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THE ROLE OF SOCIAL CAPITAL AND INTERNAL LOCUS OF CONTROL IN THE
ACADEMIC ACHIEVEMENT OF TRADITIONALLY DISADVANTAGED
STUDENTS

by

Randy Couwenhoven

Dissertation

Submitted to the Faculty of

Olivet Nazarene University

School of Graduate and Continuing Studies

in Partial Fulfillment of the Requirements for

the Degree of

Doctor of Education

in

Ethical Leadership

May 2013

THE ROLE OF SOCIAL CAPITAL AND INTERNAL LOCUS OF CONTROL IN THE
ACADEMIC ACHIEVEMENT OF TRADITIONALLY DISADVANTAGED
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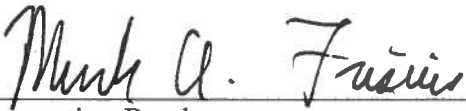
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Finally, I need to thank my Lord and Savior, Jesus Christ. My relationship with Him has grown in strange but marvelous ways over the past three years. His life has provided an example, His death has supplied salvation, and His resurrection has given hope; hope that one day all of the inequality, injustice, and disadvantage that this life holds will give way to a perfect and just eternity.

DEDICATION

This dissertation is dedicated to Jill, my beautiful bride of nearly 20 years, who has willingly sacrificed and allowed me to put projects on hold in order to devote my time and energy to the completion of this program. Jill, your beauty, patience, and loyalty never cease to humble and amaze me – you continue to be my delight and my passion!

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ABSTRACT

The academic achievement gap between minority and low socioeconomic status children and their more advantaged counterparts is a well-documented phenomenon. Many factors have contributed to this gap. The current quantitative, non-experimental, fixed-research design study has examined the potential of three social capital variables and locus of control to predict academic achievement. From a sample of 98 high school seniors, the results indicated that none of the independent variables studied were significant predictors of academic achievement for disadvantaged students. However, feelings of parental rejection were found to be a statistically significant negative predictor of grade point average (GPA) for the No Disadvantage group. Further research is recommended to more closely examine these variables and their predictive power contributing to GPA.

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CHAPTER I

INTRODUCTION

“Whatever you did for one of the least of these brothers and sisters of mine, you did for me” (Matthew 25:40b, New International Version). Earlier in this same passage, Jesus defined “the least of these” as the hungry, thirsty, stranger, naked, sick, and imprisoned. Each group of people in this list was afflicted by a deficiency: some needed food, water, or clothing; others health; and still others companionship or freedom. By definition, these individuals would be characterized as disadvantaged because they, in some way had been “deprived of a decent standard of living . . . by poverty and a lack of opportunity” (Neufeldt, 1988, p. 390). Furthermore, Jesus indicated that in order to provide relief for these disadvantaged people, it was necessary for others to act compassionately toward them. Although the list of the disadvantaged presented by Jesus may not have been exhaustive, it helped to demonstrate that society has struggled with the equality of people throughout history. Now, nearly 2000 years later, it seems that the concept of disadvantage due to some type of deprivation continues to be a familiar one that indeed has transcended both time and culture. In any major city, a sharp dichotomy of disadvantaged and advantaged people can be found, many times within a few blocks’ radius, and sometimes simply by crossing the street. At the time of this writing, this researcher was sitting in the front porch of a house in one such city in the northern Midwest. Across the alley behind the house lived a high percentage of Black

families, mostly mothers and children, in low-income housing; across the street in front of and adjacent to the house lived a diverse population of working-class and white-collar people; and just a short walk away sat a recently renovated Victorian house worth over one million dollars amidst a number of other homes nearly as pricey.

On the surface, it may appear that this dichotomy is simply one of rich and poor, sick and healthy, or native and foreigner; however, the issue goes much deeper and is vastly more complicated. While it is true today, even as it was in Jesus' day, that the poor, the sick, or the foreigner may suffer from things like hunger, thirst, a lack of housing, disease, or loneliness, there is yet another documented potential effect of disadvantage today that was not necessarily highlighted in Jesus' time on Earth: lower academic achievement. Within the United States, certain groups of students have fallen behind others with regard to academic achievement and have created what has become known as an achievement gap. Between 1971 and 2008, Black and Hispanic students did not achieve as well as White students in reading or math. Although the gap closed slightly since 1971, it remained sizeable (Rampey, Dion, & Donahue, 2009).

Furthermore, Black, Hispanic, and low-income students were the only groups without disabilities or language deficiencies in Illinois who were not meeting standards in both reading and math (Illinois Interactive Report Card, 2010). Therefore, coming from a minority group (especially Black and Hispanic), low socioeconomic status (SES), or, as Parson and Kritsonis (2006) found, "double jeopardy" (p. 4), which includes both minority and low-SES backgrounds, seemed to create a disadvantage that produces a deficiency in education.

To compound matters, formal education has been touted as one of the most important factors in determining future opportunity for “economic, personal, and social success” (Young, Wright, & Laster, 2005, p. 516). In addition, Wyatt (2009) indicated that education and job skills are two key components in the “socialization of Black men in America” (p. 464). The fact that Jesus did not mention a lack of education as a disadvantage in his list does not necessarily mean that this disadvantage did not exist in his day. However, due to the extent of the importance placed on education in this day and age, is it possible that Jesus would include teaching the disadvantaged in a list of acts of compassion for the twenty-first century?

Berends, Lucas, and Peñaloza (2008) demonstrated that the achievement gap, at least for African American students – one segment of the disadvantaged population – diminished slightly from 1972-1992, but began to widen again from 1992-2004. They also contended that the achievement gap was maintained by remaining inequities such as the socioeconomic composition of schools; this lack of progress in closing the gap was also confirmed by Lee (2004). Although the achievement gap between disadvantaged students and their more advantaged counterparts seems to be woven into the fabric of American education, evidence has been presented to indicate that seemingly disadvantaged high-poverty and high-minority schools can be academically successful (McGee, 2004; Wilder & Jacobsen, 2010), and some are even outperforming more advantaged schools relative to each school’s level of advantage (McCoach et al., 2010). In addition, there is evidence pointing to the success of individual students from disadvantaged backgrounds (Wiggan, 2008). Despite the efforts of a few researchers, the exploration of successful disadvantaged students is relatively limited.

Statement of the Problem

“The achievement gap is not about students who are failing, but about a system that has failed them” (McGee, 2004, p. 101). The gap referred to by McGee is between students from low-SES and minority backgrounds and students from more advantaged backgrounds. The achievement gap phenomenon has been well documented in past research studies (Borman & Dowling, 2010; Caro, McDonald, & Willms, 2009; Ferguson, 2002). Some of the factors that have been found to contribute to this gap may include school factors such as attending schools with fewer resources, limited curricular or extra-curricular opportunities, or teacher bias (Chiu & Khoo, 2005; Lee, Winfield, & Wilson, 1991; McCarthy, 2000). Other factors may be more related to the home or neighborhood, such as low parental involvement, coming from households that do not have computers, access to the internet, or limited in-home reading materials, living in communities without well-equipped libraries, or negative peer influence (Hanushek, Kain, Markman, & Rivkin, 2001; Lubienski & Crane, 2010; Neuman & Celano, 2006; Perry & McConney, 2010). Still others seem to be individual student-related factors, such as possessing a low self-efficacy or believing that outcomes are completely out of one’s own control, sometimes referred to as an external (rather than internal) locus of control (Schultz, 1993; Shorr & Young, 1984).

Despite the evidence of an achievement gap and the many factors that may explain it, students from disadvantaged backgrounds are still achieving academically. McGee (2004) was able to identify successful high-poverty schools in Illinois, many of which were comprised of a high-minority population. Even so, most researchers have focused on the achievement gap and the aforementioned potential contributing factors

from the perspective of parents, teachers, and administrators. Very little has been documented regarding how disadvantaged students nearing the end of secondary education believe the factors of family, teachers, peers, and individual internal qualities have interacted with their experiences to help them find success.

The purpose of this present study was to review the literature pertaining to the historical academic struggle facing low-SES, minority, or double jeopardy students; review the many factors that other researchers have determined to be potential causes of the achievement gap; and provide a voice for these three groups of disadvantaged students regarding their perception of how internal and social factors have contributed to their ability to beat the odds. In addition, data disaggregated by race/ethnicity, comparing students' perceptions of parent/caregiver, teacher, peer, and individual internal factors that may influence academic achievement may provide valuable insight regarding possible causes of and remedies for the achievement gap. In the end, the voices of students from disadvantaged backgrounds may be used to inform parents, teachers, and administrators about what the students believe they need in order to achieve. In addition, this information may become useful in new teacher training or professional development, because it can lead to a greater understanding of the needs of students from disadvantaged backgrounds, in order to prepare community members, parents, teachers, and school administrators to bridge the achievement gap more effectively.

Background

For more than 45 years, researchers have been demonstrating that an achievement gap between children from disadvantaged backgrounds, such as low social class and minority status, and their higher social class and White counterparts exists for a variety of

reasons. The first significant public recognition of the inequities within American education came in the form of *Brown v. Board of Education* (1954). This Supreme Court decision established that segregation along racial lines was unconstitutional because segregation deprived Black students of the right to equal opportunity with regard to education. Even in cases where resources seemed to be evenly distributed, Chief Justice Warren, on behalf of the court, still questioned equality:

We come then to the question presented: Does segregation of children in public schools solely on the basis of race, even though the physical facilities and other “tangible” factors may be equal, deprive the children of the minority group of equal educational opportunities? We believe that it does. (*Brown v. Board*, p. 493)

In many areas of the United States, the process to desegregate manifested itself in the forced busing of Black students from Black neighborhoods into nearby White schools. Integrating society in order to level the educational playing field between Whites and Blacks was the goal of the 1954 ruling. However, as Patterson, Mickleson, Peterson, and Gross (2008) pointed out, much of the desegregation movement was done on White peoples’ terms. Many Black schools were closed and several Black teachers found themselves unemployed. Black teachers who were hired at the White schools were kept from interacting with Black students in order to keep them from exerting too much influence.

Although *Brown v. Board of Education* (1954) focused primarily on removing racial segregation from public education, the United States Department of Health, Education, and Welfare (1966) released what became known as *The Coleman Report*, the result of an extensive study that was aimed at determining the factors, including

race/ethnicity that caused variance in academic achievement. The Coleman Report indicated that the level of academic achievement is primarily determined by individual student factors and family background, rather than school-level factors. Since 1966, other researchers have evaluated and analyzed the procedures and methods used in The Coleman Report and have found significant relationships between academic achievement and school-level factors such as curriculum, a disciplined environment, academic tracking, teacher efficacy, teacher-student relationships, school composition, and extra-curricular activities (Borman & Dowling, 2010; Caldas & Bankston, 1997; Lee et al., 1991; McCarthy, 2000). Regardless of the causes, all of the research pointed to the existence of an achievement gap between students from disadvantaged backgrounds and their more advantaged peers.

Therefore, much interest was placed on conducting original studies with unique data sets in a variety of locations to determine potential causes of the achievement gap, as well as factors that may have had mediating effects on disadvantage. Davis-Kean (2005) concluded that parental education level and occupational status, or income level, had a positive linear relationship with academic achievement. That is, as parent education level and occupational status increased, so did student achievement. Caldas and Bankston (1997) found that school composition, with regard to mean SES, had a similar impact on the mean achievement of students. In addition, location and neighborhood attributes have been found to affect student achievement, although these factors had somewhat varied affects according to race/ethnicity. When controlling for the variables of gender, free/reduced lunch, and special education, estimated Black student achievement actually improved in high-poverty/high-crime neighborhoods, while White student achievement

declined in the same setting (Lee & Madyun, 2009). Other factors, such as family structure (single parent, both parents, or no biological parents present), number of siblings, and family resources, including how many books are available to children at home or having a computer in the home, all have been found to contribute to the achievement levels of students (Dornbusch, Ritter, & Steinberg, 1991).

From achievement gap research, sociologists developed theories that seemed to apply to the consistent nature of low-SES and minority backgrounds equating to low academic achievement. Two such social theories can help explain the phenomenon of the advantaged-disadvantaged student achievement gap. Social disorganization theory states that as the resources of the community diminish, so does the ability of the people to control the values of the community, leading to less emphasis on the institutions of school, church, and family (Lee & Madyun, 2009). The lack of control and less emphasis then leads to lower academic achievement. In addition, cumulative advantage theory states that an individual's initial advantage over another early in life compounds over time, thereby widening the achievement gap (Caro et al., 2009).

Although many researchers have focused on theory to explain how and why SES and/or minority status causes an achievement gap, some have emphasized the value of finding ways to close the gap and the factors that may mediate disadvantage. McCarthy (2000) found that when students were involved in the culture and social climate of the school through extra-curricular activities, they felt a greater connection to the educational process that may have led to an increased level of academic achievement. In addition, community factors, such as informal neighboring that can be found in lower-SES communities (Lee & Madyun, 2009); participation in community service (Scales,

Roehlkepartain, Neal, Kielsmeier, & Benson, 2006); or involvement in religious activities (Regnerus & Elder, 2003), are all examples of forces that some researchers have found to help mediate disadvantage.

While social disorganization and cumulative advantage theories help in understanding why there is a gap, social capital theory was developed to explain the academic advantages some children have as a result of relationships with their parents that are dependent upon the physical presence of the adults and the amount of attention given by the adults to the child (Coleman, 1988). This theory has been studied with respect to education mostly regarding parent-student interaction and parent-school interaction. However, social capital can also be expanded to include the student's vantage point. In essence, a student has three arenas from which to garner social capital – parents, teachers, and peers (Huang, 2009). The more adept a student is at gaining social capital, the more benefit the student may see in academic achievement. In addition, the inter-relatedness of social capital and self-efficacy or internal locus of control, i.e., a person's outlook on his or her confidence and ability to control outcomes, has been noted. It could be argued that a student's level of self-efficacy or internal locus of control may be related to the ability to gain social capital, in that perceived positive relationships with others may produce a greater self-efficacy and stronger sense of internal locus of control (Shearin, 2002). Internal locus of control is closely related to a high level of self-efficacy and has been shown to be a contributing factor in increased levels of academic achievement in low-SES, minority, and double jeopardy students (Schultz, 1993; Shorr & Young, 1984). Possessing an internal locus of control in an academic setting helped students to feel more in control of and responsible for their own achievement and tended

to be found in students who related well with, and were capable of forming relationships with others.

The opportunity to develop relationships is at the disposal of most children, in the sense that children are typically surrounded by people, regardless of whether those people are parents, caregivers, siblings, other relatives, or friends and acquaintances. In many cases, positive relationships with parents, teachers, peers, and self have been found to be a mediating factor of disadvantage. For most, a lifelong child-parent relationship begins at birth. This relationship, when healthy, has been credited with the ability to protect children from deviant peer influences (Murray-Harvey, 2010), and has been shown to impact academic achievement positively when parents were willing to invest significant energy into the relationship by reading to their children (Lubienski & Crane, 2010) and developing a warm and caring home environment (Davis-Kean, 2005). In addition, McMillan and Reed (1993) found that resilient at-risk students most often acknowledged having strong connections with at least one adult; this adult was often a caregiver or teacher.

Unlike the parent-student relationship, the teacher-student relationship is much more fluid, due to the fact that a student will have many different teachers over the course of his or her schooling. A great deal of research has been conducted and has shown that the teacher-student relationship is an important factor in the academic success of disadvantaged students. In some research studies, minority students indicated that cultural barriers existed that caused deficit thinking, or low expectations, by White teachers, for minority students (Douglas, Lewis, Douglas, Scott, & Garrison-Wade, 2008). Deficit thinking has also created a lack of trust from minority parents for teachers and

administrators and this lack of trust has, in some cases, been socialized into the minority students (Beard & Brown, 2008). When distrust permeates a classroom, a high level of academic achievement becomes elusive. However, similar to the parent-student relationship, when a teacher held high expectations and believed in their students' ability to learn, was firm but caring, and established a warm, non-judgmental, and encouraging environment, students, especially African American students, tended to be more successful (McMillan & Reed, 1993; Patterson et al., 2008).

Similar to the parent-student and teacher-student factors, peer influence has been the focus of many research studies. However, in the arena of education, this influence has been examined mainly from the perspective of school composition, most often comparing the academic achievement between schools of varying SES and minority compositions (Caldas & Bankston, 1997; Perry & McConney, 2010; Willms, 2010). Some researchers have looked outside of the school to the community or neighborhood, again focusing on the influence of demographic composition on achievement. Whether comparing between or among schools, neighborhoods, or communities, researchers have found that students in low-SES or high-minority settings tended to experience lower academic achievement than their counterparts from more affluent or lower minority settings. Some have attributed these findings to the concept of privileged student bias (PSB). PSB posits that students from greater privilege, in general, had greater access to social capital because of their status, which may have then been equated to academic advantage (Chiu & Khoo, 2005). While these results may be attributed to relationships that developed between peers as a result of convenience or proximity, few studies have focused on the academic impact of peer relationships. One study that captured this dynamic, however, was an

ethnography conducted in a low-income housing development in the Northeast of the United States. MacLeod (1995) found that membership in one of two major peer groups of 16-19 year old boys was highly dependent upon success or failure in, or attitude toward schooling. In one peer group, staying in school and working toward earning a diploma increased one's status while in the other group, academic achievement was frowned upon and possibly led to disassociation.

