ARE GOOD INTENTIONS ENOUGH?

AN INVESTIGATION OF HOW MENTOR EXPERIENCES AND EXPERTISE AFFECT MENTOR-MENTEE RELATIONSHIP DEVELOPMENT AND TARGETED YOUTH OUTCOMES

by

Lauren A. Silverstein

BA, Vassar College, 2005

Ed.M., Harvard University, 2008

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This dissertation was presented

by

Lauren A. Silverstein

It was defended on

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and approved by

Rafael Engel, PhD, School of Social Work

Jennifer Iriti, PhD, Administrative and Policy Studies

M. Najeeb Shafiq, PhD, Administrative and Policy Studies

Dissertation Advisor: William E. Bickel, PhD, Administrative and Policy Studies

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In the United States, youth mentoring programs are becoming an increasingly popular educational partnership between community adults and local children. Even though programs rely on mentors to help achieve the desired outcomes, very little is known about 'what matters' in a mentor. Adhering to functionalist, human capital, teacher quality and possible selves theories, this study examines if certain mentor experiences and expertise including motivation, education and knowledge areas facilitate relationship development and positive changes in the mentee's future possible self.

A secondary data analysis, this study involved survey responses from 119 mentor-mentee pairs involved in a citywide mentoring program. Multiple regression was used to examine the relationship between the explanatory mentor characteristics and the relationship and youth outcome variables along three different paths: 1) effect of mentor attributes on relationship quality; 2) effect of mentor attributes on mentee future possible self; and 3) effect of mentor attributes on mentee future possible self; accounting for relationship quality. Perceptions of relationship quality and changes in mentee's future possible self are measured by the program's most important stakeholders: the youth.

This study confirmed prior research that suggests relationship quality is positive and significant in yielding targeted youth outcomes. However, this study extends the research in several important areas. First, certain mentor domains such as prior experiences with youth and with program content affect their ability to develop high-quality relationships. Second, even when high-quality relationships exist, certain mentor domains further facilitate or hinder their ability to achieve targeted youth outcomes. As such, this study establishes an inter-dependent relationship between relationship quality and future mentee outcomes suggesting mentoring programs must understand mentor quality by their ability to develop high quality relationships with youth *and* their ability to affect longer-term outcomes.

This study offers more precise recommendations to programs by summarizing the mentor experiences and expertise that were found to be both significant and insignificant in facilitating high relationship quality and the longer-term outcome of changes in the mentee future possible self. Programs can use these findings to inform their mentor recruitment, selection and retention strategies.

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1.0 INTRODUCTION

The word mentor conjures strong images. Typically, these images are of people who had such a significant influence, our lives were changed. For some, mentors influenced specific decisions, such as applying to college or pursuing a certain career. For others, mentors served as role models, advocates and symbols of hope. An abundance of personal anecdotes testify to the power of mentoring and fuel the creation of such programs in community organizations, schools and the workplace. In all settings, the hope is that the wisdom, expertise and care of some will be bestowed onto others. This paper will specifically focus on mentoring relationships cultivated through youth mentoring programs.

In the United States, youth mentoring programs are becoming an increasingly popular educational partnership between community adults and local children. There are more than 5,000 mentoring programs in the United States, serving about three million youths (DuBois, et al., 2011). Specifically, their growth is most concentrated in low-income and minority communities and schools. Like other education reforms, it is this population that is identified as most needy for these service programs as they are considered at-risk of school failure and delinquency behavior.

DuBois, et al. (2011) utilize the following definition of a mentoring program: "a program or intervention that is intended to promote positive youth outcomes via relationships between young persons (18-years-old and younger) and specific non-parental adults (or older youth) who are acting in a non-professional helping capacity" (p. 25). While the specific goals programs espouse may differ, many programs argue their services will achieve the targeted relationship and youth outcomes. This simple logic is illustrated in Figure 1. However, when the various factors that influence a program's ability to achieve youth outcomes are taken into account (Dubois, et al., 2011), a complicated and multidimensional theory of change emerges.

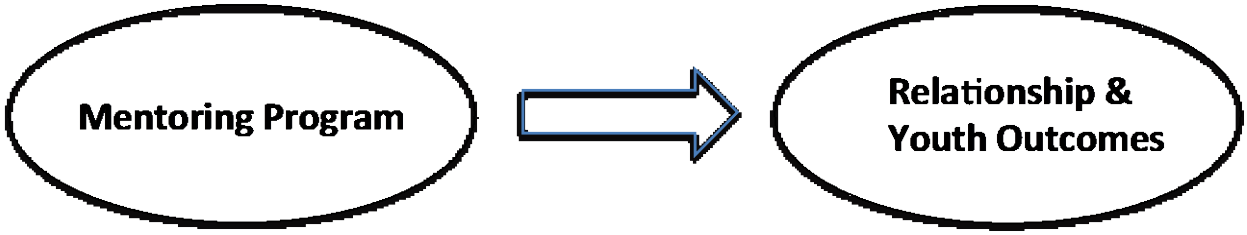

Figure 1: Program Logic

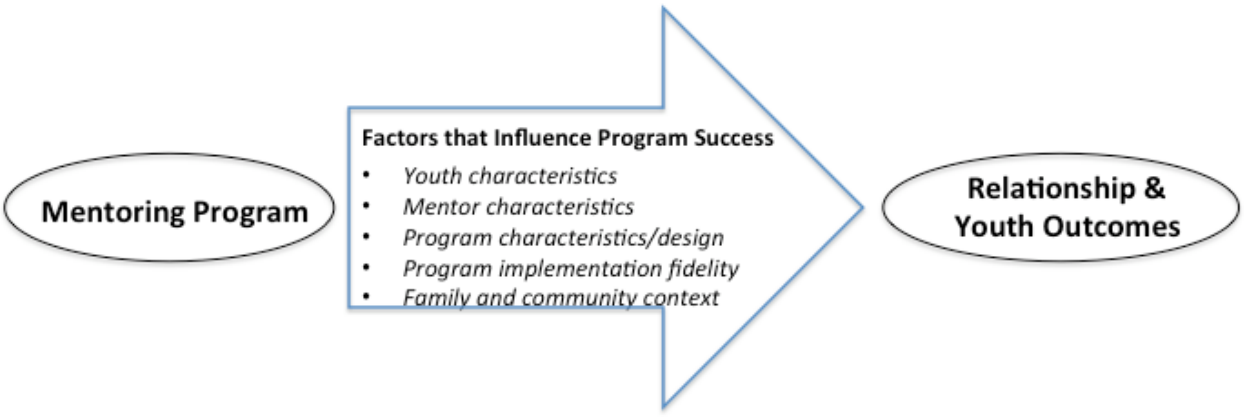

Figure 2:Unpacking the Program Theory of Change

Due to the number of factors that can influence program success, research has not

consistently found positive effects for all mentoring programs. However, some programs boast major success. If the bottom line is that "robust research does indicate benefits from mentoring for some young people, for some programmes, in some circumstances, in relation to some outcomes" (Roberts, Liabo, Lucas, DuBois, & Sheldon 2004, p. 513), then it seems crucial to ascertain the particular circumstances that have resulted in successful mentoring relationships for some students. Programs may vary by their inputs, such as their structure and purpose, as well as the youth and communities they target. However, a common element (and in fact what distinguishes this intervention from others with similar goals) is the presence of a mentor. Surprisingly, very little is known about 'what matters' in a mentor. Since programs rely on mentors to help achieve the desired youth outcomes, it is imperative to understand which mentor experiences, knowledge and characteristics are helpful and/or harmful to positive relationship development with the mentee and accomplishment of program goals.

1.1 PROBLEM SPACE

Is any mentor better than no mentor at all?

While many programs argue their mentors are key program inputs, their relationship to achieving the desired youth outcomes has not necessarily been established. Instead, program evaluations have tended to look at how youth change through their relationship with their mentor and their participation in the program. This does not allow for an understanding of how mentor knowledge, experiences, and motivation contribute to positive mentor/mentee relationships and

eventual targeted outcomes. Asking questions about what human attributes make effective mentors differ from the questions currently being asked; they are not questions about "what impact mentoring has on youth but about how mentoring occurs" (Hamilton, 1991, p. 1).

Although all mentors may receive the same training, they come to the program with varying backgrounds and experiences. Importantly, youth mentoring programs typically involve individuals 'signing up' to be a mentor. This method of self-selection on the part of the mentor is different from that of becoming a mentor through assignment or spontaneous development[1]. The non-rigorous and self-selective recruitment process in mentoring programs reflects a philosophy that 'anyone can be a mentor'. Actively signing up, and so declaring one's self, to be a youth mentor reflects an individual's self-motivation to serve in this role as well as the belief that he/she is qualified. But how does one and/or the mentoring program actually know if an individual is really qualified to mentor?

We know that some mentors are "better than others", despite having undergone the same training. Do certain characteristics, experiences and knowledge predispose mentors for success? In other words, what mentor characteristics, experiences and knowledge are most likely to positively facilitate youth outcomes and thus signify a "high-quality" mentor?

What one believes about the answers to these questions reflects a philosophical stance: is

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[1] For example, in the workplace, often individuals who have worked there for a certain amount of time or achieved a certain level of seniority are assigned as mentors to new employees. Similarly, often when working in collaboration with, or working for more experienced individuals whether in pursuit of academic, professional or personal goals, a mentoring relationship evolves. This declaration of an individual as a mentor is not made by the mentor him/herself, but rather by the mentee or protégée if he recognizes the more senior individual as having experience, knowledge or wisdom of benefit to personal and/or professional growth.

being a mentor 'trainable'? Or are there certain characteristics/experiences one can (should) come with that will make him/her more effective in this role? Due to the dearth of empirical answers to these questions, mentor recruitment, selection and training is based on unfounded beliefs. Developing an empirical foundation for these processes will ensure programming is evidence-based, an ethical responsibility to all stakeholders. In addition, information regarding which volunteers are best suited to be mentors will maximize mentor retention, a necessity since turnover is costly to both mentee well-being and program sustainability.

1.2 PURPOSE OF STUDY

"Very little is known about how variations in the characteristics of mentor relationships relate to youth outcomes." - Grossman & Rhodes, 2002, p. 200

Figure 3: Examining the "mentor" in the mentoring program

Mentors are a crucial program input. In fact, without them, mentoring programs would not exist. However, very few studies have looked at how the mentor him/herself might be related to youth outcomes. Since mentoring programs' theory of change is largely dependent on the mentor,

without knowing what matters in a mentor, even well intended programming is not grounded in theory or evidence. The purpose of this research study is to investigate the relationship between selected mentor characteristics and mentee relationship outcomes.

