A STUDY TO DETERMINE THE EXTENT TO WHICH A SCHOOL-BASED

MENTORING PROGRAM AFFECTS THE ACADEMIC ACHIEVEMENT

AND SOCIAL BEHAVIORS OF AFRICAN-AMERICAN MALES

IN A SUBURBAN MIDDLE SCHOOL

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ABSTRACT

Schools are faced with the challenge of identifying creative ways to ensure the success of all students. The academic achievement gap that persists between African-American students and their counterparts along with the disparate impact of disciplinary practices are issues that educators continue to seek solutions to address. Helping all students achieve academically is difficult; however, when confronted with issues like poverty, broken families, and crime helping students succeed in school becomes even more challenging. Although some progress has been noted, it has been well-documented that African-Americans continue to underperform and lag behind their counterparts academically (McMillian, 2003).

The purpose of this study is to examine the impact, if any, a school-based mentoring program had on the academic achievement and appropriate social behaviors of African-American male participants when used as an intervention. The participants in this study attended a suburban middle school, located just outside the city of Philadelphia, and attended this school from 2012 through 2015. The study examined grade point averages, standardized test results, and disciplinary data from two groups of students: the African-American male students who participated in the mentoring program and the remainder of the African-American male students that attended this school during the same period. Data from both the control and experimental groups were examined to determine if students who participated in the mentoring program at any point throughout middle school had an improvement in their grade-point averages, standardized test performance, or lower rates of disciplinary referrals than the group that did not participate in the mentoring program.

DEDICATION

I would like to first give all glory and honor to my Lord and Savior Jesus Christ. Without His strength and guidance throughout this process, none of this would be possible. I dedicate this to my wife Genina and my daughters Avery and Sydney for being my source of encouragement and motivation for seeing this through. To Genina, I love you. Thank you for taking care of our family and for your patience through the many years I've been in this program. To Avery and Sydney, I love you so much and I dedicate this to you. Thank you for being my inspiration.

To my mother Dr. Carol Etlen and my father Mr. James S. Etlen, Jr., thank you for all that you have sacrificed over the years for my sister and me, for laying the foundation for my life, and for instilling in me that each generation must do better that the last. To my sister Erika, I can always count on you to push me. Thank you for being the best sister a brother could ever have. To all my grandparents that have passed on, I dedicate this to your memories.

To all my friends, family, fraternity brothers, colleagues, and mentors encouraged me and have supported me through this process. Thank you. This could not have happened without you.

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CHAPTER 1
INTRODUCTION TO THE PROBLEM

Educators today are faced with the challenge of identifying ways to promote the success of all students, regardless of race, ethnicity, socio-economic status, or gender. They must, under some very precarious circumstances like poverty, dysfunctional and broken families, and crime plagued communities, help students achieve academically and perform to the standards established by the state or the federal government. Although some progress has been noted, it has been well-documented that African-American students continue to underperform and lag behind their counterparts academically (McMillian, 2003). This underperformance, commonly referred to as "the achievement gap", persists to this day and continues to present challenges to policymakers and school administrators on effective ways to address and remedy the problem.

Researchers have discussed at length the social, economic, and environmental factors believed to impact the overall academic success of African-Americans leaving this group "at-risk" of perpetuating trends that impact their success (Noguera, 2012). There are many factors that continue to plague many in this group and require a great deal of resilience to overcome. These include the following: disciplinary practices that lead to expulsion from school or alternative educational programs and ultimately the criminal justice system; poverty rates and unemployment; lack of access to mental health services; school disengagement; counter-productive academic behaviors; and violence (Barbarin, 2010; Darensbourg, Perez, & Blake, 2010; Hurd & Zimmerman, 2010; Irvin, 2012; Ogbu, 2004).

Attempting to address the academic achievement gap and the disproportionate numbers of African-Americans affected by disciplinary practices, researchers have

recommended a number of reforms and interventions to help bridge this gap and improve the disparate impact of these disciplinary practices. Many of these interventions consist of educational reforms that focus on curriculum and pedagogical changes (Green, 2005; McMillian, 2003). The literature also explores other strategies to improve outcomes for at-risk African-American youth such as school-wide interventions like School-Wide Positive Behavior Supports or programs like "Rites of Passage Programs" and mentoring (Keating, Tomishima, Foster, & Alessandri, 2002; Mitchell, Bush, & Bush, 2002; Swoszowski, Jolivette, & Fredrick, 2013; West-Olatunji, Shure, Garrett, Conwill, & Rivera, 2008).

This study examined and compared data from two groups of African-American students, one group that participated in a school-based mentoring program (program group) and the African-American students who did not participate in the mentoring program (comparison group). This study sought to determine if the mentoring program was linked to improvements in academic achievement and appropriate social behaviors of the African-American male participants. Data for this study included grade-point averages, performance on standardized tests, and disciplinary referral information. The data from both the control and experimental groups were examined to test the hypothesis that students who participated in the mentoring program at any point throughout middle school have improved grade-point averages, improved standardized test performance, and lower rates of disciplinary referrals than the group that did not participate in the mentoring program.

This study sought to understand the hypothetical impact mentoring programs, more specifically school-based mentoring programs, have on the academic achievement and social behaviors of African-American male middle school students. The impact this mentoring programs had on its participants was examined by comparing two groups of students, one group that participates in the mentoring program and the second group that does not. First, this study looked at any changes in academic performance experienced by the participants from the beginning of middle school in seventh grade year to their ninth grade year as compared to any changes in academic performance experienced by non-participants over the same time period. Secondly, this study examined any changes in social behaviors, as defined by office disciplinary referrals and suspension rates, for participants in the mentoring program compared to non-participants from their seventh grade year through their ninth grade year. Lastly, based on a comparison of the academic performance, office disciplinary referrals, and suspensions of participants in the mentoring program and non-participants this study sought to identify the impact, if any, participation in the mentoring program had on these factors.

The research for this study highlights the obstacles to success African-American males experience within the school setting. Some of the problems discussed in the literature examine the impact school disengagement, peer influence, and disparate disciplinary practices have on the success of African-American male students. This study, in particular, examined the impact that school-based mentoring, as a potential intervention, has on diminishing these obstacles to success. This study takes place within the context of a diverse, middle-income, suburban middle school, outside of the city of

Philadelphia. The research for this study also highlights mentoring programs and their potential for addressing some of the problems African-American males face in school. The information obtained from this study will contribute to the existing literature on mentoring by examining the efficacy of school-based mentoring programs and the impact this intervention has on improving academic performance and reducing social behaviors that lead to school discipline.

Research Questions

The question that guides this study is as follows: *To what extent, if any, does school-based mentoring impact the academic achievement and social behaviors of African-American males in a suburban middle school?* This study sought to understand if school-based mentoring had any link with how the participants of this program performed academically, as measured by their grade point average and performance on standardized tests results. In addition, this study also sought to identify the links, if any, this program had on the social behaviors of the participants as measured by the number of disciplinary referrals and school suspensions. The hypothesis in this study is that participants in the mentoring program will perform better academically and have lower rates of disciplinary referrals and suspensions than the group that did not participate in the mentoring program.

Definition of Terms

Academic Achievement Gap. The *academic achievement gap* is defined as difference in achievement on math and reading assessments when comparing African-Americans (males) to their Caucasian counterparts. According to NAEP, this difference in

achievement can be identified as early as their entrance in school and continues to widen by 0.10 standard deviations each year (Fantuzzo, LeBoeuf, Rouse, & Chen, 2012).

Anti-Social Behaviors. This term refers to the behaviors that society (and schools) finds unacceptable. For example: vandalism, fighting, disruptions, stealing, etc. (Kritsonis, 2015).

At-Risk. This term is used to define certain characteristics such as: single-parent families or unhealthy family dynamics; substance abuse; high-risk sexual behavior; depression; poor school performance; truancy; attitudes about school and education, etc., that may affect the success of an individual or lead to school-dropout, lack of opportunities (i.e. post-secondary education, careers, etc.), or incarceration (Eby, Allen, Evans, Ng, & DuBois, 2008; Hurd & Zimmerman, 2010: Keating, Tomishima, Foster & Alessandri, 2002).

Collective Identity. According to Ogbu (2004), *collective identity* refers to the "attitudes, beliefs, feelings, and language or dialect" that gives a group of people a sense of togetherness or "belonging". It develops as a result of a group's shared experience.

Community-Based Mentoring. Programs that are organized by community groups, non-profit groups, or churches that are dedicated to pairing potentially "at-risk" youths with volunteer mentors (Schwartz, Lowe, & Rhodes, 2012).

Culturally Responsive. This term refers to the process that educators or school professionals take in an attempt to recognize their own biases and preconceived notions of other cultures and to understand the "worldview" and perspective of those individuals and developing strategies and skills to effectively work with these individuals that are from different cultures (Green, 2005).

Disparate Impact. The term *disparate impact* refers to the effect disciplinary policies, such as zero tolerance, have on minorities. There is evidence that correlates the disproportionate rates in which minorities, specifically African-Americans, receive disciplinary consequences with high rates of delinquency, school retention, and academic failure (Lewis, Butler, Bonner, & Joubert, 2010).

Disciplinary Referral. An entry made on a student's record to indicate a disciplinary infraction.

Mentoring. Mentoring is the practice of an older, more experienced, role model imparting knowledge and experiences to a younger, less experienced individual. It has been defined as a strategy or an intervention used to pair experienced adults with youth to deter them from engaging in behaviors that could be defined as "at-risk" (Anastasia, Skinner, & Mundhenk, 2012; Eby, Allen, Evans, Ng, & DuBois, 2008).

Natural Mentor. A *natural mentor* is an adult who has a pre-existing social connection to a younger person and that adult has taken a special interest in the success of that young person. This adult is supportive and caring and may be connected to the younger person through familial ties, a coach, or a member of the community (Hurd & Sellers, 2013; Hurd & Zimmerman, 2010).

School Disengagement. School disengagement is characterized by the lack of "connectedness", bond, and/or attachment that an individual has with the school that potentially leads to problem behaviors, truancy, delinquency, and poor school performance (Henry, Knight, & Thornberry, 2012).

School-Based Mentoring. These are mentoring programs that take place in the school setting, during the school day. These programs are designed to support students academically, emotionally, and provide guidance (Schwartz, Lowe, & Rhodes, 2012).

Social Behaviors. This term refers to the behaviors that society (and schools) finds acceptable (Kritsonis, 2015).

Significance of the Study

As educators, it is our charge to do our very best to educate and meet the needs of every child, to the best of our abilities, to produce productive, contributing citizens and members of our society. Some may argue that, to this end, we have fallen short of this based on the reality that certain segments of our society are not achieving at the same rates as others. Federal and state accountability mandates, such as "No Child Left Behind", disaggregated performance based on ethnicity and race have shed light on the gap in achievement between African-Americans and their counterparts and increased the pressure on districts to become creative to develop ways to reduce and eliminate this achievement gap (McMillian, 2003).

As schools look to develop strategies to address the myriad issues that affect at-risk youth, this study sought to add to the information that can be used to substantiate the need for programs that provide opportunities for African-American middle school students to participate in programs such as school-based mentoring programs. Considering issues of school disengagement, poor academic performance, and disproportionate disciplinary practices this study's purpose was to understand the impact programs like this have on the participants.

CHAPTER 2
LITERATURE REVIEW

This literature review will provide a look at some of the current issues surrounding African-American male youths as they relate to school and social behaviors. The literature review also examines some strategies that have been implemented to address the academic achievement of African-Americans, males particularly. It will take a brief look at the pre-referral process and implementing interventions early in an attempt to improve academic outcomes and the strategies associated with the use of positive behavior instruction and support (PBIS) to monitor the daily progress of these students. This literature review will also take a close look at mentoring as a potential approach to improving self-esteem and confidence, especially in connection with school performance (Schwartz, Lowe, & Rhodes, 2012). It will examine the various forms of mentoring: natural, community-based, and school-based and how these forms of mentoring are used to improve the academic achievement and social behaviors of at-risk African-American males.