A brief review of the literature displayed the complexities of the achievement gap phenomenon. The issue has been explored from a variety of angles and many studies have documented effective best practices for teachers and schools in meeting the needs of disadvantaged students (McCarthy, 2000; McCoach et al., 2010; Wilder & Jacobsen, 2010). However, research is limited on how the various forms of social capital and locus of control interact, and even more so on *how much* social capital is necessary for students from low-SES, minority, and double jeopardy backgrounds to succeed academically. There seems to be agreement among educational researchers about “the paucity of research on the subject” (Wiggin, 2008, p. 322) of successful disadvantaged students. Burney and Beilke (2008) reiterated the paucity sentiment when they stated that “there is limited research in the literature on high achievement of high-ability students in poverty” (p. 304). This present study aimed to fill this gap and give a voice to successful students from a variety of disadvantaged backgrounds.

Research Questions

This study was guided by the following research questions:

1. To what extent does an achievement gap exist between students from disadvantaged backgrounds, specifically low-SES, minority, and double jeopardy, and those from greater advantage in this particular high school in the south suburbs of a major Midwestern city?
2. What is the correlation between each of the social capital variables (positive relationships with parents, positive relationships with teachers, and self-enhancing peer influence) and internal locus of control?
3. Which of the social capital variables seem to have the strongest relationships with internal locus of control?
4. To what degree are the different forms of social capital (positive relationships with parents and teachers and self-enhancing peer influence) and internal locus of control predictive of the academic achievement of all groups (White, Low-SES; Minority, Not Low-SES; Double Jeopardy; and No Disadvantage) of students?
5. Does the way social capital or locus of control contribute to the academic achievement of disadvantaged students differ by disadvantage (White, Low-SES; Minority, Not Low-SES; and Double Jeopardy) group?

Description of Terms

Academic achievement. The top consideration used by colleges for the admission of new students is “high school grades because they are used to compute grade point average and class rank, both of which are extremely important predictors of post-

secondary success” (Anonymous, 2012, p. 16). Therefore, academic achievement was determined by a student’s grade point average (GPA).

Advanced Placement (AP) course.

Advanced Placement courses are offered to enable students to get college credit while still attending high school. The availability of and access to Advanced Placement courses vary, but they are highly desirable and rigorous academic classes. Students who take even one Advanced Placement course have a 45% higher probability of finishing college than those who do not. (Illinois State Board of Education, 2011a, p. 4)

African American and Black. The terms “African American” and “Black” are both used throughout the current study to refer to one minority population in the United States. The term African American is used only when other specific authors referred to their sample group of participants as African American (e.g., Berends et al., 2008; Crosnoe, 2004; McMillan & Reed, 1993; Patterson et al., 2008; Vigdor & Nechyba, 2005). Otherwise the term Black is used because the assumption cannot be made that all black or darker-skinned people have originated from Africa. In addition, the demographics used in the database of the target high school, the Black or African American category from the federal ethnicity code was referred to as Black.

Disadvantaged. Disadvantaged can be defined as being “deprived of a decent standard of living . . . by poverty and a lack of opportunity” (Neufeldt, 1988, p. 390). For the purpose of this study, the groups that fit this definition are those coming from backgrounds that include low socioeconomic status, minority racial/ethnic background, or double jeopardy backgrounds.

Double jeopardy. A condition created by the combined effect of low-SES and minority racial/ethnic status (Parson & Kritsonis, 2006).

Essential level classes. These classes were defined by the school district in which the current study was conducted. The essential level class was designed for students who were deficient in the subject area in which the course was taught and will not be recognized for admission into a state university in Illinois (Anonymous, 2012, p.26).

Honors level classes. These classes have been defined by the school district in which the current study was conducted. The honors level class was designed for students who perform significantly above grade level in the subject area in which the course was taught (Anonymous, 2012, p. 35).

Locus of control. Locus of control is the way in which an individual perceives successes and failures in life to come about. Those possessing an internal locus of control believe they have control over their own fate; those with an external locus of control tend to believe other people or forces greatly influence outcomes in their lives (Shorr & Young, 1984).

Low-income. Low-income status was determined by the school free-lunch indicator used by the State of Illinois according to their income eligibility guidelines based on family size (Illinois State Board of Education, 2011c).

Positive relationships with parents. A positive relationship with parents (or caregivers) was determined by each student's perception of the level of "warmth, affection, care, nurturance, support, or simply love" (Rhoner & Khaleque, 2005 p. 43) exhibited by the parent or caregiver.

Positive relationships with teachers. A positive relationship with teachers was based on the same criteria (perceived warmth, affection, care, nurturance, and support) that was used to determine whether or not a student had a positive relationship with his/her parent or caregiver (Rohner & Khaleque, 2005).

Prairie State Achievement Exam (PSAE). The PSAE is the exam used in the State of Illinois to meet the federal requirement of the No Child Left Behind Act of 2001 (United States Department of Education, 2011). The exam measures the achievement of all juniors across the state in math, reading, science and writing (Illinois State Board of Education, 2011b).

Race/ethnicity. The federal government has established guidelines regarding how demographics are reported, and require that race and ethnicity are reported in two separate reporting questions. Two categories are used to designate ethnicity (Hispanic or Latino and Non-Hispanic or Latino) and five minimum categories for race (American Indian or Alaska Native, Asian, Black or African American, Native Hawaiian or Other Pacific Islander, and White). Individuals must report one ethnicity category and at least one racial category (United States Office of Management and Budget, 2011). However, at the time of research for the current study, the target high school classified students as only Hispanic/Latino, American Indian or Alaska Native, Asian, Black or African American, Native Hawaiian or Other Pacific Islander, and White; no students were dually classified. Therefore, the term “race/ethnicity” was used throughout the current study when referring to demographics.

Regular level classes. These classes have been defined by the school district in which the current study was conducted. The regular level class was designed for students

who perform at or above grade level in the subject area in which the course was taught (Anonymous, 2012, p. 27).

Resilience. Resilience is the ability of an individual “to develop stable, healthy personas and are able to recover from or adapt to life’s stresses and problems” (McMillan & Reed, 1993, p. 9).

School free-lunch indicator. The school free-lunch indicator is based on income eligibility guidelines according to family size (Illinois State Board of Education, 2011c). Families are allowed to apply for and receive free lunch for their students if their household income falls below the established income guidelines.

Self-efficacy. Self-efficacy is based on one’s confidence in his or her own ability to accomplish a task (Shearin, 2002).

Self-enhancing peer influence. Self-enhancing peer influence is characterized by behaviors that may lead to higher academic achievement, such as studying, doing homework, and being involved in extracurricular activities. In addition to academic benefits, these behaviors may also help to moderate the potential negative effect of poor parenting on academics (Bates, 2004).

Social capital. Social capital is the currency or leverage one is able to garner through relationships with others (Coleman, 1988).

Socioeconomic status (SES). One indicator of SES is family income (Sirin, 2005). For the purposes of this study, students were classified as low-SES if the school free-lunch indicator was checked in the student database.

Significance of the Study

Researchers and educators have struggled with the many faces of the achievement gap for decades. Evidence has indicated that the issue is not a linear, straightforward, or easy problem. Instead, it is a complex web of factors and variables that, taken together, cause the gap. In addition, because so many variables may play a role in causing educational gaps, there are innumerable combinations that possibly contribute to each specific situation.

The key to untangling this very complex issue may be found in gaining a greater understanding of students who have demonstrated resilience in overcoming the obstacles and have beaten the odds against them. In 2005, just under 20% of the population of the United States was comprised of minority races/ethnicities, but children under the age of 18 made up about 30% and 34% of the Black and Hispanic populations (the largest minority and racial/ethnic groups), respectively (United States Census Bureau, 2005). In 2009, over 20% of our nation's youth under the age of 18 lived in poverty and trends in population data have shown that poverty rates for all races/ethnicities have been on the rise since 2001, even as the population has increased (DeNavas-Walt, Proctor, & Smith, 2010). The very students who have been raised in backgrounds of disadvantage, and yet have found ways to overcome these barriers and succeed academically, very likely hold the answers to the ongoing question of how to close the achievement gap.

Answers to the research questions posed in this study may provide insight and inspiration to educators, may lead to professional development programs and new teacher training to address the paradigm shift that is necessary to meet the needs of disadvantaged students, but most of all could give hope for a successful and bright future to those who

have faced life circumstances that typically doom people to the cyclical, reproductive, and damning affects of disadvantage.

Process to Accomplish

The population used for this study was the student body of a mid-sized high school in the south suburbs of a major Midwestern city. In the fall of 2012 there were 1220 members of this population. The composition of the school by race/ethnicity was 53.4% White, 28.9% Black, 13.7% Hispanic, and 4.0% Asian, American-Indian, and Pacific-Islander. In addition, 28.0%, or 341 of the students, were classified as low-income according to the free-lunch status indicator used by the State of Illinois.

The entire graduating class of 2012 of the targeted high school was used to gather initial data for this study. This group was chosen using a combination of convenience and purposive sampling methods: convenience because those were the students most readily available to the researcher and purposive because these students had nearly completed secondary education and seemed appropriate for providing the most useful data for the purpose of this study. There were 298 students who were members of this class. Of the 298, 166 (55.7%) were classified as White, 82 (27.6%) as Black, 40 (13.4%) as Hispanic, and 10 (3.4%) as other races/ethnicities, such as Asian, American-Indian, and Pacific-Islander. In addition, 76 (25.5%) students had been classified as low-income based on free-lunch status. These percentages were fairly representative of the population group.

The data for the sample were gathered from two main sources. First, the school data base was used to acquire gender, age, race/ethnicity, and low-income status, as well as grade point average (GPA) and Prairie State Achievement Exam (PSAE) results. The PSAE is the test used in Illinois to measure the achievement of all Junior-level students in

order to meet the requirement of the No Child Left Behind Act of 2001 (United States Department of Education, 2011). This federal legislation was implemented as a means of greater accountability for state governments in measuring the progress of all schools within each respective state. Students are designated as Exceeds, Meets, Below, and Warning in reading, math, science, and writing, based on how well they performed on each portion of the exam. At the present time, the math and reading test scores are the only scores used to determine whether each school is meeting Adequate Yearly Progress (AYP).

The second data source came from a student response survey that was administered by the researcher through senior-level study halls, as well as before and after school and during other non-academic time. Students were asked to identify themselves only by school identification (ID) number on the survey in order to match completed surveys to the demographic and achievement data garnered from the school's database. The survey was compiled from a variety of sources to measure each student's level of internal locus of control, perception of relationships with parents and teachers, and peer influence. The final compiled survey that was used in this study can be found in Appendix A. The *Inventory for the Measurement of Self-Efficacy and Externality* (I-SEE) was used to measure locus of control. The I-SEE is a multidimensional scale translated to English in 2001 from the original *Fragebogen zu Kompetenz- und Kontrollüberzeugungen* (FKK) developed by Krampen in 1991 (Anderson, 2001). The four dimensions measured by this scale were self-concept of one's own ability (SK), internality (I), social externality (P), and fatalistic externality (C). A combined SK/I score measures self-efficacy and P/C measures overall externality, both good indicators of the

level of internal or external locus of control. Reliability of these scores, based upon Cronbach alpha analysis for each scale, was found to be .73 - .76, .62 - .72, .68 - .74, and .70 - .84 for SK, I, P, and C respectively (Anderson, Hattie, & Hamilton, 2005).

Permission to use the I-SEE scale for the current study can be found in Appendix B.

The Parental Acceptance-Rejection and Teacher Acceptance-Rejection

Questionnaires (PARQ and TARQ) are products of the Rohner Research Institute. When the product is purchased, the purchaser is given permission to use all of the acceptance-rejection questionnaires. Each questionnaire is offered in a short and long form; the shortened version of each was used as a part of the student response survey for this study.

The PARQ and TARQ were used to measure the level of perceived parental or teacher acceptance or rejection felt by each student through the use of four scales:

warmth/affection, hostility/aggression, indifference/neglect, and undifferentiated rejection. Scores were calculated for each scale and the combined totals indicated the overall level of acceptance or rejection. Responses were rated on a four-point Likert scale ranging from *Almost Always True* to *Almost Never True*. For most of the statements, a response of *Almost Always True* was assigned a point value of one and *Almost Never True* was assigned a point value of four. However, some statements were reverse scored, meaning that the assigned point values were a one for *Almost Never True* and a four for *Almost Always True*. Although reliability and validity statistics were only available for the PARQ long form, Rohner and Khaleque (2005) have indicated that, because the TARQ and PARQ short form are directly based on and are nearly identical to the PARQ long form, their “reliability and validity is expected to be excellent” (p. 329). Cronbach alpha analysis was used to measure reliability for each scale of the four scales on the

PARQ long form. These scores were .90, .87, .77, and .72, respectively (Rohner & Khaleque).

A portion of a self-report questionnaire developed by Carlson and Lein (1998) was used to measure two potential effects of peer influence. The *Self-Destructive Peer Influence* scale was composed of 10 items and the *Self-Enhancing Peer Influence* scale was composed of six items. Students were asked to rate each item on a four-point Likert scale about how many of their friends regularly engaged in the types of behaviors described in each scale. In a previous study (Bates, 2004), reliability of these scores, based upon Cronbach alpha analysis for each scale, were .84 and .77, respectively. Permission to use the peer influence scales can be found in Appendix C.

In order to answer research question 1, To what extent does an achievement gap exist between students from disadvantaged backgrounds, specifically low-SES, minority, and double jeopardy, and those from greater advantage in this particular high school in the south suburbs of a major Midwestern city?, comparative groups from the first data source were established by the descriptor variables as follows: No Disadvantage; Minority, Not Low-SES; White, Low-SES; and Double Jeopardy (i.e., low-SES and minority). Socioeconomic status was determined by the free-lunch indicator used by the school. Families are allowed to apply for and receive free lunch for their students if their household income falls below the income guidelines that are determined by the State of Illinois. Students who were marked in the school database as eligible for the free-lunch program were considered low-SES. The dependent variable of academic achievement was then added. Grade point average (GPA) was used to measure each student's academic achievement. Mean achievement was figured for each group and an analysis of

variance (ANOVA) was computed to test for differences between the comparative groups in order to determine the extent to which achievement gaps existed within this particular school.

In order to answer research question 2, What is the correlation between each of the social capital variables (positive relationships with parents, positive relationships with teachers, and self-enhancing peer influence) and internal locus of control?, response data from the compiled survey were analyzed to find the correlation coefficients between locus of control (the dependent variable) and each of the social capital, or independent, variables. For each of the coefficients, a value nearing +1 indicated a strong positive linear relationship and a value nearing -1 indicated a strong negative linear relationship; a value of 0 indicated no relationship between the two variables. For example, if the correlation coefficient between internal locus of control and parent-student relationship was found to be .8, this would have indicated a rather strong relationship between a positive parent-student relationship and a high level of internal locus of control.

Research question 3, Which of the social capital variables seem to have the strongest relationships with internal locus of control?, was answered by simply comparing the correlation coefficients that were calculated in order to answer research question two. The coefficient found to be the closest to a value of +1.0 or -1.0 indicated which social capital variable had the strongest relationship with internal locus of control.

Research question 4, To what degree are the different forms of social capital (positive relationships with parents and teachers and self-enhancing peer influence) and internal locus of control predictive of the academic achievement of all groups (White, Low-SES; Minority, Not Low-SES; Double Jeopardy; and No Disadvantage) of

students?, was answered by conducting a regression analysis to determine which of the four independent variables, or combination of variables, were most predictive of the academic achievement for all students in this research sample.

Multiple regression is used “to provide an estimate of the relative importance of the different independent variables in producing changes in the dependent variable” (Robson, 2002, p. 430-431). As a predictive correlational methodology, multiple regression gives the researcher the ability to create a regression equation which will help to determine if and how each independent variable, or all independent variables taken together, will cause changes in the dependent variable (Yockey, 2011).

Research question 5, Does the way social capital or locus of control contribute to the academic achievement of disadvantaged students differ by disadvantage (White, Low-SES; Minority, Not Low-SES; and Double Jeopardy) group?, was answered by comparing the data gathered for all groups of disadvantaged students. In order to conduct this comparison, a separate regression analysis was conducted for each group (White, Low-SES; Minority, Not Low-SES; and Double Jeopardy) of disadvantaged students. The most predictive model for achievement was determined for each of the three regression analyses and the best models for each group were compared in order to determine whether the independent variables predicted achievement differently for each group.

This study was well within the means and capabilities of this researcher to complete thoroughly and in a timely fashion. Written permission to conduct the study with students and parents, and to use the existing student databases was secured from the superintendent of the intended school district. With the superintendent’s approval, the

Institutional Review Board (IRB) gave the final approval to begin the current study. Only two minor limitations or barriers were noted in conducting this study. First, although permission was granted by the school district's superintendent, surveying students was only permitted during non-academic time, such as during lunch, study halls, or before or after school. The incentive of an iPod raffle was used to motivate students to be involved. Second, because parents of disadvantaged students may not always have the means to be actively involved in their students' education (Finders & Lewis, 1994; Heymann & Earle, 2000), gaining parental consent for students under the age of 18 may have presented a challenge. Because this was the sample group that ultimately provided the most useful data for this study, it was imperative to develop an effective means to obtain parental consent. As an employee of the intended school for study, this researcher was able to utilize the registration process, had access to the school's mass communication system for the dissemination of information, and had an established relationship with many of the students and families needed for participation. In addition, two \$50 gift cards for the purchase of gasoline were raffled off as an added incentive for parents to sign and return the consent forms; each of these factors helped to minimize the challenge of gaining consent.