Adhering to functionalist, human capital and teacher quality theories, it is hypothesized that the individual attributes found to maximize human potential may also apply to youth mentoring. Grounded in the above-mentioned theories, the selected explanatory variables reflect these individual attributes, and are therefore characteristics and experiences by which mentors may differ. The explanatory variables include: (a) mentor initial motivation to volunteer; (b) mentor educational attainment; (c) mentor experience with program content; and (d) mentor experience working with youth. The explanatory variables of interest are measured using mentor self-reported responses on a mentor survey instrument.

The outcome variables of interest include: (a) mentee perception of high-quality relationships; and (b) changes in mentee's perception of future possible self. A high-quality mentoring relationship is measured by the extent the mentee perceives the relationship to be youth-centered, and the degree to which mentee perceives his/her mentor to be an ally. Changes in the mentee's perception of his/her future possible self is indicated by the degree to which the mentor has influenced his/her understanding of educational and career possibilities. Youth responses were used to gauge youth outcomes. It is believed that the mentees are key program stakeholders and so their perceptions of program value/worth will better help practitioners understand and determine what matters in a mentor.

By examining the mentor as a program input and using the youth voice to communicate program outcomes, this research study addresses literature gaps in the mentoring field, as well as

questions and concerns that have become apparent to the author through her own practice and experience in mentoring program development. Knowing “what matters” in a mentor can ensure a greater positive impact of mentoring programs and help them to more effectively, efficiently and ethically recruit, select, train and retain their mentor population.

1.3 RESEARCH QUESTIONS

This study seeks to investigate the following research questions:

1. Do mentor characteristics (initial motivation to volunteer, educational attainment, experience with program content, and experience with youth) affect the degree to which the mentee perceives the relationship as high-quality?
2. Do mentor characteristics (initial motivation to volunteer, educational attainment, experience with program content, and experience with youth) affect the degree to which the mentee perceives changes in his/her future possible self?
3. Does relationship quality: (a) affect the degree to which the mentee perceives changes in his/her future possible self? and (b) serve as a mechanism to understand which mentor characteristics affect changes in the mentee’s future possible self?

1.4 SIGNIFICANCE OF STUDY

Exposing a Cautionary Tale

Some of the most popular reforms to achieve social change are those that serve our country's youth. With a sense of compassion for and loyalty to future generations, adults of all ages across the United States are involved in efforts to help children. Mentoring is an example of an organizational development and partnership between the community and local children. The potential of these programs also attract the interest of scholars who study their outcomes in various fields, including education, volunteerism and psychology.

The difficulty with a topic such as mentoring, one that, for many, holds such a deep personal connection, is that we want to believe the programs work. Program Directors and policy makers want to believe the relationships we create for others work similarly to those that may have been experienced naturally in our own lives. Compared to other programs targeted at youth services, mentoring programs are "easier to visualize…they locate the problem (a lack of role models) and solution (deployment of predominantly middle-class volunteers) at the personal level. [As such], it fits neatly into American notions of upward mobility…"(DuBois, et al., 2011, p. 8). At face value, mentoring programs look like they should work, our instinct tells us that they will work and we want them to work" (Roberts, et al., 2004, p. 512). However, without more evidence, the promises made by youth mentoring must remain a cautionary tale.

This research study is rooted in the philosophy that mentoring programs espouse: adults can touch youths' lives in ways that are meaningful, significant and life altering. It is rooted in the philosophy that non-parental adults can become mentors by providing care, guidance, support

and resources. But this research study is also rooted in the firm belief that mentoring practice must be based in evidence. It is true that although disadvantaged youth have the most to gain from a mentor, they are also significantly less likely to have one than are advantaged youth (Erickson, McDonald, & Elder, 2009). However, all children, including, and especially, the low-income youth who are most targeted for mentoring programs, are too important and also too fragile on which to experiment. This research study does not hold the perspective that "any mentor is better than no mentor at all", but that certain mentors, even if well-intended, can do harm, or at a minimum, waste precious resources that could be used to elsewhere to help disadvantaged youth. As such, this study's research questions originate from a philosophical stance that echoes Jean Rhodes (2002) strong contention supported by her findings: "vulnerable children would be better left alone than paired with mentors who do not recognize and honor the enormous responsibility they have been given" (p. 3).

This project aims to figure out how to convert the power of caring and capacity for good that exists in the mentor population into more than good intentions – into intentions whose outcomes are considered "value-added" to the lives of the youth. Mentoring actions that add no value, or are harmful to youth should not have merit, no matter how well intended they are. Therefore, this study "grapples with the complexities [of mentoring] – even at the risk of learning that commonly deployed programs and practices do not always improve youth outcomes" (Rhodes, 2008, p. 41). It follows the call set forth by Grossman and Rhodes (2002) as it takes a cautious approach to discovering what kind of infrastructure, specifically among the mentor population, can most effectively and ethically support the recent fervor to develop mentoring programs.

2.0 LITERATURE REVIEW

The literature review will (a) discuss the argument for creating formal mentoring programs; (b) provide an overview of the current landscape of the mentoring field, including differences in program structure and effectiveness; and (c) introduce the assumptions, theories and evidence that warrant the explanatory and outcome variables of interest to this research study.

2.1 THE ARGUMENT: WHY FORMAL MENTORING PROGRAMS?

The underlying premise of mentoring can boil down to the simple fact that children need to feel cared about and have positive relationships with adults. Being intentional by creating formal mentoring programs addresses several current concerns.

First, young people's access to adults is becoming less frequent. Specifically, youth in poor communities experience higher rates of divorce among their parents and higher percentages live in single parent households than youth in wealthier communities (Jekielek, Moore, & Hair, 2002). As a result, mentoring programs are often found to target youth from single parent households, as well as youth from low-income backgrounds.

Second, additional support from a non-parental adult, including, "financial support, emotional support, esteem enhancement and cognitive appraisal, can supplement what a parent provides or substitute what a parent is unable to provide" (Jekielek, 2002, p. 1). For youth who have experienced unsatisfactory or rejecting parental relationships, a non-parental, supportive, caring adult can ensure youth do not develop fears about whether others will accept and support them (Jekielek, et al., 2002, p. 2). For youth who have strong relationships with their parents, the support of another caring, concerned adult may lessen the stress parental relationships tend to endure, especially during the adolescent years (Jekielek, et al., 2002, p. 2).

Third, improving academic behaviors is a major driver of mentoring programs. Academic behaviors can include educational performance, educational attainment and school attendance. Mentoring has become a preferred strategy in attempts to reduce the risk of school failure and related youth problems" (Hamilton, 1991, p. 1; Jekielek, et al., 2002).

Fourth, mentoring is theorized to improve many social behavioral outcomes such as reducing delinquency, aggression, drug use, and recidivism and developing healthy and safe behaviors (Jekielek, et al., 2002; Rhodes, 2008). It has been well established that mentors have the potential to serve as positive role models for youth, as well as models of success. Through providing a supportive, enduring relationship, mentors may stimulate improvements in adolescents' self-perceptions, and perceptions of other relationships (Hamilton, 1991; Grossman & Rhodes, 2002; Rhodes, Reddy, Grossman and Lee, 2002). Mentors can help youth learn how to cope with different daily stresses, and provide strategies to overcome future struggles (Grossman & Rhodes, 2002, p. 201; Rhodes, Reddy, Grossman & Lee, 2002).

2.1.1 Increasing access to mentors

Mentors can serve different roles depending on the needs and situations of the youth. For advantaged youth, mentors serve a *complementary* role. They complement the advantages already present in the youth's life, resulting in stronger educational achievement. For those disadvantaged by socio-economic status, a mentor plays a *compensatory* role in the child's life. Mentors in compensatory roles have an even more significant, potentially life-changing, impact than those in the complementary role (Erickson, et al., 2009).

The compensatory role mentors can play has tremendous implications for children, as well as the future of our society. For example, Erickson and colleagues (2009) found that "youth with parents whose education is limited have only a 35% probability of attending college. But if they have a teacher as a mentor, chances increase to 65%" (p.359). Comparatively, 67% of children of highly educated parents are very likely to go on to college regardless if they had a teacher as a mentor (p. 359).

While it is encouraging to know that mentors can positively impact youth, it appears there is a discrepancy among advantaged and disadvantaged youth in their ability to identify mentors. If a young person faces disadvantaged socio-economic status, he/she is 44% likely to have a mentor compared to 82% if he/she is advantaged by socio-economic status (p. 356). In other words, those for whom mentoring can be a life-changing experience are less likely to have a mentor. Meanwhile, those most likely to have a mentor are already privileged and so the mentor adds one more advantage. Therefore, unless the availability and access to mentors becomes more equitable, the inequality gaps in the United States will continue to grow.

An entire field of formal mentoring programs has grown in response to the tremendous potential found in informal mentoring relationships, coupled with the fact that disadvantaged youth are less likely to access informal mentors on their own. These formal programs have tried to reproduce the very same relationships and outcomes of informal mentoring in hopes to create a more equitable society.

2.2 YOUTH MENTORING PROGRAMS: THE CURRENT LANDSCAPE

DuBois, et al. (2011) utilize the following definition of a mentoring program to guide their meta-analysis: "a program or intervention that is intended to promote positive youth outcomes via relationships between young persons (18-years-old and younger) and specific non-parental adults (or older youth) who are acting in a non-professional helping capacity" (p. 25). Recent data indicates that there are more than 5,000 mentoring programs in the United States, serving about three million youths (DuBois, et al., 2011). In 2005, 3,000,000 adults had a formal, one-to-one mentoring relationship with a youth (MENTOR, 2006). While these adults may be involved in a similar activity, their role and purpose differs since mentoring programs themselves are quite diverse.

2.2.1 What do youth mentoring programs look like?

Concepts such as “one size fits all” and “a cookie-cutter model” are not applicable in the mentoring field. Programs with the same goals can look quite different; programs with different goals can look the same. In response to their non-formulaic nature, Karcher, Kuperminc, Portwood, Sipe, & Taylor (2006) proposed a framework that conceptualizes the different youth mentoring approaches through their context, structure and goals.