The academic achievement gap between African-American students and their counterparts and the disparate impact of disciplinary practices have been fiercely debated issues among educators and politicians. Particularly, the achievement of African-American males appears to be at the center of these issues (McKown, 2013; Noguera, 2012; Zehr, 2011). It has been reported that African-American students, African-American males specifically, are not meeting established educational standards and are not performing as well as other groups on standardized assessments (Byrd & Chavous, 2011; Matthews, 2014; Noguera, 2012). Researchers have long studied the potential factors that may influence the lack of academic progress African-Americans males are

making. Among these factors, it is reported that African-American male students are more likely to be suspended or expelled, more likely to be identified with a learning disability and placed in special education, more likely to perceive school as negative, and less likely to take AP or honors courses (Noguera, 2012).

A review of the literature as it relates to African-American male achievement discusses several potential factors that may impact the lack academic achievement experienced among some of these youth. One factor believed to contribute to this is academic or school disengagement (Henry, Knight, & Thornberry, 2012). School disengagement, according to Henry, Knight, and Thornberry (2012), is a feeling of disconnect or lack of interest in school, school work, and the culture associated with school and academics which can have myriad effects on a child such as: delinquency, violence, and drug use. Students who are engaged academically and who hold positive feelings and opinions about themselves and their school work, tend to perform more positively in school, and engage in less at-risk behavior (Byrd & Chavous, 2011; Henry, Knight, & Thornberry, 2012; Hurd & Sellers, 2013; Hurd, Sanchez, Zimmerman, & Caldwell, 2012).

Being disengaged academically or lacking a personal connection with school and academics has significant implications for the lack of academic success experienced by African-American males, their behavior in school, and how they perceive school. These factors perpetuate the lack of academic success among African-Americans (Noguera, 2012). When students feel a genuine connection to the school they attend and feel a sense of belonging, they feel the school values who they are as individuals and the culture they represent, and there is a great potential for success academically (Byrd & Chavous, 2011;

Hurd, Sanchez, Zimmerman, & Caldwell, 2012; Lemberger & Clemens, 2012). Interestingly, it is not solely the perceptions that these individuals have about school that affects their engagement, but what these students believe about how the school, the teachers, and others perceive them that affect their engagement as well.

Peer influence and self-identification are thought to be very strong contributing factors that may impact academic success and school disengagement. Just as having a positive academic self-concept and a feeling of belonging may promote positive academic achievement, Byrd and Chavous (2012) explain the contrary may also be true among African-American youth who possess a negative self-concept. This type of self-concept rejects a social norm of academic success and perceives this as being associated with mainstream culture (Byrd & Chavous, 2011). This belief among some African-American youth has been explored in literature written by John Ogbu (2004) and David Stinson (2011) and associates the concept of academic success as a rejection of the African-American collective identity and is considered, "acting White" (Ogbu, 2004; Stinson, 2011). Ogbu (2004) and Stinson (2011) assert the term "acting White", when used by youth to mock or tease, as being associated with positive academic and behavioral qualities, and thus rejecting the concept of a collective identity. Consequently, the term "acting Black" is associated with negative academic performance and behavioral qualities that are contrary to social norms, as accepting the collective identity and rejecting mainstream culture (Ogbu, 2004; Stinson, 2011). These terms and the qualities and characteristics associated with them help to develop an identity that some African-American males unfortunately adopt. It can be debated what actually defines these terms-- "acting White" or "acting Black"-- or what societal contributions may actually

perpetuate this concept. What is significant to note, however, is the effect that peer relationships and the desire for group acceptance have and their impact on choosing behaviors that would lead to being successful in school and to possibly view academic achievement as negative (Stinson, 2011).

Another factor that may contribute to the lack of academic success is the disproportionate rates that African-Americans, males particularly, are disciplined. African-American males are more likely to be suspended or receive harsher, more punitive disciplinary actions than their counterparts for similar offenses (Butler, Lewis, Moore, & Scott, 2012). For the most part, research indicates African-American students are suspended at far greater rates and receive harsher disciplinary consequences than their peers from other racial and ethnic groups (Lewis, Butler, Bonner, & Joubert, 2010). Butler, Lewis, Moore, and Scott (2012) contend that the perception of the way African-American students behaved by their teachers and their academic performance may also impact the high rate of disciplinary actions. When we consider the possibility that mainstream culture and behavioral expectations may be rejected and rebelled against due to feeling rejected by the mainstream culture, it could be inferred that this would be a possible reason for the disproportionate disciplinary infractions (Stinson, 2011).

The obvious impact that excessive disciplinary practices, namely suspensions, have on the student is missed instructional time in the classroom and assignments that are not being completed. The depth of this impact, however, is much greater when one considers the perceptions that may be associated with being suspended, further decreasing the connection these children have with the school (Henry, Knight, &

Thornberry, 2012), impacting their self-esteem (Matthews, 2014), and widening the academic achievement gap (McKown, 2013).

Schools have sought effective ways to address these issues and to stem the tide of what has been referred to as a school-to-prison pipeline which finds African-American students, particularly males, in a precarious cycle of academic underachievement and frustration, punitive disciplinary practices which include suspensions and expulsions, truancy, legal troubles, and referrals to the justice system (Barbarin, 2010). Additionally, the increased use of high-stakes testing, disaggregating achievement data to highlight the academic performance of minority groups, and the pressures that came from the adoption of the No Child Left Behind law, have left schools feeling the pressure to identify ways to improve the academic achievement of all students, especially minority students (Schwartz, Rhodes, & Herrera, 2012).

One strategy that has been considered as a means of improving the academic performance of African-American students is a culturally responsive approach to prevention and early intervention (Green, 2005). This culturally responsive approach, as discussed by Green (2005), is more than just having teachers and members of the school community sensitive to the cultures of their students; it involves developing "cultural brokers" who thoroughly understand the cultural nuances of their students and can use this understanding to enhance the school experience for these students (Green, 2005). This approach involved a three phase process where first a positive school climate would be established, where differences and diversity is celebrated; secondly, supportive interventions would be implemented for struggling learners; and, finally, if these supports were not effective students would be referred to special education (Green, 2005).

Although the process described by Green (2005) has the qualities of an effective system to establish a school environment that is conducive to the success of all students and is inclusive of cultural brokers to facilitate this, and is quick to address and improve the academic performance of African-American students, or any student for that matter, it appears limited in how it will address possible negative social behaviors that may be displayed by students.

Another strategy discussed in the literature used to improve social behaviors and academic performance of students experiencing difficulties is the use of Positive Behavior Interventions and Supports (PBIS) (Swoszowski, Jolivette, & Fredrick, 2013). An effective strategy used in PBIS is the "check in/check out" system. This is where students who have been referred for PBIS services would "check in" and "check out" with school personnel who would speak to them and help to address problem behaviors and guide students towards appropriate behaviors (Swoszowski, Jolivette, & Fredrick, 2013). Although the "check in/check out" system, according to Swoszowski et al. (2013) seems effective it may lack a personal connection, a culturally responsive component, and an ongoing relationship with a responsible and caring adult that some of these students may need (Serpell, Hayling, Stevenson, & Kern, 2009).

Both the culturally responsive approach to referring African-American students for early supports (Green, 2005) and the PBIS strategy of "check-in/check-out" (Swoszowski, Jolivette, & Fredrick, 2013) are intended to improve both academic and behavioral outcomes. What is not addressed in either of these, however, is a strategy that attempts to shift attitudes about school, academics, and social behaviors so students' approach to school and school work is more conducive to their ultimate success.

Mentoring is described as a relationship where one person, possibly an older, more knowledgeable individual, imparts wisdom and experience to a younger, less knowledgeable, less experienced person. It is the process where an advisor, a friend, or a trusted counselor provides his or her life's experience and information that is relevant and beneficial to the development of the other person (Britner, Balcazar, Blechman, Blinn-Pike, & Larose, 2006; Rhodes, 2008; Schwartz, Lowe, Rhodes, 2012). Townsel (1997) describes mentoring as a "…one-to-one relationship between a pair of unrelated individuals, of different ages, interacting on a regular basis, usually characterized by a special bond of mutual commitment…" (pg. 125). Through researching the topic of mentoring, I discovered the literature divides mentoring into three models: youth mentoring, academic mentoring, and workplace mentoring (Eby, Allen, Evans, Ng, & DuBois, 2008). For the purpose of this literature review, I only focused on the research as it relates to youth mentoring.

As a concept, mentoring is thought to have originated from the story in ancient Greek mythology, The Odyssey of Homer. In this story, Odysseus, the king of Ithaca, had a son named Telemachus. As the city of Troy fell, Odysseus went to war leaving Telemachus and his wife Penelope behind. In leaving his wife and son behind, Odysseus asked his trusted friend Mentor to look after Telemachus in his absence. Since the Trojan War lasted longer than Odysseus expected, Mentor was left as a trusted guide, a surrogate parent, and an educator of Telemachus (Colley, 2000).

A review of the literature on youth mentoring reveals that much of what has been studied and reported on in the field of youth mentoring revolves around mentoring students who are presumed to be at-risk, whether academically or socially. This literature

also discusses the potential outcomes these mentoring programs may have on their participants, suggestions to enhance mentoring programs, and the need for additional research in this area (Chan, Rhodes, Howard, Lowe, Schwartz, & Herrera, 2013; Eby, Allen, Evans, Ng, & DuBois, 2008; Huizinga, 2012; Schwartz, Lowe, & Rhodes, 2012; Townsel, 1997; Trepanier-Street, 2004-05). There are widely accepted beliefs about the outcomes and purpose of youth mentoring and mentoring youth believed to be at-risk. One such belief is in cases where a child may be in need of a consistent positive role model; mentoring and mentoring programs may provide an opportunity for these children to be matched with a caring volunteer who could act as that role model while providing guidance and support (Herrera, Grossman, Kauh, & McMaken, 2011). Also, it is thought that through this experience mentees will improve social behaviors, will perform better in school, and will have the opportunity to develop a trusting relationship with an older, more experienced, non-parental figure (Chan et al., 2013). Additionally, mentoring is also thought to be a means of improving attitudes and providing career and academic guidance (Eby, Allen, Evans, Ng, & DuBois, 2008).

Within the field of youth mentoring, the literature provides a description of several settings in which mentoring could take place. One-to-one and natural mentoring is where a younger protégé is counseled by an older more experienced individual or "mentor". Natural mentors are individuals who may have a pre-established relationship with the young person, like a coach or a relative, but may "take the young person under his or her wing" providing them with valuable guidance and encouragement (Hurd & Sellers, 2013; Schwartz, Lowe, & Rhodes, 2012). Another setting discussed in the literature was community-based mentoring (CBM). Community-based mentoring

programs, such as "Big Brothers, Big Sisters", are dedicated to matching older, experienced trained mentors with youths as a means of providing one-to-one mentoring. These mentoring programs may also be found in churches and community organizations (Moody & Fisher, 2009; Schwartz, Rhodes, Chan, & Herrera, 2011). School-based mentoring (SBM) programs, which are growing in popularity, are mentoring programs that take place within the school setting. These programs are designed to address students' social, emotional, as well as academic well-being all within the school setting. These programs can either take place within a group setting or in a one-on-one model (Chan, Rhodes, Howard, Lowe, Schwartz, & Herrera, 2013; Grossman, Chan, Schwartz, & Rhodes, 2011; Rhodes & DuBois, 2008; Schwartz, Lowe, & Rhodes, 2012; Schwartz, Rhodes, Chan, & Herrera, 2011).

<u>Natural Mentoring</u>

Natural mentors are defined as caring and supportive adults who have a pre-existing social connection to a young person, either through familial ties, a neighbor, a coach, a community member, etc. (Hurd, Sanchez, Zimmerman, & Caldwell, 2012; Hurd & Sellers, 2013; Hurd & Zimmerman, 2010). These mentor/mentee relationships are thought to be longer lasting as these relationships oftentimes develop naturally and are mutually established (Hurd & Zimmerman, 2010). These mentor/mentee relationships, according to Hurd et al. (2012), may experience greater positive outcomes since these relationships are not formalized through programs or organizations, the relationship connection has been pre-established, and the mentee may identify in some way with the adult mentor. Additionally, natural mentoring relationships have also been credited with improving academic outcomes as well (Hurd & Sellers, 2013).