Conducting this research study in an ethical manner did not present too many challenges. This study did not involve supplying treatment or special programs to human subjects; rather, it consisted of using existing data and a student-response survey. Therefore, the risks to the participants were minimal. The greatest potential risk presented was from an emotional or social standpoint, because the primary participants were those students who came from disadvantaged backgrounds. However, the school and location

were not identified, student names were not used, and data was coded to maintain anonymity.

The purpose of the study and the process used in conducting this study was fully disclosed to potential participants and to the parents/caregivers of those students considered for participation. Informed consent was acquired for this study to be conducted – consent by students who were 18 or older as well as consent by the parents and also assent by their students under the age of 18. All information and consent forms were delivered to the parents of potential participants through the senior registration packets that were sent to each family during the summer. Because the registration packet has many parts to it and contains a great deal of information, the consent form may have been easy to overlook. Therefore, at the start of the school year, students whose parents did not return a consent form were given a second form to take home. In addition, an automated phone call was made to the parents of each potential participant, providing them with some details and inviting them to an evening informational meeting. Consent forms could be returned via the registration process or directly to the researcher by students during the school day or by parents at the informational meeting. Beginning this process in the summer provided ample time to secure as many participants as possible prior to the start of the data collection process.

This present research was inspired by the encouragement of Jesus to act compassionately towards the least of these, but taken a step beyond the obvious effects of disadvantage (hunger, thirst, a lack of housing, disease, or loneliness) to include a deficient or poor education. Data from a student-response survey was used to discover how relationships may impact the self-concept of students from disadvantaged

backgrounds in a way that may then be related to overcoming the odds with regard to academic achievement. In order to understand the issue more fully, a review of past research is necessary. This review will include a brief look at the history of the achievement gap, a deeper exploration of social capital theory and locus of control, and the many factors that other researchers have found to be correlated with both the cause of the achievement gap and potential narrowing of the achievement gap.

CHAPTER II

THE REVIEW OF THE LITERATURE

Introduction

A quick look at some historical data revealed that the achievement of middle- and upper-class White students has always outpaced that of lower-SES and minority students. As already demonstrated, the gap has fluctuated over the past 40 years. Following the release of *A Nation at Risk* (United States Department of Education, 1983), intentional efforts were made to decrease the gap and some positive effects were realized. However, during the 1990s the achievement gap grew again, nearly back to pre-1983 levels (Berends et al., 2008). Although the past decade has been a period of increased accountability for schools under the No Child Left Behind Act of 2001 (United States Department of Education, 2011), there have not been great gains in solving the problem of the academic divide between low-SES and minority students compared to their White and more advantaged counterparts. Many factors have been discussed as potential causes of this issue, but this present study focused on the potential academic impact of one socio-psychological variable (locus of control) and three social capital variables (relationships with parents, peers, and teachers). A review of the relevant literature pertaining to each of these variables is necessary to understand past research and how this study will support and build upon the body of empirical work.

Locus of Control

Since the 1970s, a wide array of constructs have been developed to explain behavioral expectancy and motivation; some of these constructs include perceived control, personal competence, self-efficacy, and causal attribution. All of these constructs have been developed as a result of research on factors that individuals attribute to causing certain events, successes, or failures in their lives (Lefcourt, 1992). However, the original construct that seems to have given birth to the others is that of locus of control, a construct built upon the foundation of social learning theory (Rotter, 1966). Despite the age of this construct and the abundance of research surrounding other variables such as self-efficacy and self-esteem, locus of control has still been found to have a stronger relationship with the moderation of stress and increased academic achievement (Cohen & Edwards, 1989; Tella, Tella, & Adeniyi, 2009).

Locus of control was developed to measure the degree to which individuals believe that outcomes in their lives are contingent upon their own actions and behaviors or whether these outcomes are contingent upon external forces. Those who believe that they have the ability to control events and outcomes are said to have an internal locus of control, while those who are resigned to the fact that fate, luck, or powerful others control their destiny possess an external locus of control (Rotter, 1966). Most of the researchers who have studied the relationship between academic achievement and locus of control have found that internality is more closely related to higher academic achievement and externality is more closely related to lower academic achievement. The findings have been consistent across cultures and a variety of age groups.

In their study of 11-14 year-old students at a Libyan international school, Uguak, Elias, Uli, and Suandi (2007) found that 202 out of 210, or 96%, of the foreign students who maintained satisfactory academic achievement possessed an internal locus of control. Similarly, in Nigeria, Tella et al. (2009) measured the relationship between academic achievement and locus of control, self-efficacy, and interest in school. They first determined that the combination of these three socio-psychological variables was positively correlated with the academic achievement of 500 students ranging in age from 12-15. However, taking the research one step further revealed that locus of control had a stronger relationship with academic achievement than self-efficacy or interest in school. These results seemed to indicate that when students felt that they had the ability to control various aspects of their own education they were more likely to gain confidence and take a greater interest in learning.

This line of thinking was corroborated by Gifford, Briceño-Perriott, and Mianzo (2006) in a study of over 3000 college freshman from large, southern universities in the United States. Their findings indicated that internal locus of control (internality) had a significantly positive correlation with GPA. Moreover, those students who possessed an external locus of control (externality) and ended their freshman year with lower GPAs were more likely to drop out of college before beginning their sophomore year. Gifford et al. concluded that it was possible that students who were externals may have been more at risk of dropping out of school. Therefore, finding ways to help students increase internality may be a worthy endeavor for educators.

Although increasing one's internality may contribute to greater academic success, researchers have not determined the best way, or if there is a systematic way to increase

this construct. Chubb and Fertman (1997) found strong evidence in their longitudinal study that locus of control is a personality trait that changes over time. In male and female ninth through 12th grade students, locus of control was found in most cases to shift from external to internal, depending upon age and life experience. Additionally, added difficulty in changing locus of control may be found in that many researchers have concluded that internality and externality seem to be at least somewhat culturally determined.

In a study of 113 economically disadvantaged adults participating in a job training program, Wenzel (1992) found that Black participants had a greater belief than White participants in the notion that powerful others and chance determined outcomes in their lives. While belief in control of powerful others was consistent with other findings regarding the economically disadvantaged, all participants in Wenzel's study were from low-SES backgrounds. Due to the similar financial status of the participants, Wenzel argued that race/ethnicity and cultural background may have been additional contributing factors to the greater externality found among the Black participants.

While Lefcourt (1992) would have agreed with the notion that externality may be more closely associated with minority groups than with White individuals, Shorr and Young (1984) found slightly different results in a study that included 1,962 intermediate and junior high-age children. Although Schorr and Young, like other researchers, found race/ethnicity to be correlated with locus of control, they ultimately concluded that SES was a much stronger determinant of internality or externality. Participants in their study from lower SES backgrounds tended to be much higher on the external scale and those from higher SES backgrounds were found to possess a greater internality. However,

when students from low-SES, minority, and double jeopardy backgrounds possessed an internal locus of control, they, like their more advantaged counterparts, realized increased levels of academic achievement (Schultz, 1993; Shorr & Young, 1984).

There seems to be agreement among most social researchers regarding locus of control: externality has typically been found in low-SES and minority study participants and internality has been more consistent in those who hail from higher-SES and White backgrounds. Findings also indicate that students who possess an internal locus of control generally have had greater academic success and are less likely to drop out of school, regardless of race/ethnicity or socioeconomic status. However, research surrounding the construct of locus of control has become less common since the 1990s; instead, studies involving other socio-psychological variables, such as self-efficacy and personal competence seem to be in the forefront. In addition, very little seems to be known about what interventions might be put in place, if internality is more desirable from an academic standpoint, to assist students in developing a stronger internal locus of control. Kirkpatrick, Stant, Downes, and Gaither (2008) have stated that “implementing an ‘internalizing’ influence” (p. 487) may help externals to improve academically, but they did not fully explain what the internalizing influences might have been. It is possible that the quality of the relationships one had with others was a contributing factor in the development of increased self-efficacy and a greater sense of internal locus of control (Shearin, 2002). When students possessed an internal locus of control they seemed more likely to take responsibility for their own academic achievement, typically related well with teachers and peers, and possessed the ability to form and maintain stable relationships. This current study will add to the limited body of empirical research that

deals with the correlation between social capital, or more specifically, relationships with parents, teachers, and peers, and locus of control in the sample of high school seniors.

Social Capital

Social capital was first alluded to by Coleman in the *Equality of Educational Opportunity Study* (EEOS) published by the United States Department of Health, Education, and Welfare (1966). Portes (1998) argued that “the term social capital simply recaptures an insight present since the very beginnings of [social research]” (p. 2). In the EEOS, which has commonly become known as The Coleman Report, one of the author’s main points was that Black people, due to a lack of educational resources and relationships with the majority in society, were not well prepared to be successful in American culture. In fact, Coleman went so far as to say that

For most minority groups, then, and most particularly the Negro, schools provide no opportunity at all for them to overcome this initial deficiency; in fact, they fall farther behind the white majority in the development of several skills which are critical to making a living and participating fully in modern society. (p. 20)

Although Coleman did not coin the phrase “social capital,” his work has been instrumental in bringing the social capital concept to the fore of social research, especially as it relates to the academic achievement of minority and low-SES youths.

In his subsequent definition of social capital, Coleman (1988) spoke extensively of the relationships that developed among people and the trust that was built as a direct result of the give-and-take interaction between individuals or groups. This interaction developed a sort of intangible currency that produced obligations, expectations, and trustworthiness between individuals, permitted information flow, or even produced norms

for communities or society; such outcomes produced power. As mentioned earlier, education is a critical avenue for individuals, especially those from low-SES and minority backgrounds, to travel in order to find more equal footing in society and future opportunities for success. In fact, Harris (2010) posited that “an individual’s income can be changed as a result of the choice of education; that is, someone with low economic ability might still earn a good income as a result of investments in education” (p. 1174). If education can be touted as a means for building one’s socioeconomic position, then social capital just might be the foundation. In their research, Wooley and Bowen (2007) concluded that social capital was the variable most strongly related to school engagement for a sample of 7,764 students in sixth through eighth grades. Because engagement has been positively linked to academic achievement (Finn & Rock, 1997), social capital may be one of the keys to closing the achievement gap. The engagement/achievement correlation will be discussed in more detail later.

Although social capital can be defined in a broader, more general sense, Coleman (1988) talked specifically about relationships developed with peers, family, and others. When addressing peer relationships, he focused on daily interactions and the development of expectations and norms among peer groups. With respect to others, Coleman pointed to community institutions that served the needs of individuals and families. His greatest emphasis, however, was on social capital developed between parents and children. Coleman posited that the strength and value of this capital was dependent upon two conditions: “the physical presence of adults in the family and on the attention given by the adults to the child” (p. S111). Presence and attention both seemed

to have a direct impact on the quality of the relationship between the parents and child, and thus the strength of social capital at the disposal of the child.

Relationships with Parents

It seems obvious that parents do have an impact, one way or another, on their children. Many researchers have focused on the SES, race/ethnicity, educational background, or occupational status of parents when studying the impact parents may have on their children's achievement or engagement in school. Most of the findings from this research point to the parent's mid- to high-SES background, Caucasian ethnicity, post-secondary education, or a high-status occupation as giving an academic advantage to school-aged children (Davis-Kean, 2005; Lubienski & Crane, 2010; Stewart, 2008). These studies seemed conclusive: the financial and human capital possessed by the parent was positively correlated with the child's academic progress. However, a large body of research has been developed about the impact of different parenting styles on child development. Regarding educational outcomes, time, attention, and warmth, also labeled encouragement and support, have been found to be most critical (Coleman, 1988; Lee, Daniels, & Kissinger, 2006).

The variables of time, attention, and warmth, all leading to greater academic achievement, seemed to be captured most effectively in two-parent, stable homes (Stewart, 2008). Possessing the ability to divide the responsibility of parenting may be one reason that two parents can provide more time, attention, and warmth and therefore participate more fully in the education of the child or children. Regarding schooling and academic achievement, students whose parents are more actively involved in the educational process typically realize higher academic gains than those whose parents are

not as active (Lee & Bowen, 2006). Involvement has been defined in a variety of ways but may include a parent frequently asking about a child's schoolwork (attention), engaging in homework with the child (time), or reading to a child at home (warmth); involvement may also mean participating in the life and culture of the school or getting to know teachers and administrators (Desimone, 1999; Parcel & Dufur, 2001). The bulk of this research has indicated that, regardless of the definition of involvement, students whose parents are involved in the educational process tend to take a greater interest in school and are more successful academically than those whose parents are not.

In educational research involving SES and race/ethnicity, low-SES and minority parents typically have been perceived by teachers and administrators to be less active and involved in their children's schooling (Desimone, 1999; Finders & Lewis, 1994). The perception that minority and low-SES parents are less involved or absent from the schools is often misinterpreted as a lack of caring. However, lack of involvement or presence at school functions may be caused by a variety of factors.

For many minority parents, "their own personal school experiences create obstacles to involvement" (Finders & Lewis, 1994, p. 51). In other words, the negative schooling experiences of the parents contributed to a lack of trust in teachers and administrators that kept minority and low-SES parents distant from their children's schooling. In addition, language barriers added to feelings of inadequacy for some minority parents. According to some of the parents interviewed by Finders and Lewis, an inability to help their children with homework and finding it necessary to use their children as interpreters during conferences at the school added to an already uncomfortable situation. Finally, time constraints and economic hardship have also

contributed to the perceived lack of involvement of minority and low-SES parents in their children's education (Finders & Lewis). Children may work outside of the home or parents may work a variety of part-time jobs, reducing the amount of time available to do school work together. All of these factors may have a compounding effect on student achievement and development for an already disadvantaged population of students.

Relationships with teachers are often patterned after relationships with parents. An absent parent relationship therefore decreased the probability that students developed positive relationships with teachers. In addition, students have been found to emulate parents who are involved and interested in their lives. In the absence of involved parents, students may be more prone to emulate peers for the purpose of belonging and acceptance; peer emulation has many negative implications for young people because these actions can be developed from a lack of self-esteem (Ryan, Stiller, & Lynch, 1994). By understanding the interrelatedness of relational development, it becomes easier to see the power and influence of the parent-student relationship.

All of the above are examples from an extensive body of research that has begun to touch more closely on how the parents' ability to garner social capital can be passed along to their children. However, only a small number of researchers have investigated the impact of the depth and quality of the parent-student relationship on academic achievement. Although Ryan et al. (1994) did not technically measure academic achievement, they found that, among adolescents, positive relationships with parents did correlate with school functioning outcomes, such as autonomy, control, engagement, and coping. Similarly, Wentzel (1998) set out to determine how relationships with parents, peers, and teachers may have impacted the enthusiasm and motivation of a sample of

sixth-grade students toward school. The researcher used a very non-specific “family cohesion” (p. 204) variable as synonymous with the parent-child relationship. Wentzel concluded that family cohesion was a positive predictor of a student’s ability to set and achieve school-related goals, which was also a positive predictor of a greater desire to learn.

In another study using relational and academic data from eighth to 12th grade students who participated in the National Education Longitudinal Study (NELS) from 1988 through 1992, Carbonaro (1998) found another interesting facet of social capital: as children developed friendships, sometimes the parents also developed a relationship with one another – this is a concept referred to by Coleman (1988) as relational closure. Essentially, the ends of the relational loop were closed, and regardless of which family the children spent time with, similar norms and standards were reinforced in the lives of the children. When parents established relationships with one another and similar norms were established, Carbonaro concluded that academic achievement in mathematics was positively impacted and high school-aged students were at far less risk of dropping out of school. While this study is still not an example of how the relationship between parent and child directly impacted academic achievement, it did demonstrate the power of familial relationships to strengthen the social capital construct in a way that infiltrated a community and impacted the educational engagement of children from a variety of families. Yet, the question still to be answered is, within the context of a single family, does the relationship of a parent with their child impact academic achievement?

In a study conducted by Crosnoe (2004), emotional distance between adolescent and parent was used as a measure of the quality of the relationship. Over a two-year

period, Crosnoe noted that students who were emotionally distant from their parents in one year experienced declining academic performance over the course of the next year. His findings indicated “that parent-adolescent emotional distance was more closely associated with academic achievement than most of the demographic factors that have received attention in educational research” (p. 273). This conclusion could have major implications in light of the fact that much of the social and educational research has indicated that factors such as race/ethnicity and SES have a strong correlation with academic performance; a positive parent-child relationship may compensate for demographic factors that typically have had a negative effect on academic achievement. However, Crosnoe did indicate that the academic achievement of African Americans did not appear to be correlated with emotional distance from parents. This missing correlation was explained by Crosnoe’s findings regarding parents’ educational aspirations for their students. When aspirations were found to be low, emotional distance did not have an impact on student performance. In Crosnoe’s study, a large portion of the African American parents were found to have low educational aspirations for their students.

As the review of the literature pertaining to parent-child relationships and education suggests, a great majority of the studies focused on how this relationship impacted school-related factors such as engagement and satisfaction. Very few dealt directly with academic achievement. However, one final study to note here adds another dimension and challenge to this segment of the extant research. In an investigation of how parent and teacher relationships with students impacted the academic achievement of 104, mostly Latino, middle-school students, Murray (2009) discussed some very

compelling evidence. As expected, he found two conditions that predicted high levels of engagement and feelings of competence: consistent and challenging expectations *from* teachers and parents *for* the student and a deep level of trust *in* teachers and parents *by* the student. However, when looking specifically at grades, Murray found that only closeness and trust with teachers positively impacted student academic grades; the level of closeness and trust felt with parents did not have the same effect. Moreover, Murray concluded that “positive teacher-student relationships appeared to compensate for poor parent-child relationships” (p. 395) when considering the academic achievement of the child.