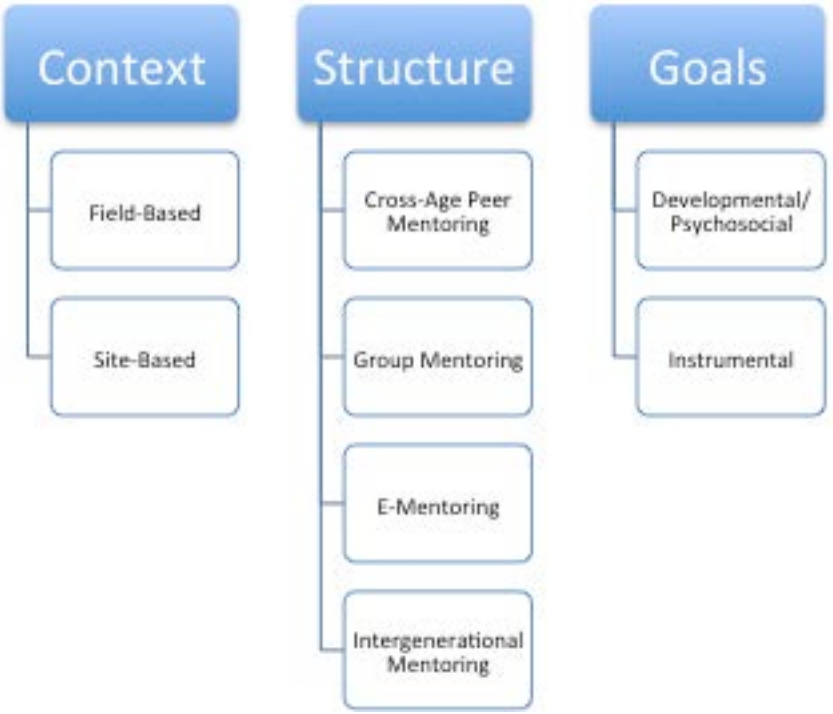

Figure 4: Youth Mentoring Programs Conceptual Framework (Karcher, et al., 2006)

As Figure 4 illustrates, youth mentoring programs tend to be field-based or site-based. Field-based programs are coordinated through a sponsoring agency such as Big Brother Big Sister of America (BBBS), but the mentor/mentee pairs can often meet at times and locations of their choosing. Site-based programs on the other hand involve the mentor and mentee meeting at

designated sites. These sites tend to be schools, community agencies, religious contexts, hospitals, workplaces, or youth development centers. School-based sites are the most common (Karcher, et al., 2006).

The structure of youth mentoring programs relates to how the program is organized, and for whom. Figure 4 illustrates the different possible structures that Karcher and colleagues (2006) found most common in their analyses. *Cross-age peer mentoring* involves an "older and wiser" youth mentor. The relationship tends to be less task-focused and more relationally focused. Goals target relationship building, self-esteem, social skills and connectedness to school over academic and behavior goals (Karcher, 2005a). *Group Mentoring* involves a mentor, or multiple mentors, meeting with a group of youth over a period of time. Group mentoring allows youth to see how adult mentors model social skills, such as negotiating, cooperating, and understanding another's perspective. It is well established that group mentoring can provide a safe environment in which to test social skills and to receive constructive feedback from peers (Karcher, et al., 2006, p. 712-713). *E-Mentoring*, a more recent programming structure facilitated by modern technology, operationalizes the mentoring relationship through email or online chat settings. It is used as a strategy to respond to a lack of adults available for face-to-face mentoring. The length of time can range from one-time "ask an expert" programs to longer-term commitments (Karcher, et al., 2006, p. 713). Finally, *intergenerational mentoring programs* involve an adult mentor of age 55 or older. Karcher, et al. (2006) cites Freedman as identifying older adults as an "increasing natural resource. Older people…have time to contribute to family and community; they have more time lived, which has given them both practical experience and wisdom, and the time they have left to live may provide an impetus to leave a legacy and to pass

on to future generations what they have learned (p. 713).

The third factor by which to conceptualize youth mentoring programs is through their goals. Goals of youth mentoring programs tend to fall into one of two categories: *developmental/psychosocial* or *instrumental*. In developmental programs, the focus is on "facilitating the relationship between mentor and mentee as a way of promoting the youth's development" (Karcher, et al., 2006, p. 714). The relationship is the primary focus since it is assumed that other development (academic, social, emotional, etc.) can only happen through the creation of supportive relationships. The underlying theory is that skill development primarily occurs as mediated by a close, trusting relationship (Morrow & Styles, 1995). Mentoring programs developed primarily with instrumental goals emphasize learning certain skills or achieving specific goals that will facilitate stronger social, emotional and academic development in the long-term (Karcher, et al., 2006; Hamilton & Hamilton, 2005).

2.2.2 What does research tell us about program effectiveness?

In response to the overwhelming number of youth mentoring programs and in anticipation of the many more that are currently being developed, researchers and evaluators have tried to find evidence that theory is actually translating into practices yielding significant, positive impact. As such, there is no shortage of program evaluations, each with its own claims about program effectiveness.

One of the most seminal reports in the field is an impact study of Big Brothers Big Sisters conducted by Tierney, Grossman & Resch in 1995. After 18 months, Tierney and colleagues

compared a treatment group and control group and found that the youth who participated in the mentoring program were less likely to start using drugs and alcohol, less likely to hit someone, improved school attendance, attitudes toward completing school work and school performance, and improved peer and family relationships (p. ii). As a result of this study, there has been unprecedented growth in different types of mentoring programs that target youth.

After reading many cited studies and positive evaluations, it is hard to be anything but supportive of mentoring relationships. It is easy to understand why formal mentoring programs have become such a desired intervention and idealized idea due to all the promises it makes. However, reviews of the research evidence some limitations as well as gaps in our ability to make causal relationships and draw sound conclusions about these programs. For example, the Big Brother Big Sister impact study cited above yielded generally small effect sizes (DuBois, et al., 2011). Previous reviews suggest that many results have not provided the evidence necessary to support the argument that mentoring programs yield transformational changes for youth (DuBois, et al., 2011, p. 9).

In 2008, Rhodes conducted a comprehensive analysis that summarized and assessed the existing program evaluations and meta-analyses. DuBois, et al. (2011) provides the most recent meta-analysis that includes 73 independent evaluations of youth mentoring programs published between 1999-2010. A meta-analysis is an important research tool as it allows for findings from individual studies to be synthesized and summarized (DuBois, et al., 2011).

DuBois and colleagues' most recent meta-analysis of youth mentoring studies produced the following conclusions and concerns:

1) In general, mentoring programs were found effective in improving youth outcomes.

Overall, mentoring programs were found to be effective as prevention and promotion practices in improving emotional, behavioral, social and academic domains of the targeted youth. The average effect size for end of program assessments across all studies was .21 with a 95% confidence interval ranging from .16 to .26 (.19 when taking publication bias into consideration) (p. 28). Benefits occurred across all ages of development, and were not products of just adult one-to-one relationships, but also group mentoring and peer mentoring. Effect sizes were positive for youth outcomes in the following areas: achievement motivation/prosocial attitudes; social skills/peer relationships; depressive symptoms and self-esteem; drug use and bullying; and standardized test scores and absences (p. 29). Fewer studies looked at specific outcomes that have been of interest to policy makers such as school engagement and attainment. Of those that did look at these measures, a positive program impact was found on school attendance (18 samples), grades (19 samples), and academic achievement test scores (15 samples). Mentoring programs are often directed at youth from single-parent households, although little evidence has found that these youth have greater potential to benefit from such programs (DuBois, et al., 2011). Instead, youth from low-income backgrounds were found to enjoy heightened benefits of mentoring (DuBois, et al., 2011).

2) Certain factors contribute to differences in effectiveness among programs.

DuBois, et al., (2011) examined programs by their different features and found certain factors to contribute to differences in effectiveness. These included characteristics of the youth, mentor recruitment and selection, youth-mentor matching and mentor roles. Specifically, programs that were more effective targeted youth who had pre-existing difficulties/more exposure to

environmental risk, more male youth participants, good fit between mentor educational/occupational background with program goals, matched youth and mentors by interest similarity and supported mentors to fill advocacy or teaching roles (p. 5).

3) There is a need for caution

DuBois, et al. (2011) also point to areas of caution as a result of their meta-analysis findings. Reviewed evaluations did not assess several key outcomes that are of interest to the general public. These include many of the promises that current mentoring programs claim to deliver such as educational attainment, juvenile offending, substance use and obesity prevention (p. 4). Furthermore, for the outcomes that were tested, DuBois and colleagues were unable to discern if the effects were long lasting. Lastly, the latest meta-analysis did not find significant improvement relative to what was found from their previous meta-analysis of programs in 2002.

Rhodes' (2008) summary, which included the 2002 meta-analysis conducted by DuBois, et al. synthesized the following:

1) One-to-one mentoring relationships are found to have promoted social, academic and behavioral outcomes.

While she did not consider a large number of the program evaluations as scientific, Rhodes (2008) cites those conducted by DeWit et al. 2006, Dubois et al. 2002a, DuBois et al. 2002b, Grossman & Tierney, 1998, Herrera et al. 2007, Karcher 2005b and Keating et al., 2002 as sound, thus justifying the merit of this claim. Rhodes (2008) found the most scientifically rigorous verdict on effectiveness to be the meta-analysis of 55 youth mentoring program evaluations conducted by DuBois et al., 2002a. In general, it has also been established that positive impacts of mentoring increase with relationship duration (Grossman & Rhodes, 2002).

2) Many program evaluations findings do not suggest mentoring programs have a strong effect; some even show a negative effect.

Those studies that indicate a positive effect of the mentoring relationship on youth show this effect lasting only for a few months after program participation. The smaller effect of youth mentoring programs compared to other mentoring programs (academic & workplace) is not surprising as "there are greater challenges facing youth, the expectations for what we expect out of mentoring (at both individual and societal levels) might be unrealistic since it is difficult for mentors alone to overcome youth needs and struggles, and academic/workplace mentoring includes a mix of assigned and natural mentors" (Rhodes, 2008, p. 38). Furthermore, mentors in workplace or higher education contexts might exhibit a higher level of fit for the protégé's specific needs (DuBois, et al., 2011). Rhodes (2008) also points out however that in program evaluations positive outcomes from effective mentoring relationships are easily overshadowed by the neutral and negative outcomes associated with less effective mentoring relationships. Thus the challenge becomes identifying "those program inputs and factors that can facilitate the formation of close, enduring, and ultimately, effective youth-mentor ties" (p. 38).

3) Meta-analyses that empirically summarize results across multiple studies reveal important trends (Rhodes, 2008).

DuBois et al. 2002a & 2002b found that "more structured programs, in which there were clear expectations, a focus on instrumental goals, and ongoing support to volunteers yielded notably strongest effects" (Rhodes, 2008, p. 38). Jolliffe and Farington (2007) found that "programs that combined mentoring with other interventions, required weekly meetings for longer periods of time per meeting (five or more hours), and had more enduring relationships had

the most positive effects on re-offending" (p.9).

Similar to DuBois, et al. (2011), Rhodes (2008) concludes we must be cautious in how we interpret the wealth of mentoring program evaluations and research. First, effect sizes depend on what outcome is being assessed. Also, as is evident in the conceptual framework illustrated in Figure 4, since programs greatly differ in their structure, context, primary goals and the specific characteristics of their youth and mentor participants, it is hard to draw conclusions for the field in general. Looking at individual program evaluations does not lead to being able to globally assess the effectiveness of mentoring programs overall (Rhodes, 2008). Within the conceptual framework, programs differ on dimensions such as duration, intensity, target populations, etc. As such, the conclusions drawn from the reviews depends on "how and what evidence is considered"; in fact the same studies have lead different reviewers to draw different conclusions (Rhodes, 2008, p. 37).