The literature regarding natural mentors discussed several studies that evaluated the impact natural mentors had on their adolescent mentees. The participants of each study were African-American, were students in either middle school or high school, and were from diverse socioeconomic backgrounds (Hurd, Sanchez, Zimmerman, & Caldwell, 2012; Hurd & Sellers, 2013; Hurd & Zimmerman, 2010). One study sought to gain a better understanding of the social and emotional benefits of natural mentoring relationships among African-American youth (Hurd & Sellers, 2013). Another study explored the impact natural mentors had in influencing the racial identity thus improving the academic outcomes of African-American high school students (Hurd, Sanchez, Zimmerman, & Caldwell, 2012). The last study looked at how natural mentoring relationships impacted African-American high school seniors and how these relationships helped to build resilience in these participants to avoid certain risks that would negatively affect their lives (Hurd & Zimmerman, 2010). Each study indicated the positive effects mentoring has on mentees and how mentoring provided social and academic benefits as well. The study discussed by Hurd and Zimmerman (2010), however, highlighted in particular the importance of developing resilience especially for youth considered at-risk and how adolescents who had a mentor and a strong relationship with them developed this resilience (Hurd & Zimmerman, 2010). Resilience, as a theory, recognizes that certain at-risk youth have developed certain competencies to overcome adversities and environmental influences to become successful individuals (Bottrell, 2009).

Rhodes and Lowe (2008) describe three factors that are important in developing resiliency in young people. They are as follows:

1.   Characteristics of the individual

2. Characteristics of the family, its relationships, and socioeconomic advantages

3. Characteristics of the community such as relationships to non-related adults, positive role models, connections to community organizations, and schools

What is important to note is that Rhodes and Lowe (2008) identify the importance of young people having supportive relationships with adults that are outside of the immediate family unit. The study discussed by Hurd and Zimmerman (2010) only underscores this importance as it was determined that by having a supportive mentor helped these young people to be resilient and avoid behaviors such as: alcohol, substance abuse, cigarette use, and sexual behavior (Hurd & Zimmerman, 2010). This study was limited in that it did not address the academic outcomes of these students after high school.

The study discussed by Hurd, Sanchez, Zimmerman, and Caldwell (2012), on the other hand, examined not only the effect that natural mentors had on the academic attitudes and achievement of their mentees, but looked at how these natural mentors influenced these attitudes through changing beliefs in racial identity (Hurd, Sanchez, Zimmerman, & Caldwell, 2012). The researchers in this study hypothesized that African-American youth who had a low racial centrality, meaning the way in which they defined themselves in terms of race and believed the public's regard for them and their race was negative, perceived there were barriers to their academic success and performed poorly in school. On the contrary, the researchers believed African-American adolescents who had a high centrality or regard for their race and a low public regard were more likely to

perform well in school and have positive attitudes toward academics (Hurd, Sanchez, Zimmerman, & Caldwell, 2012).

Carter (2008) suggests there is a correlation between racial identity, academic achievement, and school behaviors and reports that having a positive racial identity is necessary for school success (Carter, 2008). The study presented by Hurd, Sanchez, Zimmerman, and Caldwell (2012) showed that these natural mentors provided their mentees with racial socialization messages and gave mentees an opportunity to explore and develop their racial identity in a positive light. It was concluded that these benefits helped to develop resilience in the youth participants as well as improved their academic beliefs and performance (Hurd, Sanchez, Zimmerman, & Caldwell, 2012).

Community-Based Mentoring

Community-Based Mentoring programs are organized, formal programs dedicated to pairing potentially at-risk youths with volunteer mentors (Schwartz, Lowe, & Rhodes, 2012). The research on these programs indicates that these mentoring programs have recently gained in popularity as they are an inexpensive way to address youth delinquency, reducing youth violence, and a means to establish caring and supportive relationships between young people who may be from a disadvantaged background and an unrelated adult role model (Cavell, Elledge, Malcolm, Faith, & Hughes, 2009; Miller, Barnes, Miller, & McKinnon, 2013; Spencer, 2007). There is a strong belief that youth who have strong relationships with a supportive adult have positive social and emotional outcomes. Community-Based Mentoring programs attempt to develop these relationships with caring adult volunteers, relationships that for some young people may have developed naturally with a close family friend or relative (Spencer, 2007).

According to Miller et al. (2013), there are approximately 5,000 organizations in the United States that offer Community-Based Mentoring programs and services to address the needs of over three million at-risk youth (Miller, Barnes, Miller, & McKinnon, 2013). Mentoring programs have gained in popularity, because they have been widely studied as a way to provide positive role-models to youth who lacked them and it has been an initiative that many federal government agencies wanted to put their financial support behind (DuBois, Portillo, Rhodes, Silverthorn, & Valentine, 2011). These programs were believed to an effective intervention to address the various factors impacting at-risk youths such as: social behaviors, conduct disorders, exposure to parental conflict, domestic violence, living in foster care, etc. (Moodie & Fisher, 2009).

There are a variety of these mentoring programs in existence and the research indicates varying outcomes and degrees of success. These programs, however, are still widely accepted as a possible intervention for youth who exhibit at-risk behaviors (Cavell, Elledge, Malcolm, Faith, & Hughes, 2009). One popular community-based mentoring program, Big Brothers/Big Sisters (BBBSA), provides one-on-one mentoring where older mentors, referred to as "Bigs" are paired with younger mentees, referred to as "Littles" who are in need of a caring, supportive, relationship for a committed time period (Moodie & Fisher, 2009; Gettings & Wilson, 2014). Moodie and Fisher (2009) report that mentoring programs such as Big Brothers, Big Sisters (BBBSA) offer flexibility with regards to the types of activities the mentors and mentees engage in and therefore relationships tend to last for longer periods of time which is a key indicator of the success of the mentoring program (Moodie & Fisher, 2009). Other community mentoring programs that are more site-based are limited in the activities that they offer,

tend to be more structured, and have mentoring relationships that tend to be shorter (Miller, Barnes, Miller, & McKinnon, 2013). Lastly, faith-based organizations such as churches and mosques may offer mentoring to the youth who are associated with them and may also provide some outreach to youth not officially belonging to their congregations (Hamilton, Hamilton, Hirsch, Hughes, King, & Maton, 2006). These faith-based mentoring programs are popular as Rhodes and Chan (2008) report that in a national survey 24% of volunteer mentors volunteered through a religious organization (Rhodes & Chan, 2008).

There are several studies of the Big Brother, Big Sisters program as a Community-Based Mentoring program that appear in the literature (DuBois, Portillo, Rhodes, Silverhorn, & Valentine, 2011; Gettings & Wilson, 2014; Moodie & Fisher, 2009; Rhodes, 2008). Most of what has been reported about BBBSA describes this program as "effective" and even going as far as to describe this program as an exemplar in youth development models (DuBois, Portillo, Rhodes, Silverhorn, & Valentine, 2011; Rhodes, 2008). Although BBBSA is considered to be an effective mentoring program, Grossman and Rhodes (2002) highlight some potential negative effects of these mentoring programs as well. Additionally, Grossman and Rhodes (2008) reveal the quality and the effectiveness of a mentoring program had much to do with the quality and duration of the mentoring relationship, specifically mentoring relationships with short durations (less than one year) led to negative outcomes and relationship with longer durations (more than one year) had positive outcomes (Grossman & Rhodes, 2002; Grossman & Rhodes, 2008).

Moodie and Fisher (2009) discuss the effectiveness and the value of a Big Brothers, Big Sisters program (BBBS-M) in Melbourne, Australia. Similar to Big Brothers, Big Sisters in the United States, this program was designed to provide one-on-one mentoring for youths considered to be at-risk of anti-social and delinquent behavior. The young people who are referred to BBBS-M are similar to those referred to BBBSA, having difficulties in school, family issues, and behavioral problems (Moodie & Fisher, 2009). This study sought to analyze the cost-benefit of the Big Brothers, Big Sisters program to determine if the cost of running the program was worth the gains made with the youth who participated in the program. Moodie and Fisher (2009) concluded additional research was necessary to determine the actual cost-benefits of programs such as BBBS-M; however, even "…modest reductions in the prevalence…of high-risk behavior" substantiates the need for programs such as this (Conclusion section, para. 1).

Spencer (2007) writes about a study of a Big Brothers community-based mentoring program where participants who lacked a father-figure at home were paired with an adult mentor for at least one year (Spencer, 2007). This study examined not only how successful these mentoring experiences were, but also how these mentoring relationships benefitted the psychosocial development of the mentees. Interestingly Spencer (2007) notes,

> …[t]he one-to-one and ongoing nature of community-based mentoring relationships may provide special opportunities for men to engage with boys in emotionally close and supportive relationships in ways that challenge conventional gender ideologies regarding emotional vulnerability and expressivity. (pg. 195)

This seems to contradict the research about the relationships youths have and develop with natural mentors (Hurd & Sellers, 2013).

Although these mentoring programs are believed to be a worthwhile intervention for at-risk youth, the effectiveness of these programs has not truly been determined (Moodie & Fisher, 2009). Miller et al. (2013) suggest mentoring may not in all cases produce the desired effect and that there may be a need for additional interventions to produce the desired outcomes (Miller, Barnes, Miller, & McKinnon, 2013). Spencer (2007) also mentions the literature on mentoring research tends to focus on the positive outcomes of mentoring and mentoring programs, yet does very little to address the failure of these programs and the impact they may have on the mentees who participate in them (Spencer, 2007). What seems to be true, however, is mentoring programs are considered to be effective in improving academic, social, and behavioral outcomes when there is a positive relationship between the mentor and mentee and those relationships last longer than one year (Gettings & Wilson, 2014; Grossman & Rhodes, 2002; Spencer, 2007; Rhodes, 2008).

<u>School-Based Mentoring</u>

School-based mentoring (SBM) programs are mentoring programs that have been integrated into the school setting and are one of the fastest growing forms of mentoring in the United States (Chan, Rhodes, Howard, Lowe, Schwartz, & Herrera, 2013; Grossman, Chan, Schwartz, & Rhodes, 2012; Karcher, 2008; Schwartz, Lowe & Rhodes, 2012). These programs have their appeal because the take place during the school day, possibly during lunch or other free or unstructured time during the day, and typically are designed to help youth with academic support, emotional support, and guidance (Schwartz, Lowe, & Rhodes, 2012). The concept of school-based mentoring expanded from this understanding that there are some students who are in school and need extra

support to be successful (Randolph & Johnson, 2008). Also, since the signing of the No Child Left Behind Law in 2001, schools have found it necessary to identify new and innovative ways to provide effective interventions for students who may be academically disengaged and not performing well in their school work (Schwartz, Rhodes, & Herrera, 2012). Considering schools are where children spend most of their time and many of the problematic behaviors that youth may engage in that impact their success in school occur within this setting, it seems practical that a school-based intervention like a mentoring program be considered.

Although research on the success and effectiveness of school-based mentoring programs yields limited, yet mixed results, these programs appear to be an intervention that continues to grow in popularity (Pryce, 2012). Frels et al. (2013) state, "…the majority of school-based mentoring programs have been deemed unsuccessful" (pg. 618). Others such as Kolar and McBride (2010), Herrera et al. (2011) and Grossman et al. (2012) describe some success with school-based mentoring programs and leave the door open to further research (Bustamante, Garza, Nelson, Nichter & Leggett, 2013; Frels, Onwuegbuzie, Herrera, Grossman, Kauh & McMaken, 2011; Grossman, Chan, Schwartz & Rhodes, 2012; Kolar & McBride, 2011) Several key, but varied points were discussed throughout this research that seem to support the case for and against school-based mentoring programs. Similar to other forms of mentoring, the duration of the mentoring relationship continued to appear as a significant predictor in positive outcomes (Grossman, Chan, Schwartz & Rhodes, 2012; Kolar &McBride, 2011; Schwartz, Rhodes, Chan & Herrera, 2011). As with some community-based mentoring programs, mentors and mentees may have to find a common time and place to meet which requires

coordination on the part of both and may be difficult to establish consistency. School-based mentoring (SBM) programs are thought to have a greater likelihood of success because of a consistent time and place to meet (Ryan, Whittaker, & Pinckney, 2002). SBM programs are also believed to be an effective intervention in addressing at-risk youth because of their ability to reach youth who may otherwise be missed by community-based mentoring programs due to their location (Randolph & Johnson, 2008). Finally, school-based mentoring programs may have a greater focus on academics than what one might expect from a community-based mentoring program that may be more activities focused (Kolar & McBride, 2011).