Relationships with Teachers

The potential compensatory effect of the teacher-student relationship is an important variable in exploring mediating influences in the educational development of students, especially those from low-SES and minority backgrounds. The question, though, is do teachers really have the ability to compensate for parental and societal deficiencies that many of today’s youth bring into school? To educators, it may appear that the woes and struggles of today’s youth fall squarely on their shoulders. If students are poorly behaved, teachers should fix them; when students come to school three grade levels behind, the teachers and administrators feel the pressure to get the students caught up; when students struggle socially and emotionally, parents often look to the schools to intervene and provide the resources to make things right. In addition, media attention, such as the film *Waiting for Superman* (Chilcott & Guggenheim, 2010), paint a bleak picture of teachers and administrators in public education failing the nation’s students. However, it has been suggested that the compensatory effect of supportive and caring

teachers is minimal (Gregory & Weinstein, 2004). It is important to note that, although Gregory and Weinstein disagreed with Murray (2009) on the potential compensatory effect of the teacher-student relationship, they did agree that the teacher does have a greater ability than the parent to impact the academic achievement of students. Even though Gregory and Weinstein, and Murray have concluded that although a trusting and supportive teacher-student relationship can make a difference in a child's life, it is much more effective when it is supplemented by a positive and connected relationship between parent and student at home.

Although the goal of this study is not to determine whether a student's relationship with parents and teachers have an additive or compensatory effect to each other, it is important to study the students' perceptions of the strengths of these relationships and determine if they each have an individual effect on achievement that may be correlated with one another. As Gregory and Weinstein (2004) noted, "there is a lack of empirical evidence showing that a network of adult relationships predicts higher achievement" (p. 408).

Regardless of the research results, it would seem that teachers have the ability to exert great influence on the lives of children. Typically in the United States, from the ages of 5 until 18, a child may spend approximately 16,380 hours away from home while at school, based on a seven-hour day and 180-day school year from kindergarten through 12th grade. Additionally, the amount of time away from home increases for students who participate in extra-curricular activities. As groups of people spend significant amounts of time together, as in a school, a culture begins to develop. For schools, some research suggests that the culture and climate of the school environment may be an important

factor in determining the level of academic achievement of the students within the school (Crosnoe, Johnson, & Elder, 2004). However, culture and climate do not simply form on their own. Teachers, who are responsible for creatively filling most of the hours that students spend away from home, typically give rise to the atmosphere and environment within the school building. A positive climate is formed when the adults spend time creating a caring environment and fostering trust in their relationships with students (Woolley, 2006). Others have found, that under these circumstances, students, regardless of demographics, felt a sense of satisfaction with school, were more engaged in the schooling process, and even realized greater academic achievement than their counterparts from schools with a less positive school environment (Borman & Overman, 2004; McCoach et al., 2010; McGee, 2004).

Similar to the research on the parent-child relationship, much of the research on the teacher-student relationship has focused on how the support and encouragement of the teacher was related to student engagement, motivation, and pro-social behavior, rather than on academic achievement in terms of grades or GPA (Crosnoe, Johnson, & Elder, 2004; Hughes & Kwok, 2007; Klem & Connell, 2004; Voelkl, 1995). However, these researchers have demonstrated an indirect link between teacher support, engagement and participation, and achievement. Klem and Connell (2004) studied the correlations between student reports of teacher support, teacher reports of student participation and engagement, and data from school records about the achievement of over 3,000 elementary and middle school students. Their results indicated that students who reported higher levels of support from teachers were also found by their teachers to be more engaged than those who reported lower levels of support. In addition, students who were

found to be more engaged and therefore participated in class at higher levels were achieving at higher levels than their less-engaged counterparts. Klem and Connell referred to the relationship between support and engagement as “bidirectional” (p. 270) because it is difficult to determine cause and effect between the variables. When support was present, engagement was also present and vice versa, but determining which came first, if possible, would require more sophisticated methods. Klem and Connell concluded that “engaged students pay more attention, look more interested, are more persistent in the face of challenges than disengaged students, and probably receive, on average, more support from teachers by doing so” (p. 270).

In an earlier study, Voelkl (1995) also recognized the cyclical nature of teacher warmth, student engagement, and achievement. Using the NELS data from 1988 (NELS:88) for 13,121 eighth-grade students, Voelkl found that the warmth variable was more strongly related to student participation than student achievement. In fact, when participation was eliminated in the analysis, warmth had virtually no impact on achievement. Warmth had a positive impact on participation and participation had a direct relationship with achievement. Therefore, warmth had an indirect relationship with achievement. Finn and Rock (1997) used the same NELS:88 data and found that, among students at risk for school failure, those who demonstrated engagement behaviors, such as participating in class, coming prepared to class, and avoiding disruptive behavior, also realized greater academic achievement than those who did not demonstrate these same behaviors. Additionally, Skinner and Belmont (1993) found that teachers were more likely to form supportive and encouraging relationships with students who demonstrated

higher levels of engagement and achievement, thus closing the warmth-engagement-achievement loop.

While the majority of the teacher-student relationship research has focused on an indirect link with academic achievement, some researchers have looked more carefully at the potential direct correlation between the two variables. In an examination of the NELS:88 data, Gregory and Weinstein (2004) found that teacher connection had a significantly stronger correlation to academic achievement (in this case specifically, math achievement) than did parent connection. These results were later supported by Murray's (2009) investigation of how parent and teacher relationships with students impacted academic achievement. Gregory and Weinstein also determined that teachers who exerted a more authoritarian style in the classroom, i.e., those who set and maintained clear and high expectations, predicted greater math achievement, albeit very minimal, than those who used a more lenient leadership style in the classroom.

There seemed to be caution in the literature when interpreting the results of any study involving relationships; not all groups of students responded in the same ways to relational variables. For instance, teacher warmth, support, and encouragement did not seem to be as important in the academic achievement or engagement in school for more economically advantaged White students as it was for low-SES, minority students (Ferguson, 2002). Additionally, Ferguson seemed to indicate that the higher-SES, White students possibly had a greater ability to cope with a less supportive classroom environment because they were not dealing with the additional impact of racial/ethnic or SES disadvantage. On the other hand, the results of studies specifically aimed at determining the importance of teacher relationships with low-SES and minority students

were mixed. However, the evidence consistently demonstrated that disadvantaged students realized greater academic achievement and school satisfaction when teachers established a trusting and encouraging environment. In addition, trust and encouragement were found to be most critical when White teachers taught minority students (Beard & Brown, 2008; Douglas et al., 2008).

At the beginning of this section it was noted that some research has suggested that the teacher-student relationship may have a compensatory effect or greater impact on students than did the parent-child relationship. Interestingly, other researchers have demonstrated the magnitude of peer influences in the same way when compared to the importance of the teacher. When specifically looking at the lowest achieving 25% of White and minority-race/ethnicity students, the negative effects of minority peers were found to be greater in magnitude than the positive effects of increasing teacher quality or even reducing class size by as many as 13 students (Cooley, 2009; Rivkin, Hanushek, & Kain, 2005). The implications of this conclusion are extremely important for all education stakeholders: negative peer influences may have the ability to offset most, if not all of the positive benefits that parents and teachers have to offer.

Peer Influence

Up to this point, the review of the literature has demonstrated that, although results of numerous studies vary, parents and teachers had great potential for positively influencing school outcomes; typically, strong ties with and feelings of support from parents and teachers led to higher levels of engagement or achievement for students. Peer influence, on the other hand, can be much more complicated. A wide array of theories has been developed within a variety of disciplines in an attempt to explain how peers may

influence one another. Many have specifically focused on how advantaged peers, or students from White and mid- to high-SES backgrounds, impact the development of their more disadvantaged counterparts. In a review of these theories and the empirical evidence supporting each, Harris (2010) found extremely mixed results. Of the 11 theories reviewed, the author found that five predicted the benefit of having advantaged peers, four predicted the harmful effects, and two predicted no influence whatsoever.

The theoretical differences clearly demonstrated the complexity of the bidirectional nature of peer influence. Certainly having advantaged peers may have had a measurable impact on adolescents, but the presence of advantaged peers does not rule out the possibility that having disadvantaged peers may also contribute to relational effects on school outcomes and development. Evidence has been found to indicate that higher achieving students were negatively impacted by having classmates who were achieving below the 45th percentile (Hoxby & Weingarth, 2005). However, results from other investigators have demonstrated that African American students benefited from having African American peers, indicating that peer race/ethnicity may be more important than peer achievement (Vigdor & Nechyba, 2005). Because minority status has been considered disadvantaged, Vigdor and Nechyba clearly found results that confound the issue. Quite possibly the results found by Vigdor and Nechyba may indicate that when students are in a homogeneous environment, comfort level increases and leads to academic achievement, regardless of race/ethnicity.

However, a great deal of the extant research on peer influence has demonstrated just the opposite: that homogeneity is typically not a desirable characteristic among disadvantaged populations, especially for low-SES groups. Although low-SES has been

found to be more characteristically associated with minority racial/ethnic groups, the non-discriminatory impact of economic disadvantage was vividly demonstrated by MacLeod's (1995) ethnographic research. In a comparison of 16-19 year old Black and White males living in poverty, the White males were found to be more negatively impacted from a school outcomes standpoint than the Black males. MacLeod found that all of the boys wanted to belong to the group and, as a result, were easily swayed by peer pressure, despite the cost, which ranged from a poor education to getting in trouble with the police and other authorities. The group impact, or peer pressure, was certainly a key factor that supported the idea of comfort in homogeneity, even though following the group may not have been the most socially advantageous route.

While some researchers have found potential benefits for disadvantaged adolescent students when attending school with advantaged peers, two relocation experiments failed to provide the anticipated strong support for this notion. From the analysis of the *Yonkers Family and Community Project of 1985* and the *Moving to Opportunity for Fair Housing Demonstration of 1994*, researchers found that students who moved from low-income settings to more advantaged neighborhoods and schools actually saw very minimal increases, and in some cases a decrease, in behavioral and academic outcomes (Fauth, Leventhal, & Brooks-Gunn, 2007; Sanbonmatsu, Kling, Duncan, & Brooks-Gunn, 2006). As MacLeod (1995) demonstrated, the need to belong or fit in with one's peers seemed to be essential for teenagers. The two relocation studies may indicate that an inability to achieve the necessary peer acceptance may produce negative results for youths. Additionally, Black males, when going to school in a racially diverse environment, have intentionally avoided doing well in school in order to avoid

the stigma of *acting White* [emphasis added] (Fordham & Ogbu, 1986). Again, consistent with MacLeod's findings, individuals who acted counter-culturally were often ostracized by their peers, which for the adolescent was worse than poor school outcomes.

In the wake of unpromising relocation efforts, the desegregation movement that began with *Brown v. Board of Education* (1954) has begun to wane. It has become increasingly apparent that government-mandated desegregation programs do not have the same effect as voluntary relocation. While the rationale for the two mentioned relocation experiments was to decrease racial and SES segregation, Rivkin (2000) suggested that the difference between advantaged and disadvantaged students is not necessarily the color of their skin or the amount of money or education their parents possess, but the quality of their teachers and the resources held by their schools.

Social Networks

Although there is potential for each individual form of social capital to have some negative impact on school-aged children, it seems that each has been found more frequently to have a positive impact on school outcomes. However, each bit of capital by itself is not nearly as effective in bringing positive outcomes as all three forms of social capital together. It is through the development of a strong network of social capital with peers, teachers, and parents that individuals are able to access the resources that will help them to develop the skills and abilities necessary to be productive, successful, and equal members of society. The body of research on social capital and networks, i.e., the combination of relationships students may have with parents, teachers, and peers, has provided mixed results on which component of social capital may have the greatest effect on achievement. However, most researchers who have looked at all three relational

variables together seem to agree that there is an additive positive affect that far outweighs any one variable alone. Rosenfeld, Richman, and Bowen (2000) studied the social support networks of 1,815 middle- and high-school students from a variety of demographic backgrounds. They found that students who reported high support only from teachers realized better school outcomes than those who reported high support only from parents or peers. At first blush, the conclusion reached by Rosenfeld et al. seems to provide support for the relationship of the teacher and student outweighing even that of the parent and student. However, Rosenfeld et al. also noted that support from only teachers was not sufficient or effective, and that teacher support in combination with parent or peer support made a more significant impact; support from all three groups was by far the best scenario. Furrer and Skinner (2003), in a study of 641 students in third through sixth grades, also found support for the additive effect of relationships with parents, teachers, and peers. In a comparison of risk-groups, the researchers determined that the removal of support from one relational group predicted significant decreases in student engagement, both behaviorally and academically.

Although not many researchers have studied student relationships with parents, teachers, and peers in combination, Ryan et al. (1994) conducted such research. Their findings corroborate the concept that relationships with all three groups can be the determinant of academic outcomes, but they also have an undeniable interrelationship. Ryan et al. determined that positive feelings of support from parents may cause students to be prone to experience more positive relationships with teachers as well. In addition, those who felt greater security in relationships with parents and peers were likely to have

increased levels of self-esteem. The authors found that both supportive relationships and self-esteem were predictors of positive school outcomes, including engagement.

Conclusion

Any number of inputs can be identified as influential factors in the lives of children. The 21st century has ushered in an era of fast-paced social media that has the potential for strengthening a critical social network, but can just as easily and quickly destroy the links of the network, and possibly the self-esteem of the user. Even as young people spend increased amounts of time interacting electronically, research evidence has continued to demonstrate the importance of face-to-face human relationships in the development and outcomes of children. It is disheartening, however, that there is such a great discord in the social capital and locus of control literature. It seems that, because there are so many factors that could impact social research and so many variables that might confound results, consistency is limited. Moreover, research on the success of students from disadvantaged backgrounds is sparse, and not because these students are not successful. Therefore, in the following sections, the main premise of this study is presented: to determine the impact that positive relationships have had on the academic achievement of high school seniors from disadvantaged backgrounds in a Midwestern high school. This work was built upon Rivkin's (2000) notion that it was not the racial or SES background that contributed most to positive school outcomes; instead, it was the warmth, support, and encouragement of parents, teachers, and peers that may have the ability to offset and outweigh great disadvantage. In addition, the current study may add support for the concept that higher levels of social capital may be correlated with internality, thereby leading to further gains for the disadvantaged. The optimistic hope is

that the current research will shed more light on potential means for closing the achievement gap by a continued effort to move the top end higher, but at the same time, help the low end make up for lost time and opportunity.

CHAPTER III

METHODOLOGY

Introduction

The academic achievement gap between minority and low-socioeconomic status (SES) populations and white, mid- to high-SES populations has been an ongoing issue and central to many discussions about the state of American education for years. The previous chapters have laid a foundation for this current study by providing relevant background information that has exposed the many suggested and potential causes of the achievement gap. In addition, an extensive literature review has focused more specifically on the extant research regarding how locus of control and social capital variables have been found to impact the academic achievement of students from all age groups and a variety of demographic backgrounds.

This current study was designed to look more carefully at how locus of control and perceived relationships with parents, teachers, and peers may have affected the academic achievement of a sample of high school seniors at a Midwestern school. Although the achievement gap is a very real phenomenon, many disadvantaged students are finding academic success. The major goal of this study was to discover the relationships that existed between locus of control and the social capital variables, and to determine if any of these variables were predictive of the academic achievement level for three specific groups of disadvantaged students (White, Low-SES; Minority, Not Low-SES; and Double Jeopardy).

Research Design

To accomplish the purpose of this study, it was most appropriate to use a quantitative non-experimental fixed research design. This method of research involves “dealing with things as they are” (Robson, 2002, p. 155) because the conditions and events that have caused a specific phenomenon are already in place and have already occurred. Naturally occurring groups determined by race/ethnicity and SES were used in this study, and none of the variables were, or could be, manipulated. The intent of the study was to examine the relationship between the dependent, or response, variable of student GPA with the four different independent, or explanatory, variables of internal locus of control and perceived relationships with parents, teachers, and peers.

Specifically, correlational methodologies were employed to answer research questions two through five. The only exception to the general methodology used was in answering research question one, To what extent does an achievement gap exist between students from disadvantaged backgrounds, specifically low-SES, minority, and double jeopardy, and those from greater advantage in this particular high school in the south suburbs of a major Midwestern city? Simple *ex post facto* design seemed to be the most appropriate method for this question because the answer came from examining the relationship between “events that have already occurred and conditions that are already present” (Leedy & Ormrod, 2010, p. 238). In the case of this study, GPAs had already been obtained by students and students could be naturally placed in groups based upon race/ethnicity and SES. The answer to the first research question was found by analyzing the mean GPA differences between the various demographic groups.

For research questions two through five, two methods of correlation were

employed. Correlational methodology can be used for two main purposes. First, correlations can be explanatory, meaning that results of analysis will indicate to the researcher the magnitude and direction of any relationship that may exist between variables (Robson, 2002). In the current study, explanatory correlational methodology was used to determine whether and how the locus of control variable was related to each of the social capital variables. This analysis satisfied question two, For the sample of senior students, what is the correlation between each of the social capital variables (positive relationships with parents, positive relationships with teachers, and self-enhancing peer influence) and internal locus of control? The correlation coefficients were then compared to determine which social capital variable was most strongly related to locus of control in order to satisfy the inquiry of research question three, Which of the social capital variables seem to have the strongest relationships with internal locus of control?