Furthermore, the quality of the evaluation methodology and outcomes measured ranges from rigorous to non-scientific (Rhodes, 2008). Peer-reviewed research can be under the same analysis as in-house reports (Rhodes, 2008, p. 37). As such, while certain factors have shown to be significant, despite the overwhelming number of books, articles & online reports on this topic, "the base of evaluation findings on which policy and practical decisions rests remains curiously thin" (Rhodes, 2008, p. 35).

Even though it remains a puzzle for how to expand and replicate the power of mentoring relationships from an individual level to a program level, the mentoring field seems to be growing faster now than ever before. "Mentoring has taken on a life of its own, that is often removed from evidence: there has been no clear road map for how to scale up this intervention

approach in ways that provides high-quality mentoring relationships to all participants" (Rhodes, 2008, p. 41).

Despite cautionary advice from scientific studies, the instinctual belief in the power of mentoring makes it especially "difficult to really pay attention to evidence because people intuitively believe so much in this idea, they look to research to confirm this belief or they are looking for 'pure and simple' findings to put into practice" (Rhodes, 2008, p. 35). As a result, mentoring programs may be prematurely rolled out on the basis of insufficient evidence, also making it difficult to stop or change direction (Roberts, et al., 2004, p. 512). This research study specifically hopes to learn about important mentor characteristics to ensure mentor recruitment and training can be more evidence-based.

2.3 USING THEORY TO WARRANT RESEARCH

The remaining pages of this chapter will introduce the assumptions, theories and evidence that warrant the explanatory and outcome variables of interest to this research study. The next section provides an evidence-based rationale for the two youth outcome variables: a relationship with a supportive caring adult and a positive concept of a future possible self. Later, a theoretically-derived framework will provide the basis for the explanatory variables of interest: mentor initial motivation to volunteer, mentor educational attainment, mentor experience with program content, and mentor experience working with youth.

2.3.1 Warranting desired youth outcome variables

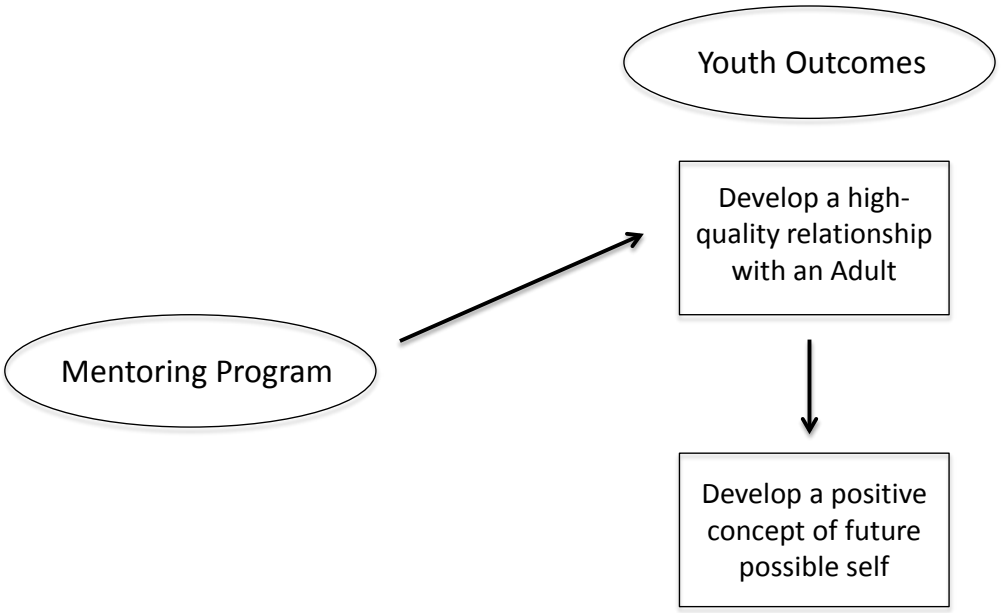

Figure 5: Specifying the desired relationship & youth outcomes in program's theory of change

Figure 5 identifies the primary relationship and youth outcomes for the program under study, also representative of programs nation wide, as: 1) developing a relationship with a supportive, caring adult and 2) developing a positive concept of a future possible self. Figure 5 positions the outcomes as relational; a high-quality relationship with an adult is not intended to be an end in it of itself. It is believed that by helping youth develop a relationship with an adult, mentoring programs are allowing the possibility for many of the well-established, long-term, positive effects of strong relationships. Similarly, for programs who espouse goals that are just task-oriented, the significance of the mentoring relationship is not recognized as a formal, desired outcome. Importantly, this model lists both the relationship and the specific goal of a positive

future possible self as mentoring program outcomes. Thus, the program's theory of change is that through their programming, relationships will be cultivated and desired youth outcomes will be realized. Since youth outcomes serve as the determinants of program effectiveness, the merit and worth of the specified, desired outcomes must be grounded in both theory and research.

As mentioned previously, the focus of this study is on mentor characteristics as a potential factor that influences a program's ability to achieve relationship development and desired youth outcomes. Thus, the discussed theories and evidence focus on how a mentor, as an individual as well as a conceptual idea, might facilitate program success.

2.3.1.1 Relationship development theories: conceptualizing the role of mentors in creating high-quality relationships with youth

In order for programs to achieve this intermediary outcome and successfully ensure a positive dynamic between youth and adult, certain theoretical assumptions surrounding relationship development must be understood. The first assumption is that the adults participating in the program are supportive and caring by nature. This assumption is grounded in a platform that youth mentors have good intentions (Homan, 2008). This study does not question mentors' intentions, but asks if these good intentions are enough and what else might matter to ensure relationship development with the mentee?

Research shows that a personal connection is at the heart of mentoring and that without some connection that include qualities such as trust, empathy, authenticity, and respect, the relationship will not emerge (Rhodes, 2006). How are these qualities developed between the mentor and mentee? Theories grounded in youth development and psychology suggests that

certain interaction methods lend themselves to higher quality relationships between youth and adults. Positive relationship development has been studied by examining characteristics that pertain to: interaction style; cross-race matches; relationship length; and specific mentor characteristics.

Mentor interaction style approach and its effects on relationship development

Relationship development is a driving motivation for many mentoring programs. For others, it is seen as an essential pre-requisite to accomplish their more task-oriented goals, such as improved academic achievement, college & career readiness, etc. By investigating *how* relationships develop, one goes beyond "simply determining which outcomes have been attained and whether they can be attributed to mentoring" (Nakkula & Harris, 2005). Rather, an examination of the underlying processes that have allowed for these outcomes occurs. Understanding how the relationship develops is important to this study as it is an interaction in which the mentor becomes a focal point. Specifically, a mentor's interaction style is an important variable in relationship development.

Mentor interaction styles broadly characterize mentoring relationships as developmental or prescriptive. Developmental relationships are those in which the mentor places greatest emphasis on the needs/goals of the youth and developing reliable, trusting relationships with him/her. Prescriptive relationships are those in which the greatest emphasis is on achieving goals that are set by the mentor. While the activities undertaken in each type of relationship may be the same, the process by which they occur differs. It is argued that the interaction styles exhibited by those in developmental relationships lead to higher-quality, positive, longer-lasting and more productive mentoring relationships (Jekielek, et al., 2002; Morrow & Styles, 1995).

A key characteristic of developmental relationships is their high degree of youth-centeredness. In a youth-centered relationship, the mentees' concerns are the focal point of the match, and thus they feel agency and positively valued. Developmental relationships exhibit much higher degrees of youth-centeredness than do prescriptive relationships as their mentors consider the youth's enjoyment important to a much greater extent (Morrow, K. & Styles, M., 1995, p. iv). The mentor's goals for the relationship, as well as how decisions are made not only take the youth's opinion into account, but also prioritize it. Mentors who operate from a developmental standpoint are "willing to adjust their plans –both for daily activities and for achieving overall relationship goals to include youth's preferences" (Morrow & Styles, 1995, p. ii). When program studies and meta-analyses define relationship quality, many times the definition, and thus associated data collection instruments, use youth centeredness as a key measure (Jekielek, et al., 2002).

A second characteristic of developmental relationships is that through this interaction style, the mentor defines his/her role as that of an ally. In their recent meta-analysis, DuBois, et al., (2011) found that when the mentor serves in an advocacy role, there is evidence of stronger program effects. By allowing mentees to talk freely without feeling judged or reprimanded, youth know the mentor is on their side and cares about them. As an ally, mentors only sparingly comment on youths' mistakes and advice is offered in the form of solutions or possible strategies as the relationship matures (Morrow & Styles, 1995). As a result of being in a developmental-style mentoring relationship, Morrow & Styles (1995) found that youth reported feeling a considerable sense of support from their adult mentor, and believed he/she would be there for them in time of need, to listen or offer assistance" (p. ii).

Interaction styles of developmental mentoring are youth-centered and position the mentor as an ally, while prescriptive relationships tend to be more adult-centered and task-oriented. In the prescriptive relationship interaction style, “adults set the goals, the pace and/or the ground rules for the relationship” (Morrow & Styles, 1995, p. iii). Specifically, mentors who adopted prescriptive style approaches to mentoring believed their primary purpose was to guide the youth “toward embracing values, attitudes and behaviors the adults defined as positive” (Morrow & Styles, 1995, p. iii). Activities were not done ‘for fun’, but because they were ‘good for the mentee’ (Morrow & Styles, 1995). Resulting mentor and mentee sentiments from prescriptive relationships include frustration and dissatisfaction with the relationship. Mistrust and disappointment grew as a result from not feeling like their preferences or requests mattered (Morrow & Styles, 1995). These perceptions reveal the relationship is not youth-centered, and nor is the mentor seen as an ally.

If high-quality relationships are defined by the extent to which they are youth-centered and the extent to which the mentor is perceived as an ally, evidence suggests prescriptive approaches to mentoring are unlikely to yield high-quality relationships. Instead of interacting with the mentor as an ally and trustworthy companion, youth shielded their behaviors even more and avoided talking about difficulties they were facing (Morrow & Styles, 1995). Both participants demonstrated growing tension from being in the relationship that ultimately resulted in matches breaking up or meeting less regularly (Morrow & Styles, 1995).

A prescriptive mentoring style can be productive once a developmental approach has been established. While trust may be built through task-oriented activities and pursuing goals (both typically characteristic of prescriptive relationships), it is argued that the foundation

necessary to complete the tasks is only possible through a developmental interaction style initially. It was only after "spending the time needed to establish trust and partnership with the youth" that many of the youth reached out to the mentor for assistance and guidance (Morrow & Styles, 1995, p. iv).