Students selected to participate in these school-based mentoring programs are typically referred for a variety of reasons; however, the students who are referred to these programs are generally all considered "at-risk". Students referred to these programs were from single-parent families, received free and/or reduced lunch (which is an indicator of family financial status), had behavioral and psychological problems, a high exposure to stress, and/or were affected by some academic difficulties. The inclusion of these students in these mentoring programs was considered an intervention in an attempt to help these children (Grossman, Chan, Schwartz & Rhodes, 2012; Herrera, Grossman, Kauh & McMaken, 2011; Karcher, 2008; Schwartz, Rhodes, Chan & Herrera, 2011). These children are referred to these programs because without addressing these challenges the likelihood that the child will experience success in school diminishes. These children will continue to have persistent academic problems, issues with self-esteem, school disengagement, and may act out behaviorally (Schwartz, Rhodes, & Herrera, 2012).

Schwartz et al. (2012) discussed a study that sought to identify the challenges of school-based mentoring programs and the time in which these programs are scheduled throughout the school day (Schwartz, Rhodes, & Herrera, 2012). This study examined mentoring programs that used class and instructional time to meet with students, programs that met with students during lunch, and programs that met after school. Schwartz et al. (2012) stated that students who met with their mentors during instructional time and had to be pulled out of class did not necessarily experience the positive effects that were anticipated and the programs were seen as more problematic by teachers. Karcher (2008) writes "school-related phenomena" such as this can impact the overall effectiveness of the mentoring program (Karcher, 2008; Schwartz, Rhodes, & Herrera, 2012). Additionally, students referred to these mentoring programs for reasons including academic difficulties were missing important instructional time (Schwartz, Rhodes, & Herrera, 2012). On the other hand, programs that met with students after school or during lunch were seen as beneficial as they provided youth with opportunities to participate in constructive activities that they may otherwise not have the opportunity to participate in or the chance to talk and share with their mentor in a safe environment (Schwartz, Rhodes, & Herrera, 2012). Although this study revealed some differences in the effects of mentoring based on when the program was scheduled, it was recommended that this be studied further (Schwartz, Rhodes, & Herrera, 2012).

The duration of mentoring relationships and the frequency in which programs met were other factors that impacted the success of school-based mentoring programs. Most of what has been reported in the literature regarding the duration of successful mentoring relationships seems to be about one year (Grossman, Kauh & McMaken, 2011; Herrera,

Grossman, Chan, Schwartz & Rhodes, 2012; Karcher, 2008). In the studies discussed by both Herrera et al. (2011) and Grossman et al. (2012), students who participated in school-based mentoring programs experienced modest academic improvement after one year of participating in the program (Grossman, Chan, Schwartz & Rhodes, 2012; Herrera, Grossman, Kauh & McMaken, 2011). Karcher (2008) reported students who participated in SBM programs experienced improved self-esteem and improved connections to friends after one year of participation (Karcher, 2008). What is important to note, however, is that the academic gains made by these students were not sustained after a year's time (Herrera, Grossman, Kauh, & McMaken, 2011). Additionally, academic gains were only noted in students who had intact mentoring relationships at the end of the school year (Grossman, Chan, Schwartz, & Rhodes, 2012).

Summary

There has been extensive research conducted related to improving the outcomes of at-risk youth, especially as it relates to the factors that may impact the academic achievement and social behaviors of African-American males (Henry, Knight, & Thornberry, 2012; Noguera, 2012; McKown, 2013; Zehr, 2011). Mentoring has been researched as a potential intervention in addressing the social and emotional needs, as a means of building resilience and reducing high-risk behavior, and improving the academic outcomes that may impact at-risk youth (Hurd & Zimmerman, 2010; Moody & Fisher, 2009; Randolph & Johnson, 2008; Hurd & Sellers, 2013). The research conducted on mentoring identified and explored the three dominant fields within this topic: natural mentoring, community-based mentoring (CBM), and school-based mentoring (SBM).

Natural mentoring or natural mentors are positive, supportive, and caring relationships that develop between an older person and a younger person who have a pre-existing social connection with one another (Hurd & Sellers, 2013). These relationships form naturally with a coach, a neighbor, or a community-member who happens to take an interest in the life of a young person. The research on natural mentors highlighted the importance of young people developing a supportive relationship with adults other than those who are in their immediate family (Rhodes & Lowe, 2008). These natural mentors were significant in helping these youths develop a positive racial identity (Hurd, Sanchez, Zimmerman, & Caldwell, 2012) and to build resilience (Hurd & Zimmerman, 2010) which improved these young peoples' performance in school and helped them overcome adversities when they were confronted with them.

Community-based mentoring (CBM) programs are dedicated to matching adult mentors with young at-risk mentees (Schwartz, Lowe, & Rhodes, 2012). These programs are quite popular in the United States, the most popular being "Big Brother, Big Sisters of America" (Gettings & Wilson, 2014). The research related to community-based mentoring programs revealed mixed results. Although some of what has been discussed was positive, the effectiveness of these programs has not really been determined and in some situations additional interventions were in place to realize a positive results (Miller, Barnes, Miller, & McKinnon, 2013; Moody & Fisher, 2009). The research did, however, indicate that the duration of these mentoring relationships played a role in how successful they were and mentoring relationships that ended abruptly had a negative impact on the mentee (Grossman & Rhodes, 2002; DuBois, Portillo, Rhodes, Silverhorn, & Valentine, 2011).

School-Based Mentoring (SBM) programs, considered to be the fastest growing form of mentoring, are programs that take place within the school setting. These programs are designed to help youth with academic and emotional support, as well as guidance (Schwartz, Lowe, & Rhodes, 2012).What is interesting to note is that the literature describes these programs and their rise in popularity as interventions to address academic performance issues as an outgrowth of the pressures from the 2001 No Child Left Behind legislation (Schwartz, Rhodes, & Herrera, 2012). Although the effectiveness of school-based mentoring programs is mixed (Pryce, 2012), similar to other forms of mentoring the success and the effectiveness appears to be determined by the duration of the mentoring relationships (Grossman, Chan, Schwartz & Rhodes, 2012; Kolar &McBride, 2011; Schwartz, Rhodes, Chan & Herrera, 2011).

Although the research in the field of mentoring tends to report on the positive outcomes of mentoring, the research does little to address the shortcomings of mentoring and mentoring programs and does not sufficiently speak to the effect that abruptly ending mentoring relationships has on the mentee (Spencer, 2007). The research also does not clearly explain how these programs may improve academic performance, attitudes towards school work, and social behaviors that may lead to disciplinary practices that only perpetuate the negative elements impacting African-American males (Barbarin, 2010). This study sought to identify the impact, if any, that school-based mentoring programs have on the academic achievement and social behaviors of African-American males.

Research Design

This study is designed to test the hypothesis that a school-based mentoring program impacts the social behaviors and academic performance of African-American males. In an attempt to address the academic achievement gaps and the disparate impact of disciplinary practices, Sydvery Middle School (pseudonym) developed a mentoring program to support and improve the academic achievement of its participants and to reduce the incidence of inappropriate social behaviors that were leading to suspensions and other exclusionary disciplinary practices.

This quasi-experimental, pre-test/post-test study gathered the following quantitative data: grade point averages, standardized test performance (results from the Pennsylvania State System of Assessment or PSSA), behavioral referrals, and number of suspensions from both the mentored group (program group) and the non-mentored group (comparison group) at the beginning of their middle school experience, seventh grade. These data were then compared to the grade point averages, standardized test performance (PSSA), behavioral referrals, and number of suspensions at the end of their middle school experience, ninth grade. The data were analyzed to determine the impact, if any, this school-based mentoring program, as an intervention, had on these variables.

Research Question

The purpose of this study is to determine the extent to which a school-based mentoring program at a suburban middle school outside of Philadelphia, PA is related to the social behaviors and the academic achievement of African-American male participants. The following research questions guided this study:

1. Do the African-American male students who participate in the mentoring program perform better, as defined by grade point average, than the African-American male students who do not participate in the mentoring program?

2. Do the African-American male students who participate in the mentoring program perform better, as defined by performance on PSSA, than the African-American male students who do not participate in the mentoring program?

3. To what extent is the mentoring program at Sydvery Middle School correlated with social behaviors of the students who participate?

    a. After participating in this mentoring program, is there a change in the number of disciplinary referrals?

    b. After participating in this mentoring program, is there a change in the number of suspensions?

<u>Participants</u>

This study sought to examine the effects a school-based mentoring program had on African-American male students over the course of their time in middle school. This study identified and selected the African-American male students who were at some point during their seventh, eighth, or ninth grade year referred to and participated in this school's mentoring program, because they were considered to be "at-risk" for academic underachievement and/or pervasive disciplinary issues. This consideration for being "at-risk" was based on an observed academic and/or behavioral need, the need for a positive role model in their lives, or these students were considered to be disengaged in school. The participants in this study all attended Sydvery Middle School, located in a suburban community outside of the city of Philadelphia, PA. According to information obtained

from the National Center for Education Statistics, Sydvery Middle School educates approximately 1,731 students. Sixty-four percent of the students who attend Sydvery Middle School are Caucasian and 23.4% of students are African-American. Nineteen percent of the students at Sydvery Middle School are considered low-income students as determined by their free or reduced-price lunch eligibility (Common Core of Data School Directory Information, 2015).

To determine the impact this mentoring program had on its participants this study examined grade point averages, standardized test performance, office discipline referrals, and the number of suspensions of the all the African-American male students who attended Sydvery Middle School during the same three year period (SY 2012-2013; SY 2013-2014; and SY 2014-2015).

Program Description

This program was designed to address what was seen as a problem impacting a segment of the school's population, African-American male students. Although the program's demographics include female students, as well as students of other races and ethnicities, for the purpose of this study the focus will be on the African-American students in the program. As an outgrowth of the school's School-Wide Positive Behavioral Support (SWPBS) program and in an effort to utilize preventative and proactive measures to improve academic performance and to address behaviors that were leading to exclusionary disciplinary practices, such as out of school suspensions, the school recognized the need to develop a program that could address these concerns. The development of a school-based mentoring program was seen as a way to not only provide students with a trusting adult within the school whom they could develop a positive

relationship with, but also have someone within the school who could assist and support these children with issues related to school work and academic performance, behavior, attendance, or a lack of school engagement (Randolph & Johnson, 2008).

Sydvery Middle School's CORE team, which is comprised of the building principal, assistant principals, coordinator of student services, and guidance counselors, meets regularly to discuss student issues such as academic performance, problematic behavioral issues displayed by students, school attendance problems, and general issues that may affect the success of the students at the school. During these meetings, the school team discusses individual students referred to this process and shares possible strategies and interventions for addressing these concerns. One of the intervention strategies that has been used at Sydvery Middle School is assigning students displaying these "at-risk" behaviors, whom the team feels would benefit, a mentor that could establish a relationship with these students to help them become more successful or to address specific concerns they may have.

These mentors are teachers, guidance counselors, or support staff members that work at Sydvery Middle School and who have an interest or desire to work with students that may be considered at risk. The age, ethnicity, and the length of time these individuals have worked at this middle school varied, however each of the adult mentors happened to be male. Based on the information provided, these individuals did not seem to possess any specialized skills or training to become mentors, but had a desire to help these students succeed academically and improve the behaviors that were leading to these students getting into trouble.

Prior to these school mentors engaging or establishing this more targeted contact with the student, parents or guardians are notified via letter or phone call from the school's guidance department to solicit their permission for their child to participate in the mentoring program. Once the parent or guardian grants permission for their child to participate, a letter of affirmation is sent home to the parent and then the mentor can begin this more targeted interaction with the student. Mentors would be assigned to students based on how their schedules coordinated, if the adult mentor had some pre-existing relationship with the student, or on a first come, first served basis. These mentors would schedule a time to meet with the students on a weekly basis where the student could come to the mentor's office or classroom and have an opportunity to talk, discuss concerns, or share experiences with one another. Some mentors, during their meetings with their student, would help them organize their backpacks and provide them with tutoring or assistance with their school work. Other mentors would work with students to come up with behavior, academic or school attendance goals and use these meetings with students to check in on their progress in meeting those established goals. If students did find themselves in trouble and a disciplinary meeting with the principal or one of the assistant principals was scheduled, mentors would also attend the meeting as a support for the students to talk about ways to improve their behavior so the same mistakes would not be repeated.