Correlational methodology can also be predictive in nature. Predictive methodology gives the researcher the ability to use current data for a particular sample to indicate how other similar groups in similar situations may respond to the given variables (Salkind, 2011). For the current study, predictive methodology was used to determine whether internal locus of control and the social capital variables were predictive of the academic achievement for each group of student participants. This analysis satisfied research question four, To what degree are the different forms of social capital (positive relationships with parents and teachers and self-enhancing peer influence) and internal locus of control predictive of the academic achievement of all groups (White, Low-SES; Minority, Not Low-SES; Double Jeopardy; and No Disadvantage) of students? The final

research question, Does the way social capital or locus of control contribute to the success of disadvantaged students differ by disadvantage (White, Low-SES; Minority, Not Low-SES; and Double Jeopardy) group? was also satisfied by using predictive correlational methodology.

Population

In order to address the issue of the achievement gap in American education most effectively, it is important to examine a demographically diverse population. For the purpose of this current study, a sample of students was drawn from the population of a mid-sized high school in the Midwestern United States. This particular school is not considered to be a community high school. Instead, the school is comprised of students from four different communities and, as such, is more of a *melting pot* school. As a result of being spread out geographically, students coming in to their freshman year have typically attended four different public junior high schools and a variety of private schools. The communities themselves are very diverse in terms of race/ethnicity and socio-economic status; all walks of life and a variety of backgrounds are represented from one corner of the school's attendance area to the other. Although the sample was taken out of convenience, it also fit the criteria of being demographically diverse.

Descriptive statistics can be used to paint a picture of the population. It is important to note that, due to rounding, percentages in this section may not always equal 100. As can be seen in Figure 1, the portrait of this particular high school of 1220 students shows that, during the 2011-12 school year, 53.4% (652 students) of the student body was non-minority, or White, and 46.6% (568 students) were minority. More specifically, 13.7% (167 students) were Hispanic, 28.9% (353 students) were Black,

53.4% (652 students) were White, and 4.0% (48 students) were of other races/ethnicities, such as Asian, American-Indian, and Pacific-Islander. In addition, 28.0% (341 students) of the students were indicated as low-SES by the free-lunch indicator used by the school and 72.0% (879 students) of students were not low-SES.

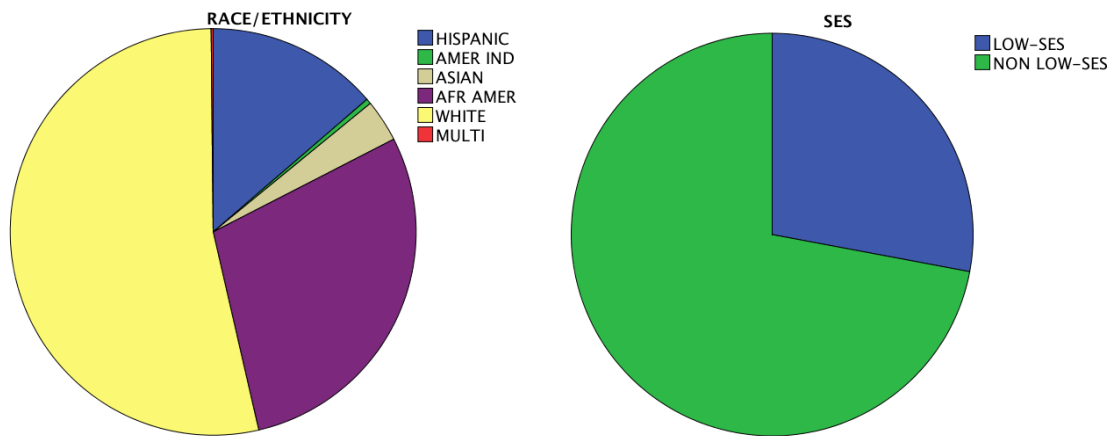


Figure 1. Demographic make-up of the target school.

Finally, 21.1% of the student body (257 students) was classified as minority *and* low-SES, or double jeopardy, and 46.6% (568 students) was found to be *neither* minority nor low-SES and were considered to have no disadvantage. The remaining 32.4% of the student body (395 students) fell into the categories of having one disadvantage; 6.9% (84 students) were White but low-SES and 25.5% (311 students) were not low-SES but minority. Although beyond the scope of this study, gender was nearly equal. Of the 1220 students in this high school, 48.9%, or 597 students were male and 51.1%, or 623 students, were female.

The sample for this current study was gathered using both convenience and purposive sampling methods (Robson, 2002). All of the participants were taken from the population of students who were at the end of their compulsory, formal educational career and provided the best opportunity for gathering the most comprehensive data. In

addition, each participant was a student at the targeted high school, which was readily accessible to the researcher. The total population of senior students at the time of the survey totaled 298 students. This population included 166 (55.7%) non-minority students and 132 (44.3%) minority students. More specifically, 13.4% (40 students) were Hispanic, 27.6% (82 students) were Black, 55.7% (166 students) were White, and 3.4% (10 students) were other races/ethnicities, such as Asian, American-Indian, and Pacific-Islander. In addition, 25.5% (76 students) of the students were indicated as low-SES by the free-lunch indicator used by the school and 74.5% (222 students) of students were not low-SES.

In addition, 19.1% of the senior class (57 students) was classified as minority *and* low-SES, or double jeopardy, and 48.3% (144 students) was found to be *neither* minority nor low-SES and were considered to have no disadvantage. The remaining 97 students fell into the categories of having one disadvantage; 6.4% (19 students) were White but low-SES and 26.2% (78 students) were not low-SES but minority. Gender was nearly equal; 52.0%, or 155 students were male and 48.0%, or 143 students were female.

From the senior class population, 101 parents or caregivers provided consent for their students to be involved with the study. The final sample included 59 (58.4%) non-minority students and 42 (41.6%) minority students. More specifically, 11.9% (12 students) were Hispanic, 26.7% (27 students) were Black, 58.4% (59 students) were White, and 3.0% (3 students) were other races/ethnicities, such as Asian, American-Indian, and Pacific-Islander. In addition, 24.8% (25 students) of the students were indicated as low-SES by the free-lunch indicator used by the school and 75.2% (76 students) of students were not low-SES.

Finally, for the sample of 101 students, 18.8% (19 students) were classified as minority *and* low-SES, or double jeopardy, and 52.5% (53 students) were found to be *neither* minority nor low-SES and were considered to have no disadvantage. The remaining 28.7% of the sample students (31 students) fell into the categories of having one disadvantage; 5.9% (6 students) were White but low-SES and 22.8% (23 students) were not low-SES but minority. Although beyond the scope of this study, 47.5%, or 48 students, were male and 52.5%, or 53 students, were female.

Data Collection

Prior to beginning the data collection process, permission to conduct the study with students and parents, and to use the existing student databases was secured from the superintendent and Board of Education of the targeted school district. In addition, the Institutional Review Board at Olivet Nazarene University, after reviewing the scope and intentions of the study, gave final approval to begin.

When working with seniors in high school, it is likely that one will encounter students who are already 18 years of age and technically able to provide their own consent to participate in a research study. However, for this study, as a result of concerns by the district and because the survey contained sensitive statements regarding the students' relationships with parents or caregivers, only students whose parents or caregivers provided consent were allowed to be included in the study. The process of gaining consent was begun through the school's registration process. A letter explaining the study and a consent form were sent with the registration packet to all incoming seniors for the 2011-12 school year. If parents or caregivers agreed, they simply needed to sign the consent form in the presence of a witness and return it with the registration

materials. As a result of this process, 75 students were secured for the study. An additional 26 students were secured once the school year began by meeting senior students in their study halls and providing them with the necessary documents to have signed and returned. The final sample totaled 101 students who were in their senior year of high school. In addition to parental/caregiver consent, each student surveyed was asked to sign an assent form prior to participation.

The 101 students were surveyed using a Likert-type measurement instrument that measured each students' perception of their ability to control events in their lives (locus of control), their relationships with parents or primary caregivers, their relationships with teachers, and the influence of their peers in their lives. The scale was compiled from three separate sources, all of which had been previously tested for reliability and validity and were found to be adequate measures of their respective variables.

The *Inventory for the Measurement of Self-Efficacy and Externality* (I-SEE) was used to measure locus of control. The I-SEE is a multidimensional scale translated to English in 2001 from the original *Fragebogen zu Kompetenz- und Kontrollüberzeugungen* (FKK) developed by Krampen in 1991 (as cited in Anderson, 2001). The four dimensions measured by this scale were self-concept of one's own ability (SK), internality (I), social externality (P), and fatalistic externality (C). A combined SK/I score measures self-efficacy and P/C measures overall externality, both good indicators of the level of internal or external locus of control. Reliability of these scores, based upon Cronbach alpha analysis for each scale, has been found to be .73 - .76, .62 - .72, .68 - .74, and .70 - .84 for SK, I, P, and C respectively (Anderson, Hattie, & Hamilton, 2005).

The Parental Acceptance-Rejection and Teacher Acceptance-Rejection

Questionnaires (PARQ and TARQ) are products of the Rohner Research Institute. Each questionnaire is offered in a short and long form; the shortened version of each was used as a part of the student response survey for this study. The PARQ and TARQ were used to measure the level of perceived parental or teacher acceptance or rejection felt by each student through the use of four scales: warmth/affection, hostility/aggression, indifference/neglect, and undifferentiated rejection. Scores were calculated for each scale and the combined totals indicated the overall level of acceptance or rejection. Responses were rated on a four-point Likert scale ranging from *Almost Always True* to *Almost Never True*. For most of the statements, a response of *Almost Always True* was assigned a point value of one and *Almost Never True* was assigned a point value of four. However, some statements were reverse scored, meaning that the assigned point values were a one for *Almost Never True* and a four for *Almost Always True*. Although reliability and validity statistics were only available for the PARQ long form, Rohner and Khaleque (2005) have indicated that, because the TARQ and PARQ short form are directly based on and are nearly identical to the PARQ long form, their “reliability and validity is expected to be excellent” (p. 329). Cronbach alpha analysis was used to measure reliability for each scale of the four scales on the PARQ long form. These scores were .90, .87, .77, and .72, respectively (Rohner & Khaleque).

A portion of a self-report questionnaire developed by Carlson and Lein (1998) was used to measure two potential effects of peer influence. The *Self-Destructive Peer Influence* scale was composed of 10 items and the *Self-Enhancing Peer Influence* scale was composed of six items. Students were asked to rate each item on a 4-point Likert

scale about how many of their friends regularly engaged in the types of behaviors described in each scale. In a previous study (Bates, 2004), reliability of these scores, based upon Cronbach alpha analysis for each scale, were .84 and .77, respectively.

The survey was administered to all students either during study hall time or after school hours, depending upon each student's schedule. Time for completion of the 96-item survey varied from 15 to 25 minutes.

Analytical Methods

Organizing and analyzing the demographic and quantitative data from a 96-item survey for 101 participants was an important step in this research process to ensure meaningful and reliable results. Statistical Package for the Social Sciences version 19 (SPSS v. 19) was used by this researcher to accomplish the organization and analysis task. Through the use of this tool, the data set was sorted and manipulated as necessary in order to run the appropriate test statistics for each research question.

Each of the four sections of the survey instrument were scored and, based on the response to each item, a final score was assigned to each participant for locus of control and each social capital variable. In addition, all demographic information was coded numerically for every participant. Race/ethnicity was coded using the federal ethnicity codes used in the target school's data system. Therefore, Hispanic was coded as 11, American-Indian as 12, Asian as 13, Black as 14, Pacific Islander as 15, White as 16, and multi-racial as 17. The federal ethnicity categories were then combined to create only two categories: 1 = minority and 2 = White or non-minority. Similarly, each student was coded as either low-SES with the number 1 or not low-SES with the number 2. The operationalized variables of minority, White, low-SES, and not low-SES were then used

to determine the four groups of students of interest for this study: White, Low-SES; Minority, Not Low-SES; Double Jeopardy; and No Disadvantage. This data, as well as GPA data were entered into SPSS v. 19 for each participant.

The purpose of this present study was to determine if internal locus of control and social capital variables were predictors of the academic achievement of students from a variety of backgrounds, and to investigate whether or not there was any correlation between the predictor variables. A variety of analytical strategies and methods were employed to achieve these objectives. Mean GPA was analyzed by group, using a between-subjects analysis of variance (ANOVA) to determine if a significant difference existed between groups with regard to academic achievement. Post-hoc analysis was conducted to determine exactly where the differences were. All of the survey data were examined by variable and for each construct within each variable to determine if any outliers existed that may have skewed results (Salkind, 2011).

Calculating z-scores is a method of determining how many standard deviations any given score is from the mean of the data set. According to the empirical rule of statistics, more than 99% of the scores in a data set should fall within three standard deviations of the mean. Simply stated, z-scores greater than ± 3 are considered outliers (Gibilisco, 2011). By creating histograms for all variables it became apparent which variables might have contained outliers. Therefore, z-scores were calculated for all variables with possible outliers in order to standardize scores for those particular variables. Once outliers were discovered, data analyses were conducted with and without outliers to determine the impact that these scores had on the analyses. As a result of these analyses, three outliers were completely removed from the data set. The removal of

outliers resulted in a final sample data set of 98 participants.

In addition, Pearson product moment correlation analyses were conducted to determine the direction and magnitude of the relationship (if any existed) between all three of the social capital variables and internal locus of control. Multiple linear regression analyses were conducted for the entire sample, for the no disadvantage group, and for the disadvantaged groups separately to determine if internal locus of control or any of the social capital variables were significant predictors of academic achievement.

Limitations

As with most research studies, this current study had limitations that may have been potential barriers to the procedure and data analysis process. The first of these barriers stems from the simple fact that social research, in general, is very tenuous. When trying to isolate factors that cause other factors or find correlations between variables, it must always be recognized that an abundance of issues are probably confounding any social research endeavor. It is very difficult to gauge or monitor how seriously research participants take their participation. For the sample of high school seniors in this particular study, a wide variety of factors may have influenced how they responded to survey items about their relationships with their parents and the behaviors of their friends. For instance, because personal time is important to teenagers, they may have simply hurried through the survey, giving it very little thought. In addition, the fact that the researcher was an administrator in their high school, even though he did not administer the survey, may have also impacted survey responses.

The second barrier or limitation has to do with range restriction. When the range of responses (or variance) for one variable is small, the likelihood of finding any

statistically significant correlations with other variables is also small (Salkind, 2011). In the current study, the fact that very little variance was found regarding locus of control and all of the social capital variables for all groups of students, will be discussed in greater detail in Chapter Four.

A third limitation, related to the second, came from the fact that the sample population was taken only from the senior class of the targeted high school. It is likely that the above mentioned range restriction was partially a result of the limited sample. By only studying seniors, it is possible that many at-risk students who may have felt more negatively about their parents and teachers, and were more closely associated with peers who were self-destructing influences may have already dropped out of school.

The fourth limitation was the size of the sample of participants. Although the sample was demographically representative of the population, a larger sample from all grade levels, in addition to reducing range restriction and increasing the likelihood of catching some at-risk students prior to dropping out, may have provided more evidence of correlations between variables and may have solidified some of the predictive findings of this study. Consequently, larger samples of students in the various disadvantaged groups could have increased the confidence level for conducting a predictive analysis for each group, therefore increasing the overall power of the study. However, it should be noted as well that, even with a larger sample from this school, this data would still only be relevant to what was happening at this particular school. The culture and atmosphere in the school itself may have been compensating for or causing some of the factors.

Finally, the last limitation was specifically caused by the locus of control variable. Research has indicated that locus of control develops rapidly during the high school years

(Chubb & Fertman, 1997). Therefore, a study involving all high school grade levels (again increasing the sample size) might have provided more information with regard to how locus of control impacts relationships and GPA.

When conducting social research, there will always be a number of factors that could potentially confound the results of the study. Even when a study has been carefully planned, a sample deliberately and thoughtfully chosen, and data meticulously collected, a researcher can never control or anticipate all of the variables that might impact the outcomes of the research when working with human subjects in a real world setting. However, the goal for this current study was to achieve results that would add to the existing body of research pertaining to the achievement gap and provide direction for the researchers of future studies. Each of these topics will be discussed in greater detail in the next and final chapter.

CHAPTER IV

FINDINGS AND CONCLUSIONS

Introduction

Education is an important factor that can help to determine the course of one's life. People are hired for jobs often based upon their education level or because, through education, they have gained certain skills. Yet, too many students in the United States are being left behind and too many of those who are being left behind can be classified as "the least of these," or the disadvantaged population. Disadvantaged, not because they are any less smart or capable than others; instead, they are disadvantaged because they have been born into life situations, such as being from a minority race/ethnicity or from a low-SES. These characteristics are among those that have been found to be correlated with lagging academic performance (Berends et al., 2008; Illinois Interactive Report Card, 2010; Lee, 2004; Parson & Kritsonis, 2006; Rampey et al., 2009).

The current study was guided by the following research questions in an effort to determine if locus of control or social capital variables, such as relationships with parents, teachers, or peers, were predictive factors of academic achievement that could help disadvantaged students close the achievement gap.

1. To what extent does an achievement gap exist between students from disadvantaged backgrounds, specifically low-SES, minority, and double jeopardy, and those from greater advantage in this particular high school in the south

suburbs of a major Midwestern city?

2. What is the correlation between each of the social capital variables (positive relationships with parents, positive relationships with teachers, and self-enhancing peer influence) and internal locus of control?
3. Which of the social capital variables seem to have the strongest relationships with internal locus of control?
4. To what degree are the different forms of social capital (positive relationships with parents and teachers and self-enhancing peer influence) and internal locus of control predictive of the academic achievement of all groups (White, Low-SES; Minority, Not Low-SES; Double Jeopardy; and No Disadvantage) of students?
5. Does the way social capital or locus of control contribute to the academic achievement of disadvantaged students differ by disadvantage (White, Low-SES; Minority, Not Low-SES; and Double Jeopardy) group?