It is not just the order in which these styles become apparent to the youth, but also the pace at which they happen. Those who are successful in securing a long-lasting match took a slower, more developmental approach to their mentoring relationships (Morrow & Styles, 1995, p. iv). While prescriptive relationships are well intentioned to influence positive behavioral change, this change will not occur unless there is "a solid relationship between the adult and youth, and the youth is receptive to the adult's input" (Morrow & Styles, 1995, p. viii). Developmental interaction styles achieve this through their youth-centeredness as well as the perception of the mentor as an ally.

Male mentors tended to have more developmental relationships. Morrow & Styles (1995) posit this may be because the fun-activity-focus is likely more conducive to male relationship tendencies than that of females who tend to encourage stronger verbal communication (p. vi). Both cross-race and same-race matches were equal in their likelihood of exhibiting developmental style relationships.

The evidence is fairly conclusive in claiming that developmental interaction styles will result in higher meeting regularity, and longer lasting, more satisfying relationships than those prescriptive in nature. Since youth-centeredness and the mentor serving as an ally to the youth characterize developmental relationships, these two characteristics will serve as indicators of the targeted youth outcome "high-quality relationships with an adult".

A caveat that must be recognized is while the mentor characteristics greatly determine the interaction style, so too do program values and practices. For example, in a program such as Big Brother Big Sister, the primary goal of developing friendships between adult and youth is very conducive to the developmental interaction style. While this study will focus on mentor characteristics specifically, it is important to acknowledge the role of the program in mediating how these characteristics might manifest themselves differently in interaction style.

Mentor Match Characteristics and their effect on relationship quality

Limited research investigates how mentor characteristics affect or influence relationship quality, hence the justification for this study. Karcher, Nakkula, & Harris (2005) found that mentors' self-efficacy influenced how the mentor perceived the quality of the relationship. However, the frequency of which mentees sought support from their mentors, even more so than mentor characteristics, predicted the extent to which the mentor perceived the relationship as high-quality. If the mentee appeared to be open to guidance and advice from the mentor, the mentor had a positive perception of relationship quality (Karcher, et al., 2005). Importantly, Karcher and colleagues' 2005 investigation used *mentor* perception of relationship quality as the outcome variable. This study differs in that it is interested in the *mentee* perception of relationship quality as the outcome variable of interest.

Mentor characteristics have also been explored as potential predictors of relationship length. Relationship length should be considered not just as an absolute value, but as relative to the expected time frame of program length (DuBois, et al., 2011). While a 2002 meta-analysis conducted by DuBois, et al., did not find evidence to support the length of mentoring relationships to be important, others (DuBois & Neville, 1997; Grossman & Rhodes, 2002) have

found this variable to significantly affect positive youth outcomes. "Youth in matches that last more than 12 months report significant increases in many categories, while those in shorter-length matches can suffer harmful results" (Grossman & Rhodes, 2002, p. 208). In fact, youth in relationships that lasted less than three months showed declines in areas such as self-esteem compared to control groups (Grossman & Rhodes, 2002).

In their 2002 single-program study, Jean Grossman and Jean Rhodes detected certain patterns among adult mentors that related to the length of the mentoring match. Matches that were more likely to break up included:

- Those with youth who were referred for psychological reasons or had sustained different forms of abuse
- Youth 13-16 years old were 65% more likely to terminate than youth 10-12 year olds
- Lower income volunteers
- Married volunteers ages 26-30 were more likely to terminate than unmarried volunteers ages 26-30 and 18-25[2]
- Female matches more likely to terminate than male matches
- Same race minority a little more likely to terminate than same race White matches – but not when a minority dyad was requested
- Cross race was a bit more likely to terminate than same race White matches – but not when interests of youth were primary matching criteria

Probably the most salient mentor and mentee characteristics that have been examined for their relationship with program effectiveness are their racial and ethnic backgrounds. In many cases, mentoring programs serve minority youth and the mentors are typically White adults (Sanchez & Colon, 2005). As such, scholars have analyzed the racial characteristics of the match

[2] Once relationship quality was taken into account, the marital status had little effect on the length of the match for those volunteers who were able to form good relationships with their youth (Grossman & Rhodes, 2002, p. 215).

to determine if cross-race or same-race matches have a stronger effect on improving youth outcomes. Most recent research suggests that matching on the basis of race does not appear to enhance relationship quality (DuBois, et al., 2011; DuBois, et al., 2002; Jekielek, et al., 2002; Sanchez & Colon, 2005). However, despite a lack of empirical evidence, there are historic and current arguments both for and against matching on the basis of race (Rhodes, et al., 2002).

Many of the arguments for same-race matching are based on ideological premises that are rooted in belief systems or historical and cultural experiences (Rhodes, et al, 2002) as well as theoretical paradigms. As an ideology, it is believed that those of different racial or ethnic backgrounds will not be drawn to each other or understand each other. The concern for mentoring relationships in particular is that the mentor will not be able to identify with being a minority, and thus will most likely not be able to identify with his/her mentee (Rhodes, et al., 2002). This theory is rooted in the similarity-attraction paradigm: individuals are not as attracted to or interested in others who appear different based on race/ethnicity" (Sanchez & Colon, 2005). Those who are proponents of this theory use trends in natural mentoring matches as proof: when given the opportunity to select mentors, youth are more likely to choose someone of the same race, ethnicity or culture (Sanchez & Colon, 2005). As such, formal mentoring programs in which the mentors tend to be of a different race than their mentee oppose humans' natural proclivity toward same-race mentors.

Some develop the similarity-attraction paradigm even further by asserting that not only do people of similar backgrounds gravitate toward each other, but same-race adults are in the best position to serve as role models for youth. Ogbu (1990) has laid a framework especially for minority youth in his arguments that minority mentors are the only ones who can teach youth

how to cope with and combat discrimination and racism in the United States. A mentor of a different race may offer unrealistic solutions, inadvertently offend or belittle the youth, or fail to affirm the youth's culture" (Rhodes, et al., 2002, p. 2115). Without a common racial/ethnic bond, some are unsure if mentee/mentor matches will be able to develop trust. Instead of serving as an ally, a mentor may actually threaten a mentee's identity. Rhodes, et al. (2002) cites Nobels, 1985 in stating that allowing European Americans to mentor minority children becomes not just an issue of helping children, but a much larger intrusion and danger to the child's racial identity" (p. 2116). The concern is that "mentors will inevitably and subconsciously impose his/her racial values and customs on that child" (p. 2116). Furthermore, if a mentor enters the relationship hoping to save the at-risk youth, he/she is entering with very different goals than is the youth (Ogbu, 1990). In this sense the mentor is not perceived as someone hoping to be an ally, but rather a missionary. The fact that the majority of mentors tend to be White and the majority of mentees tend to be a racial minority may also give the wrong message about who is an appropriate role model and whose knowledge counts and matters (Ogbu, 1990; Rhodes, et al., 2002).

Sanchez and Colon (2005) also cite stereotype threat (Steele, 1997) as a potential discouraging factor to relationship development. There is the threat that others' judgments of one's actions will cause a person to be negatively stereotyped (p. 192). This may be more likely in cross-race matches due to heightened cultural mistrust, which would be harmful to the relationship in terms of its ability to set a foundation of trust, respect and understanding (Rhodes, 2002). Sanchez and Colon (2005) cite evidence that cultural mistrust is related to mentees' perception of mentors' credibility. Very specific mentor actions can either cultivate or challenge

this mistrust. Often, the mentor may believe he/she is helping to build trust, but if mistrust is present in the relationship the mentor's actions will be interpreted differently. For example, overpraising minority youth may be interpreted as insulting and patronizing, as the youth are unsure if it is due to racial sympathy. White students' self-esteem, on the other hand, increases as a result of overpraising (Cohen & Steele, 2002). In this sense it appears that cultural mistrust serves as a mediator between the mentor and youth outcomes. Thus, same-race matching might be most important for Black youth who mistrust White individuals (p. 197).

In contrast to those opposed to cross-race matching, some argue the worth, value and practicality of this approach. First, fewer individuals of a minority race volunteer and so there is a shortage compared to White individuals. Second, some argue that race isn't what guarantees the success of a match, but rather a person's skills, interests, capacity to support and openness to cultural differences, etc. (Flaxman, 1992). Race might not matter if mentors and mentees are matched based on similar interests (Sanchez & Colon, 2005; DuBois, et al., 2011). Finally, cross-race matches symbolize people of different backgrounds are working together (Rhodes, et al., 2002, p. 2118).

As many of the arguments for both cross and same-race matching are largely theoretical in nature, Jean Rhodes and colleagues conducted a study in 2002 to measure the effects of youth outcomes as related to their participation in a same race vs. cross-race match. Many of their findings favored cross-race matches and were thus contrary to some of the above theoretical arguments and specifically Ogbu's claims. They found the following: youth in same-race matches were more likely to have had initiated alcohol use at follow-up; youth in cross-race relationships were more likely to talk to their mentors when something was bugging them and

were more likely to perceive their mentors as providing unconditional support; and parents of youth in cross-race matches were more likely to believe relationships improved children's peer relationships, the mentor built on youth's strengths and took them to places they wanted to go (p. 2124).

However, there were no differences in cross-race and same-race matches on many of the outcomes measured. When gender was taken into consideration as a moderator, some significant differences emerged: minority boys in same-race matches reported smaller reductions in scholastic competence and self-worth than minority boys in cross-race matches; minority girls in same-race matches reported smaller reductions in school value and self worth than minority girls in cross-race matches; and parents of youth in same-race matches were more supportive (p. 2124). Recent meta-analyses (DuBois, et al., 2002a; DuBois, et al., 2011) have also found that matching by race is not associated with significant differences in effect size for mentee outcomes. These mixed findings reveal potential methodological limitations as well as the suggestion that it is not that cross-race mentoring is as effective as same-race mentoring, but that it can still be effective (Sanchez & Colon, 2005).

In sum, observations from the literature suggest that mentor and mentee characteristics and preferences influence the nature, functions, and benefits of the relationship (Rhodes, Bogat, Roffman, Edelman & Galasso, 2002). Mentoring programs hope to foster positive relationships between youth and adults as the benefits for mentees, academically, emotionally and socially, are not only significant but well established (see section 2.1).

2.3.1.2 Possible Selves theory: A framework for understanding how youth develop positive images of their future self

The fact that many mentoring programs target youth reflects a common American truism: the children are our future. But mentoring programs are not just targeted at youth already identified as on the road to success and to becoming our future leaders. In fact, the majority of programs are designed for youth at-risk of school failure and juvenile delinquency. As such, in order to achieve the desired outcomes – whether they are academic or behavioral in nature – the program's theory of change and mentors themselves are working under the assumption that the self is malleable. In other words, youth, and their future trajectory, can be altered or influenced by a mentoring program. If a deterministic attitude shaped society (fate is determined by circumstances), mentoring programs would not exist.

