “none” to “5.” Questions number 35 through 38 asked about peer perception of risky behaviors (i.e. *What are the chances you would be seen as cool if you carried a handgun?*). Participants indicated their answers on a Likert-type 5-point scale that ranged from “No or very little chance” to “Very good chance.” Questions number 201 through 205 asked about peer engagement in positive behaviors (i.e. *Think of your four best friends [the friends you feel closest to]. In the past year [12 months], how many of your best friends have made a commitment to stay drug-free?*). Participants indicated their answers on a Likert-type 5-point scale that ranged from “None of my friends” to “four of my friends.” Similar to questions number 35 through 38, questions number 206 through 209 asked about peer perception of risky behaviors. This set of questions, however, is asked from a negative perspective (i.e. *How wrong do your friends feel it would be for you to smoke tobacco?*). Participants indicated their answers on a Likert-type 5-point scale that ranged from “Very wrong” to “Not wrong at all.”
School Connectedness

School Connectedness was assessed using 17 items adapted from the self-reported CTC Youth Survey. Students were asked to indicate the support they receive from their school through a variety of questions. Questions were broken up into sections based on scales. Questions number 11 through 13 asked about school enjoyment (i.e. Now, thinking back over the last year in school, how often did you enjoy being in school?). Participants indicated their answers on a Likert-type 5-point scale that ranged from “Never” to “Almost always.” Questions number 14 through 23 asked about teacher support and school participation (i.e. I have lots of chances to be part of class discussions or activities). Participants indicated their answers on a Likert-type 4-point scale that ranged from “NO!” to “YES!”.

Community Organization

Community organization was assessed using 15 items adapted from the self-reported CTC Youth Survey. Students were asked to indicate the level of organization and engagement in their community through a variety of questions. Questions were broken up into sections based on scales. Questions number 138 through 140 asked about community member perception of drug/alcohol use (i.e. How wrong would most adults [over 21] in your neighborhood think it was for kids your age to drink alcohol?). Participants indicated their answers on a Likert-type 4-point scale that ranged from “Very wrong” to “Not wrong at all.” Questions number 148 through 152 asked about how much they liked their neighborhood (i.e. If I had to move, I would miss the neighborhood I now live in.). Participants indicated their answers on a Likert-type 4-point scale that ranged from “NO!” to “YES!”. Questions number 158 through 161 asked about community disorganization (i.e. How much do each of the following statements describe your neighborhood:}
crime and/or drug selling?). Participants indicated their answers on a Likert-type 5-point scale that ranged from “NO!” to “YES!”.

Data Analysis Plan

Pre-Analysis Data Screening

There were four main reasons to perform pre-analysis data screening: (1) validating the accuracy of the data collection, (2) identifying missing data, (3) checking for outliers, (4) checking the three basic assumptions of normality, linearity, and homoscedasticity. First, pre-analysis screening assessed the three basic assumptions, followed by missing data analysis. Variables should be linear in nature (linearity), and typically, variables should maintain a consistent slope (homoscedasticity); however, for the nature of this analysis (Exploratory Factor Analysis [EFA]), homoscedasticity is not required (Viera, 2017). Values for kurtosis and skewness should be close to zero as that demonstrates a perfect distribution and symmetry for both respectively (Viera, 2017). Multicollinearity can be assessed through tolerance and variance inflation factor. For this analysis, tolerance was being utilized, as variance inflation factor is reciprocal of tolerance. Tolerance <.20 requires further investigation as it denotes that less than 20% of the variance is not unique and multicollinearity is present, increasing the likelihood of inaccurate results (Viera, 2017). Lastly, during the pre-analysis data-screening phase, data were recoded to align the scales used in the CTC Youth Survey.

Missing Data Analysis

Missing data were examined using the “Missing Value Analysis” feature in SPSS (v.25). Addressing missing data is critical because it can reduce statistical power or level of confidence, threaten normal distribution, and/or reveal valuable information regarding the study analysis.
(Viera, 2017). Missing data can still be imputed as long as no more than 5% of variables are missing and there is a sufficient sample size to maintain statistical power (Viera, 2017).

Missing data can occur under three conditions: (1) missing completely at random (MCAR), (2) missing at random (MAR), or (3) missing not at random (MNAR). Little’s MCAR Test was performed in SPSS (v.25) to determine whether the missing data are MCAR. Sets of questions were analyzed based on their grouping within the CTC Youth Survey and dataset. For those variables that had Little’s MCAR results that were not meaningful (p > .05), indicating that the missing data do not follow a pattern, expectation-maximization (EM) imputation was conducted, providing a complete dataset. EM imputation is recommended for most missing values analyses as it is easily executed in SPSS (v.25) through a single imputation process (Viera, 2017).

**Exploratory Factor Analysis (EFA)**

Factor analysis seeks to determine the underlying structure that exists among a set of variables. The purpose of factor analysis is to examine shared variability among variables to group variables that are measuring the same concept into a larger, unobservable factor (Brown, 2015; Gie Yong & Pearce, 2013). Essentially, factor analysis reduces the number of variables by which a construct is measured. There are two types of factor analysis: exploratory factor analysis (EFA) and confirmatory factor analysis (CFA). EFA is typically the first step in developing new scales. As its name states, EFA is an exploration of variables that attempts to uncover underlying patterns by testing and retesting a dataset (Gie Yong & Pearce, 2013). Unlike exploratory factor analysis (EFA), CFA is grounded in theory, meaning that researchers using CFA must perform an extensive review of literature and develop hypotheses before the analysis is run, to test for model fit (Brown, 2015).
For the purpose of this study, EFA was used to examine the CTC Youth Survey’s 210 variables that were obtained through the questionnaire to analyze the variables that were aligned to create latent factors. This allowed the researcher to focus on the key factors rather than hundreds of smaller factors that may have been inconsequential (Gie Yong, & Pearce, 2013). An example of EFA would be examining the HIV epidemic and linking “drug use” and “unprotected sex” under the factor of “risky behaviors.” In this example, the latent factor is not measured directly but is inferred from the overlap of the two smaller observed variables.

**EFA Assumptions**

There are several main assumptions that the data must meet when using EFA as an analysis. There can be no outliers in the dataset and there must be univariate and multivariate normality (Gie Yong & Pearce, 2013). For the purpose of EFA, homoscedasticity is not required. The sample size should include at least 300 participants as it reduces the chance of error within the dataset. Additionally, the variables should have at least a 10:1 response with a response rate of 30:1 being a sign of stabilization amongst the variable (Gie Yong & Pearce, 2013). Lastly, the data must be linear and at least interval in nature in order to be analyzed. For a cluster of variables to be considered a factor, there must be at least three underlying variables; however, two variables can be considered when they are highly correlated with each other and no other variables (Gie Yong & Pearce, 2013). To suggest a strong relationship, the correlation ($r$) must be $>.30$ (Gie Yong & Pearce, 2013).

The decision to retain and interpret components is critical because specifying too few or too many factors can result in analysis errors and misinterpretation of the study findings (Hayton, Allen, & Scarpello, 2004). There are four criteria used during the interpretation process. The first, Kaiser’s rule, was used to evaluate the total variance explained by each factor, called the
eigenvalues. Eigenvalues should be >1 (Gie Yong & Pearce, 2013; Hayton et al., 2004). The second criteria, scree plots, created a visual representation of the eigenvalue. Components found prior to the leveling of the graph were retained (Gie Yong & Pearce, 2013; Hayton et al., 2004). Third, the total amount of variability was examined and the components that accounted for at least 70% of the total variability were retained (Gie Yong & Pearce, 2013). Lastly, using SPSS, an assessment of the model fit by assessing the reproduction of bivariate correlations and original correlations was conducted. A good fit is within .05 (Gie Yong & Pearce, 2013). The likelihood of the four criteria to produce contradictions is high. Ultimately, the decision to retain factors is a judgement call based on parsimony.

**Single Logistic Regression (SLR)**

Correlation analysis allows researchers to examine the strength and direction of a linear relationship between two variables. If a strong linear relationship exists between two variables then as one variable changes, the other changes as well. While these relationships are correlated with each other, they are not considered to be causal in nature (Viera, 2017). Therefore, we cannot determine if one variable is causing the change in another. For the purpose of this study, we examine the direct relationship between parental support and academic achievement, as well as peer support and academic achievement.

SLR, often referred to as a “simple logistic regression,” is a highly used correlation analysis that extends the correlation of two variables to predict the relationship between the dependent and independent variable (Viera, 2017). SLR calculates the correlation between two known variables to predict the outcome of another dataset. There are seven general assumptions that must be met for SLR to be accurate. In general, the data should be numeric with a sample size of n > 30. Additionally, the data must be independent, normally distributed, and
homoscedastic. Lastly, there must be a linear relationship between the variables (Viera, 2017). The Shapiro-Wilk test is conducted in SPSS to confirm normality and remove outliers and a scatter plot is assessed to check for linearity and homoscedasticity (Viera, 2017).

To examine if a relationship exists, the mathematical SLR equation is assessed for a line of best fit. For a regression to be statistically significant, the p-value should be < .05, meaning that there is a strong possibility that the results are meaningful. The regression coefficient ($b_1$) explains the slope of the line or the change in the dependent variable, which correlates with the change in the independent variable. Additionally, the coefficient of determination, labeled as $r^2$ (squared correlations), explains that percentage of variance that is predicted by the independent variable. For a correlation to be considered strong, the $r^2$ should be statistically significant (p > .05) (Viera, 2017). If the $r^2$ is low, it indicates that the change in the dependent variable is less likely to be explained by the change in the independent variable.

**Structural Equation Modeling (SEM)**

To create a visual representation of the interaction among the factors found from EFA, SEM was used. SEM is a statistical methodology used to examine the interactions among the latent factors and hypothesized outcomes, as grounded in the previous literature review and theoretical framework. SEM’s grounding in hypothesis testing has made it a popular statistical analysis for social science researchers. SEM was conducted to highlight causal processes and develop a visual model that allows for a clearer depiction of the proposed theoretical assumptions (Byrne, 2016). This hypothesized model was then analyzed through statistical testing, such as regression, to determine a goodness of fit. Goodness of fit determined whether the variables examined in the model had a relationship among them (Byrne, 2016). Since SEM analysis requires a hypothesis grounded in research prior to the model development, a
confirmatory, not exploratory, approach to testing is used (i.e. CFA). Additionally, SEM accounts for measurement error, exceeding traditional multivariate analysis in the ability to address critical errors that may lead to inconsistent results (Byrne, 2016).

SEM is comprised of a measurement model and a structural model. The measurement model is typically represented by a CFA model, whereas the structural model examines the causal effects among latent variables (Byrne, 2016). SEM allows the researcher to examine both latent (unobserved) and observed variables. Latent variables, or factors, are constructs that cannot be observed. However, with SEM, researchers can link latent variables to observed variables, making it possible to measure and examine them (Byrne, 2016). To assess these factors, factor analysis (i.e. EFA) was used to examine the extent to which the latent factors are related to the observed variables through the use of factor loadings (Byrne, 2016). Path diagrams provided a visual representation of the statistical equations relating the dependent variables to the independent variables (Byrne, 2016).

The goal of statistical modeling such as SEM is to determine a goodness of fit between the sample data and the researcher’s hypothesized model. This is often done through a process that can take on three different scenarios. In strictly confirmatory model testing, the researcher develops one model based on theory and tests the fit to sample data. The model is then either accepted or rejected based on the residuals or discrepancy between model and data (Byrne, 2016). The second approach is the alternative model that allows the researcher to develop multiple models from the same theory to test the fit to sample data. The model with the best fit is then accepted. In the model-generating scenario, the researcher tests the hypothesized model with the sample data and, if rejected, takes an EFA approach to reexamining the model (Byrne, 2016). Typically, model generating is used as it allows for hypothesis testing but also allows the
researcher to examine the model further for goodness of fit (Byrne, 2016). This was the approach utilized for this research.

**SEM Assumptions**

There are several main assumptions that the data must meet when using SEM as an analysis. Compared to other statistical methods, SEM requires a larger sample size (n = 150-200, Holbert & Stephenson, 2002) due to the complex nature of the model design (Breitsohl, 2019). SEM is a linear model; therefore, the relationship between variables should be linear and have a causal relationship based on theory (Iacobucci, 2010). Additionally, the relationship between variables should be nonspurious, or unexplained by an outlying variable (Hoyle & Panter, 1995). Estimated parameters must be greater than the equations between variables (Iacobucci, 2010) and error terms must be uncorrelated (Hoyle & Panter, 1995). Lastly, the data should be at least interval and free of outliers (Hoyle & Panter, 1995).

**Mediation Analysis**

Mediation analysis is based on a theoretical hypothesis in which an intervening variable has an effect on the relationship between an independent and dependent variable (Iacobucci, Saldanha, & Deng, 2007). For this study, the main study variables were examined using six SEM models based on four research questions, including two mediating variables: school support and community organization. Analysis of a Moment Structures (AMOS) software was used to reassess model fit and path analyses from the SEM models to look for a reduction in magnitude (Iacobucci et al., 2007 & Zhao, Lynch, & Chen, 2010). Mediation was declared as full (if direct path(s) relations reduce to 0) or partial (if direct path(s) relations reduce, but not completely to 0). Chi square ($\chi^2_{\text{diff}}$) testing evaluated the significant path changes (Iacobucci et al., 2007; Zhao et al., 2010). To assess for model fit among the four SEM models, several indices were used. The
assumptions of these tests included: a) a nonsignificant chi square ($X^2$), b) comparative fit index (CFI) and goodness of fit (GFI) of 0.95, c) root mean square error of approximation (RSMEA) < 0.09 (Byrne, 2016; Iacobucci, 2010).
Chapter 4: Results

Preliminary Analysis

Descriptive statistics of the study variables are shown in Table 1 (see Appendix A). Missing response rates for main study variables are shown in Table 2 (see Appendix A) and are discussed in depth below. Additionally, tests for normality and correlations among study variables are displayed in Table 3 (see Appendix A). While the tests for skewness and kurtosis showed non-normal distributions for most of the variables, it was not a concern due to the nature of analysis. SEM is robust to non-normality and therefore, the use of this data should not impact the findings of this study (Iacobucci, 2010).