Findings

Research Question One

The first research question in the current study was, To what extent does an achievement gap exist between students from disadvantaged backgrounds, specifically low-SES, minority, and double jeopardy, and those from greater advantage in this particular high school in the south suburbs of a major Midwestern city? This question was answered by using a set of existing demographic and academic information for the population of the target school. An achievement gap can be examined in a number of different ways. For the purpose of the current study, the primary concern was a three-fold potential gap: between minority and non-minority students (particularly between White,

Black, and Hispanic), between students who were low-SES and those who were not low-SES, and between students who were minority *and* low-SES and those who had neither of these disadvantages.

As stated in chapter three, descriptive statistics were used to demonstrate the diversity found within the target high school. As also mentioned in chapter three, due to rounding, percentages may not always equal 100. In particular, of the 1220 students enrolled for the 2011-12 school year, 53.4%, or 652 students, were non-minority, or White, and 46.6%, or 568 students, were minority. More specifically, 13.7%, or 167 students, were Hispanic, 28.9%, 353 students, were Black, 53.4%, or 652 students, were White, and 4.0%, or 48 students, were other races/ethnicities, such as Asian, American-Indian, and Pacific-Islander. In addition, 28.0% of the students, or 341, were identified as low-SES by the free-lunch indicator used by the school and 72.0% of the students, or 879, were not low-SES. A visual description of these statistics can be found in chapter three, Figure 1. Finally, 21.1%, or 257 students, were classified as minority *and* low-SES, or double jeopardy, and 46.6%, or 568 students, were found to be *neither* minority nor low-SES and were considered to have no disadvantage, according to the criteria used in the current study.

With an adequate picture painted of the population, the next step in answering the first research question was to analyze academic achievement data that had been gathered for this same group of students. Again, descriptive statistics were used to get a clearer picture of how various groups of students were achieving with regard to mean GPA. All GPAs for all students were based on weighted grades because this was the criteria used to determine class rank. Non-weighted grades at the target high school were based on a 5.0

scale and weighted grades were based on a 6.4 scale. In other words, on the weighted scale, a grade of A was worth 4.0 for essential level classes, 5.0 for regular level classes, 6.0 for honors level classes, and 6.4 for Advanced Placement (AP) courses. One full point was deducted for each grade lower than an A, regardless of the level. Based on the weighted scale, it was possible for a student who took all honors level and AP classes from freshman year until graduation to finish with a GPA of over 6.0.

A broad view of student GPAs demonstrated that the overall mean GPA of the total White population was 3.96 with a standard deviation (*SD*) of 1.06 and the mean GPA of the total minority population was 3.23 (*SD* = 1.08). In addition, the mean GPA of the total low-SES population was 3.07 (*SD* = 1.08) and the mean GPA of those who were not classified as low-SES was 3.83 (*SD* = 1.07). The groups to be analyzed to answer the first research question were No Disadvantage, Minority, Not Low-SES, White, Low-SES, and Double Jeopardy. Therefore, broken down even further, the mean GPA of the 46.6% of the population, or 568 students, who were in the No Disadvantage group was 3.96 (*SD* = 1.05); the mean GPA of the 25.5% of the population, or 311 students, in the Minority, Not Low-SES group was 3.51 (*SD* = 1.08); the mean GPA of the 6.9% of the population, or 84 students, in the White, Low-SES group was 3.53 (*SD* = 1.14); and the mean GPA of the 21.1% of the population, or 257 students, in the Double Jeopardy group was 3.02 (*SD* = 1.07). The GPA data can be found in Table 1.

Table 1

Descriptive Statistics for GPAs of Population by Demographic Groups

	<i>N</i> ^a	Mean GPA	<i>SD</i>
White	652	3.96	1.06
Minority	568	3.23	1.08
Low-SES	341	3.07	1.08
Not Low-SES	879	3.83	1.07
No Disadvantage	568	3.96	1.05
Minority, Not Low-SES	311	3.51	1.08
White, Low-SES	84	3.53	1.14
Double Jeopardy	257	3.02	1.07

Note. *SD* = Standard Deviation.

^a*N* = 1220.

Using the mean GPAs for the various groups, a between-subjects analysis of variance (ANOVA) was conducted to determine if the achievement gaps were statistically significant. Using the four demographic groups as the independent variable and GPA as the dependent variable, results of this analysis were statistically significant, $F_{(3, 1216)} = 48.04, p < .05$. Additionally, least significant difference (LSD) post-hoc analysis was conducted to determine the extent of the difference between individual groups. Results were statistically significant for all group pairs with the exception of the comparison between the Minority, Not Low-SES and White, Low-SES groups. Figure 2 depicts a graphic representation of mean GPA by demographic group. Table 2 represents the results of the LSD post-hoc analysis.

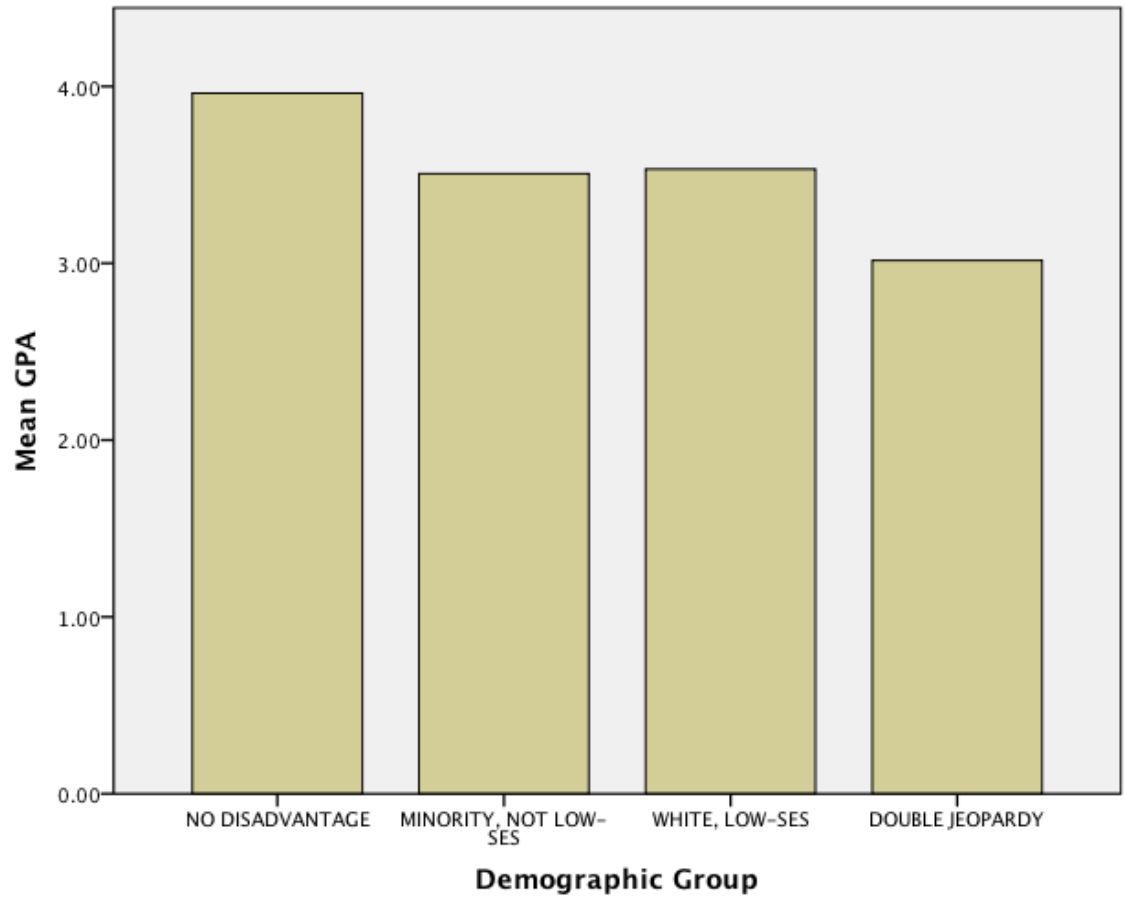


Figure 2. Graphic representation of mean GPA by demographic group for the population of students at the targeted high school.

Table 2

Results of LSD Post-Hoc Analysis of Significant GPA Differences from the Achievement Gap ANOVA for No Disadvantage; Minority, Not Low-SES; White, Low-SES; and Double Jeopardy Student Groups

Student Group (A)	Student Group (B)	Mean Difference (A-B)	SE	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
No Disadvantage ^a	Minority, Not Low-SES	.455*	.075	.000	.307	.603
	White, Low-SES	.430*	.125	.001	.184	.675
	Double Jeopardy	.946*	.080	.000	.788	1.10
Minority, Not Low-SES ^b	No Disadvantage	-.455*	.075	.000	-.603	-.307
	White, Low-SES	-.026	.131	.846	-.284	.232
	Double Jeopardy	.491*	.090	.000	.314	.668
White, Low-SES ^c	No Disadvantage	-.430*	.125	.001	-.675	-.184
	Minority, Not Low-SES	.026	.131	.846	-.232	.284
	Double Jeopardy	.516*	.134	.000	.253	.780
Double Jeopardy ^d	No Disadvantage	-.946*	.080	.000	-1.10	-.788
	Minority, Not Low-SES	-.491*	.090	.000	-.668	-.314
	White, Low-SES	-.516*	.134	.000	-.780	-.253

Note. SE = Standard Error of the Mean Difference.

^an = 568. ^bn = 311. ^cn = 84. ^dn = 257.

* $p < .05$.

The results of the analysis of the data pertaining to the first research question for the current study indicated the presence of a statistically significant achievement gap between demographic groups. Research questions two through five of the current study addressed the correlation of student relationships with academic achievement for each of the four demographic groups already mentioned.

Research Question Two

The second research question in the current study was, For the sample of senior students, what is the correlation between each of the social capital variables (positive relationships with parents, positive relationships with teachers, and self-enhancing peer influence) and internal locus of control? One hundred and one senior students completed a survey that measured their level of internal and external locus of control and their perceptions of their relationships with parents, teachers, and peers. As mentioned earlier, during the analysis of data, in creating histograms for each variable and calculating z -scores to determine which data fell outside of the acceptable ± 3 range, three outlying scores were removed from the data set. The final sample consisted of 98 participants. A section of the survey was devoted to each variable. The survey included a series of Likert-type scales; items in the locus of control section were rated on a one-to-six scale and the items in the parent, teacher, and peer sections were rated on a one-to-four scale. After participants completed their surveys, the scores were tabulated and each participant received a total score for each section and for every subscale within each section.

Pearson product-moment correlations were conducted to test the relationships between locus of control and each of the social capital variables. When the initial correlations were conducted, perceived teacher relationships were found to have a

statistically significant ($r_{\text{intloc}*\text{tar}} = -.315, p < .05 [.002]$) negative relationship with internal locus of control. In addition, peer influence was found to have a p value of .065. The statistical correlations are shown in Table 3.

Table 3

Results of correlational analysis of internal locus of control with the social capital variables of Peer Influence, Perceived Relationships with Parents, and Perceived Relationships with Teachers^a

Variable	1	2	3	4
1. Internality	1.00			
2. Peer Influence	.187	1.00		
3. PAR	-.134	-.219*	1.00	
4. TAR	-.315**	-.333**	.239*	1.00
Mean	70.44	-316	36.36	39.50
Standard Deviation	7.92	4.70	8.82	8.97

Note. All tests are two-tailed. PAR = Parent Acceptance Rejection (index of perceived relationship with parents); TAR = Teacher Acceptance Rejection (index of perceived relationship with teachers).

^a $N = 98$.

* $p < .05$.

** $p < .01$.

Pearson product-moment correlations were conducted for the two subscales of peer influence: self-enhancing and self-destructive. This analysis demonstrated that self-enhancing peer influence had a statistically significant positive relationship with internal locus of control ($r_{\text{intloc}*sepeerinf} = .248, p < .05 [.014]$), while self-destructive peer influence

was not statistically significant when related to internal locus of control. The statistical correlations are shown in Table 4.

Table 4

Results of correlational analysis of internal locus of control with the subscales of Peer Influence: Self-Enhancing and Self-Destructive^a

Variable	1	2	3
1. Internality	1.00		
2. Self-Enhancing	.248*	1.00	
3. Self-Destructive	-.043	-.065*	1.00
Mean	70.44	16.67	16.99
Standard Deviation	7.92	2.95	3.48

Note. All tests are two-tailed.

^a $N = 98$.

* $p < .05$.

Research Question Three

The third research question in the current study was, Which of the social capital variables seem to have the strongest relationships with internal locus of control? In order to satisfy this inquiry, it was only necessary to conduct a simple comparison of the Pearson product-moment correlations. The information found in Table 3 indicated that, although the subscales for peer influence did show a statistically significant relationship with internality, perceived teacher relationships had the strongest correlation. Even when broken down into subscales, two of the four elements of perceived teacher relationships, i.e., teacher warmth and teacher indifference, continued to show stronger negative

relationships with internality than did the positive relationship of self-enhancing peer influence with internality. The results of the statistical correlations of the perceived teacher relationship subscales are shown in Table 5.

Table 5

Results of correlational analysis of internal locus of control with the subscales of Perceived Teacher Relationships: Warmth, Hostility, Indifference, and Rejection^a

Variable	1	2	3	4
1. Internality	1.00			
2. Warmth	-.324**	1.00		
3. Hostility	-.163	.349**	1.00	
4. Indifference	-.313**	-.333**	.491**	1.00
5. Rejection	-.016	.178	.672**	.397**
Mean	70.44	16.26	7.79	5.27
Standard Deviation	7.92	4.63	2.36	1.70

Note. All tests are two-tailed.

^a $N = 98$.

* $p < .05$.

** $p < .01$.

Research Question Four

The fourth research question in the current study was, To what degree are the different forms of social capital (positive relationships with parents and teachers and self-enhancing peer influence) and internal locus of control predictive of the academic achievement of all groups (White, Low-SES; Minority, Not Low-SES; Double Jeopardy;

and No Disadvantage) of students? Multiple linear regression analysis was conducted to determine how predictive each variable was of the response variable, GPA, for all of the sample students. The results indicated that the overall model was not statistically significant ($p = .123$) and had an R^2 value of .074. The results of this regression are shown in Table 6.

Table 6

Results of multiple linear regression to determine predictors of Grade Point Average for all sample students^a

Variable	<i>B</i>	<i>t</i>	Sig.
Constant	5.48	4.26	.000
Internality	-.012	-.849	.398
Peer Influence	.040	1.69	.095
PAR	-.019	-1.58	.119
TAR	-.003	-.198	.843
R^2	.074		
<i>F</i>	1.87		.123

Note. PAR = Parent Acceptance Rejection (index of perceived relationship with parents);

TAR = Teacher Acceptance Rejection (index of perceived relationship with teachers).

^a $N = 98$.

From the initial regression that was conducted to answer research question four, the peer influence variable was found to have a p value of .095. Although the peer influence variable was not a statistically significant predictor of GPA, another regression was conducted to examine the predictive nature of the peer influence variable when

broken down into the two separate constructs of self-enhancing peer influence and self-destructive peer influence. This analysis still yielded results that were not statistically significant. Self-destructive peer influence had a beta weight of -.193 and a t value of -1.92, which was not statistically significant ($p = .058$). Self-enhancing peer influence had a beta weight of .085 and a t value of .845, which also was not statistically significant ($p = .400$). Table 7 presents the results of this analysis.

Table 7

Results of multiple linear regression to determine the predictive power of peer influence on Grade Point Average^a

Variable	b	t	Sig.
Constant	4.32	5.33	.000
SD Peer Influence	-.058	-1.92	.058
SE Peer Influence	.030	.845	.400
R^2	.047		
F	2.32		.104

Note. SD Peer Influence = Self-Destructive Peer Influence; SE Peer Influence = Self-Enhancing Peer Influence.

^a $N = 98$.

Research Question Five

The fifth and final research question in the current study was, Does the way social capital or locus of control contribute to the academic achievement of disadvantaged students differ by disadvantage (White, Low-SES; Minority, Not Low-SES; and Double Jeopardy) group? As mentioned earlier, the final sample consisted of 98 students. Of the

98 students, 51 students, or 52.4% of the sample, were classified as No Disadvantage; 23 students, or 23.5% of the sample, were classified as Minority, Not Low-SES; six students, or 6.1% of the sample, were classified as White, Low-SES; and 18 students, or 21.1% of the sample, were classified as Double Jeopardy. Figure 3 provides a graphic representation of the mean GPA by demographic group for the sample students.