The assumption that the self is malleable is revealed through program strategies that seek to influence students' futures by helping them develop a positive self-concept and identify their goals and aspirations for the future. The development and evolution of one's self-concept, and the specific hopes, fears and fantasies one has regarding their future is referred to in the literature as a possible self. Possible selves theory argues that these images of our possible selves are the essential link between self-concept and motivation (Markus & Nurius, 1986). Whether a possible self is a symbol of hope or a reminder of a bleak future that one hopes to prevent, a possible self is powerful. It can influence and guide a youth's plans and courses of action, offering incentive and motivation for future behavior (Lapan, 2004; Markus & Nurius, 1986; Oyserman & Fryberg, 2006). If a program's goal is to influence self-concept, it is assumed mentors are capable of

making this happen. According to possible selves theory, the mentor can only make this happen by targeting and influencing the mentee's perception of his/her possible selves.

Adolescence is an especially formative time for the development of possible selves. A youth's possible self is the self he/she imagines becoming in the future. It is the self he/she hopes to become, is afraid of becoming and expects to become (Markus & Nurius, 1986; Oyserman & Fryberg, 2006). The sense of self is based on current perception of skills and competencies, representations of the self in the past, and representations of the self in the future (Oyserman & Fryberg, 2006; Markus & Nurius, 1986). In this sense, possible selves are cumulative and serve as a cognitive bridge from the present to the future (Lapan, 2004). If mentoring programs aim to influence a youth's future trajectory, incorporating this theoretical framework into practice is worthwhile and applicable. Importantly, the academic and occupational possible selves developed in early adolescence can determine what sort of future self is plausible (Oyserman, Gant, & Ager, 1995).

While technically an individual is free to create any possible self, possible selves are distinctly social and relational in nature, and therefore can also reveal the extent to which the self is determined and constrained (Kerpelman, et. al., 2002; Markus & Nurius, 1986, p. 954; Oyserman & Fryberg, 2006). As such, possible selves can be restricting or liberating. Images of who one can become are shaped by his/her surrounding context. This includes sociocultural, familial and historical context, including media images, and also by social comparisons to others whom the individual perceives to be like him/her and not like him/her (Kerpelman, et al., 2002; Markus & Nurius, 1986; Oyserman & Fryberg, 2006). Research has shown that individuals such as family, peer groups, teachers and administrators can either maintain the youth's possible self

or challenge it (Oyserman & Fryberg, 2006), however it is unclear if mentors too can serve in this role in a significant way.

While early teen years are a time of much identity negotiation during which youth are trying on many different possible selves (Kao, 2000; Oyserman & Fryberg, 2006; Oyserman, et al., 1995), the mentor represents a single individual that is relatively new to the mentee's life and not a natural part of the youth's environment. He/she is someone the mentee may or may not identify with, value or trust. A mentor's insistence that a youth "can be anything he/she wants" may counteract many existing stereotypes or experiences the youth has already faced that have shaped what he/she perceives to be possible in his/her future. Especially for minority populations, those at whom mentoring programs are typically targeted, the social context has the possibility of encouraging negative future self-images. First, increasing levels of depression and anxiety related to awareness of and experiences with racism and discrimination may decrease career self-efficacy beliefs (Lapan, 2004, p. 33). Second, if there exist prevailing notions and stereotypes about school success for a particular youth, or he/she has had negative experiences in school, one's imagined self may not include images of educational achievement. When stereotype threat (Steele, 1997) is strong, it can weaken one's academic possible self, making it less salient and more resistant to school-focused strategies (Oyserman, Bybee, & Terry, 2006), and thus arguably the strategies of mentors as well.

Possible selves theory is especially relevant when studying youth mentoring programs as a positive possible self results in many of the same outcomes desired by mentoring programs. First, possible selves are linked to academic attainment in that youth whose possible selves are academically oriented and self-regulated achieve better grades compared to those lacking these

possible selves (Oyserman, Terry, & Bybee, 2002; Oyserman, Bybee, Terry, & Hart-Johnson, 2004; Oyserman & Fryberg, 2006). Oyserman & Fryberg (2006) cite a number of studies that evidence students with academically focused possible selves had significantly improved grades compared to those lacking these possible selves (p. 11). Studies showed that among both advantaged youth and those disadvantaged by high poverty and so at-risk for academic problems, those with academically focused possible selves had significantly improved grades (Oyserman & Fryberg, 2006). However, a positive possible self on its own is not enough to yield significant outcomes. Rather, these images of self-concept must also be tied to other factors including strategies to realize the future self (Oyserman, et al., 2006, p. 200).

Second, the possible self is also related to youth delinquency and substance abuse. Specifically youth with a background of problematic behavior were found to have negative images of their future selves (Oyserman & Fryberg, 2006). "The amount of official delinquency predicted greater likelihood of generating these kinds of negative selves" (Oyserman & Fryberg, 2006, p. 12). These youth may be missing the positive possible selves that could "provide the organizing and energizing vision" of how to avoid criminal activity (Oyserman & Fryberg, 2006, p. 12). Additionally, youth who smoked and drank more had fewer balanced possible selves. In interpreting the results of these studies, it is apparent that depending on the nature of the possible self, it can either lead to positive outcomes or encourage negative outcomes.

A posture of the possible selves theoretical framework is an agreement that while the "now" self may be stable, possible selves are not tied to behavioral evidence or bounded by social reality constraints (Markus & Nurius, 1986, p. 964). As rooted in social contexts and local norms, if either of these shifts or changes, so too are possible selves open to these changes

(Oyserman & Fryberg, 2006). The introduction of a mentor reflects a change in the environment. As such, it may be this change that can affirm or introduce positive possible selves. By engaging in a dialogue, the mentor and mentee can evaluate and interpret the mentee's current view of the self, and assess how this can be altered or influenced to incorporate other images of what might be possible. In this sense, the possible self is dynamic. "All of these ideas about what is possible for us to be, to think, to feel, or to experience provide a direction and impetus for action, change and development" (Markus & Nurius, 1986, p. 960). Since there may be barriers to goal achievement for the populations that mentoring programs aim to target (female, minority and lower SES students), assessing adolescents' possible selves can increase the likelihood that motivating influences can overcome some barriers and lead to desired outcomes (Kerpelman, et. al, 2002). Thus, possible selves theory supports the promise espoused by mentoring programs by allowing for the possibility that mentors can have a significant influence as an adolescent's sense of self is not static.

However, there is also reason to believe mentors will not be effective in influencing a youth's possible self. Mentoring programs hope to inspire students and to instill in them the self-knowledge of what they can achieve. The hope is this will be motivating in lasting and impressionable ways. But the interpretation of self depends on one's surrounding context of possibility (Markus & Nurius, 1986, p. 955). A mentor is just *one person* in a youth's surrounding context, and often for just 45 minutes to an hour once or twice a week. For these reasons there is skepticism regarding the impact a mentor can have in altering a youth's self concept. There exists the potential risk that mentors may not alter the sense of self, or may unintentionally affirm negative self-concepts. As previous research has not explored these

possible outcomes, this study seeks to answer if, how and when mentors positively influence a youth's perception of his/her possible self.

A host of research has concluded that "socially constructed selves rely heavily on the backing of 'important others' in the social environment, both as models ("what others are now, I can become"), as purveyors of messages about which characteristics of the self are valued and important, and as resources, providing experiences of success and competence in roles relevant to adult statuses and attainment" (Oyserman, et al., 1995, p. 1216). The mentor has the potential to serve either the model, purveyor or resource role, but each requires the time necessary to develop trust which enables the mentor to become an "important other." If a mentee does not identify with his/her mentor, and sees him/her as having very different experiences and circumstances, it will be harder for the mentor to serve as a model and for his/her advice to be trusted and valued. This research will also seek to understand in what capacities mentors are serving as models and allies, thus optimizing their potential for positively influencing their mentee's possible self.

Possible selves theory tells us achievement, that which mentoring programs hopes to encourage, is not necessarily a result of a direct motive, but is mediated by what the self believes to be possible and by importance assigned to these possibilities (Markus & Nurius, 1986, p. 960). As such, if a goal of a mentoring program is to improve student achievement, targeting a youth's possible self seems a crucial step for this transaction.

2.3.2 Warranting the explanatory variables

The past section outlined theoretical assumptions present in youth mentoring programs' theory of change. As programs believe the cultivated high-quality relationships with adults will lead to positive youth outcomes such as developing positive images of their future selves, understanding the kinds of interactions and conceptual frameworks that lend themselves to these outcomes is essential. While a few studies have examined mentor characteristics, their role as explanatory variables and their relationship to achieving high-quality relationships and the desired youth outcomes has not necessarily been established. Are certain mentors better equipped or more naturally predisposed to making relationships youth-centered or being perceived as an ally to their mentee? Do certain mentor characteristics and experiences help mentors more significantly influence a mentee's possible self? The next section will explore first what we know about the current mentor population and then return to the literature to speculate on what else might matter in yielding a high-quality mentor.

2.3.2.1 Who mentors? A review of what we currently know about the mentor population

The most recent evidence pertaining to mentor demographics comes from the 2005 MENTOR report, "Mentoring in America 2005: A snapshot of the current state of mentoring". This was the second poll the organization conducted to assess the state of mentoring; the first was in 2002.

Following are a few of the characteristics the report assessed regarding the current mentor population participating in formal youth mentoring programs in the United States. The

report compared the formal mentor population to the informal mentor population and found the following:

- Formal mentors tend to be older than informal mentors. 51% of formal mentors are considered baby boomers, compared to 40% of informal mentors.
- Formal mentors differ from informal mentors in terms of income. Almost half (44%) of formal mentors have incomes of $75,000 or higher compared to more than half (55%) of informal mentors who have household incomes under $50,000.
- Formal mentors differ from informal mentors in terms of employment. 70% percent of formal mentors are employed full-time, compared to 45% of informal mentors.
- Formal mentors are more likely to be White (85%)
- Formal mentors are more likely to be male (55%)

While there appears to be a shortage in minority mentors, it may be more of a function of low volunteer rates rather than their propensity to be mentors (Foster-Bey, Dietz, & Grimm, 2006). A report published by the Corporation for National & Community Service compared the mentor population to the overall volunteer population. Of all volunteers, Blacks are more likely than Whites or other racial/ethnic minorities to be mentors when they volunteer (p. 8). In 2005, 25% of Black volunteers were engaged in mentoring, compared to only 17% of Whites and 17% of Asians and other racial minorities (p. 9-10). While females are more likely than males are to volunteer (32.4% to 25%), they both have about the same likelihood of engaging in mentoring as their volunteer involvement (p. 8).

2.3.2.2 What does the literature tell us we might want to know about the mentor population?

The following sections review relevant literature to shed insight on what differences in mentor demographics and dispositions might be important to consider in understanding if certain mentor

characteristics are more closely connected to desired program outcomes than others.