Data Collection

Data for this study were provided to me and contained a de-identified list of all African-American male students who attended this school during the 2012-2013 (grade 7), 2013-2014 (grade 8), and 2014-2015 (grade 9) school years. The spreadsheet

indicated the students who participated in the school's mentoring program at any point during the 2012-2013, 2013-2014, and 2014-2015 school years. These students were classified as the program group. The remaining students, those who did not participate in the mentoring program or those that were offered the opportunity to participate in the mentoring program, but chose not to, were considered the comparison group. The quantitative data included on this spreadsheet consisted of grade point averages, disciplinary referrals, and number of suspensions for the participants and non-participants groups from the school's data collection software. PSSA test data included on this spreadsheet were gathered from State reports that are released to the district. The grade point averages and PSSA test data collected were used to answer the question if mentoring had any impact on academic performance. The data collected for disciplinary referrals and suspensions were used to answer the question if mentoring had any impact on the social behaviors of the participants. These data were provided to me by the district in a FERPA de-identified way where the names of the students and student identification numbers were removed and random subject numbers were assigned to protect the identity of the students in this study.

CHAPTER 4
FINDINGS

The purpose of this study was to determine the extent to which a school-based mentoring program impacted the social behaviors and academic performance of African-American males in a middle school located in suburban Philadelphia. The methodology section described the process of collecting and analyzing data which consisted of: grade-point averages, standardized test results (Reading and Mathematics PSSA results from grade 7 and grade 8), and data specific to disciplinary infractions and suspensions from two groups, a mentored group and a non-mentored group, during the 2012-2013, 2013-2014, and 2014-2015 school years.

The research questions that were used to guide this study were:

1. Do African-American male students who participate in the mentoring program perform better, as defined by grade point average, than African-American male students who do not participate in the mentoring program?

2. Do African-American male students who participate in the mentoring program perform better, as defined by performance on PSSA, than African-American male students who do not participate in the mentoring program?

3. Do the African-American male students who participate in the mentoring program at Sydvery Middle School have fewer instances of inappropriate social behaviors than students with similar characteristics who do not participate?

    a. Is there a difference between the two groups regarding a change in the number of disciplinary referrals?

b. Is there a difference between the two groups regarding a change in the number of suspensions?

Descriptive Data

        This study examined the impact of a school-based mentoring program on African-American male participants who attended Sydvery Middle School between September 2012 and June 2015 compared to African-American males who attended this school, but were not mentored during the same time period. The table below provides some demographic information about each group. Although these data were not used to determine the impact of mentoring, it is information that is collected and reported for the purpose of disaggregating PSSA results and is illustrated here to provide information about the characteristics of the participants in each group.

Table 1
Descriptive Data of Participants in Special Education and Economically Disadvantaged

Demographic Information	Mentored Group (n=11)	Non-Mentored Group (N=112)
Students Receiving Special Education		
YES	4	10
NO	6	66
Missing	1	36
Students who are Economically Disadvantaged		
YES	7	28
NO	3	35
UNKNOWN	1	49

<u>GPA</u>

To answer research question number one: *Do African-American male students who participate in the mentoring program perform better as defined by grade point average than African-American male students who do not participate in the mentoring program?,* Grade Point Averages (GPA) for the 123 students in this study were collected for each of the three years of their attendance at Sydvery Middle School. Table 2 illustrates the means and standard deviations for the participants' grade point averages over three years. GPA1 reflects their grade point average in seventh grade (2012-2013); GPA2 reflects the participants' grade point average in eighth grade (2013-2014); and GPA3 reflects the participants' grade point average in ninth grade (2014-2015).

Table 2
Means and Standard Deviations for GPA

	Group	Mean	Standard Dev.	N
GPA Year 1	Non-mentored	2.50	.84	48
	Mentored	1.69	.74	9
	Total	2.37	.87	57
GPA Year 2	Non-mentored	2.45	.82	48
	Mentored	1.75	.63	9
	Total	1.34	.83	57
GPA Year 3	Non-mentored	2.44	.82	48
	Mentored	1.78	.84	9
	Total	2.33	.85	57

The GPA data were analyzed by a 2 (Mentored/Non-Mentored) by 3 (Year 1, 2, and 3), repeated measures analysis of variance. The results of this analysis are presented in Table 3. Before the results are presented, a brief comment is in order about the analysis used. The repeated measures analysis of variance used for this analysis tests the main effect for group, the main effect for time and the interaction between these two. Since the students who are in the mentored group were placed there because of their lower

academic performance, it would be expected that this group would have a significantly lower GPA, especially at the beginning the program. The effectiveness of the program would be demonstrated by a change in GPA between the two groups. This would be shown by a significant interaction term in the ANOVA. Also, in current usage, all statistical results must be reported with some form of an effect size. For all ANOVAs, this is reported as what is called a partial eta squared. A partial eta squared of .13 or above is considered "large" using the term originally created by Cohen. As shown in Table 3 there is a significant main effect for group with a large effect size. As illustrated in Table 3 and Figure 1, the Non-Mentored group has a significantly higher GPA at all three data points. A follow-up analysis indicated that the difference at each of the years was statistically significant ($p < .01$ in each case). A comparison across time for each group indicated that there was no significant difference for any of the years. Consequently, the Non-Mentored group started out with higher grade point averages and maintained this difference throughout their middle school years. This is not particularly shocking as part of the criteria for recommendation to the mentoring program is being at-risk academically. Based on these results, the Non-Mentored group and the Mentored group are significantly different in terms of their GPA in all three years. The students in the Non-Mentored group had a higher GPA than the students in the Mentored Group at the end of their seventh grade year. As such, these data show that the mentoring program did not have an impact on the academic performance of the students in the program.

Table 3
ANOVA Summary Table for GPA

Source	Df	Mean Squared	F	Significance	Partial Eta Squared
Group	1	11.749	6.589	.013	.107
Year	2	.002	.014	.986	.000
Interaction	2	.053	.494	.612	.009

Figure 1
ANOVA Graph for GPA
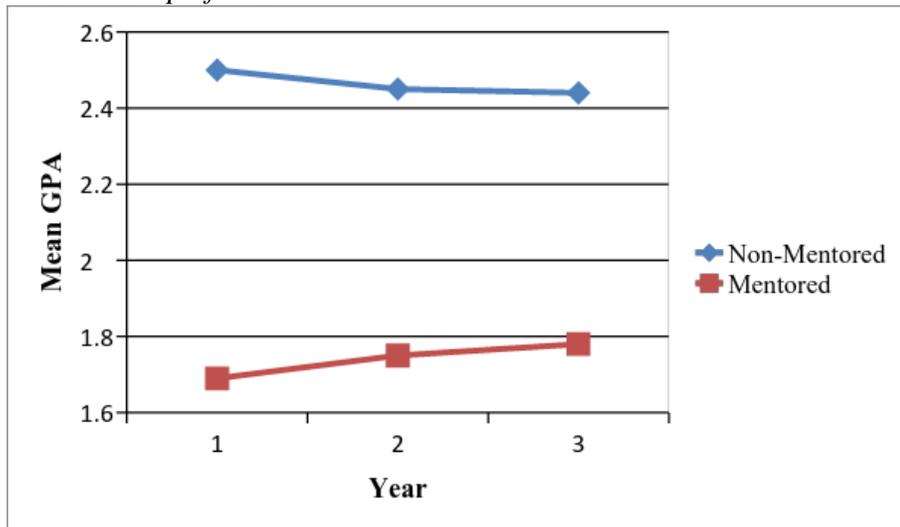
PSSA Data

Math

 The second research question is: *Do African-American male students who participate in the mentoring program perform better on PSSA than African-American male students who did not participate in the mentoring program?* A total of sixty-three PSSA scores were collected in reading and in mathematics for students in both groups during their seventh and eighth grade year, the years this assessment is given. The total number of scores collected for this assessment may differ from the total number of students in the study due to a variety of reasons, such as opting-out of the assessment by parent request.

 Table 4 provides a description of how students in both the non-mentored and mentored groups performed on the mathematics PSSA assessment in seventh grade (Year 1 of the study). This table delineates the performance into four categories, students who performed at the *Advanced* level, *Proficient* level, *Basic* level, or *Below Basic* level. Students performing at the *Basic* or *Below Basic* level are deemed academically at-risk. As illustrated in Table 4, during Year 1, thirty-six non-mentored students performed at the *Advanced* level compared to one mentored student. Seventeen non-mentored students performed at the *Proficient* level compared to five mentored students. Six non-mentored students performed at the *Basic* level compared to three mentored students. Four non-mentored students performed at the *Below Basic* level compared to one mentored student.

 Similarly, Table 5 provides a description of how these students performed on the mathematics PSSA assessment in their eighth grade year (Year 2 of the study). Table 5

shows that thirty-three non-mentored students performed at the *Advanced* level compared to one mentored student. Nine non-mentored students performed at the *Proficient* level compared to four mentored students. Ten non-mentored students performed at the *Basic* level compared to four mentored students. Two non-mentored students performed at the *Below Basic* level compared to one mentored student.

Table 4
Percent of Students in Each PSSA Mathematics Category in Year 1 for Mentored and Non-Mentored Students.

			Level Math1				Total
			Below Basic	Basic	Proficient	Advanced	
Group	Non-Mentored	Count	4	6	17	36	63
		% within Group	6.3%	9.5%	27.0%	57.1%	100.0%
	Mentored	Count	1	3	5	1	10
		% within Group	10.0%	30.0%	50.0%	10.0%	100.0%
Total		Count	5	9	22	37	73
		% within Group	6.8%	12.3%	30.1%	50.7%	100.0%

The data in Table 4 were analyzed by a 2 by 5 chi square. The result was statistically significant (chi square = 8.404, p = .038).

Table 5
Percent of Students in Each PSSA Mathematics Category in Year 2 for Mentored and Non-Mentored Students.

			Level Math2				Total
			Below Basic	Basic	Proficient	Advanced	
Group	Non-Mentored	Count	2	10	9	33	54
		% within Group	3.7%	18.5%	16.7%	61.1%	100.0%
	Mentored	Count	1	4	4	1	10
		% within Group	10.0%	40.0%	40.0%	10.0%	100.0%
Total		Count	3	14	13	34	64
		% within Group	4.7%	21.9%	20.3%	53.1%	100.0%

As before, the data were analyzed by chi square. The value of the chi square was 8.904, p = .031.

Table 6 presents the mean PSSA scores and standard deviations in mathematics for both the non-mentored and mentored groups.

Table 6
Means and Standard Deviations for PSSA Math Data

Test	Group	Mean	Std. Deviation	N
PSSA Math1 (Grade 7)	Non-Mentored	1547.92	276.42	53
	Mentored	1292.50	131.82	10
	Total	1507.38	274.70	63
PSSA Math2 (Grade 8)	Non-Mentored	1507.17	225.46	53
	Mentored	1274.80	117.10	10
	Total	1470.29	227.93	63

The PSSA Math data were also analyzed by a repeated measure analysis of variance which is presented below in Table 7 and Figure 2. As shown in Table 7 there is a significant main effect for Group with a large effect size, with a non-significant main effect for Time and a non-significant interaction. These data can be interpreted as the non-mentored group starts out significantly higher than the mentored group and remains higher. Neither the non-mentored group nor the mentored group changes significantly over time.