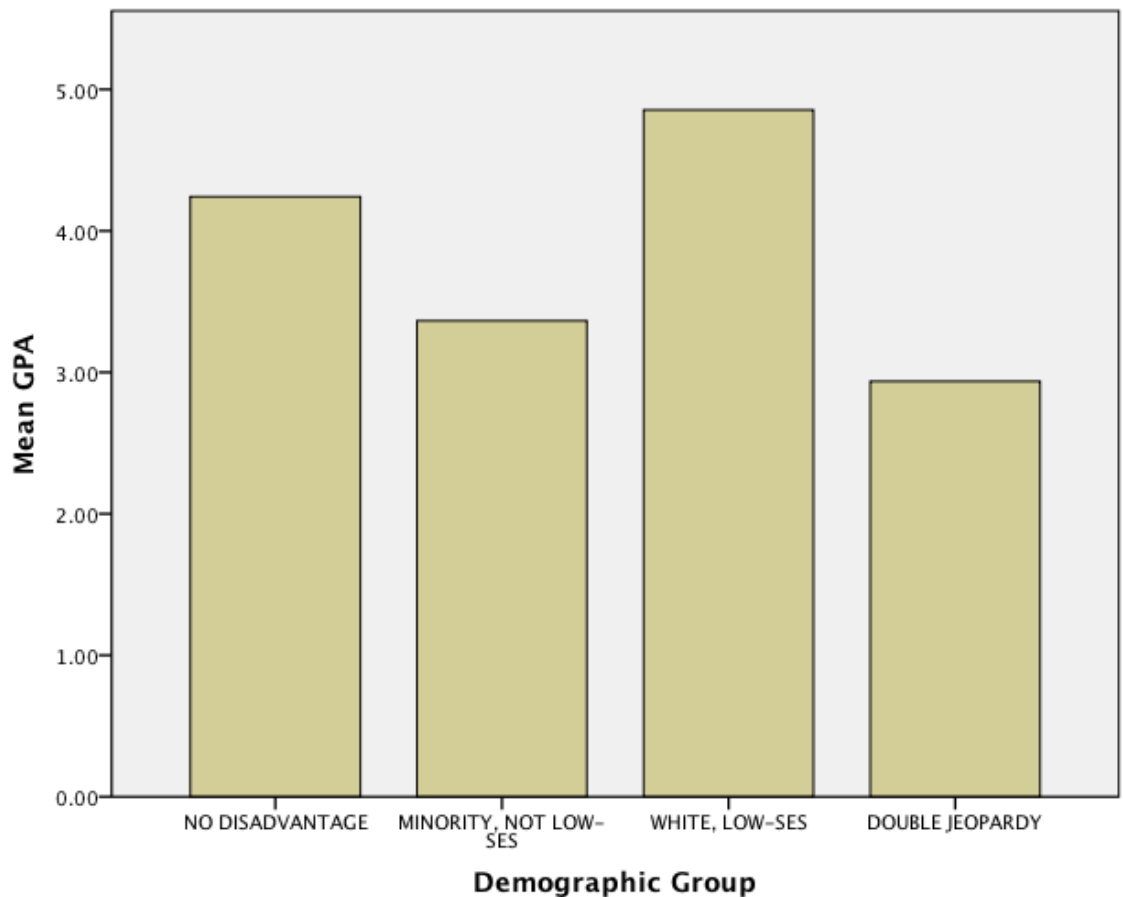


Figure 3. Graphic representation of mean GPA by demographic group for the sample of students at the targeted high school.

Multiple linear regressions were conducted for each group to determine the potential impact of internal locus of control and perceived relationships with parents, teachers, and peers on GPA. None of the results from this analysis were found to be

statistically significant. The variable that seemed to hold the most promise for all groups of disadvantaged students was the perceived relationships with teachers for the Minority, Not Low-SES group of students where $p = .061$. The results from the multiple linear regression analyses for each of the three groups can be seen in Tables 8, 9, and 10.

Table 8

Results of multiple linear regression to determine predictors of Grade Point Average for White, Low-SES students^a

Variable	<i>b</i>	<i>t</i>	Sig.
Constant	25.72	4.09	.153
Internality	-.211	-3.09	.199
Peer Influence	-.083	-1.01	.497
PAR	.021	.409	.753
TAR	-.175	-6.01	.105
R^2	.980		
<i>F</i>	12.10		.212

Note. PAR = Parent Acceptance Rejection (index of perceived relationship with parents);

TAR = Teacher Acceptance Rejection (index of perceived relationship with teachers).

^a $n = 6$.

Table 9

Results of multiple linear regression to determine predictors of Grade Point Average for Minority, Not Low-SES students^a

Variable	<i>b</i>	<i>t</i>	Sig.
Constant	2.18	.684	.503
Internality	-.002	-.059	.954
Peer Influence	.060	1.42	.173
PAR	-.010	-.261	.797
TAR	-.044	2.00	.061
R^2	.230		
<i>F</i>	1.34		.293

Note. PAR = Parent Acceptance Rejection (index of perceived relationship with parents);

TAR = Teacher Acceptance Rejection (index of perceived relationship with teachers).

^a*n* = 23.

Table 10

Results of multiple linear regression to determine predictors of Grade Point Average for Double Jeopardy students^a

Variable	<i>b</i>	<i>t</i>	Sig.
Constant	6.12	3.74	.002
Internality	-.025	-1.68	.116
Peer Influence	.018	.690	.502
PAR	-.006	-.432	.673
TAR	-.027	-1.74	.106
R^2	.272		
<i>F</i>	1.22		.351

Note. PAR = Parent Acceptance Rejection (index of perceived relationship with parents);

TAR = Teacher Acceptance Rejection (index of perceived relationship with teachers).

^a*n* = 18.

Although the results of the original analysis by disadvantaged group were not found to be statistically significant, additional analyses were conducted to find the potential impact of disadvantage in general on GPA. Multiple linear regressions were conducted for the No Disadvantage students and for the Disadvantaged students as two distinct groups. For the No Disadvantage group, the regression model was found to be statistically significant with a *p* value of .033. Results for this analysis can be seen in Table 11.

Table 11

Results of multiple linear regression to determine predictors of Grade Point Average for No Disadvantage students^a

Variable	<i>b</i>	<i>t</i>	Sig.
Constant	4.14	2.91	.006
Internality	.019	1.15	.258
Peer Influence	.043	1.42	.163
PAR	-.027	-2.10	.041 [*]
TAR	-.005	-.298	.767
R^2	.199		
<i>F</i>	2.87		.033 [*]

Note. PAR = Parent Acceptance Rejection (index of perceived relationship with parents); TAR = Teacher Acceptance Rejection (index of perceived relationship with teachers).

^a*n* = 51.

^{*}*p* < .05.

The PAR construct was the only variable that was found to be statistically significant, with a *p* value of .041. A second regression was conducted, this time only entering the four PAR construct variables. This model was significant, with a *p* value of .035; parent rejection was found to be the strongest predictor of GPA, with a *t* value of -2.12. This finding was statistically significant at the *p* < .05 level. Results for this analysis can be seen in Table 12.

Table 12

Results of multiple linear regression to determine the Parent Acceptance Rejection (PAR) subscale predictors of Grade Point Average for No Disadvantage Students^a

Variable	<i>b</i>	<i>t</i>	Sig.
Constant	5.05	9.79	.000
Warmth	-.040	-.939	.353
Hostility	.117	1.44	.158
Indifference	-.041	-.716	.478
Rejection	-.176	-2.12	.039 [*]
R^2	.198		
<i>F</i>	2.83		.035 [*]

^an = 51.

^{*}*p* < .05.

The results of the multiple linear regression that was conducted for the Disadvantaged group were not found to be statistically significant. These results can be seen in Table 13.

Table 13

Results of multiple linear regression to determine predictors of Grade Point Average for all Disadvantaged students^a

Variable	<i>b</i>	<i>t</i>	Sig.
Constant	5.44	2.79	.008
Internality	-.021	-1.07	.289
Peer Influence	.053	1.72	.093
PAR	-.005	-.266	.791
TAR	-.009	-.533	.597
R^2	.093		
<i>F</i>	1.08		.379

Note. PAR = Parent Acceptance Rejection (index of perceived relationship with parents);
TAR = Teacher Acceptance Rejection (index of perceived relationship with teachers).

^a*n* = 47.

Although none of the individual predictors were found to be statistically significant for the Disadvantage group, the variable that held the most promise for significance was Peer Influence, with a *p* value of .093. However, when a separate regression was conducted to test the two components of peer influence, i.e., self-enhancing and self-destructive, neither was found to be statistically significant. Self-destructive peer influence had a *p* value of .107 and self-enhancing peer influence had a *p* value of .432. The results of this analysis can be seen in Table 14.

Table 14

Results of multiple linear regression to determine the predictive power of peer influence on Grade Point Average for all Disadvantaged students^a

Variable	<i>b</i>	<i>t</i>	Sig.
Constant	3.77	3.73	.001
SD Peer Influence	-.061	-1.64	.107
SE Peer Influence	.037	.794	.432
<i>R</i> ²	.071		
<i>F</i>	1.67		.199

Note. SD Peer Influence = Self-Destructive Peer Influence; SE Peer Influence = Self-Enhancing Peer Influence.

^a*n* = 47.

Conclusions

Despite the evidence from other studies that internal locus of control and social capital variables do have an impact on the academic achievement of students (Gifford et al., 2006; Tella et al., 2009; Uguak et al., 2007), the current study produced some mixed, and not quite as promising, results. Research question one of the current study examined the existence of an achievement gap between students who were from a minority race/ethnicity or came from low-SES families and those who were White and not from low-SES families. For this research question, the findings clearly indicated consistency with other achievement gap studies (Davis-Kean, 2005; Lubienski & Crane, 2010; Rivkin, 2000; Stewart, 2008); from the whole population of the target high school,

students coming from more advantaged backgrounds had outpaced those from disadvantaged backgrounds academically.

An ANOVA was conducted to determine if there were statistically significant differences in terms of mean GPA between the four demographic groups (No Disadvantage; Minority, Not Low-SES; White, Low-SES; and Double Jeopardy) used in the current study. The results of this analysis indicated that there was a statistically significant gap in the achievement among these four groups. Post-hoc LSD analysis was used then to determine exactly where the differences were. Through this analysis, the author determined that, with one exception, there was a statistically significant achievement gap among all the groups, regardless of which two groups were being compared. The No Disadvantage group was achieving significantly better than any of the other three groups and the single disadvantage groups were achieving significantly better than the Double Jeopardy group. The only exception was between the Minority, Not Low-SES and the White, Low-SES groups; these two groups did not show a significant difference in mean GPA. As expected, and consistent with the work of Parson and Kritsonis (2006), who have examined the double jeopardy phenomenon, the biggest difference in mean GPA was found between the Double Jeopardy group and the No Disadvantage group, with the No Disadvantage group achieving at nearly a full grade point higher than the Double Jeopardy group.

Research questions two and three began to address the independent variables that were of particular interest for this current study. Internal locus of control has been found to have a positive impact on academic achievement and engagement in school by other researchers (Schultz, 1993; Shorr & Young, 1984). However, that which predicts one's

level of internality or externality is a little less clear (Chubb & Fertman, 1997; Lefcourt, 1992; Shearin, 2002; Shorr & Young; Wenzel, 1992). Research questions two and three were specifically focused on determining whether there was a correlation between the level of internality and perceived relationships with parents, teachers, and peers for the sample group of high school seniors at the target school. Conducting Pearson product moment correlation analysis revealed that only perceived relationships with teachers had a statistically significant relationship with internal locus of control.

More specifically, the results of this analysis indicated that there was a statistically significant negative relationship between internality and perceived relationship with teachers, indicating that, as internal locus of control increased, perceived relationships with teachers weakened. This finding did not necessarily mean that students had a negative or adversarial relationship with teachers. Rather, it may indicate that as students felt more empowered or self-confident in their ability to impact their own life events, such as learning and grades, the relationship with the teacher was not as important as if they felt less empowered or confident in their own abilities. This speculation may provide focus for further research. One of many questions still to be answered is, do students with tendencies towards an external locus of control indicate stronger perceived relationships with teachers, or possibly exhibit a stronger desire for more support from the adults in their lives? If so, is that desire a result of feelings of insecurity or a lack of self-confidence that students who possess an internal locus of control have been able to overcome? These questions may lay the groundwork for future research.

Although the overall peer influence variable was not found to have a statistically significant relationship with internality, when an additional analysis was conducted on the correlation of the peer-influence subscales, the author found that self-enhancing peer influence had a statistically significant positive relationship with internality. The relationship between self-enhancing peer influence and internal locus of control was evidence that internal locus of control increased when students were positively influenced by their peers. This finding was consistent with the work of MacLeod (1995) and Bates (2004), who found that peer groups and attitudes are positively correlated with academic achievement and general worldview. Little work, however, has been conducted that has specifically focused on the impact of peers on locus of control. If internality is positively correlated with academic achievement as other researchers have indicated (Schultz, 1993; Shorr & Young, 1984), then further research on the relationships or other factors that foster internality seems like an important and logical next step.

Research question four examined the potential predictive power of locus of control and social capital on the academic achievement of all students in the sample group. Although other researchers have found a correlation between locus of control and relationships and academic achievement (Coleman, 1988; Finn & Rock, 1997; Gifford et al., 2006; Lee et al., 2006; Wooley & Bowen, 2007), very few have studied the actual predictive power of these variables on academic achievement. However, from the multiple linear regression analysis that was conducted in the current study, for this sample of students, none of the independent variables were found to be statistically significant predictors of GPA. Beyond the scope of the current study, but consistent with some of the other research mentioned above, the regression also indicated that peer

influence was positively correlated with GPA, although such influence was not predictive.

Whereas research question four examined the predictive power of locus of control and social capital for the entire sample of students together, research question five examined whether the individual independent variables were more or less predictive of academic achievement for the four different groups. The main emphasis of this question was to determine whether one or more of the independent variables could be pinpointed as a strong predictor or set of strong predictors of academic achievement for the individual demographic groups.

Multiple linear regressions were conducted for each subgroup of students in order to determine the predictive power of each independent variable on GPA. None of these results were statistically significant, which indicated that locus of control and perceived relationships with parents, teachers, and peers were not adequate predictors of GPA for the sample group of students, regardless of which demographic group they were in. However, the subgroup sizes and group characteristics may have affected this analysis. For example, as indicated in Figure 3, there were only six students in the White, Low-SES group and the average GPA for the group was 4.86, which indicated that this small group of students was doing well academically, despite their disadvantage. In fact, of those six students, one graduated as the valedictorian of the senior class with a 6.11 GPA and two others had GPAs of over 5.0.

As a result of the small subgroup sizes and the anomalies mentioned above, additional analyses were conducted to determine how locus of control and social capital may have impacted students from disadvantaged groups in general differently than

students from more advantaged backgrounds. However, for the total disadvantaged group of students, none of the independent variables were found to be statistically significant predictors of academic achievement. This finding was contradictory to the results found by other researchers in previous studies, who indicated that locus of control and social capital were significant predictors of academic achievement (Coleman, 1988; McMillan & Reed, 1993; Schultz, 1993; Shorr & Young, 1984). For this particular sample of disadvantaged students, some other factors were contributing to the achievement gap phenomenon.

On the other hand, the results of the analysis on the No Disadvantage group of students were found to be statistically significant. The overall regression model was statistically significant, with a p value of .033. The regression analysis also indicated that the PAR construct was the only variable that was a statistically significant predictor of academic achievement for the No Disadvantage group. When a multiple linear regression was conducted by entering only the four subscales of the PAR construct, the author determined that the rejection subscale was the only statistically significant predictor of GPA in the negative direction for the No Disadvantage group. From the results of this analysis, it can be concluded that when students from the target high school had feelings of parental rejection, then GPA was likely to be negatively impacted, a finding that supported other researchers' conclusions that a student's relationships with parents or primary caregivers is related to academic achievement and engagement (Schultz, 1993; Shorr & Young, 1984).

Although some of the findings of the current study were contrary to the findings of previous research, this discordant finding may be due to range restriction. When the

range of responses, or variance, for one variable is small, the likelihood of finding any statistically significant correlations with other variables is also small (Salkind, 2011). In the current study, very little variance regarding locus of control and all of the social capital variables was found within and between all groups. When an ANOVA was conducted to compare the means of all social capital variables and locus of control between all four groups, no statistically significant results were found; the only statistically significant result was between the mean GPA of the four groups. This analysis indicated that students at the target high school had similar perceptions about their relationships with parents, teachers, and peers and had similar levels of internality, regardless of which demographic group they were from (No Disadvantage; Minority, Not Low-SES; White, Low-SES; or Double Jeopardy).

There was, however, still a gap in academic achievement levels among the groups. These findings indicated that, for this sample of students, one of the many other factors, such as community, school structure, parent's education level, and extracurricular involvement, that had been studied by previous researchers (Caldas & Bankston, 1997; Davis-Kean, 2005; Dornbusch et al., 1991; Lee & Madyun, 2009; McCarthy, 2000) was more closely correlated or more highly predictive of academic achievement than the independent variables chosen for the current study.

Implications and Recommendations

The education of America's youth is a topic worthy of continued discussion and examination. It is important to find ways to keep pace in math and science with many other countries around the world, and it is equally important from a social justice standpoint to ensure that America's most disadvantaged students find opportunity in

American schools. The number of factors that may reduce opportunity can seem overwhelming and insurmountable. What is most certainly implied from the current study is that every educational setting is unique and generalization from one setting to another should be done with intentional caution. However, five other major implications and recommendations can be made from the current study.

First, it was interesting to find that, in the total sample of students, there was a negative correlation between perceived relationships with teachers and internal locus of control. Chubb and Fertman (1997) found that internal locus of control seemed to increase during the adolescent years and that locus of control typically went from external to internal as students advanced from their freshman to senior year in high school. Because the sample group for the current study was taken from the population of senior-level students, the above finding may imply that as students matured and became more independent, their need for close and supportive relationships with teachers tended to decrease. Therefore, a recommendation for future researchers would be to expand this same study to a broader group of students, including all levels of high school students.

Second, the results of the current study imply that the disadvantages of being from a minority race/ethnicity and coming from a low-SES background have basically the same impact on student achievement; when taken together (double jeopardy) they have a compounding effect. Of the four demographic groups taken into consideration when examining the extent of the achievement gap at the target high school, the only two groups that did not show a significant achievement gap between them were the Minority, Not Low-SES and White, Low-SES. More research needs to be conducted to determine whether Minority, Not Low-SES and White, Low-SES groups of students are closely

related or if this finding was simply unique to the population of students at the high school utilized for the current study.