2.3.2.3 Does *why* the adult is mentoring affect relationship outcomes?

Mentoring is a form of volunteering. As such, individuals are typically not forced or required to mentor. So, why do millions of Americans volunteer to mentor? While research that seeks to understand why people mentor is sparse (Allen, Poteet, & Burroughs 1997), understanding the underlying motivational drives has been a major theme in the volunteering literature (Esmond & Dunlop, 2004).

Various disciplines have developed models to help explain why people volunteer. By understanding why people volunteer, these models also shed light on predictors for sustained mentor involvement, a variable that has been found to improve relationship satisfaction and other targeted youth outcomes.

The role identity model is sociological in nature and assumes that "as people continue as volunteers, their commitment to the organization increases. With increased commitment, the volunteer becomes so much involved that this role becomes part of his/her personal identity. When a role is part of a person's identity, it predicts sustained involvement as the person strives to make his behavior consonant with this part of his/her identity (Penner and Finkelstein, 1998, p. 526).

Other models reflect more of a psychological stance suggesting that volunteering serves certain important functions. On the surface volunteering may appear as solely a charitable act to benefit others, but researchers have speculated that selfish reasons motivate volunteer activity as well (Allen, et al., 1997; Allen, 2003; Cialdini, et al., 1987; Clary, et al., 1998). While the field

started by using two or three factor models to understand volunteers' motivation, it has evolved to be multifactorial. The two-factor model developed by Hortan-Smith in 1981 categorized motivational reasons as binary in nature: altruistic motives or egoistic motives. The three factor model suggested three motivation categories for volunteering: altruistic, social or material (Morrow-Howell & Mui, 1989). More recently, scholars have concluded that the underlying reasons that people volunteer are not so distinct. Rather, many factors simultaneously motivate people to volunteer. The unidimensional model suggests that it is a combination of motives (Cnaan & Goldberg-Glen, 1991) and the multifactor model is based on functional analysis, which initially identified six primary functions of motivations served through volunteering (Clary, Snyder & Ridge, 1992). This study uses functional analysis to analyze mentor motivation.

Functional Analysis

Functional analysis is an approach that is concerned with "the reasons and the purposes, the plans and the goals, that underlie and generate psychological phenomena" (Clary, et al., 1998, p. 1517). As volunteering and thus mentoring, are activities that people tend to willingly employ, functional analysis can be applied to this phenomena. The "functional perspective encourages considering a wide range of personal and social motivations that promote this form of sustained helping behavior" (Clary, et al., 1998, p. 1518). Core propositions of functional analysis support a hypothesis that mentor motivation may be related to desired relationship and youth outcomes as they assert that "acts of volunteerism that appear to be quite similar on the surface may reflect markedly different underlying motivational processes and that the functions

served by volunteerism manifest themselves in the unfolding dynamics of this form of helpfulness" (Clary, et al., 1998, p. 1517).

The volunteer process model (Omoto & Snyder, 1990; Omoto & Snyder, 1995) applies functional analysis by suggesting dispositional variables may serve as the motivations or functions of why an individual chooses to volunteer. "Because there are usually few situational constraints on the initial decision to volunteer, dispositional variables play a major role in this decision" (Penner and Finkelstein, 1998, p. 525). This model is based on analysis of the prosocial personality, characteristics described in the social psychology literature that predispose individuals toward helpful actions and thus a higher likelihood of volunteer activity (Allen, 1993; Penner, 2002; Penner & Finkelstein, 1998). By assuming that volunteers tend to be prosocial in nature, other dispositional variables then must be examined. In the case of volunteering, variables can include the volunteer's prior personal experiences, current circumstances, current personal motives and social needs (Penner and Finkelstein, 1998, p. 525).

In order to better capture the reasons why people volunteer, Clary and colleagues (1992; 1998) developed the Volunteer Functions Inventory (VFI) to reflect the possible psychological and social functions of volunteerism (p. 1519):

1. *Values:* individual volunteers as an expression of their values of altruism and humanitarian concern for others.
2. *Understanding:* individual volunteers to learn more about the world and exercise knowledge, skills and abilities that might go unpracticed.
3. *Social:* individual volunteers to be with friends or engage in activity viewed favorably by others.
4. *Career (later referred to as career development):* individual volunteers as there is the prospect of meeting people and gaining skills that could assist them in finding employment.
5. *Protective:* individual volunteers to reduce guilt over being more fortunate and address one's own personal problems.

6. *Enhancement (later referred to as self-esteem):* individual volunteers to boost ego growth and development (Clary, et al., 1998); to increase their feelings of self worth and self-esteem (Esmond & Dunlop, 2004).

In 2004, Esmond and Dunlop created the Volunteer Motivation Inventory (VMI). This new scale is an adaptation of the VFI. The Values, Understanding, Protective and Social scales reflect minor wording changes. Their Career Development and Self-Esteem scales are somewhat similar to the original VFI scales, but have different statements. In addition, they created four scales totally unique from previous work: Recognition, Reciprocity, Reactivity and Social Interaction.

7. *Recognition:* individual is motivated to volunteer by being recognized for his/her skills and contribution and enjoys the recognition volunteering gives him/her.
8. *Reciprocity:* individual volunteers in the belief that their helping others and "doing good" will bring about good things for them. Simply it is the philosophy "what goes around, comes around".
9. *Reactivity:* individual volunteers out of a need to 'heal' and address their own past or current issues.
10. *Social Interaction:* individual volunteers to build social networks and enjoys the social aspects of interacting with others.

Understanding why people volunteer to mentor has important implications for program recruitment and retention of their mentors (Clary, et al., 1998; Esmond & Dunlop, 2004; Fact Sheet, 2006). If programs are knowledgeable of the underlying motivational drives of potential volunteers, they may be able to more effectively recruit mentors by using the techniques that appeal to these drives. Furthermore, they can create activities or support structures that continue to fulfill these motivational needs to increase the likelihood mentors will want to stay involved. For example, if a program knew individuals mentored for recognition purposes, they could host award ceremonies honoring their volunteers. In fact, not understanding what people need may be

a barrier to recruiting volunteers. The 2005 MENTOR report found that many individuals do not mentor because they do not understand what mentoring is or what skills are needed.

Research has explored and speculated on the importance of mentor motivation to programming activities. To my knowledge, however, a connection between mentor motives and youth outcomes has not yet been considered. Allen (2003) investigated mentor motivation (not specifically towards youth mentoring) by prosocial disposition. She found that the helpfulness dimension of the personality was a better predictor of the actual decision to mentor (p. 148). She also found that the helpfulness dimension related to career mentoring while other-oriented dimension related to psychosocial mentoring. Those who mentored for self-enhancement reasons were more likely to provide career mentoring, while those mentoring for more intrinsically motivated reasons were more likely to provide psychosocial mentoring (p. 148).

Nakkula and colleagues (2005) used the self-enhancement scale as an indicator variable to predict mentor perception of relationship quality. While they found it initially mediated the perception of relationship quality, this study is interested in how *youth* perception of relationship quality is influenced by different motives for mentoring.

Finally, the 2005 MENTOR report incorporated mentor motivation by asking survey respondents to choose three reasons they thought were most important in their decision to becoming a mentor. An overwhelming number, 82%, mentored to help a young person succeed and 76% mentored to make a difference in someone's life. However, the survey only listed five reasons the respondents could choose from, most of which were other-oriented. Therefore, the instrument somewhat forced a response that reflected one type of motivation. It is also not clear from what literature or validated scales the listed reasons on the survey instrument were

generated. Furthermore, the 2005 MENTOR survey uses motivation to help describe the mentor population, but it does not seek to draw connections between mentor motivation and youth outcomes. As such, we may know why individuals mentor, but not if or why this might matter in helping the youth.

2.3.2.4 Does mentor experience with program content and working with youth affect relationship outcomes?

Human Capital Theory

Human capital theory considers education and experience to be positively related to, and possibly even predictive of, worker productivity. By imparting useful knowledge and skills, education and training have been established as key methods of investing in human capital (Becker, 1994). If increased education and experience are thought (and evidenced) to increase productivity in the workplace, there is reason to believe these forms of human capital may also apply to mentoring outcomes. Accordingly, this study seeks to investigate whether a mentor's educational attainment and experiences affect relationship and youth outcomes.

From its initial conception in the early 1960's, human capital theory has proposed not only the importance of investing in human capital but the means by which this will most profitably occur: "education and training are the most important investments in human capital" (Becker, 1994, p. 17). Education has been shown to promote health, reduce smoking, raise the propensity to vote, improve birth control knowledge, and stimulate the appreciation of classical music, literature, and even tennis (Becker, 1994, p 21). However, most relevant to this study is

the assertion that as a result of education and training, workers develop skills and build knowledge, which improves their capabilities (Schultz, 1961). "Many workers increase their productivity by learning new skills and perfecting old ones while on the job" (Becker, 1994, p 31).

Today, fifty years after Becker and Schultz developed this theory, education is understood as not just a good investment, but also a critical one.

> "High school and college education has spread extensively in modern economies because the additional knowledge and information acquired in school is so important in technologically advanced economies…The systematic application of scientific knowledge to production of goods has greatly increased the value of education, technical schooling, and on-the-job training as the growth of knowledge has become embodied in people-in scientists, scholars, technicians, managers, and other contributors to output" (Becker, 1994, p. 20 & 24).

While many of the human capital studies look for connections between education, experience and earnings, Black and Lynch (1996) have confirmed the connection between education, experience and productivity. When establishments prioritized applicant grades in the hiring process and required more time spent in formal off the job training, their workers were more productive (Black & Lynch, 1996, p. 265). The authors don't just look at individual productivity, but also organization productivity. Both the impact of education and certain types of employer-provided training had substantial impact on establishment productivity (Black & Lynch, 1996, p. 265-266). Furthermore, human capital theory finds that while ability on its own may determine earnings, it only explains a relatively small part of human performance. Becker

supports the power of schooling by asserting, “college education explains the larger part [of human performance]” (Becker, 1994, p 247).

Human capital theory is well accepted in society. Whether or not we are conscious of it, schools and businesses make assumptions about individuals’ abilities based on their degree credentials and prior work experience. If worker education and training is positively related to not only the individual’s own productivity but also the organization’s, perhaps this theory may also hold true for mentoring. Currently, mentoring programs are not consistent in education or experience requirements for their mentors. The only consistent requirement of all individuals who wish to mentor tends to be a criminal background check. By not requiring mentors to have had strong educational backgrounds, certain amounts of experience working with youth, or prior knowledge of the program’s curricular content, mentoring programs are indeed suggesting that ‘anyone can be a mentor’. This study seeks to confirm the validity of this statement by inquiring whether mentors with higher investments in related forms of human capital (education and career experiences) tend to more significantly achieve the targeted relationship and youth outcomes. To my knowledge, no studies have explored relationships between mentor education/experiences and mentoring relationship outcomes.