Table 7
ANOVA Summary Table of PSSA Math Data

Source	df	Mean Squared	F	Significance	Partial Eta Squared
Group	1	1000872.67	10.37	.002	.145
Year	1	14372.90	.87	.355	.014
Interaction	1	2235.76	.14	.714	.002

Figure 2
ANOVA Graph of PSSA Math Data
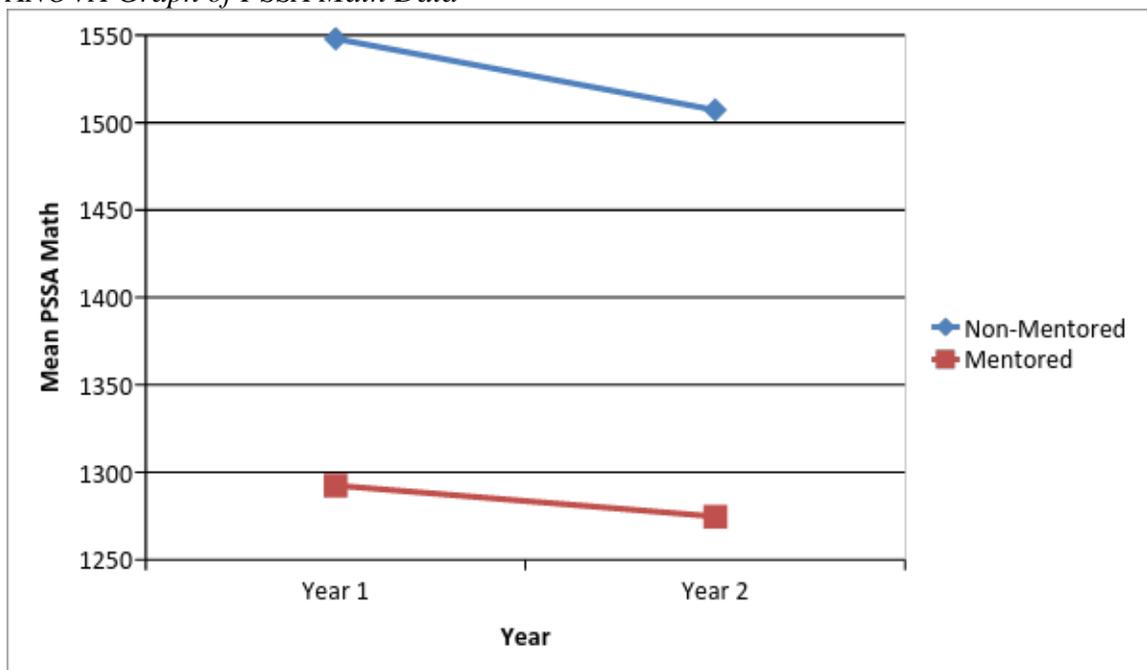
Reading

Table 8 provides a description of how students in both the non-mentored and mentored groups performed on the reading PSSA assessment in seventh grade (Year 1 of the study). This table, similar to the data for the math PSSA, delineates the performance into four categories, students who performed at the *Advanced*, *Proficient*, *Basic*, or *Below Basic* level. As illustrated in Table 8, during Year 1, fifteen non-mentored students performed at the *Advanced* level compared to no mentored students. Twenty-nine non-mentored students performed at the *Proficient* level compared to one mentored students. Nine non-mentored students performed at the *Basic* level compared to four mentored students. Ten non-mentored students performed at the *Below Basic* level compared to five mentored student.

Similarly, Table 9 provides a description of how these students performed on the reading PSSA assessment in their eighth grade year (Year 2 of the study). Table 9 shows that twenty-eight non-mentored students performed at the *Advanced* level compared to two mentored students. Fifteen non-mentored students performed at the *Proficient* level compared to two mentored students. Seven non-mentored students performed at the *Basic* level compared to two mentored students. Four non-mentored students performed at the *Below Basic* level compared to four mentored students.

Table 8
Crosstab PSSA Reading Results for Year 1

			LevelReading1				
			Below Basic	Basic	Proficient	Advanced	Total
Group	Non-Mentored	Count	10	9	29	15	63
		% within Group	15.9%	14.3%	46.0%	23.8%	100.0%
	Mentored	Count	5	4	1	0	10
		% within Group	50.0%	40.0%	10.0%	0.0%	100.0%
Total		Count	15	13	30	15	73
		% within Group	20.5%	17.8%	41.1%	20.5%	100.0%

The chi square computed on the data in Table 8 = 13.203, p = .004.

Table 9
Crosstab PSSA Reading Results for Year 2

			LevelReading2				
			Below Basic	Basic	Proficient	Advanced	Total
Group	Non-Mentored	Count	4	7	15	28	54
		% within Group	7.4%	13.0%	27.8%	51.9%	100.0%
	Mentored	Count	4	2	2	2	10
		% within Group	40.0%	20.0%	20.0%	20.0%	100.0%
Total		Count	8	9	17	30	64
		% within Group	12.5%	14.1%	26.6%	46.9%	100.0%

For the data in Table 9, the chi square = 9.486, p = .023.

The means and standard deviations for the two years the Reading PSSA was administered during this study are presented in Table 10.

Table 10
*Means and Standard Deviations for PSSA Reading Data*

	Group	Mean	Std. Deviation	N
PSSAReading1	Non-Mentored	1363.74	191.56	53
	Mentored	1150.20	122.31	10
	Total	1329.84	197.83	63
PSSAReading2	Non-Mentored	1462.66	210.60	53
	Mentored	1196.80	173.34	10
	Total	1420.46	226.17	63

The PSSA reading data were analyzed by a repeated measure analysis of variance which is shown below in Table 11 and Figure 3. As shown in Table 11, there is significant main effect for Group and a significant main effect for Year, both with large effect sizes. The interaction, however, is not significant. Consequently, these data indicate that there was significant improvement shown in the non-mentored group from year one to year two in their mean reading PSSA scores. Additionally, the mentoring group also improved their mean reading PSSA scores from year one to year two of the study, albeit not as significant as the non-mentored group. The groups, however, remain different in that the non-mentoring group continues to outperform the mentored group during both year one and year two.

Table 11
ANOVA Summary Table of PSSA Reading Data

Source	df	Mean Square	F	Significance	Partial Eta Squared
Group	1	966706.30	14.04	.000	.187
Year	1	89079	12.99	.001	.176
Interaction	1	11516.380	1.68	.200	.027

Figure 3
ANOVA Graph of PSSA Reading Data
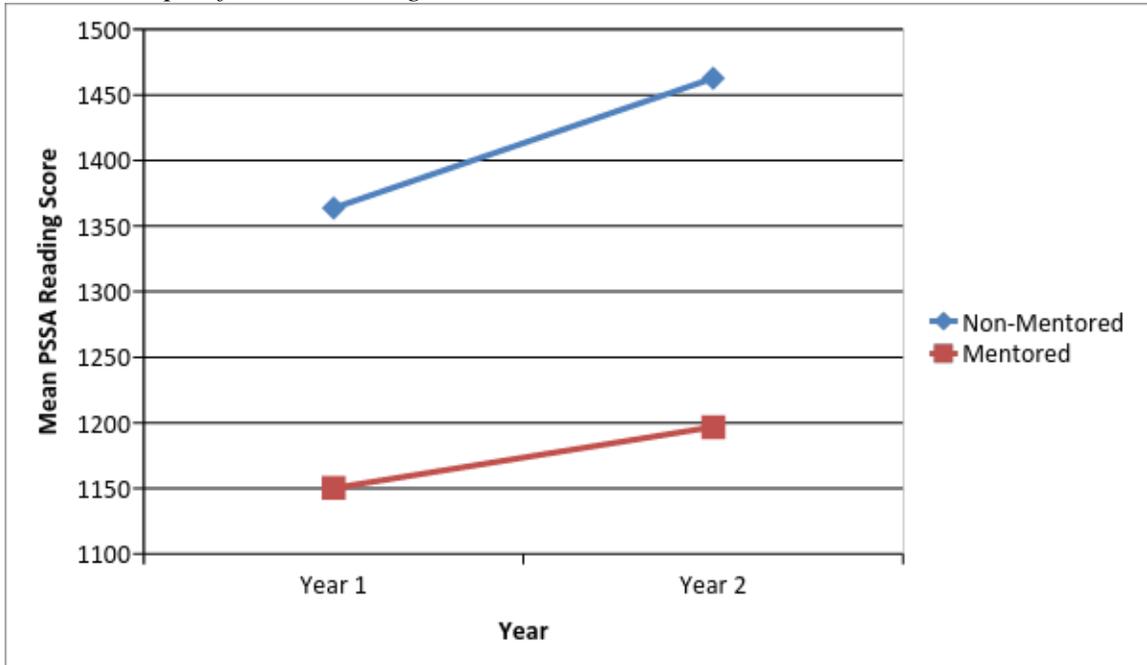
Discipline Data

Infractions

To answer the third research question: *To what extent does the mentoring program at Sydvery Middle School impact the social behaviors of African-American male students as indicated by a change in disciplinary infractions and suspension?*, data from disciplinary infractions and suspensions from the 2012-2013, 2013-2014, and 2014-2015 school year were collected. Table 12 presents the means and standard deviations of the behavioral infractions from each of the three years of this study for the non-mentored group and the mentored group. These behavioral infractions are instances of inappropriate behavior such as: cutting class, profanity, or disrespect that lead to an office disciplinary referral and a consequence like an after school detention. As illustrated here, the mean of the non-mentored group's behavioral infractions decreases from their seventh grade year to their ninth grade year (mean=2.30 in SY 2012-2013 to mean=.67 in SY 2014-2015). The students who were in the mentored group experienced a decrease in their mean behavioral infractions from their seventh grade year (mean= 10.10 in SY 2012-2013) to their eighth grade year (mean= 4.50 in SY 2013-2014), but experienced a slight increase in mean behavioral infractions in their ninth grade year (mean= 5.81 in SY 2014-2015).

Table 12
Means and Standard Deviations of Behavioral Infractions

	Group	Mean	Std. Deviation	N
# of infractions SY2013	Non-Mentored	2.30	7.31	112
	Mentored	10.10	7.11	11
	Total	2.99	7.60	123
# of infractions SY2014	Non-Mentored	1.14	3.10	112
	Mentored	4.46	4.27	11
	Total	1.44	3.33	123
# of infractions SY2015	Non-Mentored	.67	1.65	112
	Mentored	5.82	7.05	11
	Total	1.12	2.95	123

To further compare the behavioral infractions of the non-mentored group and the mentored group a repeated measures analysis of variance was conducted for the non-mentored and the mentored group for the three years they attended this school. This ANOVA is shown below in Table 13 and in Figure 4. As shown in Table 13, there is a significant main effect for Group with a large effect size and a significant main effect for Year with a medium effect size. The interaction between Group and Year is not significant although the probability approaches significance ($p = .069$).

Table 13
ANOVA Summary Table of Behavioral Infractions

Source	df	Mean Square	F	Significance	Partial Eta Squared
Group	1	883.314	27.283	.000	.184
Year	2	136.463	7.242	.001	.056
Interaction	2	50.885	2.701	.069	.022

In looking at the visual representation of this analysis (Figure 4), both the mentored and the non-mentored groups have less behavioral infractions from their seventh grade year compared to their ninth grade year. The decline in behavioral

infraction of the non-mentored group appears subtle, yet over time there are less infractions. The mentored group, however, appears to have a significant decrease in behavioral infractions from Year 1 to Year 2 (p= .026), but no significant difference between Year 1 and Year 3, or between Year 2 and Year 3.

Figure 4
ANOVA Graph of Behavioral Infractions
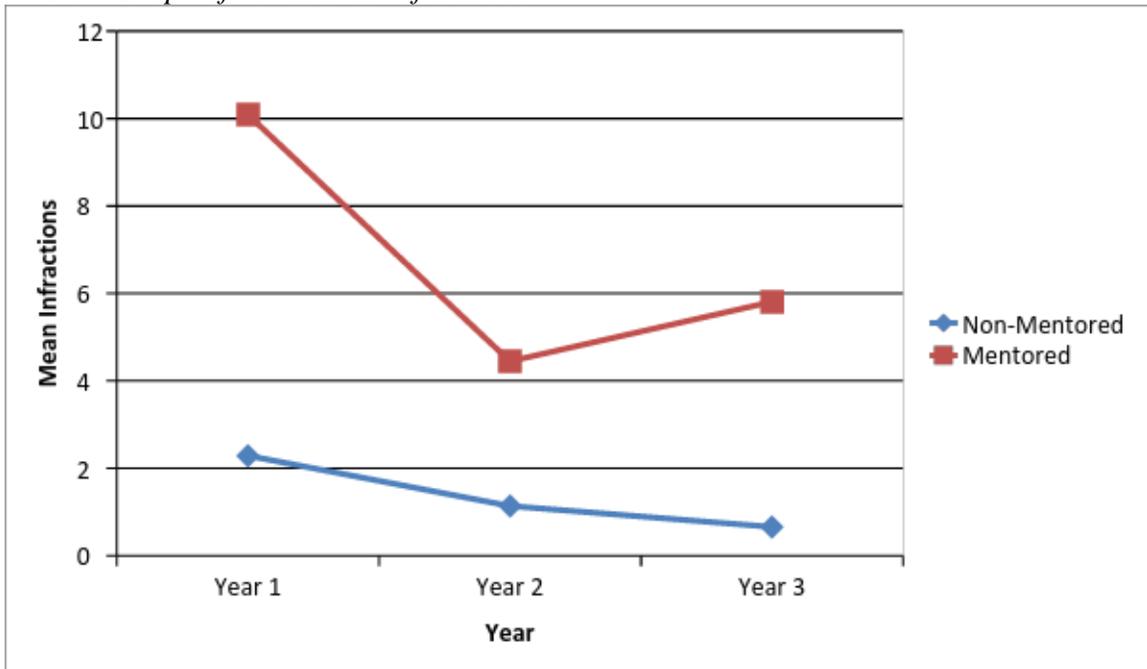
Suspensions

In addition to analyzing behavioral infractions, to answer research question number three: *To what extent does the mentoring program at Sydvery Middle School impact the social behaviors of African-American male students as indicated by a change in disciplinary infractions and suspension?*, suspension data were also analyzed for the non-mentored and mentored students using a repeated measures analysis of variance. Table 14 shows the means and standard deviations of the suspensions that the non-mentored and the mentored students received during SY2012-2013, SY2013-2014, and SY2014-2015. These suspensions are exclusions from school that are received for more serious behavioral offenses such as fighting or pervasive instances of defiance. The students who did not participate in the mentoring program were suspended less than students who did participate in the mentoring program during each of their three years attending this school. The non-mentored students reduced their mean suspensions from SY2013 to SY 2015. The mentored students, however, had an increase in their mean suspension from SY2013 to SY2104 and a decrease in their mean suspensions from SY2014 to SY2015.