All main study variables were correlated for the full sample except for two: peer support and grades; community organization and grades (see Table 3). Those that were correlated ranged from low, such as the correlation between peer support and school connectedness (-.117, \( p < .05 \)) to high, such as parental support and school connectedness (.528, \( p < .001 \)). When controlling for race, for Black participants (see Table 4), the relationship between school connectedness and race was the only significant correlation (.295, \( p < .05 \)). For Hispanic participants (see Table 5), six out of the 10 correlations were significant with parental support and school connectedness being highly correlated (.554, \( p < .001 \)).

Missing Data

Being that the dataset analyzed in this study was a secondary dataset, meaning that it was not collected by the researcher herself, missing data was to be expected (Donnellan & Lucas, 2013). Secondary datasets are often used in research due to the ease of accessibility however, the researcher has had no control over the data collection and therefore can experience high levels of missing data (Donnellan & Lucas, 2013). Additionally, this dataset relied on self-report surveys,
which have higher levels of missing data, particularly for at risk youth. When evaluating missing data for the Longitudinal Study of Adolescent Development, Jelicic, Phelps, and Lerner (2010) found that students who were Black or Hispanic, came from families with lower SES, and had lower GPAs had lower response rates than their counterparts. However, utilizing imputation methods to compute missing data has been shown to produce results that we be similar to those occurring without missing data (Jelicic et al., 2010). While there is no unanimous way to handle missing data, it is important to note when data is missing and resolve issues of missing data appropriately to get accurate findings.

To examine missing data within the dataset, “Missing Value Analysis” was conducted in SPSS (v.25) to see if the data was missing completely at random (MCAR). The questions included on the CTC Youth Survey were not consistent in reporting methods with responses being both ordinal and nominal and scales ranging from 4-points to 9-points. Due to the mixed nature of the data, sections of data were evaluated as opposed to screening the whole dataset at once, allowing for accurate analysis of each variable.

Little’s MCAR Test was conducted on 16 sub-datasets to examine if the missing data was missing completely at random. There were three sub-datasets that were meaningful (p < .05). This missing data followed a pattern and therefore could not be imputed. However, for two of the sub-datasets, the percentage of data that were missing was below 5% of the dataset, therefore findings should not be affected (Viera, 2017). There were nine sub-datasets where Little’s MCAR was not meaningful, but the percentage was above acceptable 5% and because of that missing values could not be imputed. However, four sub-datasets that were not meaningful via Little’s MCAR Test had percentages of missing data below the 5% cut off and Expectation-Maximization (EM) was conducted to provide complete datasets. EM imputation is often used
for factor analysis and linear regressions because it maintains the variable relationships by imputing values that are most likely to occur in a natural setting allowing for findings that would be comparable to those from a full dataset (Viera, 2017).

**Main Analytic Results**

Once missing data were imputed, exploratory factor analysis was conducted to examine the underlying factors of parental and peer support, as well as school connectedness and community organization. Additionally, simple logistic regressions confirmed the positive relationship between parental support and academic achievement for both Black and Hispanic adolescents in a low-income urban school district. The positive relationship between peer support and academic achievement was partially supported for both Black and Hispanic adolescents. To further examine these relationships, model fit was examined through structural equation modeling for the mediating variables of school connectedness and community organization.

**Exploratory Factor Analysis**

Factor analysis was conducted to determine what, if any, underlying structures exist for measures on 29 parental support variables, 24 peer support variable, 17 school connectedness variables, and 15 community organization variables. Principal components analysis was conducted utilizing a varimax rotation. Principal component analysis is often utilized in exploratory factor analysis to extract maximum variance with the least amount of uncorrelated component. Varimax rotation, a form of orthogonal rotation, is the most common type of rotation procedure as it allows for a loading of factors to examine the relationship between the observed variable and each factor, with the ultimate goal of obtaining uncorrelated factors (Mertler & Vannatta Reinhart, 2017). The analysis produced a component solutions for each factor, which
were evaluated with the following criteria: eigenvalue, variance, scree plot, residuals, and communalities. Not all criteria need to fit perfectly to declare good model fit, yet, parsimony is the ultimate goal of a research and therefore, each criterion should be examined and evaluated.

**Parental Support.** Factor analysis was conducted to determine what, if any, underlying structures exist for measures on 29 parental support variables (see Table 6). Principal components analysis was conducted utilizing a varimax rotation. The analysis produced a six-component solution, which was evaluated with the following criteria: eigenvalue, variance, scree plot, residuals, and communalities.

Kaiser’s rule states that only components with eigenvalues, the total amount of variance explained by each factor, greater than one should be retained (Mertler & Vannatta Reinhart, 2017). There were six factors with eigenvalues above one, however only 67.92% of the variance was explained by these six factors. At least 70% of variance should be explained to retain the six components. The scree plot which visually describes the eigenvalue, leveled off around six components, indicating to retain six components. With contradicting findings, criteria indicated that retaining six components should be investigated further.

To assess for model fit, residuals and communalities were examined. First, residuals were evaluated to compare the observed correlations with reality. For the model to be accurate most of the correlations should be within 0.05 of each other (Mertler & Vannatta Reinhart, 2017). In this case, there were 22% nonredundant residuals with absolute values greater than 0.05 leading to the conclusion that it is not accurately descriptive of reality. Additionally, communalities were examined to view the individual variables and the amount in which they are explained by the factors. For a good model fit, the majority of communalities should be 0.70 or greater (Mertler & Vannatta Reinhart, 2017). For this analysis, there were 18 communalities below the 0.70
criterion with the lowest being .408 (How wrong do your parents feel it would be to pick a fight with someone?).

All five evaluative criteria (eigenvalue, variance, scree plot, residuals, and communalities) did not align with a six-component model, thus, principal components analysis was conducted again, applying the varimax rotation. For this data set, principal component analysis was conducted to retain five components and apply the varimax rotation after removing six variables (see Table 6).

Exclusion of the six variables and inclusion of five components increased the model fit as it increased communalities and decreased the number of residuals exceeding the 0.05 criterion. After rotation, the first component accounted for 24.45% variance, the second component accounted for 16.38% variance, the third component accounted for 10.61% variance, the fourth component accounted for 9.08% variance, and the fifth component accounted for 8.70% variance. With a total variance of 69.22% the five-component model accounted for slightly more variance. Table 7 (see Appendix A) presents the loadings for each component. Component 1 consists of 8 of the 23 variables. These variables had positive loadings and addressed Primary Caregiver Support. Component 2 consists of 6 of the 23 variables. These variables had positive loadings and addressed Family Rules. Component 3 consists of 3 of the 23 variables. These variables had positive loadings and addressed Father Closeness. Component 4 consists of 3 of the 23 variables. These variables had positive loadings and addressed Parental Perceptions of Drug Use. Component 5 consists of 3 of the 23 variables. These variables had positive loadings and addressed Family Cohesion.

Peer Support. Factor analysis was conducted to determine what, if any, underlying structures exist for measures on 24 peer support variables (see Table 8). Principal components
analysis was conducted utilizing a varimax rotation. The analysis produced a six-component solution, which was evaluated with the following criteria: eigenvalue, variance, scree plot, residuals, and communalities. Criteria indicated that retaining six components should be investigated.

For peer support, there were six factors with eigenvalues above one, however only 67.29% of the variance was explained by these six factors falling below the 70% variance cutoff. The scree plot leveled off around seven components, indicating to retain seven components. Retaining seven components would increase the variance to 70.65%, however the seventh eigenvalue was below one, contradicting Kaiser’s rule. Next, to assess for model fit, residuals were examined. There were 24% nonredundant residuals with absolute values greater than 0.05 leading to the conclusion that it is not accurately descriptive of reality. Additionally, there were 14 communalities below the 0.70 criterion with the lowest being .453 (Think of your four best friends. In the past year, how many of your best friends have been suspended from school?).

All five evaluative criteria (eigenvalue, variance, scree plot, residuals, and communalities) did not align with a six-component model, thus, principal components analysis was conducted again, applying the varimax rotation. For this data set, principal components analysis was conducted to retain four components and apply the varimax rotation after removing seven variables (see Table 8).

Exclusion of the seven variables and inclusion of four components increased the model fit as it increased communalities and decreased the number of residuals exceeding the 0.05 criterion. After rotation, the first component accounted for 23.43%, the second component accounted for 17.15%, the third component accounted for 15.34%, the fourth component accounted for 11.33% for a total variance of 67.25% which was lower than the six-component
model. However, only 10 communalities were below the 0.70 criteria with the lowest being .510
(Think of your four best friends. In the past year, how many of your best friends have stolen or
tried to steal a car?). Additionally, nonredundant residuals with absolute values greater than 0.05
reduced from 24% to 19% or 27 residuals. Based on the reduction of residuals and increase in
 communalities, as well as a variance that is close to 70%, the four-component model was
accepted.

Table 9 (see Appendix A) presents the loadings for each component. Component 1
consists of 6 of the 17 variables. These variables had positive loadings and addressed Negative
Peer Influence. Component 2 consists of 4 of the 17 variables. These variables had positive
loadings and addressed Peer-to-Peer Judgement. Component 3 consists of 4 of the 17 variables.
These variables had positive loadings and addressed Peer Acceptance (Coolness). Component 4
consists of 3 of the 17 variables. These variables had positive loadings and addressed Positive
Peer Influence.

**School Connectedness.** Factor analysis was conducted to determine what, if any,
underlying structures exist for measures on 17 school connectedness variables (see Table 10).
Principal components analysis was conducted utilizing a varimax rotation. The analysis produced
a four-component solution, which was evaluated with the following criteria: eigenvalue,
variance, scree plot, residuals, and communalities. Criteria indicated that retaining four
components should be investigated.

For school connectedness, there were four factors with eigenvalues above one, however
only 56.11% of the variance was explained by these four factors falling far below the 70%
variance cutoff. The scree plot leveled off around four components, also indicating to retain four
components. Next, to assess for model fit, residuals were examined. There were 45%
nonredundant residuals with absolute values greater than 0.05 leading to the conclusion that it is not accurately descriptive of reality. Additionally, all communalities fell below the 0.70 criterion with the lowest being .305 (Teachers ask me to work on special classroom projects.).

All five evaluative criteria (eigenvalue, variance, scree plot, residuals, and communalities) did not align with a four-component model, thus, principal components analysis was conducted again, applying the varimax rotation. For this data set, principal components analysis was conducted to retain five components and apply the varimax rotation after removing five variables (see Table 10).

Exclusion of the five variables and inclusion of five components increased the model fit as it increased communalities with only six below 0.70. Additionally, it decreased the number of residuals exceeding the 0.05 criterion from 45% to 37% or 25 nonredundant residuals. After rotation, the first component accounted for 18.36%, the second component accounted for 15.90%, the third component accounted for 13.39%, the fourth component accounted for 12.50%, the fifth component accounted for 11.11%, the total accounting for 71.27% of variance. The increase in communalities, decrease in residuals, and increase in total variance led to the acceptance of a five-component model.

Table 11 (see Appendix A) presents the loadings for each component. Component 1 consists of 3 of the 12 variables. These variables had positive loadings and addressed School Interest. Component 2 consists of 2 of the 12 variables. These variables had positive loadings and addressed Teacher Praise. Component 3 consists of 3 of the 12 variables. These variables had positive loadings and addressed School Participation. Component 4 consists of 2 of the 12 variables. These variables had positive loadings and addressed School Enjoyment. Component 5
consists of 2 of the 12 variables. These variables had positive loadings and addressed Academic Interest.

**Community Organization.** Factor analysis was conducted to determine what, if any, underlying structures exist for measures on 15 community organization variables (see Table 12). Principal components analysis was conducted utilizing a varimax rotation. The analysis produced a four-component solution, which was evaluated with the following criteria: eigenvalue, variance, scree plot, residuals, and communalities. Criteria indicated that retaining four components should be investigated.

For community organization, there were five factors with eigenvalues above one with 72.95% of the variance explained, indicating a good fit. The scree plot however, leveled off at six components, indicating to retain six components. Next, to assess for model fit, residuals were examined. There were 28% nonredundant residuals with absolute values greater than 0.05 leading to the conclusion that it may not be an accurate description of reality. Additionally, there were only four communalities below 0.70. However, there was one communality severely below the 0.70 criterion (*I’d like to get out of my neighborhood* at 0.364) that made up the fourth component. Based on the analysis of the scree plot, residuals, and the outlying communality, principal components analysis was conducted to retain three components and apply the varimax rotation after removing one variable (see Table 12).

Exclusion of the one variable and inclusion of three components increased the model fit as it increased factor loadings with the lowest communality now being 0.524 (*If I had to move, I would miss the neighborhood I live in.*). After rotation, the first component accounted for 28.72%, the second component accounted for 22.54%, the third component accounted for 17.50%, totaling 68.76% of the variance. While the five criteria are still not in agreement, based
on the increase in communalities and the variance totaling near 70%, the decision was made to retain the three-component model.