Third, many other studies have examined how race/ethnicity, income level, and upbringing have impacted academic achievement (Caro et al., 2009; Ferguson, 2002; Parson & Kritsonis, 2006). However, most studies have explored the correlation between certain demographic factors and academic achievement. The current study analyzed potential predictors of academic achievement, rather than simple correlations. The results implied that finding predictive variables of academic achievement is much more difficult than finding relationships between academic achievement and independent variables. For instance, consistent with some of the other researchers mentioned above, the regression analysis conducted for the sample students in the current study indicated that peer influence was positively correlated with GPA, although it was not predictive. Due to the number of factors that impact social research, predictive variables will not be found easily and will most likely vary from setting to setting. In addition, one of the aims of the current study was to uncover how certain demographic characteristics that have been considered disadvantages to education may have differed in their predictive power of academic achievement. Future work in this area must be continued on a larger scale, expanding the sample group of participants to entire schools or districts.

Fourth, another recommendation for researchers looking to advance and expand the body of research about potential ways of closing the advantage/disadvantage achievement gap is to examine disadvantaged groups by community or neighborhood. Although students may have the same apparent disadvantages, e.g., minority or low-SES, correlations have been found between community and neighborhood influences and

academic achievement (Lee & Madyun, 2009; Lubienski & Crane, 2010; Neuman & Celano, 2006). But the question remains, are community and neighborhood influences strong enough to predict academic achievement?

Finally, as mentioned above, on the surface, students may appear to be similar in many ways. However, just as it may be important to consider the community and neighborhood influences that may be at play in the lives of students, it is equally important to recognize the needs of individuals, not merely groups of people. This notion was made vividly clear in the examination of the subgroups in the current study. The White, Low-SES group, with only six students, was outperforming all other groups of students in the sample. It was obvious that they were successfully overcoming their disadvantage. Therefore, it is the recommendation of the author that future researchers wishing to examine the achievement gap include a qualitative piece that would help to get to the heart of how some traditionally disadvantaged students overcome the barriers and obstacles that they face as a result of their demographic status.

As demonstrated in chapter one, education can provide opportunity, but, for many American youth, disadvantage has limited their access to education or has diminished their external support systems in such ways that they become “deprived of a decent standard of living” (Neufeldt, 1988, p. 390). Just as Jesus exhorted those he taught to care for the unmet needs of the poor, the hungry, and the thirsty, education is an unmet need of too many youth in the United States today; this need must be met. The potential factors that limit the opportunities of the disadvantaged are numerous and are as diverse as the people they impact. Parents, teachers, peers, locus of control, SES, race/ethnicity, community, school resources, and a variety of other factors will have varying interactions

and effects from one situation to another. Although the results of social research in general, and of the current study in particular, may not always be generalizable from one situation to another, the methodology can be applied to different and larger groups of students in order to help determine a focus for administrators, teachers, parents, and communities. This compelling need is precisely why localized research must continue; the education and, in turn, the lifelong opportunity of the least of these in the 21st century may be counting on it.

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APPENDIX A

Compiled Locus of Control and Social Capital Survey

**THANK YOU FOR AGREEING TO PARTICIPATE IN THIS SURVEY.
RESULTS FROM THIS SURVEY WILL BE USED TO BETTER UNDERSTAND
THE IMPACT OF RELATIONSHIPS ON STUDENT ACADEMIC
ACHIEVEMENT.**

**PLEASE WORK CAREFULLY THROUGH THE ENTIRE SURVEY, MARKING
A RESPONSE FOR EVERY STATEMENT. THERE ARE NO RIGHT OR
WRONG ANSWERS; SIMPLY ANSWER HONESTLY FOR EVERY
STATEMENT.**

- **SECTION ONE IS ABOUT YOU**
- **SECTION TWO IS ABOUT YOUR FRIENDS**
- **SECTION THREE IS ABOUT YOUR PARENTS OR
PRIMARY CAREGIVER**
- **SECTION FOUR IS ABOUT YOUR TEACHERS**

**INDIVIDUAL RESPONSES TO THE STATEMENTS IN THIS SURVEY WILL
BE VIEWED ONLY BY THE RESEARCHER AND WILL BE KEPT
COMPLETELY CONFIDENTIAL.**

**PLEASE ATTEMPT TO RESPOND TO ALL STATEMENTS, BUT IF YOU
CHOOSE, YOU MAY STOP YOUR PARTICIPATION IN THIS SURVEY AT
ANY TIME.**

**PLEASE IDENTIFY YOURSELF ONLY BY YOUR SCHOOL
IDENTIFICATION (ID) NUMBER BELOW:**

SCHOOL ID #
(If you do not know your ID #, please ask for help.)

STATEMENTS ABOUT YOURSELF

In this section you should answer each statement by circling the corresponding number for how true the statement is about you. Your answer choices for each statement are as follows:

If the statement is not at all true for you	circle	1
If the statement is not true for you	circle	2
If the statement is slightly not true for you	circle	3
If the statement is slightly true for you	circle	4
If the statement is true for you	circle	5
If the statement is very true for you	circle	6

For each statement circle the number that best reflects your personal opinion.

<u>The Statement is:</u>	<u>Not true at all</u>						<u>Very true</u>
1. Whether or not other people respect my wishes is mostly up to me.	1	2	3	4	5	6	
2. To a great extent my life is controlled by accidental happening.	1	2	3	4	5	6	
3. I feel like what happens to me in my life is mostly determined by powerful people.	1	2	3	4	5	6	
4. Sometimes I feel like I have no ideas and don't want to do anything.	1	2	3	4	5	6	
5. Whether or not I have an accident depends entirely on my behavior.	1	2	3	4	5	6	
6. When I make plans, I am almost certain to make them work.	1	2	3	4	5	6	
7. There is very little chance of protecting my personal interests from bad luck happenings.	1	2	3	4	5	6	
8. I don't like confusing situations because I don't know how to behave or what to do.	1	2	3	4	5	6	
9. When I get what I want it's usually because I'm lucky.	1	2	3	4	5	6	
10. Other people often prevent my plans from working out.	1	2	3	4	5	6	
11. I <u>can</u> do a lot to protect myself from disease.	1	2	3	4	5	6	
12. I often don't know what to do to make my wishes come true.	1	2	3	4	5	6	
13. Much of what happens to me in my life is a matter of coincidence.	1	2	3	4	5	6	
14. My life is mostly controlled by powerful others.	1	2	3	4	5	6	

<u>The Statement is:</u>	Not true at all				Very true	
	1	2	3	4	5	6
15. Whether or not I have an accident is mostly a matter of luck.	1	2	3	4	5	6
16. I know many ways of protecting myself from disease.	1	2	3	4	5	6
17. I have very little chance of protecting my personal interests when they conflict with those of other people.	1	2	3	4	5	6
18. It's not wise for me to plan too far ahead because many things turn out to be a matter of good or bad fortune.	1	2	3	4	5	6
19. Getting what I want requires pleasing those people above me.	1	2	3	4	5	6
20. In unclear or dangerous situations I always know what to do.	1	2	3	4	5	6
21. It is sheer coincidence when somebody else ever considers my wishes.	1	2	3	4	5	6
22. My wellbeing depends to a great extent on the behavior of other people.	1	2	3	4	5	6
23. I can pretty much determine what will happen in my life.	1	2	3	4	5	6
24. Sometimes I just don't know at all what to do in a given situation.	1	2	3	4	5	6
25. I am usually able to protect my personal interests.	1	2	3	4	5	6
26. Whether or not I have an accident depends to a large extent on the behavior of others.	1	2	3	4	5	6
27. When I get what I want, it's usually because I worked hard for it.	1	2	3	4	5	6
28. I can usually think of many alternative ways of dealing with difficult situations.	1	2	3	4	5	6
29. In order to have my plans work I make sure that they fit in with the desires of people who have power over me.	1	2	3	4	5	6
30. My life is determined by my own actions.	1	2	3	4	5	6
31. Whether I fail or not is a matter of luck.	1	2	3	4	5	6
32. I can usually think of many ways of solving problems.	1	2	3	4	5	6

PLEASE CONTINUE TO THE NEXT SECTION →

STATEMENTS ABOUT YOUR FRIENDS

The following statements refer to your friends. Circle the number that corresponds with how strongly you agree or disagree with each statement.

If you:

Strongly Disagree	circle	1
Disagree	circle	2
Not Sure	circle	3
Agree	circle	4
Strongly Agree	circle	5

Please make sure you circle one answer for each statement.

<u>The Statement is:</u>	Strongly Disagree	Disagree	Not Sure	Agree	Strongly Agree
1. My friends and I go to each other's houses after school and on weekends.	1	2	3	4	5
2. Sometimes my friends and I just sit around and talk about things like school, sports, and things we like.	1	2	3	4	5
3. My friends bug me or annoy me sometimes.	1	2	3	4	5
4. My friends and I can argue a lot.	1	2	3	4	5
5. If I forget my lunch or need a little money, my friends will loan it to me.	1	2	3	4	5
6. If other kids are bothering me, my friends will help me.	1	2	3	4	5
7. If I have a problem at school or at home, I can talk to my friends about it.	1	2	3	4	5
8. If my friends or I do something that bothers each other, we can make up easily.	1	2	3	4	5
9. If I had to move away from my friends, I would miss them.	1	2	3	4	5
10. If I have a secret, I can tell my friends without them telling anyone.	1	2	3	4	5
11. My friends would stick up for me if another kid was messing with me.	1	2	3	4	5
12. Sometimes my friends do things for me, or make me feel special.	1	2	3	4	5
13. I can get into fights with my friends.	1	2	3	4	5
14. My friends would help me if I needed it.	1	2	3	4	5
15. I feel happy when I'm with my friends.	1	2	3	4	5

For this next section, circle the number that corresponds with how many of your friends do these behaviors regularly.

Your answer choices for each statement are as follows:

None	circle	1
Some	circle	2
Many	circle	3
All	circle	4

Please make sure you circle one answer for each statement.

<u>My friends:</u>	None	Some	Many	All
16. Study hard/do their homework	1	2	3	4
17. Drink alcohol	1	2	3	4
18. Use drugs	1	2	3	4
19. Talk back to their teachers	1	2	3	4
20. Talk about going to college	1	2	3	4
21. Get into fights with other students	1	2	3	4
22. Skip school	1	2	3	4
23. Get good grades/are on the honor roll	1	2	3	4
24. Work part-time	1	2	3	4
25. Have a serious girlfriend/boyfriend	1	2	3	4
26. Carry weapons (knives, guns, etc.)	1	2	3	4
27. Are active in school activities	1	2	3	4
28. Belong to a gang	1	2	3	4
29. Are actively in community or religious activities	1	2	3	4
30. Get along well with their parents	1	2	3	4
31. Have dropped out of school	1	2	3	4

PLEASE CONTINUE TO THE NEXT SECTION →

STATEMENTS ABOUT YOUR PARENTS/CAREGIVER

The following section contains statements about how a caregiver sometimes may act toward their children. Think about each statement and circle the number that corresponds to how true (**1=Almost Never True, 2=Rarely True, 3=Sometimes True, 4=Almost Always True**) each statement is about your caregiver.

Before answering the statements, please indicate who your primary caregiver is: (circle one)

Mother

Father

Other (i.e., aunt, uncle, grandma, grandpa, etc.)

Please make sure you circle one answer for each statement.

<u>My caregiver:</u>	Almost Never True	Rarely True	Sometimes True	Almost Always True
1. Says nice things about me	1	2	3	4
2. Pays no attention to me	1	2	3	4
3. Makes it easy for me to tell him/her things that are important to me	1	2	3	4
4. Gets angry with me, even when I do not deserve it	1	2	3	4
5. Sees me as a big nuisance	1	2	3	4
6. Gives me harsh consequences when he/she is angry	1	2	3	4
7. Is too busy to answer my questions	1	2	3	4
8. Seems to dislike me	1	2	3	4
9. Is really interested in what I do	1	2	3	4
10. Says many unkind things to me	1	2	3	4
11. Pays no attention when I ask for help	1	2	3	4
12. Makes me feel wanted and needed	1	2	3	4
13. Pays a lot of attention to me	1	2	3	4
14. Goes out of his/her way to hurt my feelings	1	2	3	4
15. Forgets important things I think he/she should remember	1	2	3	4
16. Makes me feel unloved if I misbehave	1	2	3	4
17. Makes me feel what I do is important	1	2	3	4
18. Frightens or threatens me when I do something wrong	1	2	3	4

<u>My caregiver:</u>	Almost Never True	Rarely True	Sometimes True	Almost Always True
19. Cares about what I think, and likes me to talk about it	1	2	3	4
20. Feels other children are better than I am no matter what I do	1	2	3	4
21. Lets me know I am not wanted	1	2	3	4
22. Lets me know he/she loves me	1	2	3	4
23. Pays no attention to me as long as I do nothing to bother him/her	1	2	3	4
24. Treats me gently and with kindness	1	2	3	4

PLEASE CONTINUE TO THE NEXT SECTION →

STATEMENTS ABOUT YOUR TEACHERS

The following section contains statements about how teachers may act toward their students. Think about each statement and circle the number that corresponds to how true (1=Almost Never True, 2=Rarely True, 3=Sometimes True, 4=Almost Always True) each statement is about how your teachers treat you in general.

Please make sure you circle one answer for each statement.

<u>My teachers:</u>	Almost Never True	Rarely True	Sometimes True	Almost Always True
1. Say nice things about me	1	2	3	4
2. Pay no attention to me	1	2	3	4
3. Make it easy for me to tell about things that are important to me	1	2	3	4
4. Get angry with me, even when I do not deserve it	1	2	3	4
5. See me as a big nuisance	1	2	3	4
6. Give me harsh consequences when they are angry	1	2	3	4
7. Are too busy to answer my questions	1	2	3	4
8. Seem to dislike me	1	2	3	4
9. Are really interested in what I do	1	2	3	4
10. Say many unkind things to me	1	2	3	4
11. Pay no attention when I ask for help	1	2	3	4
12. Make me feel wanted and needed	1	2	3	4
13. Pay a lot of attention to me	1	2	3	4
14. Go out of their way to hurt my feelings	1	2	3	4
15. Forget important things I think they should remember	1	2	3	4
16. Make me feel disliked if I misbehave	1	2	3	4
17. Make me feel what I do is important	1	2	3	4
18. Frighten or threaten me when I do something wrong	1	2	3	4
19. Care about what I think, and like me to talk about it	1	2	3	4
20. Feel other children are better than I am no matter what I do	1	2	3	4
21. Let me know I am not wanted	1	2	3	4
22. Let me know they care about me	1	2	3	4
23. Pay no attention to me as long as I do nothing to bother them	1	2	3	4
24. Treat me gently and with kindness	1	2	3	4

**THANK YOU FOR TAKING THE TIME TO
COMPLETE THIS SURVEY!**

**FOR YOUR EFFORTS, YOUR NAME WILL BE
ENTERED INTO A RAFFLE TO WIN A NEW IPOD.
IN ADDITION, YOUR PARENTS NAMES WILL BE
ENTERED INTO A RAFFLE TO WIN A \$50 GAS
CARD.**

APPENDIX B

Permission to use the I-SEE scale

From: Angelika Anderson [angelika.anderson@monash.edu]
Sent: Thursday, January 27, 2011 3:33 AM
To: Randy Couwenhoven
Cc: John Hattie
Subject: Re: FW: Locus of Control scale

Dear Randy

Professor Hattie passed on your request for the I-SEE scales to me. I have attached the scales here. I translated them as part of my PhD by the back-translation method:

Angelika Anderson (2001). The Effect of Locus of Control and Classroom Climate on Motivation in the Classroom: An Ecological Approach to Personality and Action. A Thesis Submitted in Fulfillment of the Degree of Doctor of Philosophy in Education, The University of Auckland, 2001.

Feel free to use the scales, I trust with due acknowledgment. This measure is a multidimensional measure of LOC measuring these sub-scales:

I-SEE scales:

I-SEE I: 1 +, 5 +, 6 +, 11 +, 23 +, 25 +, 27 +, 30 +

I-SEE SK: 4 -, 8 -, 12 -, 16 +, 20 +, 24 -, 28 +, 32 +

I-SEE P: 3 +, 10 +, 14 +, 17 +, 19 +, 22 +, 26 +, 29 +

I-SEE C: 2 +, 7 +, 9 +, 13 +, 15 +, 18 +, 21 +, 31 +

If you need further information do not hesitate to ask. I also created a 'junior' version for another study with younger children, should that be useful.

I wish you well with your studies.

Kind regards

Angelika

Angelika Anderson
Senior Lecturer
Faculty of Education
Monash University

APPENDIX C

Permission to use the Peer Influence scale

From: Carlson, Cindy [ccarlson@austin.utexas.edu]
Sent: Monday, January 31, 2011 11:44 AM
To: Randy Couwenhoven
Subject: Re: RE:

Dear Randy,

The survey to which you are referring was created as part of funded research by the Carnegie Foundation. Although we completed appropriate statistics to determine internal consistency of the scales, we did not publish a study of the survey's reliability and validity. Therefore, it may not be ideal for your purposes. What I can furnish you with is a copy of the measure and a copy of the Final Report to Carnegie Corporation, which includes much of these data.

Please let me know if you wish to pursue this further, given the constraints to which I have referred.

Also, an FYI, one of my colleagues, Dr. Toni Falbo, does research on social capital and student achievement. You may wish to also check out her methods.

Best,

Cindy Carlson