Table 14
*Means and Standard Deviations for Suspensions*

	Group	Mean	Std. Deviation	N
# of suspensions SY2013	Non-Mentored	.312	1.3222	112
	Mentored	.636	1.0269	11
	Total	.341	1.2984	123
# of suspensions SY2014	Non-Mentored	.179	.6327	112
	Mentored	1.000	.7746	11
	Total	.252	.6847	123
# of suspensions SY2015	Non-Mentored	.098	.3541	112
	Mentored	.818	1.6011	11
	Total	.163	.6056	123

A repeated measures analysis of variance was conducted to further compare these two groups. As shown in Table 15, there was only a significant main effect for Group. The visual representation of the means in Figure 5 displays the increase in suspensions from Year 1 to Year 2 for the mentored group and then a decrease in suspensions in Year 3. It is clear that the non-mentored group reduced their suspensions significantly between Year 2 and Year 3.

Table 15
ANOVA Summary Table for Suspensions

Source	Df	Mean Square	F	Significance	Partial Eta Squared
Group	1	11.616	9.587	.002	.073
Year	2	.205	.335	.716	.003
Interaction	2	.692	1.132	.324	.009

Figure 5
ANOVA Graph for Suspensions
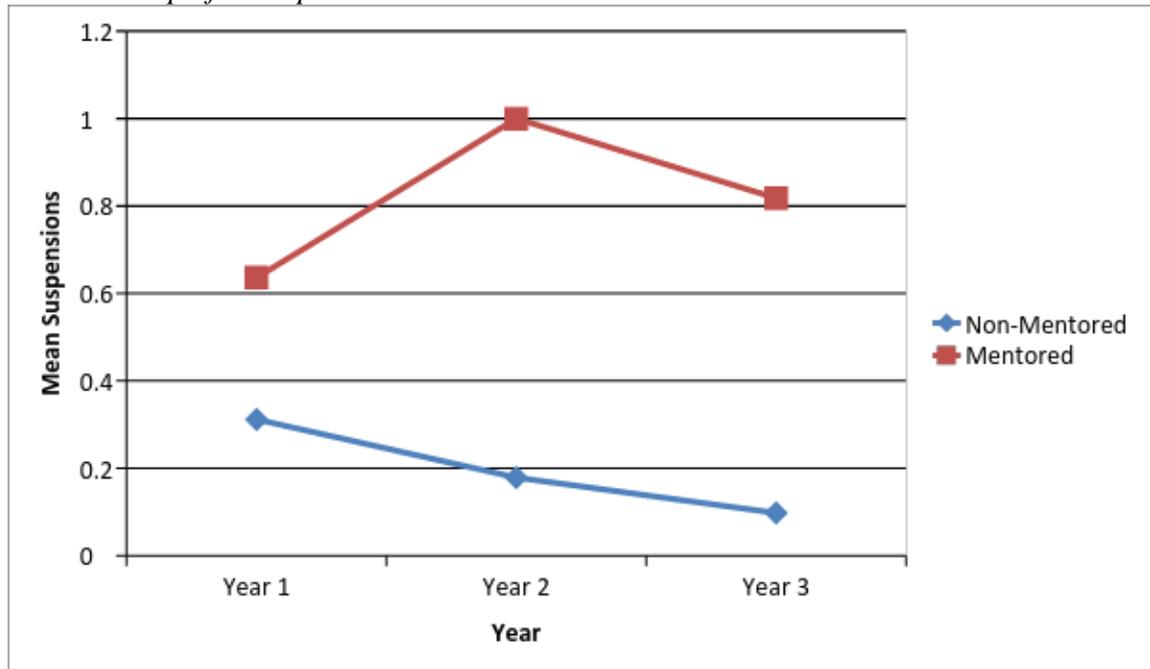
Summary

The data presented in this study indicated the academic performance of students who participated in the mentoring program at Sydvery Middle School as determined by their mean overall grade point averages, improved slightly from their seventh grade year to their ninth grade year (mean=1.69 in Year 1 to mean = 1.78 in Year 3). A slight decline in overall mean grade point averages was noticed for the students in the non-mentored group from their seventh grade year to their ninth grade year (mean= 2.50 in Year 1 to mean= 2.44 in Year 3). Although it may appear that the mean grade point average of students in the mentoring group improved slightly during their three years, the non-mentored group started out with a significantly higher mean grade point average than the mentored group and this remained the case during each of the three years these students were in middle school.

The data for the math PSSA results were analyzed by examining their performance as indicated by their levels of proficiency and their mean PSSA math scores over time. During their seventh grade year, ten out of sixty-three or sixteen percent of the non-mentored students who took the math PSSA performed at the *Basic* or *Below Basic* level and therefore are considered academically at-risk. Four out of ten or forty percent of the mentored students or who took the math PSSA performed at the *Basic* or *Below Basic* level and therefore are considered academically at-risk. Similarly, in eighth grade twelve out of fifty-four or twenty-two percent of the non-mentored students performed at the *Basic* or *Below Basic* level compared to five out of ten or fifty percent of the mentored students. The percentage of students in the non-mentored group who performed at the *Basic* or *Below Basic* level in their seventh grade year (16%) increased in their eighth

grade year (22%). This was also the case for the students in the mentored group where forty percent of the students were *Basic* or *Below Basic* in seventh grade and fifty percent of the students were *Basic* or *Below Basic* in eighth grade. The math PSSA data were also analyzed using an analysis of variance which indicated that there was no statistically significant interaction between the non-mentored and mentored groups over time (p< .714). The non-mentored group performed better on their math PSSA than the mentored group in both their seventh and eighth grade years.

Similarly, the data for the reading PSSA results were also analyzed by examining their performance as indicated by their levels of proficiency and their mean PSSA reading scores over time. In seventh grade, nineteen out of sixty-three or thirty percent of the non-mentored students who took the reading PSSA performed at the *Basic* or *Below Basic* level compared to nine out of ten or ninety percent of mentored students performing at the *Basic* or *Below Basic* level. In their eighth grade year, eleven out of fifty-four or twenty percent of non-mentored students performed at the *Basic* or *Below Basic* level compared to six out of ten or sixty percent of mentored students performing at the *Basic* or *Below Basic* level. There were three more students in the mentored group who improved their performance to either the *Advanced* or *Proficient* level in their eighth grade year, which could be considered an improvement from Year 1 to Year 2 for the mentored group. The same improvement, however, holds true for the students in the non-mentored group from Year 1 to Year 2. These data were also analyzed using an analysis of variance which founded no statistically significant interaction between these groups over time (p < .200). Overall, like their performance on the math PSSA, the non-

mentored students performed better than the mentored students in both their seventh grade and eighth grade years.

The analysis of behavioral infractions and suspensions yields results that are more interesting and should be considered as part of future research on school-based mentoring. This study examined behavioral infractions and suspensions separately since the severity of the offense leading to a suspension is much greater. In each of the three years of this study the mentored group had significantly more behavioral infractions than the non-mentored group. This is not an unexpected fact as students who demonstrated a high propensity for inappropriate behaviors were recommended for this program. This study found that both the mentored and the non-mentored groups' behavioral infractions decreased from Year 1 to Year 3. The behavioral infractions for the mentored and non-mentored groups were analyzed using an analysis of variance which found that although there was no statistical significance for the interaction between group and year ($p < .069$), when the analysis is conducted for the transition from Year 1 to Year 2 there is statistical significance ($p = .026$). This interesting reduction from Year 1 to Year 2 is further illustrated when it appears in the graphic representation of the ANOVA, although there is a slight increase in behavioral infractions in Year 3. The reduction in behavioral infractions from Year 1 to Year 2 could partly address the hypothesis that the mentoring program has some impact on social behaviors; however, further analysis would need to be conducted to solidly make that claim.

The number of suspensions for both the mentored and non-mentored groups was also analyzed using an analysis of variance. Similar to the data for behavioral infractions, the non-mentored group had significantly fewer suspensions than the mentored group in

all three years of the study. Where the students in the non-mentored group decreased the number of suspensions from Year 1 to Year 2 to Year 3, the students in the mentored group experienced a slight increase in the number of suspensions from Year 1 to Year 2, then a decrease in Year 3. The mean number of suspensions for the mentored group was higher in Year 3 (mean= .818) than the mean in Year 1 (mean= .636). Again, the data for suspension indicated no statistical significance for the interaction between group and year ($p < .324$).

One might deduce from the analysis of these data that school-based mentoring may not be effective in significantly improving the academic performance or substantially reducing the instances of problematic behavior in African-American students who are considered academically or behaviorally at-risk. The academic gains as determined by mean grade point averages were minimal for the students in the mentoring group and changes in mean grade point averages for the students in the non-mentoring group did not change significantly enough to make a determination that mentoring, as an intervention, had any impact. The same would be the case for the analysis of the math and reading PSSA results. The analysis indicates that there was not any significant change in the results to make a determination that mentoring impacted academic performance, as determined by these measures. The analysis of the disciplinary data, specifically for behavioral infractions, leads me to feel that there is enough evidence to warrant additional studies on the effectiveness of school-based mentoring on African-American males.

CHAPTER 5
CONCLUSIONS AND DISCUSSIONS

The purpose of this study was to determine the extent to which a school-based mentoring program in a suburban middle school outside of Philadelphia, PA impacts the social behaviors and the academic achievement of African-American male participants. This mentoring program was designed to link students who are struggling academically and are at-risk behaviorally with a trusting adult role model within the school. The relationship that was developed between the student participants in the program and the role models or mentors is thought to be a proactive and preventative intervention designed to assist students academically and to reduce problematic behaviors. In an attempt to understand the potential benefits of this mentoring program, this study considered grade point averages, performance on the Pennsylvania State System of Assessment (PSSA), behavioral infractions, and suspensions of the African-American male students that participated in this program and compared these data to the African-American male students who attended the same middle school, but did not participate in the mentoring program.

To examine the hypothetical impact the mentoring program had on academic achievement, this study analyzed grade point averages of the African-American male participants in the mentoring program during the 2012-2013, 2013-2014, and 2014-2015 school year and compared them to the African-American male students who did not participate in the mentoring program during the same time period. This study also examined the performance of these students on the standardized test, the Pennsylvania State System of Assessment (PSSA), from the 2012-2013 and 2013-2014 school year. To understand the impact this mentoring program had on social behaviors, this study

examined the number of behavioral infractions and the number of suspensions received during middle school for the African-American male participants in this mentoring program as compared to the African-American males who did not participate the program.