Table 13 (see Appendix A) presents the loadings for each component. Component 1 consists of 7 of the 14 variables. These variables had positive loadings and addressed Neighbor Support. Component 2 consists of 4 of the 14 variables. These variables had positive loadings and addressed Community Disorganization. Component 3 consists of 3 of the 14 variables. These variables had positive loadings and addressed Drug and Alcohol Perception.

**Single Logistic Regression**

A single linear regression (SLR) was conducted to determine if parental support and/or peer predicts academic achievement for Black and Hispanic adolescents in a low-income urban school district. SLR is commonly used to determine the direction and strength of the relationship between two variables. While it does not demonstrate a direct cause and effect relationship, it can help to predict the values of a dependent variable based on changes within the independent variable (Viera, 2017).

**Parental Support.** To view the relationship between parental support and academic achievement, the first regression was conducted for both Black and Hispanic participants combined (n=272). Results are reported in Table 14 (see Appendix A). A statistically meaningful regression equation was found ($F(1,271) = 40.158, p < .001$), with an $R^2$ of .126, indicating that 12.6% of variance in grades are explained by parental support. Next an SLR was conducted to control for gender and race. There were no significant findings for gender ($p = .091$) however, identifying as Black in contrast to identifying as Hispanic increased academic achievement through parental support ($p = .082$ and $p = .234$, respectively).
To explore the relationship further, an SLR was conducted for each underlying factor. Factor 2 (family rules) and factor 3 (father closeness) showed the highest levels of significance (p = .006, p = .007). For factor 1 (primary caregiver support), a statistically meaningful regression equation was also found (p < .05), but both factor 4 (parental perceptions of drug use) and factor 5 (family cohesion) were non-significant (p = .822, p = .084) indicating that parental support, particularly support from a father is strongly correlated with academic achievement.

Peer Support. Next, to examine the relationship between peer support and academic achievement, an SLR was conducted for both Black and Hispanic participants combined once again (n=272). Results are reported in Table 15 (see Appendix A). No relationship was found between these two variables (F(1,291) = 40.158, p = .770), therefore it is unlikely that peer support predicts academic achievement. For further examination, an SLR was conducted to control for gender and race which led to non-significant results as well.

Since peer support as a whole was not significant, to explore the different layers of peer support further, an SLR was conducted for each underlying factor. When examining each factor separately and controlling for race, a statistically meaningful regression equation was found (F(1,202) = 4.090, p < .001), with an R² of .094, indicating that 9.4% of variance in grades are explained by peer support. Factor 1 (negative peer support) and factor 4 (positive peer support) showed the highest levels of significance (p = .033, p = .000). Both factor 2 (peer-to-peer judgement) and factor 3 (peer acceptance (coolness)) were non-significant (p = .927, p = .901) indicating that peer support, particularly the activities and behaviors that peers participate in predict academic achievement. There were no significant differences for gender. When controlling for race however, there was higher significance for Black adolescents than for Hispanic (p = .041, p = .070).
In both cases, only around 10% of the variance in grades was explained by parental or peer support meaning that the remaining 90% could be explained by additional variables. The next section discusses the results of structural equation modeling to examine the mediating variables of school connectedness and community organization.

**Structural Equation Model Testing**

To highlight the differences between minority groups who are often examined under the umbrella term “minority,” the hypothesized path-models were tested separately by group (Black and Hispanic). To analyze the four models, AMOS SEM (v. 26) software was used. Path analysis is a visual representation of underlying multiple regressions examining the relationships between observed variables and unobserved latent variables (Byrne, 2016). Path analysis can result in full, partial, or no mediation including direct and indirect paths (Zhao et al., 2010). Path analysis goes beyond traditional multiple regression analysis by estimating the maximum amount of regression equations needed to examine the hypothesized relationships amongst all the variables in the model simultaneously (Byrne, 2016; Lleras, 2005). Additionally, it allows for hypothesis testing by specifying direct and indirect relationships, allowing for multiple complex relationships to be examined at one time (Byrne, 2016; Lleras, 2005). Lastly, a maximum likelihood estimator was used as a way to account for missing data, heteroskedasticity, and nonnormal variables (Byrne, 2016).

**Path Analysis on School Connectedness as a Mediator for Black Adolescents (N = 78)**

Model 1 (see Figure 1) examined the relationship between parental support and peer support as exogenous variables and academic achievement mediated by school connectedness as an endogenous variable for the subset of Black adolescents. Table 16 (see Appendix A) displays the results of the path analysis. This model was a good fit, as evidenced by the fit indices, [χ2
Based on standardized regression coefficients, school connectedness had a significant, positive relationship with academic achievement ($b = .107, p = .007$). However, neither parental support nor peer support had a significant relationship with school connectedness ($b = .217, p = .146$; $b = .163, p = .216$).

These results indicated that school connectedness predicted higher academic achievement, but parental support and peer support did not influence school connectedness. In conclusion, considering both the significant findings of parental support on academic achievement through logistic regression analysis and the direct path from school connectedness to academic achievement, a partial mediation has been found.

**Path Analysis on School Connectedness as a Mediator for Hispanic Adolescents ($N = 228$)**

Model 2 (see Figure 2) examined the relationship between parental support and peer support as exogenous variables and academic achievement mediated by school connectedness as an endogenous variable for the subset of Hispanic adolescents. Table 16 (see Appendix A) displays the results of the path analysis. This model was a good fit, as evidenced by the fit indices, $[(x^2 (3) = 7.479, p = .058) \text{ RMSEA} = .081 (90\% \text{ CI} = [.00, .16]); \text{ CFI} = .96]$. Based on standardized regression coefficients, school connectedness had a significant, positive relationship with academic achievement ($b = .178, p < .001$). Additionally, parental support has a positive relationship with school connectedness ($b = .556, p < .001$) However, peer support did not have a significant relationship with school connectedness ($b = -.032, p = .658$). These results indicated that school connectedness predicted higher academic achievement and parental support predicted higher school connectedness, but peer support did not influence school connectedness.
Path Analysis on Community Organization as a Mediator for Black Adolescents (N = 78)

Model 3 (see Figure 3) examined the relationship between parental support and peer support as exogenous variables and academic achievement mediated by community organization as an endogenous variable for the subset of Black adolescents. Table 16 (see Appendix A) displays the results of the path analysis. This model was a good fit, as evidenced by the fit indices, $\chi^2 (3) = 5.407, p = .144$ RMSEA = .102 (90% CI = [.00, .24]); CFI = .00. Based on standardized regression coefficients, community organization did not have a significant relationship with academic achievement ($b = .025, p = .678$). Additionally, neither parental support nor peer support had a significant relationship with community organization ($b = .030, p = .809$; $b = .085, p = .442$). These results indicated that community organization did not act as a mediator for academic achievement, and community organization was not influenced by parental support or peer support.

Path Analysis on Community Organization as a Mediator for Hispanic Adolescents (N = 228)

Model 4 (see Figure 4) examined the relationship between parental support and peer support as exogenous variables and academic achievement mediated by community organization as an endogenous variable for the subset of Hispanic adolescents. Table 16 (see Appendix A) displays the results of the path analysis. This model was not a good fit, as evidenced by the fit indices, $\chi^2 (3) = 23.545, p < .001$ RMSEA = .174 (90% CI = [.11, .24]); CFI = .61. Based on standardized regression coefficients, community organization did not have a significant relationship with academic achievement ($b = .025, p = .493$). However, parental support and peer support had a significant relationship with community organization ($b = -.348, p = .003$; $b = .182, p = .003$). These results indicated that community organization did not have a significant
interaction with academic achievement, but parental support and peer support significantly interact with community organization.
Chapter 5: Discussion

Examining low-income Black and Hispanic adolescents in comparison to their middle-class White counterparts has been the norm in educational research for far too long. Frequently, these comparisons publicize findings that are biased and promote negative stereotypes but do not acknowledge the uneven playing field in which they were examined. Exploring the needs of low-income Black and Hispanic adolescents as separate and different from middle-class White adolescents, allows for policymakers and practitioners to tailor services that benefit each distinct group and may begin to close the achievement gap. Additionally, as researchers, if we study Black and Hispanic adolescents as one minority unit, we undermine and ignore the vastly unique cultural strengths that each population has to offer.

Grounded in previous research, current policy and prevention programs targeted at academic achievement oftentimes view Black and Hispanic adolescents, particularly those from low-income families, from a deficit lens. Researchers who ignore the strengths of Black and Hispanic adolescents often blame the individual for poor outcomes instead of exploring environmental factors that may be creating barriers to success. This study aims to open the discourse for policy and prevention researchers to begin exploring cultural strengths that low-income Black and Hispanic adolescents bring to the classroom and how—with support from parents, peers, schools, and the community—academic achievement can be attained. Particularly, by examining the varying support systems that promote academic achievement for low-income Black and Hispanic adolescents during an oftentimes tumultuous developmental period, this study provides practitioners and policymakers with evidence that systemic change needs to occur.
Additionally, viewing social support through the social development model in conjunction with the convoy model of social networks, highlights the power that positive social support brings to typically marginalized people. SDM proposes that behaviors are developed through repetitive social interactions that are reinforced over the life course (Catalano & Hawkins, 1996). Developing positive social support reinforces pro-social behaviors and, therefore, can often produce positive outcomes such as academic achievement. The convoy model and the theory of weak ties propose that social support networks are an ever-changing kaleidoscope of individuals who play different roles throughout the lifespan. The ebb and flow of support allows adolescents to access the type of support that may be necessary at the time. In line with SDM, the convoy model proposes that these positive reciprocal relationships help individuals develop positive behaviors. The convoy model has been studied mainly with older adults, with findings highlighting the positive impact of social support networks on well-being (Levitt, 2005). Developmental researchers often focus on human development across different stages in life, with adolescents being a critical and transformative period, therefore, focusing on positive support networks earlier in the lifespan can set students up for success in later life. Additionally, the findings from this dissertation support the assumptions of the SDM. Findings highlight the influence that social relationships have during adolescence and the effect these relationships can have on positive behavioral development.

While it was not done in this study, future researchers should examine the amount of support low-income Black and Hispanic adolescents have within the convoy levels. Exploring the roles within the convoys for low-income Black and Hispanic adolescents might help to explain why some levels of support are more influential than others. Through a development lens, we understand that different relationships have stronger impacts than others across the
lifespan. The findings of this study, however, did not find support for peers being a stronger influence during adolescents than parents. This aligns with previous research on the convoy model which highlights the importance of family in the innermost convoy (Antonucci & Akiyama, 1987; Fuller-Igelsias, Webster, & Antonucci, 2013) but does not support SDM which proposes that peers may enforce more control during adolescences (Catalano & Hawkins, 1996). There has been limited research on the convoy models for adolescents, and therefore, future researcher should examine this further by measuring the convoys themselves. For policymakers and practitioners, knowing who is present in each convoy can allow them to develop targeted prevention programs that engage those specific support networks.

Historically, the examination of marginalized groups from a deficit lens promotes the idea that they are lacking resources, including support, in comparison to their White counterparts. This narrative, however, does not consider the varying modes in which support is provided throughout different cultures. Without a doubt, low-income Black and Hispanic adolescents receive support from their parents comparable to that of their White counterparts, yet far too often their expressions of support are not always understood, captured, or valued by non-minority populations. As a consequence, it is often reported that they lack investment in their children’s wellbeing (Caldas & Cornigans, 2015; Smith, Reinke, Herman, & Huang, 2019; Stacer & Perrucci, 2012) or that the only way to access support is through Eurocentric modifications. This perspective, however, privileges support provided by non-racial and ethnic minority populations as being the standard by which to compare all other groups. Additionally, for low-income Black and Hispanic adolescents, involving parents in the educational process can help to promote positive academic outcomes (Carolan-Silva & Reyes, 2013; Carswell et al., 2009), but for low-income families, school faculty ought to engage them in a way that honors,
respects, and provides a nuanced understanding of the varied ways in which Black and Hispanic parents support their children (Smith et al., 2008; Williams & Awe Agahe Portman, 2012).

Additionally, practitioners and school faculty can help to promote positive peer relationships to build social capacity within the school environment, as it encourages school engagement (Davis et al., 2002; Salerno & Reynolds, 2017). When low-income Black and Hispanic adolescents feel supported by teachers and community members, it builds confidence and promotes a positive learning experience. Low-income Black and Hispanic adolescents, who did not feel supported by school faculty, have reported feelings of not belonging and a lack of motivation (Lee & Breen, 2007; Olsson, 2009). Previous research has often focused on one or two areas of support instead of examining the multiple layers of support and the interactions among them. This study aims to resolve this issue by examining four layers of support (parental, peer, school, and community) to explore the interactions among them and academic achievement for low-income Black and Hispanic adolescents.

**Parental Support and Academic Achievement**

Previous research has found that parental support has a positive influence on academic achievement for all adolescents (Bean et al., 2003; Benner et al., 2016; Benner et al., 2017; Caldas & Cornigans, 2015; Day & Dotterer, 2018; Fan & Chen, 2001; Hill & Tyson, 2009; Hill & Wang, 2015; Jeynes, 2005; Ogbu, 2003; Smith et al., 2019; Stacer & Perrucci, 2012). However, it is critical to examine parental support from a cultural, strength-based lens to fully understand the impact it has across racially/ethnically diverse groups. Past studies found that low-income Black adolescents often have high levels of non-physical support (Williams & Awe Agahe Portman, 2012) and Hispanic families stress *educacion,* which places value on education beyond learning in the classroom (Arbelo Marrero, 2016). To promote the need to examine
parental support through a strength-based cultural lens, one aim of this study was to highlight the support that low-income Black and Hispanic adolescents receive from their parents.

The results of the EFA revealed five components that were positively correlated with parental support: primary caregiver support, family rules, father closeness, parental perceptions of drug use, and family cohesion. To examine the interaction between parental support and academic achievement, SLR was conducted for Black and Hispanic adolescents separately. Parental support appeared to have a positive relationship with academic achievement for both Black and Hispanic participants, with parental support being more significant for Black adolescents. One explanation for the racial differences may be that Hispanic culture often values a collectivist way of raising children, meaning that parents are not the only close family members that adolescents can turn to for support. These findings are consistent with literature that supports the role of Black and Hispanic parents in the education of their children (Bean et al., 2003; Benner et al., 2016; Benner et al., 2017; Caldas & Cornigans, 2015; Day & Dotterer, 2018; Fan & Chen, 2001; Hill & Tyson, 2009; Hill & Wang, 2015; Jeynes, 2005; Ogbu, 2003; Smith et al., 2019; Stacer & Perrucci, 2012). Future research should utilize the convoy model to examine if family members other than parents are found in the innermost circle for Hispanic adolescents. Additionally, doing the same for Black adolescents would allow researchers to better understand who, besides immediate family, are the most important pillars of support for positive youth development. This would allow developmental researchers to examine the transactional relationships proposed by SDM during this critical life period and determine who, within and outside of the family, has an influence on pro-and anti-social behaviors. Additionally, is allows researchers to better understand the strength of Hispanic families and how to utilize those
strengths when working with policymakers and practitioners so that programming can be tailored to fit the specific needs of these families.

Interestingly, these findings also highlighted the importance of father support as separate from mother support or parental support in general. Previous research has highlighted the importance of a positive male role model for Black and Hispanic young men (Thompson & Davis, 2013), which may explain the distinction between “parental support” and “father closeness.” Controlling for gender did not result in any significant findings, but this may be explained by the small sample size and should be examined in the future with a larger sample to fully understand the differences in parental support for females and males. Future research should delve into this further by replicating this study with data that would allow for a closer examination of gender differences. Additionally, both SDM and the convoy model suggest that behaviors are developed and maintained through transactional relationships across the lifespan (Hawkins & Catalano, 1996; Kahn & Antonucci, 1980). Future research should examine these results longitudinally, as developmental studies suggest that the influence of parental support changes over time.

**Peer Support and Academic Achievement**

In previous research, the role of peer support for low-income Black and Hispanic adolescents has been found to have a positive relationship with overall well-being and connectedness to school (Lee & Breen, 2007; Mouratidis & Sideridis, 2009; Rasalingam et al., 2017; Stadler et al., 2010). Developmental researchers, however, have proposed that the influence of these relationship varies based on age and gender. Additionally, peer friendships can impact the relationship that adolescents have with their parents. This study aimed to examine the direct effect peer relationships have on academic achievement separate from parental support and
school connectedness. The initial findings of this study did not support a direct relationship between peer support and academic achievement, contradicting previous research and the assumption proposed by SDM which highlights the importance of peer relationship on pro-and anti-social behavioral development. However, upon further examination of the components that make up the factor of peer support, there were some significant findings.

The components of negative peer support and positive peer support were both correlated with academic achievement but peer-to-peer judgment and peer acceptance (coolness) were not. These findings indicate that the types of friends that adolescents have and the behaviors they engage in, whether positive or negative, impact academic achievement more than the perception of fitting in. This finding is important as it contradicts previous research that cites the need to fit in amongst peers as a main reason for poor academic achievement (Lee & Breen, 2007; Mouratidis & Sideridis, 2009). However, this finding shows support for SDM and the convoy model, as it highlights the importance of learned behaviors through transactional relationships. In other words, the behaviors that are being reinforced through the types of friendships that adolescents have are ultimately what drive the adolescent to take part in pro- or anti-social activities.

When examining racial differences, peers had a stronger influence on Black participants than Hispanic participants. This aligns with previous research that found peers to be a major part of the inner convoy for Black adolescents (Levitt et al., 1993; Levitt, 2005). The issue of “acting White” may explain this. Black adolescents often feel the need to act like their peer group, regardless of whether they are positive or negative, due to the stigma of acting White (Davis et al., 2019; Neal-Barnett et al., 2010; Smalls et al., 2007). Although the component of being accepted by peers was not significant, the influence of peers was still strong. One explanation for
this may be that “acting White” may be a subconscious fear to which Black adolescents are unaware they are responding but are still acting upon according to their peer groups. Additionally, Afrocentric models highlight collectivist cultural values that value friendships outside of the family. Family-like bonds, such as brother- or sisterhoods, are often formed through similar experiences with oppression or discrimination and lead to strong bonds that can be influential in the development of pro- or anti-social behavior (Clayton, 2017; Goza & Ryabov, 2009; Lundy & Firebaugh, 2005; Quimby et al., 2017; Ueno, 2009). Future research should consider the racial composition of friend groups for Black adolescents when examining the influence of peer support.

Additionally, since logistic regression found relationships between individual components of peer support and academic achievement, future research should consider unpacking these layers further by examining them through an SEM path analysis. Accounting for these factors as separate from peer support as a whole, may have found significant relationships for school connectedness as a mediator and therefore, should be examined further for future research.

**School Connectedness as a Mediator**

While both parental and peer support were found to have some significance on academic achievement, they only accounted for a small level of variance in participants’ grades, indicating that there are other variables that may have an impact as well. School connectedness has been shown to have a relationship with academic achievement for all students but particularly for low-income Black and Hispanic adolescents (Bear et al., 2011; Behnke et al., 2010; Corprew & Cunningham, 2012; Cunningham & Phillips Swanson, 2010; Garrett et al., 2010; Hawley McWhirter et al., 2013; Olsson, 2009; Neseth et al., 2009; Salerno & Reynolds, 2017; Thompson
& Davis, 2013; Zaff et al., 2017). However, school connectedness is often examined as a factor in academic achievement in lieu of parental support, not in addition to it. Furthermore, peer support is often considered to be an element of school connectedness instead of being a separate factor that may impact academic achievement, with school connectedness as a mediating factor. One aim of this study was to examine school connectedness as a mediator of parental and peer support for academic achievement for low-income Black and Hispanic adolescents.

As predicted, school connectedness had a significant positive relationship with academic achievement. This finding supports previous research that examines school connectedness as a factor in academic achievement, separate from other forms of social support (Olsson, 2009; Zaff et al., 2017). However, there were differences among the results for Black and Hispanic participants that provided either partial, full, or no mediation.

For Black adolescents, there was no significant relationship between parental and peer support and school connectedness. There was, however, a significant relationship between parental support and school connectedness for Hispanic adolescents. This is an interesting finding for three reasons: (1) it complicates SLR findings that parental support influences academic achievement for Black adolescents, (2) it highlights the cultural aspects of familismo, educacion, and respeto for Hispanic families, and (3) it supports the notion that peer support should be evaluated as a possible factor within school connectedness, not outside of it.

Proposing peer support as a factor of school connectedness, however, contradicts developmental research and more specifically, the assumptions of SDM. Previous research highlights the importance of peer relationships during this developmental period as peers are often a major influence over delinquent behaviors (Kelly et al., 2012). Utilizing school connectedness as an all-encompassing variable, undermines the importance of peer relationships
hence why it was studied as a separate entity for this dissertation. Yet, upon review of the findings from this study, there is just cause for researchers to consider an alternative method of examining peer relationships.

In conjunction with the previous findings on the significance of parental support on academic achievement for Black adolescents, this finding indicates that, while there may not be a direct relationship between parental support and school connectedness, there may be a mediating relationship. This partial mediation shows support for hypothesis three in which school connectedness is proposed to be a mediator between parental support and school connectedness. It also supports previous research that found a positive relationship between both parental support and school connectedness.

Additionally, for Hispanic adolescents, the mediating effect and relationship between parental support and school connectedness support literature that highlights the importance of cultural values in Hispanic families. Hispanic parents are cited as the most important factor for Hispanic adolescents to strive towards higher education (Carolan-Silva & Reyes, 2013). Yet, there is sometimes a disconnect between the parent and the school due to systemic and cultural barriers. Previous research has found that support within the school from teachers can fill in the gaps by providing knowledge on college applications, standardized testing, etc. (Carolan-Silva & Reyes, 2013; Salerno & Reynolds, 2017). The findings in this study support the hypothesis that, together, parents and school staff can provide the full spectrum of support that is necessary for low-income Hispanic adolescents to show high levels of academic achievement.

Lastly, while school connectedness did not have a mediating effect for peer support, it does align with literature that examines peer support as a factor of school connectedness. Future
research should examine if peer support would have a stronger influence on academic achievement if it were considered a component of school connectedness.

**Community Organization as a Mediator**

While there is some evidence to support the hypothesis that students who attend low-income urban school districts often have lower levels of academic achievement, there is little research on the direct link between community organization and academic achievement (Orfield et al., 2004). Current literature suggests that community organization has a relationship with well-being, drug and alcohol use, and positive youth development (Anderson et al., 2018; Garcia-Reid et al., 2013; Jain & Cohen, 2013; Jennings et al., 2006; Lardier, 2018), all of which may impact academic achievement. Based on the EFA, community organization consisted of three components including neighbor support, community organization, and drug and alcohol perception. Surprisingly, there was no support found for a relationship between community organization and academic achievement. This contradicts previous findings that examine the influence of living in an urban community on positive youth development (Garcia-Reid et al., 2013; Hughey, Peterson, Lowe, & Oprescu, 2008; Lardier et al., 2017; Peterson, Speer, & Peterson, 2011). One explanation, however, is that academic achievement is only one variable within positive youth development. This study did not consider other dependent variables, such as well-being, that may have been influenced by community organization. Future research should expand upon this study by incorporating more variables that compose positive youth development.

One unexpected finding, however, is that parental support and peer support had a significant relationship with community organization for Hispanic participants. Moreover, the relationship between parental support and community organization was negative, once again
highlighting the importance of parental support for Hispanic families. One explanation for this could be the importance of familismo for Hispanic families (Arbelo Marrero, 2016), meaning that the familial relationship is more important than support from outside community members. This can also be seen with the convoy model, as parents are often found in the innermost convoy for Hispanic families (Fuller-Iglesias & Antonucci, 2015). However, there was a positive relationship between peer and community organization, which is not as surprising since peers typically interact with each other within the community. Future research should examine if Hispanic families are connecting with the community in any capacity or if family has become their community.

Implications

Findings from this dissertation have implications for future research, teachers and school faculty, and educational policy. Future research should use a strength-based lens to examine Black and Hispanic adolescents as separate and distinct populations of people. Additionally, using middle-class White adolescents as the control group to which low-income Black and Hispanic students are compared compromises accurate findings and promotes bias in practice and policy. Teachers and school faculty should be mindful of previous research findings and teach from a culturally sensitive lens as opposed to the unfair, and often regular, practice of color blindness. Additionally, policymakers should consider the strengths of Black and Hispanic adolescents when developing educational policies to provide systemic change and close the ever-widening achievement gap.

Implications for Research

This dissertation has five main impacts for future research: (1) there are multiple layers of support that are often intertwined, (2) Black and Hispanic adolescents should be examined as
separate populations, (3) low-income minority populations should not be compared to middle-
class White populations, (4) a strength-based approach should be taken when studying
marginalized populations of people, and (5) development models should consider the varying
levels of social support that are present for adolescents. All of these suggestions would help to
alleviate the unfair biases and stereotypes that are often placed on minority populations in all
areas of research.

The findings from this dissertation only begin to untangle the layers of support that help
to promote positive academic achievement for low-income Black and Hispanic adolescents
attending school in an urban school district. The results from this study support previous research
on social support and academic achievement by highlighting the interaction between parental and
peer support and school connectedness but, unfortunately, was unable to find support for the
mediating effect of community organization. This gap in literature still exists, and future
researchers should continue to expand upon the definitions of support. This research also
highlighted aspects of support that are critical to the overall factors of parental, peer, school, and
community support. For example, the findings of father closeness as separate from that of overall
parental support. Future research should delve deeper into the components that make up support
through a qualitative lens to better understand the lived experiences of low-income Black and
Hispanic adolescents.

The findings of this study also highlight the importance of researching Black and
Hispanic populations as separate identities. This research found drastically different outcomes
for each population. For example, community organization had no significant relationship for
Black study participants but had one for Hispanic participants. Had the populations been
measured as one minority group, findings could have been swayed, resulting in conclusions that
were not accurate for one group. This can also be seen in previous research, which has—time and time again—found varying outcomes based on race. For example, Zaff et al. (2017) found variations in the types of support that Black and Hispanic parents provide to their children. The more knowledge practitioners and policymakers have regarding support for particular populations of people, the more they can tailor programming to meet the needs of all students.

Third, the comparison of low-income Black and Hispanic adolescents to middle-class White adolescents is sadly too common in educational research. This study highlights the strengths that low-income Black and Hispanic adolescents possess that, if compared to middle-class White adolescents, may have skewed the conclusions that could be drawn. Comparing low-income Black and Hispanic adolescents to middle-class White adolescents can take on a “less-than” mentality. Middle-class adolescents, regardless of race, have access to more resources and have higher levels of academic achievement due to these resources (Carter & Welner, 2013). To make a comparison overlooks the inherent systematic differences that automatically put low-income Black and Hispanic adolescents at a deficit.