An analysis of variance was conducted to determine if there was a statistically significant difference in academic performance for the students participating in the mentoring program compared to the students that did not participate. This study found no significant differences in the academic performance between the participants in the mentoring program compared to students who did not participate in the mentoring program over their three years in middle school. The students who were not in the mentoring program started out with higher grade point averages than the student in the mentoring program in seventh grade and their grade point averages remained higher than the mentored group through ninth grade. This was also the case when analyzing the performance of both the non-mentored and mentored group on the Pennsylvania State System of Assessment (PSSA) in grades seven and in grade eight. The reading and math PSSA results were also analyzed using an analysis of variance. Similar to the analysis of grade point averages, the students in the non-mentored group performed better than the students in the mentored group in both reading and math in seventh grade and this remained the case when these students took the reading and math PSSA in grade eight.

An analysis of variance was also conducted for the behavioral infractions and suspensions for both the mentored and non-mentored group to determine if there was a statistically significant difference in social behaviors. This study determined that there was no statistically significant difference in social behaviors over three years for both the

mentored group and the non-mentored group. The students in the non-mentored group had fewer behavioral infractions and suspensions than the students in the mentored group. Interestingly, there was a decrease in behavioral infractions experienced with the mentored group from Year 1 of the study to Year 2 was significant.

Although the statistical analyses in this study did not yield results that support the hypothesis that this mentoring program impacted the academic performance or the social behaviors of African-American males, I do not feel a conclusion as to the overall effectiveness of this program can be made. There are, however, several questions that arise as a result of the outcome of this study. First, since there was no statistically significant change in academic performance or social behaviors, it would be interesting to know how these students would have done had there been no intervention. Would there have been a decline in academic performance; would there be more behavioral infractions or suspensions? Second, this study looked at data from students during their seventh, eighth, and ninth grade years. It would be interesting to know how these students are currently doing in school, academically and behaviorally. Third, would the results be similar if the mentoring program occurred in another school, with different participants and different mentors? Fourth, it would also be interesting to know how these students felt about the mentoring program, what their attitudes were towards school, and if they developed a trusting relationship with their mentor. It would be interesting to know how the adult mentors felt about the program and their effectiveness in impacting their mentee's academic performance or how their mentee behaved in school or the decisions they may have made that led to behavioral infractions or suspensions. These questions

along with the qualitative aspects of this mentoring program should be examined in future research.

The results of this study could also indicate that school-based mentoring as an intervention to improve academic achievement and social behaviors is not effective. This model of pairing an adult faculty member with an at-risk student may be seen by the students this program is designed to help as an artificial relationship. This program, because it takes place during the school day, may be limiting in terms of the time these mentors and mentees spend with one another. Lastly, there was no specific training that was provided to the mentors in this program that could have helped these mentors in develop skills that may have been beneficial to their mentees.

It is unclear whether or not these mentors developed a trusting bond with their mentees. What was clear about this program was once a student was referred to the program and their parents gave permission for them to participate, the student was paired with an adult in the building. This could have been an adult that the child already had a relationship with or an adult that was familiar with the student. Knowing that it is critical to the mentoring relationships that a bond is developed between the mentor and the mentee, this study could not determine if there was a bond developed.

The time in which the mentors and mentees got to spend with one another could have also been a factor. School-based mentoring programs occur during the school day. Specifically, this program was designed where mentors and mentees would get together during free periods that they both shared or during their lunch times. Considering the classes and other responsibilities that the mentors have during the day and the classes that the mentees have on their rosters, there really isn't a lot of time for these mentors and

mentees to spend with one another. There is a limited amount of time mentors can spend trying to get a clear understanding of and discuss the problems or issues that their mentee may be facing to provide possible solutions.

Another factor that could have impacted the results of this study was the lack of training provided to the mentors. In gathering information about the mentoring program, there was no mention of training or professional development designed to enhance the skills of the adult mentors to address the some of the social, emotional, or familial issues these participants may have been dealing with. Also, although the adult mentors in this program worked at the middle school, there was no indication whether the mentors were teachers, counselors, school psychologist, or some other employee. Their areas of academic expertise could have varied greatly and may have impacted their ability to provide addition academic support to students that may have needed it. The mentees in this program were considered, at-risk, either academically, behaviorally, or both. Having an adult mentor with the capacity and skill set to deal with the various needs that these students may have brought to the program would have been beneficial. Unfortunately, as will be discussed in the limitations section, access to the adult mentors and the student mentees was prohibited and therefore not known if these were factors.

Limitations

The analysis of the impact mentoring has on academic performance and social behavior was specific to one setting and one group of students over a three year time span. The students in this study all attended the same middle school and were exposed to similar teachers, a similar curriculum, and a similar educational program. Additionally, the results are generalized based on one school-based mentoring program. This study did

not take into account the impact other school-based mentoring programs may have on students who participate in them. Considering these facts, the findings from this study should not be assumed to reflect the potential success or the possible limitations of other programs.

The groups examined here were not comparable groups and this also posed a limitation to this study. The students in the mentored group were referred to this group because they were considered "at-risk", either academically or behaviorally. The non-mentored group consisted of students that were not necessarily considered "at-risk". The dissimilarity between these two groups meant one group would be expected to have lower academic achievement and higher rates of disciplinary infractions than the other. Attempting to identify a significant change in academic achievement or behavioral infractions was difficult considering these two groups started out uneven to begin with.

Another limitation in this study is that I am employed by the district and so as to not violate the Family Educational Rights to Privacy Act (FERPA), access to student data was limited and was presented to me in a way that individual students could not be identified. This limited access to student data prevented me from being able to determine the specific reasons why individual students were referred to the mentoring program, whether the referral was made for academic or behavioral reasons, or if there were possible outside circumstances that may have led to academic and/or behavioral difficulties.

The comparison group in this study consisted of all the African-American males who did not participate in the mentoring program, whether they were referred to the program or not. Due to the limited access to student data and records, I was not able to

identify students who were referred to the mentoring program, but chose not to participate for whatever reason and those students who were not referred to the mentoring program. This being the case, the comparison group may have contained students that had characteristics that could have been very similar to those students participating in the mentoring group and characteristics that would have been very different.   The   analysis of the students' academic performance indicated there was no statistically significant change in this performance. This fact was disappointing, but not necessarily surprising. It was understood that students were recommended for this mentoring program, in part, due to their lack of academic success. The cause of this lack of success could have been attributed to poor study habits, lack of homework completion, or more significant academic deficits. This study was limited in that I could not make this determination due to the restricted access to individual student records.

When analyzing data specific to student behaviors, I was privy to the number of behavioral infractions and the number of suspensions each student in the study received. This study did not report on the severity of each behavioral infraction or the offense that led to a suspension from school.

Additionally, this study examines the performance and the disciplinary patterns for students over the course of their career in middle school. This study does not examine student academic performance and disciplinary information prior to the students' entrance in middle school nor does it track data for the students upon leaving middle school. It would have provided perspective to examine academic and disciplinary data for these students prior to their seventh grade year. Likewise, it would have been interesting

to see if there was any academic growth or any lasting behavioral changes when the students entered high school.

Finally, another limitation of this study was the lack of a qualitative component. Mentoring, by definition, is a relationship between an older, more experienced individual imparting knowledge, guidance, and experience to a younger, less experienced individual (Eby, Allen, Evans, Ng, & DuBois, 2008). The quantitative data that were analyzed in this study illustrated one aspect of the potential success of this mentoring program, the potential changes in academic performance and in social behaviors. This study did not take into account the relationships that may or may not have been developed between the mentors and their mentees. It did not take into account how the mentees felt about the mentoring program or their feelings and attitudes towards school, which are important indicators of school engagement and factors contributing to school success (Henry, Knight, & Thornberry, 2012).

<u>Role of the researcher</u>

As the researcher of this study and an employee in the district where this study took place, there were several limiting factors that arose from these roles. The first factor I confronted was this study taking place at the middle school and my position as an elementary administrator. Having access to the students and to the mentors was not possible due to the conflicting schedules between an elementary schedule and a middle school schedule. As a condition of conducting this study in this district and being an employee, all work associated with this study was to take place after my work day was completed. This made it difficult to engage with the mentors of the program to get an

understanding from them how they felt about the program or what their impressions were about their role as a mentor.

Another issue that I dealt with as a researcher and an employee was access to the students associated with this program. As an employee, more specifically an administrator, getting permission from the families to speak to their children about the mentoring program would have been improper. Also, I feel getting permission to reach out to the families of the students in this study would not have been something that the district would have granted.

Recommendations for future research

This study did not find any statistically significant changes in academic performance as indicated by grade point averages and standardized test results. The analysis also did not reveal any statistically significant changes in behavioral infractions and suspensions when looking at the data over three year. There was, however, a significant reduction in behavioral infractions between Year 1 and Year 2 ($p = .026$) in the mentored group. This indicator gives me reason to consider what might happen if this study continued to follow these students through high school. Would the study find the change in the number of behavioral infractions and suspension to be significantly reduced in the mentoring group? This is one question that could be posed for a future study on school-based mentoring.

Similarly, the academic performance differences between the mentored and non-mentored group were not statistically significant. Between the 2012-2013 (Year 1) school year and the 2014-2015 (Year 3) school year, there was a slight improvement in the mean grade point average of the students in the mentored group (mean = 1.69 in SY 2012-2013

to mean= 1.78 in SY 2014-2015). If this study were to follow these students through high school, would a significant difference between the grade point averages of each group be noticed?

As mentioned earlier in the limitations section, this study compared the African-American students that participated in this school's mentoring program to the African-American students that did not participate in the mentoring program. Since the comparison group likely contained students that both had characteristics that were very similar to the student in the mentoring program and characteristics that were very different, a recommendation for a future study would be a three group design. This research design should examine students who participated in the mentoring program, students who were referred to the mentoring program, but did not participate, and students who were never referred to this school's mentoring program. It would be interesting to determine if there would be any statistically significant impact between the groups, but more specifically if there was a difference between the mentored group and the non-mentored group that was referred, but did not participate.

This mentoring program was founded with a specific purpose; however the administrators in the school saw that it would be beneficial to include students other than African-American students in this intervention. Based on initial conversations with the coordinator of this mentoring program, the program included female students and students from other ethnic groups. Although this study focused solely on the impact this program had on the academic performance and social behaviors of the African-American male participants in this program, a recommendation for a future study would be to look

at this program's impact on all participants, regardless of race or gender compared to the rest of the school's population.

As part of a future study, the length of time that students are involved in a school-based mentoring program and the impact on academic performance and social behaviors should be analyzed. Additionally, it would be interesting to consider how mentoring impacts students who are involved in the program for different lengths of time to gain an understanding if students who are mentored for longer periods of time perform better academically and behaviorally than student who are mentored for shorter periods.

Mentoring, by definition, is the development of an ongoing, personal relationship between the mentor and the mentee (Townsel, 1997). Absent from this study were qualitative accounts of the personal aspects of this school-based mentoring program and the impact the development of these relationships had on the participants. Future studies should not only evaluate and analyze the quantitative data such as grade point averages and discipline data, but should also have a qualitative aspect where mentees are interviewed to determine how they felt this program changed the way they felt about their education, how they saw themselves as students, and if they felt the program made a difference in how they handled social situations that were leading to disciplinary consequences.

Conclusions

This dissertation was designed to analyze the impact a school-based mentoring program had on the academic achievement and social behaviors of African-American males by examining grade point averages, PSSA results, behavioral infractions, and suspensions of these students over a three year time frame. I analyzed the grade point

averages of African-American students who participated in the mentoring program and compared them to the grade point averages of African-American male student who did not participate in the mentoring program. The same analysis was used to compare PSSA results, behavioral infractions, and suspensions during the 2012-2013, 2013-2014, and 2014-2015 school year. Although it was determined that there was no significant change in grade point averages, PSSA reading and math scores, and suspensions, the change in behavioral infractions when comparing the 2012-2013 to the 2013-2014 school year indicates there may be cause for additional research.

This study is important as it examines a school-based mentoring program in an attempt to determine if there is an impact on academic performance and social behaviors. There need for continued research in the area of school-based mentoring programs as this study only provides a generalization of how mentoring impacted the academic performance of these particular students and how the students who participated in this mentoring behaved when this school-based mentoring program was used as an intervention. There is a need for continued research because there are unanswered questions that can only be satisfied through a qualitative study that examines the feelings these students have about the program, their attitudes towards academics and school and how these students see themselves as learners. The data from this study could be provided to the middle school where the study took place to provide information on how this particular program impacts academic performance and social behaviors. Prior to making any determination about the effectiveness of this program, it would be important to understand the other aspects that were not analyzed in this study to make an informed decision about this school's mentoring program.

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