Additionally, researchers should be mindful of a deficit-lens approach when examining Black and Hispanic populations. The findings of this study show the strengths that both Black and Hispanic adolescents possess in terms of support. Black and Hispanic adolescents, particularly those who are low income, are often examined from the narrative as “lacking” in comparison to White adolescents. Continuing to hold this deficit lens only perpetuates the “White over color” mentality that is often beneficial to the majority groups (Delgado & Stefancic, 1993; Delgado Bernal, 2002). Researchers are a critical resource for policymakers and practitioners and promoting a deficit-based research lens only allows them to justify biased policies and practices within the education system.
Lastly, human development researchers should consider the availability of support when examining the relationships that are developed during adolescents. The assumption that all adolescents have access to positive social relationships does not allow for an accurate examination of disadvantaged populations. Additionally, this dissertation adds to the growing body of literature that highlights the importance of social support during adolescent development (Benner et al., 2016; Benner et al., 2017; Chung-Do et al., 2017; Kelly et al., 2012; Lambert et al., 2014; Lansford et al., 2016; Lee & Breen, 2007; Maslowsky et al., 2015; Mouratidis & Sideridis, 2009; Olsson, 2009; Rasalingam et al., 2017; Stadler et al., 2010; Stearns & Glennie, 2006; Zaff et al., 2017). Through this study, I also propose that human development researchers consider the cultural biases that many aspects of development models, such as SDM, unintentionally hold against non-White adolescents. Similar to educational research, many of these models examine minority adolescents through frameworks that are based in Westernized, Anglocentric views of human development. It is critical for future developmental researchers to examine the cultural and racial differences among types of support so to examine the strengths of marginalized populations of people.

Implications for Practice

Low-income Black and Hispanic adolescents often face bias educational environments, whether conscious or unconscious, that have an impact on their overall educational well-being. Low-income Black students face higher rates of retention (held back one grade level), out-of-school suspensions, and exposure to violence (NCES, 2018). In 2010, the most recent data shows that close to 3% of Black students were retained compared to 1.7% of White students. Black students, particularly male, had the highest rates of out-of-school suspensions for the 2013-2014 school year, with 13.7% for Black students overall and 17.6% for Black males (NCES, 2018).
This is more than four times the amount of suspensions for White students (3.4 percent). Similarly, low-income Hispanic students face higher levels of retention, suspensions, and exposure to drugs and violence than White students, with male Hispanic students facing the daunting intersection of race and gender. In 2010, almost 3% of Hispanic students were retained in 9th-12th grade and 4.5% were suspended, with suspensions being higher for males than females (6.4% and 2.6% respectively) (NCES, 2018). These statistics highlight biased teacher practices that often lead to negative academic achievement among low-income Black and Hispanic students.

This bias also infiltrates the perception of teacher responsiveness for both Black and Hispanic students. In a study utilizing data from the National Education Longitudinal Study (NELS), Cheng and Starks (2002) found that, regardless of the teacher’s intention, Hispanic students perceived teachers to have lower levels of educational aspirations for them compared to White and Black students. Additionally, Black students were consistently rated as “poorer students” both academically and behaviorally by teachers (Chung-Do et al., 2017; Downey & Pribesh, 2004), which promoted a stereotype threat and created a negative academic identity (Syed et al., 2011).

A key issue expressed by many new teachers was their lack of cultural competence and familiarity with students’ cultural differences (Siwatu, 2011; Smith & Smith, 2009). Two studies highlighted the frustrations teachers faced when being employed in a low-income, urban school district without having knowledge of the landscape and culture. Using data collected from a mixed methods study, Siwatu (2011) found that teachers were confident in their ability to teach in a general sense. However, when teachers had to include culturally relevant material by combining their students’ home culture with the school culture, their confidence dropped
drastically. In the qualitative section of this study, teachers stressed that they did not have much exposure to culturally responsive teaching and had little to no exposure working with low-income, minority adolescents. Furthermore, in their qualitative study, Smith and Smith (2009) found that 78% of their teacher participants felt “somewhat” or “not at all” prepared to work with low-income minority adolescents. When asked about their experiences with teaching in a low-income urban school district, teachers highlighted culture, attitude and behavior, parents, and “street influences” as the problems that disrupt the learning process (Smith & Smith, 2009). In particular, some teachers highlighted the lack of respect, lack of discipline, and low value of education as reasons why low-income minority students do poorly in school.

However, even accounting for their lack of cultural awareness, teachers still believed that they could make a difference in their students’ lives (Smith & Smith, 2009). Teachers who have worked in a low-income, urban school district understood that the interactions between teachers and students could have a positive effect on students. Although teachers expressed frustration in taking on multiple roles without proper training, they felt like positive role models for their students, especially for those who are lacking support from home (Smith & Smith, 2009).

Based on the findings of this study, as well as previous research, there are three ways in which teachers can help to change the trajectory of academic achievement for low-income Black and Hispanic adolescents: valuing the role of culture and parents, promoting positive peer interactions, and providing a safe environment that can deter negative interactions within the community. First, findings highlight the importance of having culturally sensitive teachers and school faculty as school connectedness is a strong predictor of academic achievement (Salerno & Renolds, 2017). Teachers who view low-income Black and Hispanic parents as sources of strength, not barriers, can find ways to involve them in the educational life of their children.
School faculty should be open to new ways of interacting with parents that may alleviate barriers to being involved with their child’s education. In their qualitative study, Parsons, Walsemann, Jones, Knopf, & Blake (2018) found that teachers and parents often struggled to find ways in which to communicate. Teachers, albeit subconsciously, spoke to parents in ways that were demeaning and perpetuated racism, making the parents less inclined to be involved with the school.

Future teachers should be trained to interact with students and parents in a way that is culturally sensitive. This can be done through teacher education programs to promote cultural awareness and confidence when interacting with culturally diverse population. Teachers should not only be taught culturally relevant teaching strategies in the classroom but be provided with the experience of working with culturally diverse students and their families. Colleges and universities should consider aligning with urban low-income school districts to develop student-teaching opportunities that expose pre-service teachers to a variety of students. This would not only increase teacher confidence levels when working with diverse populations, but also increase capacity at urban low-income schools which are oftentimes understaffed. Additionally, once teachers are actively working in an urban low-income school district, continued education needs to occur. Teachers are currently mandated to obtain continuing education credits to keep their certifications. These trainings should include working with diverse students and families. There should be further education on the interaction of parents and schools, especially for those from diverse backgrounds.

As this study highlights, engaging parents in a student’s education can have an impact on academic engagement. Teachers should be aware of opportunities to engage parents and families. School districts should consider alternative pathways to parental engagement as well since many
low-income families have difficulty attending school functions due to work or family obligations. Providing opportunities for parents to engage with school faculty during alternative times can begin to close the gap between parents and schools and develop school engagement. Lastly, involving parents beyond traditional parent-teacher conferences that often have a negative connotation, can help to promote trust and relationships with school faculty.

The responsibility cannot be placed solely on teachers, however. This dissertation highlights for parents, how important being engaged in school achievement can be. When parents are provided the opportunity to be involved, they should try to provide support. Both SDM and the convoy model, as well as other developmental models, highlight the importance of parents throughout adolescence. Support and relationships are not stagnant, but ever-changing and therefore, as adolescents begin to develop stronger relationships with peers, parents need to readjust their role and provided the necessary support for that time. The findings from this study show how critical parental support is, even more so than peer support, which aligns with previous research on parental and peer support (Benner et al., 2016; Rasalingam et al., 2017; Stadler, 2010; Zaff et al., 2017).

Although parental support was shown to be more influential than peer support, this study still contributes to the growing body of research that implicates peers as an important factor in academic achievement. From a developmental perspective, as adolescents age, they begin to form stronger bonds with peers than they do with their parents. Oftentimes, these relationships can overshadow parental and school influence. Teachers and school faculty should develop programming that helps to form positive connections between peers to promote positive academic outcomes. In their meta-analysis of school-based, peer-intervention programs, Domitrovich, Durlak, Staley, and Weissberg (2017) propose that schools need to take on an
active role in peer relationship development that is tied to a specific set of skill development activities, focused directly on social skill development, and explicitly identifies the skills that students will be learning. Including these aspects in the development of pro-social skills has helped schools to promote positive peer relationships (Domitrovich et al., 2017).

Additionally, socio-emotional learning (SEL) which consists of five core competencies should be promoted to create an environment that fosters growth through relationships. These five competencies include self-awareness, self-management, responsible decision making, relationship skills, and social awareness (Domitrovich et al., 2017). SDM states that pro-social behaviors are developed via reoccurring behaviors and can be reinforced or diminished through transactional relationships. Relationship skills and social awareness are tied directly to peer interactions and can help adolescents develop pro-social behaviors. If schools promoted a community that fosters positive peer engagement, these relationships could ultimately reinforce pro-social behaviors such as school engagement and academic achievement. One example of this would be a peer mentoring program. Low-income Black and Hispanic adolescents often rely on peers to navigate the education system when parents are not knowledgeable (Salerno & Reynolds, 2017). Additionally, peers tend to form friendships that are homogenous in nature. For Black adolescents, this can hinder academic achievement, however for Hispanic adolescents it can promote it (Graham et al., 2014). Connecting Black adolescents with peers who are high-achieving, and ethnically diverse, may promote school connectedness and reduce the stigma of “acting White.” For Hispanic students, creating an environment where adolescents from culturally similar backgrounds can form positive relationship might help to reduce bullying and increase educational capacity, promoting a positive academic discourse.
Lastly, while this study did not find significant interactions among the community and academic achievement, previous research has shown a significant relationship between community organization and positive youth development. Teachers in urban school districts should be mindful of the environment in which students reside and help them to engage in positive community activities. Lardier et al. (2019c) highlights the importance of community involvement in addition to school supports. This research found that when students participated in positive youth development programs in their communities, it fostered a sense of school belongingness, decreased depressive symptoms, and generally increased well-being (Lardier et al., 2019c). While this may not directly influence academic achievement, teachers should be concerned with the overall well-being of their students as it often helps to promote a sense of belongingness in the school environment and encourages learning. One example of this would be community events that are held in conjunction with the schools. Holding events within the community that involve school staff can help students feel more comfortable and increase involvement (Jain & Cohen, 2013). Prevention practitioners within urban low-income communities should also consider involving school staff in the development and implementation of programming. Oftentimes school faculty can quickly identify what the needs of adolescents are and ways to engage them. Again, having familiar faces can help to alleviate some of the fear that students may have when participating in community events. Overall, including school districts in prevention programming can help to build capacity.

Ultimately, educational policies pave the way for teacher education, academic testing, and inclusion of prevention programming within the school environment. Without policy changes, teacher practices are going to be difficult to alter. If policy can become more inclusive
of low-income Black and Hispanic adolescents, it will have an impact on the way in which teachers and schools provide educational services.

**Implications for Policy**

Three major educational policies have highlighted the disparities of support for minority adolescents over the last 60 years: The Elementary and Secondary Education Act, the No Child Left Behind Act (NCLB), and the Every Student Succeeds Act (ESSA). Two of these policies were distinctly created to provide a fair education for all students but, due to underlying systemic biases, widened the achievement gap. In 1960, policymakers passed the first piece of legislature focused on the academic achievements of minority youth: Elementary and Secondary Education Act. This act became critical in providing a fair education to all students after Brown v. Board of Education and the desegregation of public schools (Storey, 2018). In 2001, the controversial NCLB act was signed into law to hold school districts accountable for the academic achievement of their students (Storey, 2018).

While good intentions were behind the NCLB Act, it ultimately widened the academic achievement gap and promoted high-stakes standardized testing, tracking and labeling of students, and biased teaching practices that hindered the academic success of minority, low-income students. In 2015, policymakers realized the flaws in NCLB and passed the Every Student Succeeds Act (ESSA) to help provide support to schools and alleviate some of the stressors of the high-stakes testing environment (Storey, 2018). Additionally, the Department of Education began to recognize the importance of building mental health supports into the academic curriculum and created core competencies in Social Emotional Learning (SEL). Teachers and school staff, instead of an outside agency, led the most successful programs,
highlighting the importance of teachers as support (Durlak, Weissberg, Dymnickim, Taylor, & Schellinger, 2011).

SEL consists of five core competencies to create an environment that fosters growth through relationships (Domitrovich et al., 2017). The findings from this dissertation that highlight the importance of teacher and peer relationships support the use of relationship building and social awareness as ways to improve academic achievement. Additionally, as proposed by both SDM and the convoy model, reciprocal and transactional relationships help to develop either pro- or anti-social skills (Hawkins & Catalano, 1996; Kahn & Antonucci, 1980). If schools utilize SEL to help students develop positive relationships, it could lead to pro-social behavior.

The findings from this study support the need to further include teachers and school faculty in the socio-emotional learning of Black and Hispanic adolescents attending a low-income urban school district. One of the strongest significant results highlights schools as a key source of support for academic achievement, acting as a direct variable for academic achievement as well as a mediating variable for parental support for Hispanic adolescents. While policy is beginning to recognize the need for change with ESSA, there is still more that can be done. Cooper Stein et al. (2018) found racial injustices across multiple facets of a majority Hispanic school in Texas. Teacher-student relationships, the ethnic diversity of teachers, higher academic class enrollment, and school policies were all based on White norms. Additionally, unfair testing under the former NCLB act caused disproportionate bias against English Language Learners (ELL) in a Chicago school district. Testing used to assess English proficiency was creating a divide amongst native and non-native speakers of English as they were used to determine class enrollments and academic ability (Davila & Aviles de Bradley, 2010).
Unfortunately, having a “White over color” mentality is advantageous for the dominant group and, therefore, changes will only occur when it benefits them. Interest convergence, the term proposed by Bell (1980) to explain this phenomenon, can be seen in his discussion on the Supreme Court’s ruling in Brown v. Board of Education. Bell (1980), in his seminal work, suggested that rulings in favor of the minority group were false victories in that they benefitted the dominant group more than the minority group. This can still be seen today with the inclusion of required multicultural courses during teacher trainings. To alleviate the tensions between the dominant and minority group, teachers are typically required to take courses on teaching in a culturally sensitive way. This may seem like a win for the minority group, yet these trainings are a façade because they do not address the main issue in a systemic way (Sleeter, 2017).

Ultimately, racism exists, and unfortunately for people of color, racism has become a part of ordinary life. Microaggressions have become so commonplace that it is difficult for society to realize that these are acts of racism. The phenomenon of “color blindness,” or the idea that race no longer exists, diminishes the experiences of people of color and erases their cultural history (Cooper Stein, Wright, Gil, Min ess, & Ginanto, 2018; Curtis, 2019; Delgado & Stefancic, 1993; Sleeter, 2017). While proponents of color blindness believe that they are leveling the playing field by treating all people the same, they are unintentionally widening the gap. The United States education system, built on White, middle-class standards, highlights the detrimental effect of color blindness. By ignoring race, teachers who practice color blindness in their classrooms fail to consider the implications of a biased education system on students of color (Curtis, 2019; Sleeter, 2017). Academic assessments are one specific example of using a color-blind approach to perpetuate intellectual deficiencies in Black students (Davila & Aviles de Bradley, 2010). Standardized testing provided the dominant group with documented proof that White students
outperformed Black students academically when given the same exam and provided with the same resources, yet research has shown that these tests are disproportionately biased against Black students (Storey, 2018).

Future policymakers should be critical in their examination of testing, teacher education, and cultural inclusion within the classroom. This study supports previous research that highlights the importance of school connectedness and cultural awareness as a way to promote academic achievement among low-income Black and Hispanic adolescents. Policymakers, as well as researchers and practitioners, need to evaluate current policies that promote biased practices and, instead, begin to develop policies that build upon the cultural strengths of Black and Hispanic families.

**Strengths and Limitations**

This dissertation contributes to the growing body of research on academic achievement for minority populations in several ways. First, this study examined low-income Black and Hispanic adolescents apart from middle-class White adolescents, an area where much improvement needs to be made in educational research. Second, this study considered Black and Hispanic adolescents as two separate identities versus one minority group allowing for an in-depth, culturally-accurate analysis of social support. Third, Black and Hispanic adolescents were viewed as having assets that promote positive outcomes instead of viewing them through a deficit lens. Fourth, social support was analyzed on four different levels, including mediation analyses, expanding the current body of literature on social support networks. Fifth, each level of support was examined separately through factor analysis to explore the underlying components that are meaningful for parental, peer, school, and community support. Last, this dissertation contributes to the growing body of literature in educational research for low-income Black and
Hispanic adolescents in urban schools from a systemic standpoint. Study findings contribute significantly not only to educational research, but also to research on social support across the lifespan, including during adolescent development. This dissertation highlights the need for a strengths-based research approach when examining marginalized groups of individuals for human developmental and educational researchers.

While this study makes significant contributions to a growing body of literature, it is not without its limitations. First, the data used for this study were secondary data. Data were collected for a different purpose, and therefore, while it provided adequate data to answer the aforementioned research questions, it was not necessarily gathered with the intention of addressing them directly. Additionally, this survey relied on participants to self-report sensitive information. At risk youth often have lower response rates and may inaccurately report information which can lead to skewed data, such as inflated grades (Jelcic et al., 2010; Sutton et al., 2018). Due to the nature of this survey as well as the time constraints and the length of the survey, participants might have skipped over questions. Therefore, there were large pockets of missing data that could have contributed the findings of this study. While analytic techniques were used to best alleviate any skewed findings, this could have been avoided by using data collected from a shorter survey that gathered information pertinent to this study only.

Additionally, the use of secondary data limited my ability to examine gender and socioeconomic status differences. As discussed throughout this dissertation, there are differences among outcomes based on SES. Another limitation caused by my use of secondary data is the inability to account for the SES of participants. Future research should consider the variation within groups due to SES. Males and females also often value different types of support and perform at varying levels academically. Another limitation of this study is the lack of
consideration for gender differences. Unfortunately, I was unable to examine gender differences in this dissertation due to the low number of participants and high levels of missing data. When data were disaggregated by race and gender, statistical power would have been too low to produce accurate findings. Although I controlled for gender when possible, future research should examine gender difference between and within race.

Third, the cross-sectional survey design hindered my ability to establish causal relationships between the varying levels of social support and academic achievement. Future research should consider a longitudinal design to replicate the findings of this study. In addition, future research should look to explain the findings of this study through qualitative research. The fourth limitation of this study is the quantitative design that did not allow for an in-depth examination of the impact of support. A qualitative analysis would allow for the lived experiences of participants to be told through a narrative. Utilizing a qualitative methodology would allow researchers to expand upon the findings of this study and examine the underlying factors that contribute to feelings of support.

Fifth, this study did not examine the levels of support within each convoy level through the convoy model of social support. Future research should examine the types of relationship that are formed within the innermost, middle, and outer convoys to see which individuals provide the most support for low-income Black and Hispanic adolescents.

Last, while a strength of this study was the examination of Black and Hispanic populations as separate beings, racial groups are not homogeneous and within-group differences should be examined. The labels of Black (which is comprised of ethnicities such as Afro-Caribbean, African American, and African) and Hispanic (which is comprised of ethnicities such
as Puerto Rican, Guatemalan, and Mexican) provide a base for which between-group differences can emerge, but future researchers should examine the various ethnicities within groups as well.

**Conclusion**

Low-income Black and Hispanic adolescents have traditionally, and unfairly, been studied as one minority group (Zaff et al., 2017) and contrasted largely against middle-class White counterparts (Davis-Kean & Sexton, 2009; Desimone & Long, 2010) creating an inequitable deficit lens through which they are examined. The findings of this study portray a different and unique experience for low-income Black and Hispanic adolescents as separate identities, exclusive of middle-class White adolescents. Results from this study are important in both the education and family science fields as they highlight the interactions among students’ parents, peers, schools, and communities. Findings also show distinct variations in support for Black and Hispanic populations, expanding upon previous research that has examined them as one minority unit.

Overall, results indicate that support from parents, peers, and schools are influential in the academic achievement of low-income Black and Hispanic adolescents. The relationship between parental support and academic achievement was significant with an even stronger relationship for Black participants as compared to Hispanic participants. Moreover, the mediating factor of school connectedness was shown to be significant for both Black and Hispanic adolescents. In combination with parental support, school connectedness was shown to be influential for academic achievement in low-income Black and Hispanic adolescents. Utilizing a strength-based lens, these findings show that the support is present and meaningful, suggesting need for more inclusion of parents in students’ education planning. As previous research shows, low-income parents may struggle with school involvement due to barriers that are beyond their control (i.e.
employment) (Bean et al., 2003; Caldas & Cornigans, 205; Day & Dotterer, 2018; Zaff et al., 2007), so schools need to find innovative ways to include them instead of dismissing them.

Additionally, support for SDM was found, as peers were influential based on the type of support they provided. Aligned with SDM theory, the behaviors that peers engaged in, whether positive or negative, were more influential than the feeling of “fitting in.” This is contradictory to previous research that found the need to fit in as being a critical aspect of school connectedness and, in turn, academic achievement (Lee & Breen, 2007; Mouratidis & Sideridis, 2009). A further investigation through a qualitative analysis would allow for a better understanding of the influence of peer behaviors.

While the results from this study did not find a significant relationship between community organization and academic achievement, there are possible explanations for this. One caveat to this research is that there was no investigation into the members within students’ convoys. Future research should examine the members within each convoy to determine if community members could be found versus the current study that only examined the nature of the community, as there is a growing body of research that strongly suggests an interaction between community organization and positive youth development (Garcia-Reid et al., 2013; Hughey, Peterson, Lowe, & Oprescu, 2008; Lardier et al., 2017; Peterson, Speer, & Peterson, 2011). Previous research has also found that disorganization within the community can become a normalized culture if adolescents have become desensitized (Forenza et al., 2019; Lardier et al., 2019b). The use of secondary data for this study limited my ability to ask questions specific to the normalization of community disorganization that may have garnered a different response. Findings from this study involving community organization should not be taken in vain.
Community support is still a growing area of research, and thus, this study begins to point future research in a new direction to examine the true nature of community support.

Overall, the findings of this study contribute to the ever-changing landscape of educational and family science research. The examination of often-marginalized groups of people from a strength-based lens only begins to unpack the layers of oppression. This study highlights the intersections of race and socioeconomic status while avoiding the all too common pitfall of biased comparisons. Future research should continue to acknowledge the strengths that Black and Hispanic families have—separate from each other—through a culturally sensitive lens, while taking a critical look at the current education system in the United States.
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Appendix A: Tables and Figures

Table 1

Descriptive Statistics of Demographic Variables ($N = 401$)

<table>
<thead>
<tr>
<th>Variable</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age ($M = 16.56$, $SD = 1.33$)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>14 years</td>
<td>19</td>
<td>4.7</td>
</tr>
<tr>
<td>15 years</td>
<td>87</td>
<td>21.7</td>
</tr>
<tr>
<td>16 years</td>
<td>82</td>
<td>20.4</td>
</tr>
<tr>
<td>17 years</td>
<td>85</td>
<td>21.2</td>
</tr>
<tr>
<td>18 years</td>
<td>104</td>
<td>25.9</td>
</tr>
<tr>
<td>19 years and older</td>
<td>17</td>
<td>4.2</td>
</tr>
<tr>
<td>Grade</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9th grade</td>
<td>98</td>
<td>24.4</td>
</tr>
<tr>
<td>10th grade</td>
<td>72</td>
<td>18.0</td>
</tr>
<tr>
<td>11th grade</td>
<td>89</td>
<td>22.2</td>
</tr>
<tr>
<td>12th grade</td>
<td>142</td>
<td>35.4</td>
</tr>
<tr>
<td>Gender</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>180</td>
<td>44.9</td>
</tr>
<tr>
<td>Female</td>
<td>217</td>
<td>54.1</td>
</tr>
<tr>
<td>Race</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Black/African American</td>
<td>78</td>
<td>19.5</td>
</tr>
<tr>
<td>Spanish/Hisp/Latino</td>
<td>228</td>
<td>56.9</td>
</tr>
</tbody>
</table>
Table 2

*Item Nonresponse Rate (N = 401)*

<table>
<thead>
<tr>
<th></th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Race – Black/African American</td>
<td>0</td>
</tr>
<tr>
<td>Race – Spanish/Hisp/Latino</td>
<td>0</td>
</tr>
<tr>
<td>Sex</td>
<td>1.0</td>
</tr>
<tr>
<td>Grades</td>
<td>3.2</td>
</tr>
<tr>
<td>Parental Support</td>
<td>31.4</td>
</tr>
<tr>
<td>Peer Support</td>
<td>25.9</td>
</tr>
<tr>
<td>School Connectedness</td>
<td>4.2</td>
</tr>
<tr>
<td>Community Organization</td>
<td>22.9</td>
</tr>
</tbody>
</table>
Table 3

Correlations of Main Variables Within Full Sample (N = 401)

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Parental Support</td>
<td>--</td>
<td>-.126*</td>
<td>.528***</td>
<td>-.337***</td>
<td>.359***</td>
</tr>
<tr>
<td>2. Peer Support</td>
<td>--</td>
<td>-.117*</td>
<td>.200**</td>
<td>- .017</td>
<td></td>
</tr>
<tr>
<td>3. School Connectedness</td>
<td>--</td>
<td>.309***</td>
<td>.445***</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Community Organization</td>
<td>--</td>
<td>- .017</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Grades</td>
<td>--</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mean</td>
<td>.568</td>
<td>.267</td>
<td>.943</td>
<td>.060</td>
<td>--</td>
</tr>
<tr>
<td>SD</td>
<td>1.97</td>
<td>1.80</td>
<td>1.76</td>
<td>1.82</td>
<td>--</td>
</tr>
<tr>
<td>Cronbach alpha</td>
<td>.90</td>
<td>.75</td>
<td>.83</td>
<td>.83</td>
<td>--</td>
</tr>
<tr>
<td>Skewness</td>
<td>-.224</td>
<td>.820</td>
<td>-.089</td>
<td>-.046</td>
<td>--</td>
</tr>
<tr>
<td>Kurtosis</td>
<td>-.323</td>
<td>2.11</td>
<td>-.127</td>
<td>-.411</td>
<td>--</td>
</tr>
</tbody>
</table>

Note: *p < .05; **p < .01; ***p < .001
Table 4

Correlations of Main Variables Within By Race - Black (N = 78)

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Parental Support</td>
<td>--</td>
<td>-.081</td>
<td>.218</td>
<td>.023</td>
<td>.232</td>
</tr>
<tr>
<td>2. Peer Support</td>
<td>--</td>
<td>--</td>
<td>-.196</td>
<td>.098</td>
<td>.196</td>
</tr>
<tr>
<td>3. School Connectedness</td>
<td>--</td>
<td>--</td>
<td>.011</td>
<td>.295*</td>
<td></td>
</tr>
<tr>
<td>4. Community Organization</td>
<td>--</td>
<td>--</td>
<td></td>
<td>.047</td>
<td></td>
</tr>
<tr>
<td>5. Grades</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>--</td>
</tr>
</tbody>
</table>

Note: *p < .05; **p < .01; ***p < .001
Table 5

*Correlations of Main Variables Within By Race - Hispanic (N = 228)*

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Parental Support</td>
<td>--</td>
<td>-.160</td>
<td>.554***</td>
<td>-.432***</td>
<td>.325***</td>
</tr>
<tr>
<td>2. Peer Support</td>
<td>--</td>
<td>--</td>
<td>-.118</td>
<td>.249**</td>
<td>.025</td>
</tr>
<tr>
<td>3. School Connectedness</td>
<td>--</td>
<td>--</td>
<td>-.252**</td>
<td>.453***</td>
<td></td>
</tr>
<tr>
<td>4. Community Organization</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>.091</td>
<td></td>
</tr>
<tr>
<td>5. Grades</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
</tr>
</tbody>
</table>

*Note: *p < .05; **p < .01; ***p < .001*
Table 6

**Parental Support Variables**

<table>
<thead>
<tr>
<th>Question</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>How wrong do your parents feel it would be for you to:</strong></td>
<td></td>
</tr>
<tr>
<td>Have one or two drinks of an alcoholic beverage nearly every day</td>
<td>q1001NEW*</td>
</tr>
<tr>
<td>Smoke tobacco</td>
<td>q1002NEW</td>
</tr>
<tr>
<td>Smoke marijuana</td>
<td>q1003NEW</td>
</tr>
<tr>
<td>Use prescription drugs not prescribed to you</td>
<td>q10pdNEW</td>
</tr>
<tr>
<td>Steal anything worth more than $5</td>
<td>q1004NEW*</td>
</tr>
<tr>
<td>Draw graffiti or write things or draw pictures on buildings or other property (without the owner’s permission)</td>
<td>q1005NEW*</td>
</tr>
<tr>
<td>Pick a fight with someone</td>
<td>q1006NEW*</td>
</tr>
<tr>
<td>The rules in my family are clear</td>
<td>q1017</td>
</tr>
<tr>
<td>People in my family often insult or yell at each other</td>
<td>q1018NEW</td>
</tr>
<tr>
<td>When I am not home, one of my parents knows where I am and who I am with</td>
<td>q1019</td>
</tr>
<tr>
<td>We argue about the same things in my family over and over</td>
<td>q1020NEW</td>
</tr>
<tr>
<td>If you drank some beer or wine or liquor (for example, vodka, whiskey, or gin) without your parents’ permission, would you be caught by your parents</td>
<td>q1021</td>
</tr>
<tr>
<td>My family has clear rules about alcohol and drug use</td>
<td>q1022</td>
</tr>
<tr>
<td>If you carried a handgun without your parents’ permission, would you be caught by your parents</td>
<td>q1023</td>
</tr>
<tr>
<td>If you skipped school, would you be caught by your parents</td>
<td>q1024</td>
</tr>
<tr>
<td>My parents notice when I am doing a good job and let me know about it</td>
<td>q1101</td>
</tr>
<tr>
<td>How often do you parents tell you they’re proud of you for something you’ve done</td>
<td>q1102</td>
</tr>
<tr>
<td>Do you feel very close to your mother</td>
<td>q1103</td>
</tr>
<tr>
<td>Do you share your thoughts and feelings with your mother</td>
<td>q1104</td>
</tr>
<tr>
<td>My parents ask me what I think before most family decisions affecting me are made</td>
<td>q1105</td>
</tr>
<tr>
<td>Do you share your thoughts and feelings with your father</td>
<td>q1106</td>
</tr>
<tr>
<td>Do you enjoy spending time with your mother</td>
<td>q1107</td>
</tr>
<tr>
<td>Do you enjoy spending time with your father</td>
<td>q1108</td>
</tr>
<tr>
<td>If I had a personal problem, I could ask my mom or dad for help</td>
<td>q1109</td>
</tr>
<tr>
<td>Do you feel very close to your father</td>
<td>q1110</td>
</tr>
<tr>
<td>My parents give me lots of chances to do fun things with them</td>
<td>q1111</td>
</tr>
<tr>
<td>My parents ask me if I’ve gotten my homework done</td>
<td>q1112*</td>
</tr>
<tr>
<td>People in my family have serious arguments</td>
<td>q1113NEW</td>
</tr>
<tr>
<td>Would your parents know if you did not come home on time</td>
<td>q1114*</td>
</tr>
</tbody>
</table>

*Note: *variable was removed for final analysis
Table 7

**EFA Component Loadings - Parental Support Variables**

<table>
<thead>
<tr>
<th>Component 1: Primary Caregiver Support</th>
<th>Loadings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Do you share your thoughts and feelings with your mother (q1104)</td>
<td>.833</td>
</tr>
<tr>
<td>Do you feel very close to your mother (q1103)</td>
<td>.819</td>
</tr>
<tr>
<td>Do you enjoy spending time with your mother (q1107)</td>
<td>.801</td>
</tr>
<tr>
<td>My parents give me lots of chances to do fun things with them (q1111)</td>
<td>.770</td>
</tr>
<tr>
<td>My parents ask me what I think before most family decisions affecting me are made (q1105)</td>
<td>.760</td>
</tr>
<tr>
<td>If I had a personal problem, I could ask my mom or dad for help (q1109)</td>
<td>.750</td>
</tr>
<tr>
<td>My parents notice when I am doing a good job and let me know about it (q1101)</td>
<td>.719</td>
</tr>
<tr>
<td>How often do you parents tell you they’re proud of you for something you’ve done (q1102)</td>
<td>.702</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Component 2: Family Rules</th>
<th>Loadings</th>
</tr>
</thead>
<tbody>
<tr>
<td>My family has clear rules about alcohol and drug use (q1022)</td>
<td>.803</td>
</tr>
<tr>
<td>If you carried a handgun without your parents’ permission, would you be caught by your parents (q1023)</td>
<td>.785</td>
</tr>
<tr>
<td>If you drank some beer or wine or liquor (for example, vodka, whiskey, or gin) without your parents’ permission, would you be caught by your parents (q1021)</td>
<td>.746</td>
</tr>
<tr>
<td>If you skipped school, would you be caught by your parents (q1024)</td>
<td>.709</td>
</tr>
<tr>
<td>When I am not home, one of my parents knows where I am and who I am with (q1019)</td>
<td>.684</td>
</tr>
<tr>
<td>The rules in my family are clear (q1017)</td>
<td>.665</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Component 3: Father Closeness</th>
<th>Loadings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Do you feel very close to your father (q1110)</td>
<td>.841</td>
</tr>
<tr>
<td>Do you share your thoughts and feelings with your father (q1106)</td>
<td>.816</td>
</tr>
<tr>
<td>Do you enjoy spending time with your father (q1108)</td>
<td>.783</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Component 4: Parental Perceptions of Drug Use</th>
<th>Loadings</th>
</tr>
</thead>
<tbody>
<tr>
<td>How wrong do your parents feel it would be for you to: Smoke tobacco (q1002NEW)</td>
<td>.859</td>
</tr>
<tr>
<td>Use prescription drugs not prescribed to you (q10pdNEW)</td>
<td>.848</td>
</tr>
<tr>
<td>Smoke marijuana (q1003NEW)</td>
<td>.705</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Component 5: Family Cohesion</th>
<th>Loadings</th>
</tr>
</thead>
<tbody>
<tr>
<td>We argue about the same things in my family over and over (q1020NEW)</td>
<td>.821</td>
</tr>
<tr>
<td>People in my family often insult or yell at each other (q1018NEW)</td>
<td>.749</td>
</tr>
<tr>
<td>People in my family have serious arguments (q1113NEW)</td>
<td>.692</td>
</tr>
</tbody>
</table>
### Table 8

**Peer Support Variables**

<table>
<thead>
<tr>
<th>Question</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Think of your four best friends (the friends you feel closest to). In the past year (12 months), how many of your best friends have:</td>
<td></td>
</tr>
<tr>
<td>Smoked cigarettes</td>
<td>q0314NEW*</td>
</tr>
<tr>
<td>Tried beer, wine, or hard liquor (for example, vodka, whiskey or gin) when their parents didn’t know about it</td>
<td>q0315NEW*</td>
</tr>
<tr>
<td>Used marijuana</td>
<td>q0316NEW*</td>
</tr>
<tr>
<td>Used LSD, cocaine, amphetamines, or other illegal drugs</td>
<td>q0317NEW</td>
</tr>
<tr>
<td>Been suspended from school</td>
<td>q0318NEW*</td>
</tr>
<tr>
<td>Carried a handgun</td>
<td>q0319NEW</td>
</tr>
<tr>
<td>Sold illegal drugs</td>
<td>q0320NEW</td>
</tr>
<tr>
<td>Stolen or tried to steal a motor vehicle such as a car or motorcycle</td>
<td>q0321NEW</td>
</tr>
<tr>
<td>Been arrested</td>
<td>q0322NEW</td>
</tr>
<tr>
<td>Dropped out of school</td>
<td>q0323NEW*</td>
</tr>
<tr>
<td>Been members of a gang</td>
<td>q0324NEW</td>
</tr>
</tbody>
</table>

What are the chances you would be seen as cool if you:

| Smoked cigarettes                                                        | q0325NEW     |
| Began drinking alcoholic beverages regularly, that is, at least once or twice a month | q0326NEW     |
| Smoke marijuana                                                          | q327NEW      |
| Carried a handgun                                                        | q0328NEW     |

Think of your four best friends (the friends you feel closest to). In the past year (12 months), how many of your best friends have:

| Participated in clubs, organizations or activities at school             | q1115NEW     |
| Made a commitment to stay drug-free                                     | q1116NEW*    |
| Liked school                                                            | q1117NEW     |
| Regularly attended religious services                                   | q1118NEW*    |
| Tried to do well in school                                              | q1119NEW     |

How wrong do your friends feel it would be for you to:

| Have one or two drinks of an alcoholic beverage nearly every day         | q1120        |
| Smoke tobacco                                                           | q1121        |
| Smoke marijuana                                                         | q1122        |
| Use prescription drugs not prescribed to you                            | q1123        |

*Note: *variable was removed for final analysis
Table 9

**EFA Component Loadings – Peer Support Variables**

<table>
<thead>
<tr>
<th>Component 1: Negative Peer Influence</th>
</tr>
</thead>
<tbody>
<tr>
<td>Think of your four best friends (the friends you feel closest to). In the past year (12 months),</td>
</tr>
<tr>
<td>how many of your best friends have: Carried a handgun (q0319NEW)</td>
</tr>
<tr>
<td>Sold illegal drugs (q0320NEW)</td>
</tr>
<tr>
<td>Been arrested (q0322NEW)</td>
</tr>
<tr>
<td>Used LSD, cocaine, amphetamines, or other illegal drugs (q0317NEW)</td>
</tr>
<tr>
<td>Been members of a gang (q0324NEW)</td>
</tr>
<tr>
<td>Stolen or tried to steal a motor vehicle such as a car or motorcycle (q0321NEW)</td>
</tr>
<tr>
<td>Loadings:</td>
</tr>
<tr>
<td>.865</td>
</tr>
<tr>
<td>.820</td>
</tr>
<tr>
<td>.806</td>
</tr>
<tr>
<td>.793</td>
</tr>
<tr>
<td>.773</td>
</tr>
<tr>
<td>.695</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Component 2: Peer-to-Peer Judgement</th>
</tr>
</thead>
<tbody>
<tr>
<td>How wrong do your friends feel it would be for you to: Have one or two drinks of an alcoholic beverage nearly every day (q1120)</td>
</tr>
<tr>
<td>Smoke marijuana (q1122)</td>
</tr>
<tr>
<td>Smoke tobacco (q1121)</td>
</tr>
<tr>
<td>Use prescription drugs not prescribed to you (q1123)</td>
</tr>
<tr>
<td>Loadings:</td>
</tr>
<tr>
<td>.854</td>
</tr>
<tr>
<td>.846</td>
</tr>
<tr>
<td>.821</td>
</tr>
<tr>
<td>.788</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Component 3: Peer Acceptance (Coolness)</th>
</tr>
</thead>
<tbody>
<tr>
<td>What are the chances you would be seen as cool if you: Began drinking alcoholic beverages regularly, that is, at least once or twice a month (q0326NEW)</td>
</tr>
<tr>
<td>Smoke marijuana (q0327NEW)</td>
</tr>
<tr>
<td>Carried a handgun (q0328NEW)</td>
</tr>
<tr>
<td>Smoked cigarettes (q0325NEW)</td>
</tr>
<tr>
<td>Loadings:</td>
</tr>
<tr>
<td>.837</td>
</tr>
<tr>
<td>.824</td>
</tr>
<tr>
<td>.749</td>
</tr>
<tr>
<td>.732</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Component 4: Positive Peer Influence</th>
</tr>
</thead>
<tbody>
<tr>
<td>Think of your four best friends (the friends you feel closest to). In the past year (12 months),</td>
</tr>
<tr>
<td>how many of your best friends have: Tried to do well in school (q1119NEW)</td>
</tr>
<tr>
<td>Participated in clubs, organizations or activities at school (q1115NEW)</td>
</tr>
<tr>
<td>Liked school (q1117NEW)</td>
</tr>
<tr>
<td>Loadings:</td>
</tr>
<tr>
<td>.831</td>
</tr>
<tr>
<td>.774</td>
</tr>
<tr>
<td>.767</td>
</tr>
</tbody>
</table>
Table 10

*School Connectedness Variables*

<table>
<thead>
<tr>
<th>Question</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>During the last four weeks, how many whole days have you missed because you skipped or “cut”</td>
<td>q0207*</td>
</tr>
<tr>
<td>How often do you feel that the schoolwork you are assigned is meaningful and important</td>
<td>q0208NEW</td>
</tr>
<tr>
<td>How interesting are most of your courses to you</td>
<td>q0209NEW</td>
</tr>
<tr>
<td>How important do you think the things you are learning in school are going to be for your later life</td>
<td>q0210</td>
</tr>
<tr>
<td>Now, thinking back over the past year in school, how often did you:</td>
<td></td>
</tr>
<tr>
<td>Enjoy being in school</td>
<td>q0301NEW</td>
</tr>
<tr>
<td>Hate being in school</td>
<td>q0302NEW</td>
</tr>
<tr>
<td>Try to do your best work in school</td>
<td>q0303NEW</td>
</tr>
<tr>
<td>In my school, students have lots of chances to help decide things like class activities and rules</td>
<td>q0304*</td>
</tr>
<tr>
<td>Teachers ask me to work on special classroom projects</td>
<td>q0305*</td>
</tr>
<tr>
<td>My teacher(s) notices when I am doing a good job and lets me know about it</td>
<td>q0306</td>
</tr>
<tr>
<td>There are lots of chances for students in my school to get involved in sports, clubs, and other school activities outside of class</td>
<td>q0307</td>
</tr>
<tr>
<td>There are lots of chances for students in my school to talk with a teacher one-on-one</td>
<td>q0308</td>
</tr>
<tr>
<td>I feel safe at my school</td>
<td>q0309*</td>
</tr>
<tr>
<td>The school lets me parents know when I have done something well</td>
<td>q0310*</td>
</tr>
<tr>
<td>My teachers praise me when I work hard in school</td>
<td>q0311</td>
</tr>
<tr>
<td>Are your grades better than the grades of most students in your class</td>
<td>q0312</td>
</tr>
<tr>
<td>I have lots of chances to be part of class discussions or activities</td>
<td>q0313</td>
</tr>
</tbody>
</table>

*Note:* *variable was removed for final analysis*
Table 11

**EFA Component Loadings – School Connectedness Variables**

<table>
<thead>
<tr>
<th>Component</th>
<th>Description</th>
<th>Loadings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Component 1: School Interest</td>
<td>How important do you think the things you are learning in school are going to be for your later life (q0210NEW)</td>
<td>.779</td>
</tr>
<tr>
<td></td>
<td>How often do you feel that the schoolwork you are assigned is meaningful and important (q0208NEW)</td>
<td>.768</td>
</tr>
<tr>
<td></td>
<td>How interesting are most of your courses to you (q0209NEW)</td>
<td>.754</td>
</tr>
<tr>
<td>Component 2: Teacher Praise</td>
<td>My teachers praise me when I work hard in school (q0311)</td>
<td>.827</td>
</tr>
<tr>
<td></td>
<td>My teacher(s) notices when I am doing a good job and lets me know about it (q0306)</td>
<td>.756</td>
</tr>
<tr>
<td>Component 3: School Participation</td>
<td>There are lots of chances for students in my school to get involved in sports, clubs, and other school activities outside of class (q0307)</td>
<td>.871</td>
</tr>
<tr>
<td></td>
<td>I have lots of chances to be part of class discussions or activities (q0313)</td>
<td>.589</td>
</tr>
<tr>
<td></td>
<td>There are lots of chances for students in my school to talk with a teacher one-on-one (q0308)</td>
<td>.530</td>
</tr>
<tr>
<td>Component 4: School Enjoyment</td>
<td>Now, thinking back over the past year in school, how often did you: Hate being in school (q0302NEW)</td>
<td>.871</td>
</tr>
<tr>
<td></td>
<td>Enjoy being in school (q0301NEW)</td>
<td>.715</td>
</tr>
<tr>
<td>Component 5: Academic Interest</td>
<td>Are your grades better than the grades of most students in your class (q0312)</td>
<td>.863</td>
</tr>
<tr>
<td></td>
<td>Now, thinking back over the past year in school, how often did you: Try to do your best work in school (q0303NEW)</td>
<td>.664</td>
</tr>
</tbody>
</table>
Table 12

*Community Organization Variables*

<table>
<thead>
<tr>
<th>Question</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>How wrong would most adults (over 21) in your neighborhood think it was for kids your age:</td>
<td></td>
</tr>
<tr>
<td>To use marijuana?</td>
<td>q0901</td>
</tr>
<tr>
<td>To drink alcohol?</td>
<td>q0902</td>
</tr>
<tr>
<td>To smoke cigarettes?</td>
<td>q0903</td>
</tr>
<tr>
<td>If I had to move, I would miss the neighborhood I now live in</td>
<td>q0908NEW</td>
</tr>
<tr>
<td>My neighbors notice when I am doing a good job and let me know</td>
<td>q0909NEW</td>
</tr>
<tr>
<td>I like my neighborhood</td>
<td>q0910NEW</td>
</tr>
<tr>
<td>There are lots of adults in my neighborhood I could talk to about something important</td>
<td>q0911NEW</td>
</tr>
<tr>
<td>There are people in my neighborhood who are proud of me when I do something well</td>
<td>q0912NEW</td>
</tr>
<tr>
<td>I feel safe in my neighborhood</td>
<td>q0913NEW</td>
</tr>
<tr>
<td>I’d like to get out of my neighborhood</td>
<td>q0914*</td>
</tr>
<tr>
<td>There are people in my neighborhood who encourage me to do my best</td>
<td>q0915NEW</td>
</tr>
<tr>
<td>How much do each of the following statements describe your neighborhood:</td>
<td></td>
</tr>
<tr>
<td>Crime and/or drug selling</td>
<td>q0921</td>
</tr>
<tr>
<td>Fights</td>
<td>q0922</td>
</tr>
<tr>
<td>Lots of empty or abandoned buildings</td>
<td>q0923</td>
</tr>
<tr>
<td>Lots of graffiti</td>
<td>q0924</td>
</tr>
</tbody>
</table>

*Note:* *variable was removed for final analysis*
### Table 13

**EFA Component Loadings – Community Organization Variables**

<table>
<thead>
<tr>
<th>Component 1: Neighbor Support</th>
<th>Loadings</th>
</tr>
</thead>
<tbody>
<tr>
<td>I like my neighborhood (q0910NEW)</td>
<td>.713</td>
</tr>
<tr>
<td>There are lots of adults in my neighborhood I could talk to about something important (q0911NEW)</td>
<td>.689</td>
</tr>
<tr>
<td>There are people in my neighborhood who are proud of me when I do something well (q0912NEW)</td>
<td>.677</td>
</tr>
<tr>
<td>I feel safe in my neighborhood (q0913NEW)</td>
<td>.660</td>
</tr>
<tr>
<td>There are people in my neighborhood who encourage me to do my best (q0915NEW)</td>
<td>.658</td>
</tr>
<tr>
<td>If I had to move, I would miss the neighborhood I now live in (q0908NEW)</td>
<td>.638</td>
</tr>
<tr>
<td>My neighbors notice when I am doing a good job and let me know (q0909NEW)</td>
<td>.609</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Component 2: Community Disorganization</th>
<th>Loadings</th>
</tr>
</thead>
<tbody>
<tr>
<td>How much do each of the following statements describe your neighborhood:</td>
<td></td>
</tr>
<tr>
<td>Lots of empty or abandoned buildings (q0923)</td>
<td>.709</td>
</tr>
<tr>
<td>Fights (q0922)</td>
<td>.681</td>
</tr>
<tr>
<td>Lots of graffiti (q0924)</td>
<td>.677</td>
</tr>
<tr>
<td>Crime and/or drug selling (q0921)</td>
<td>.663</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Component 3: Drug and Alcohol Perception</th>
<th>Loadings</th>
</tr>
</thead>
<tbody>
<tr>
<td>How wrong would most adults (over 21) in your neighborhood think it was for kids your age:</td>
<td></td>
</tr>
<tr>
<td>To drink alcohol (q0902)</td>
<td>.750</td>
</tr>
<tr>
<td>To use marijuana (q0901)</td>
<td>.705</td>
</tr>
<tr>
<td>To smoke cigarettes (q0903)</td>
<td>.693</td>
</tr>
</tbody>
</table>
### Table 14

*Single Logistic Regression – Parental Support*

<table>
<thead>
<tr>
<th></th>
<th>Model 1</th>
<th>Model 2</th>
<th>Model 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>F</td>
<td>40.158</td>
<td>6.415</td>
<td>3.756</td>
</tr>
<tr>
<td>Beta</td>
<td>.359***</td>
<td>.294***</td>
<td>--</td>
</tr>
<tr>
<td>$R^2$</td>
<td>.126***</td>
<td>.118***</td>
<td>.138**</td>
</tr>
<tr>
<td>N</td>
<td>272</td>
<td>196</td>
<td>196</td>
</tr>
</tbody>
</table>

*Note: Model 1 = no controls, full sample; Model 2 = controls for gender and race; Model 3 = controls for gender and race, examines each component of parental support; *$p < .05$; **$p < .01$; ***$p < .001$*
Table 15

*Single Logistic Regression – Peer Support*

<table>
<thead>
<tr>
<th></th>
<th>Model 1</th>
<th>Model 2</th>
<th>Model 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>F</td>
<td>40.158</td>
<td>1.683</td>
<td>4.090</td>
</tr>
<tr>
<td>Beta</td>
<td>-.017</td>
<td>.049</td>
<td>--</td>
</tr>
<tr>
<td>$R^2$</td>
<td>--</td>
<td>.032</td>
<td>.124***</td>
</tr>
<tr>
<td>N</td>
<td>292</td>
<td>209</td>
<td>209</td>
</tr>
</tbody>
</table>

*Note: Model 1 = no controls, full sample; Model 2 = controls for gender and race; Model 3 = controls for gender and race, examines each component of parental support; \(^* p < .05; \(^{**} p < .01; \(^{***} p < .001)*


### Table 16

**Standardized and Significance Levels for Direct Effects Path Model**

<table>
<thead>
<tr>
<th>Model</th>
<th>Outcome Variable</th>
<th>Predictor 1</th>
<th>Standardized</th>
<th>$p$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model 1: School Connectedness as the Outcome for Black Participants ($N = 78$)</td>
<td>School Connectedness</td>
<td>Parental Support</td>
<td>.217</td>
<td>.146</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Peer Support</td>
<td>-.163</td>
<td>.216</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>School Connectedness</td>
<td>.107</td>
</tr>
<tr>
<td>Model 2: School Connectedness as the Outcome for Hispanic Participants ($N = 78$)</td>
<td>School Connectedness</td>
<td>Parental Support</td>
<td>.556</td>
<td>***</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Peer Support</td>
<td>-.032</td>
<td>.658</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>School Connectedness</td>
<td>.178</td>
</tr>
<tr>
<td>Model 3: Community Organization as the Outcome for Black Participants ($N = 228$)</td>
<td>Community Organization</td>
<td>Parental Support</td>
<td>.030</td>
<td>.809</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Peer Support</td>
<td>.085</td>
<td>.442</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Community Organization</td>
<td>.025</td>
</tr>
<tr>
<td>Model 4: Community Organization as the Outcome for Hispanic Participants ($N = 228$)</td>
<td>Community Organization</td>
<td>Parental Support</td>
<td>-.348</td>
<td>***</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Peer Support</td>
<td>.182</td>
<td>**</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Community Organization</td>
<td>.025</td>
</tr>
</tbody>
</table>

*Note: Model 1 fit statistics: $\chi^2 (3) = 5.763, p = .124; \text{RMSEA} = .109, \text{CFI} = .56; \text{CMIN/df} = 1.921$. Model 2 fit statistics: $\chi^2 (3) = 7.479, p = .058; \text{RMSEA} = .081, \text{CFI} = .96; \text{CMIN/df} = 2.493$. Model 3 fit statistics: $\chi^2 (3) = 5.407, p = .144; \text{RMSEA} = .102, \text{CFI} = .00; \text{CMIN/df} = 1.802$. Model 4 fit statistics: $\chi^2 (3) = 23.545, p < .001; \text{RMSEA} = .174, \text{CFI} = .61; \text{CMIN/df} = 7.848. *p < .05; **p < .01; ***p < .001*
Figure 1. Model 1 testing the relationship between parental support and peer support as exogenous variables and academic achievement mediated by school connectedness as an endogenous variable for the subset of Black adolescents ($N = 78$)
Figure 2. Model 2 testing the relationship between parental support and peer support as exogenous variables and academic achievement mediated by school connectedness as an endogenous variable for the subset of Hispanic adolescents (N = 228)
Figure 3. Model 3 testing the relationship between parental support and peer support as exogenous variables and academic achievement mediated by community organization as an endogenous variable for the subset of Black adolescents ($N = 78$)
Figure 4. Model 4 testing the relationship between parental support and peer support as exogenous variables and academic achievement mediated by community organization as an endogenous variable for the subset of Hispanic adolescents ($N = 228$)
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