Teacher quality studies

Since many argue that teacher quality is a powerful predictor of student performance, this study uses this theory and its related empirical studies as evidentiary support for exploring potential relationships between mentor quality and relationship outcomes.

Most studies suggest teacher expertise in their particular subject matter is a determinant

of teacher quality. Instead of just studying teacher quality by their degree attainment, recent research has investigated how the particular subjects and classes taken towards the degree influence student outcomes (Rowan, Chiang, & Miller, 1997). Students whose teachers had subject matter expertise, as evidenced by a master's degree in their respective field, had higher achievement gains than those whose teachers did not have an advanced degree or an advanced degree in the specified subject (Goldhaber & Brewer, 1997; Goldhaber & Brewer, 2000; Rowan, et al., 1997). These findings hold true in both high school and elementary school levels. When controlling for student SES and prior academic achievement, "research has generally shown that high school math and science teachers who have a major in the subjects they teach elicit greater gains from their students than out of field teachers" (Goldhaber & Brewer, 2000, p. 8). At the elementary school level, coursework taken in preparation for the profession and the specific type of the degree are associated with significant positive effects on student reading achievement (Croninger, Rice, Rathbun, & Nishio, 2007). Similar to human capital studies, Croninger, et al., 2007, found it was not just individual teacher qualifications that mattered for student performance but there was also a contextual effect. Higher student outcomes resulted from collective effects of highly qualified teachers (Croninger, et al., 2007). Furthermore, teacher ability and talent had a larger effect in schools where students were low-achieving (Rowan, et al., 1997). Since mentoring programs most often target low-achieving youth, this finding is especially relevant in suggesting that talent and ability might significantly matter among youth mentors.

Other teacher qualifications that have been found to have a relationship to student achievement include: "general academic and verbal ability; subject matter knowledge;

knowledge about teaching and learning as reflected in teacher education courses or preparation experiences; and teaching experience" (Darling-Hammond & Youngs, 2002).

Darling-Hammond and Youngs (2002) also provide evidence that many teachers cite their teacher education programs as preparing them for classroom teaching. These findings are consistent with human capital theory in suggesting education and experience are powerful predictors of teacher achievement.

However, teacher quality studies find strongest support for teacher experience and degree attainment in the *specific content areas* they will be teaching, not in the broader context of educational attainment as human capital theory suggests. As such, this study will investigate if there is a relationship between mentor experiences in the content areas most central to the program under study. These content areas include: career and college advising and working with youth at-risk for school failure. As the teacher quality studies evidence, it is important to look at the content of the mentor's experiences, not just the degree level. These findings will indicate if certain knowledge areas lead to more positive relationship outcomes. Working with youth at-risk of school failure or prior mentoring involvements are specific experiences that may inform and improve mentor practice. By learning more about what kinds of education and experiences are related to relationship and youth outcomes, programs can recruit their mentors based on this information, or train them to ensure they are equipped with the skills and knowledge most relevant to youth satisfaction and success in the program.

2.4 CONTRIBUTING TO AN UNDERSTANDING OF MENTORING THEORY AND PRACTICE

This research study hopes to contribute to an understanding of mentoring theory and practice in the following ways: a focus on mentors as program inputs; using the youth voice to indicate program outcomes; and adhering to a theoretical model to inform research design.

2.4.1 Mentors as program inputs

"The challenge is to identify those program inputs and factors that can facilitate the formation of close, enduring, and ultimately, effective youth-mentor ties"
Rhodes, 2008, p. 38

Figure 6: A focus on mentor characteristics as program inputs

Very few studies have sought to examine how differences in the mentor population are related to youth outcomes. This research seeks to resolve this problem space as mentors are an indispensible input to this educational reform. This study focuses on the mentor as a program

input with the hope of understanding what characteristics, motivation, and educational and career experiences are related to relationship outcomes.

2.4.2 Listening to the kids: Youth self-reports as measures of mentor quality

Despite the fact that some people volunteer for self-focused reasons, mentoring programs as social change agents are set up primarily to serve youth. As such, it is this study's belief that the opinions of those being mentored are important indicators of a program's merit and worth. This involves an assumption that children are observant, perceptive and have worthwhile reflections that will contribute to the conversation. This study is willing to make that assumption. Relationship satisfaction, which includes the degree to which the relationship is youth-centered, and the mentor is perceived as an ally, will be measured by youth self-reports. The extent to which the youth's possible self has been influenced will also be determined by the youth. By incorporating the youth's perspective on the effects of the program, it will become apparent what has worked for them.

Contrary to previous studies, this research does not use youth test scores or attendance measures to evaluate program impact, as it believes that many contextual and historical factors in the youth's life and community affect these outcomes. Putting full weight on a mentoring program to solely affect these variables is unfair and unrealistic. Mentoring programs hope to foster strong relationships between youth and adults. It is this relationship they hope will be a mechanism to future targeted outcomes. Therefore, learning about relationship quality from the *youth* will help understand which mentor characteristics not only result in this short-term

outcome, but hopefully also the desired longer-term outcomes. Using youth responses to questions regarding their perception of relationship quality and their reflection on program influence is an honest, telling and missing perspective in the mentoring literature.

2.4.3 Adhering to theoretical models to inform research design

"With few exceptions, most mentoring relationship measures rely on a global index or a few atheoretical dimensions."

- Rhodes, Spencer, Keller, Liang, & Noam, 2006, p. 698

Using theory to ground the assumptions about what factors might matter to mentor quality is a crucial prerogative of this study. While many mentoring programs operate under the theory that 'anyone can be a mentor' or 'any mentor is better than no mentor at all', this study actually questions these assumptions by drawing on other, well-established theories. Relationship development theories explain *how* positive interactions between adults and youth emerge, and thus warrant the vehicle hoped to produce other intended youth outcomes. Possible selves theory explains the specific desired youth outcome of developing positive ideas of what one can become which will serve to motivate future behavior. The explanatory variables employ theoretical constructs from other fields. The Volunteer Motivation Inventory (Esmond & Dunlop, 2004) is a validated measure based on a functional analysis of volunteerism, set forth originally by Clary and colleagues (1992). Similar to how it is used in the volunteer literature, this measure can be used to understand why individuals choose to mentor. Additionally, the mentoring population can be compared to the general volunteer population to determine if certain motivations are

better predictors of who will want to become a youth mentor as opposed to volunteering in another capacity. Both human capital theory and teacher quality theories suggest that mentor educational attainment and experience in program content area might encourage more effective practice. To my knowledge, no mentoring studies have understood how mentor motivation, educational attainment and experience are related to youth outcomes.

3.0 METHODOLOGY

3.1 PURPOSE

The purpose of this research study is to investigate the relationship between selected mentor characteristics and mentee relationship outcomes. Since there is great variation among mentor populations, it is hard to consider this program input as a constant. Particular mentor attributes, then, are ripe for examination as independent variables. Even though mentoring programs rely on their mentors to realize their theory of change, currently there is a limited understanding of how differences in the mentor population influence achievement of desired program outcomes.

Specifically this study is interested in how mentor motivation, mentor education attainment and mentor experiences mediates the mentee's perception of a high-quality relationship[3] with an adult and a positive future possible self. This study is also interested in exploring the role of relationship quality as an intermediary outcome that mediates the youth's perception of his/her positive future possible self. As a relational study, this project aims to move

[3] A high-quality relationship is measured by the degree to which it is perceived to be youth-centered and the degree to which the mentor is perceived to be an ally (DuBois, et al., 2011; Jekielek, et al., 2002; Nakkula & Harris, 2005; Morrow & Styles, 1995).

beyond descriptions of program participants to understand "*why* things are the way they are" by investigating whether there are associations in the natural variation of predictors and outcomes (Light, Singer, & Willett, 1990). While this study may be limited in that it can only establish correlation and not causation, it is designed to provide a clearer understanding of what mentor characteristics and experiences are more likely to yield "high- quality" mentoring practices. With this knowledge, programs can recruit mentors more purposefully and train more efficiently in ways relevant to the population and literature.

This chapter will (a) restate the research questions; (b) describe the study design, including the sample population; (c) introduce the research hypotheses, variables of interest and data analysis procedures; and (d) discuss the study limitations.

3.2 RESEARCH QUESTIONS

This study seeks to investigate the following research questions:

1. Do mentor characteristics (initial motivation to volunteer, educational attainment, experience with program content, and experience with youth) affect the degree to which the mentee perceives the relationship as high-quality?
2. Do mentor characteristics (initial motivation to volunteer, educational attainment, experience with program content, and experience with youth) affect the degree to which the mentee perceives changes in his/her future possible self?

3. Does relationship quality: (a) affect the degree to which the mentee perceives changes in his/her future possible self? and (b) serve as a mechanism to understand which mentor characteristics affect changes in the mentee's future possible self?

3.3 DESIGN

This study is a secondary data analysis. The research tools were developed and subsequent data collected primarily by other researchers for a different purpose. As a research methodology, secondary data analysis has several benefits, as well as potential drawbacks.

The benefits of secondary data analysis research include access to data and research instruments that already exist (Johnson & Christensen, 2004). Since the data collection process can be lengthy, especially if it is a longitudinal study, research involving secondary data analysis tends to happen more quickly as access to the data is immediate. However, with secondary data analysis the data might not fit the researcher's primary objective as well as it might have if the researcher had developed the data collection instruments specifically for his/her purposes.

Survey research was used to learn about the mentor population as well as the mentees' experiences in the program. Questionnaires can obtain information about the characteristics and experiences of research participants including their "thoughts, feelings, attitudes, beliefs, values, perceptions, personality and behavioral intentions" (Johnson & Christensen, 2004, p. 164). As such, data collected by this method was found to be appropriate and suitable as the researcher

was looking primarily at mentor characteristics and mentee experiences and perceptions, all of which the existing survey contained.

The adopted questionnaire was originally designed for evaluative purposes of a city wide mentoring program, and required responses from mentors and mentees. Both mentor and mentee surveys were administered at the end of the school year. At this time, 66% of the matches had worked together for one academic year. The remaining 34% had completed their second academic year working together. The mentee survey was administered by the mentoring agencies. Each mentee completed the survey at his/her site. The mentor survey was administered online. Each mentor completed the survey electronically, at his/her leisure, over a two week period.

While the data was originally collected for program evaluation purposes, the goals of the current research differ. The citywide program under study is not considered the focus of this research and was not examined holistically with the intent of being described in depth. Therefore, this research method does not aspire to be, nor intend to reflect the case study approach (Fitzpatrick, Sanders, & Worthen, 2004). Instead of using the data to conduct a case study of the program under study, this research hopes to gain information about a subset of the mentoring population (both mentors and mentees) to suggest implications for broader partnership development and educational reform.

3.4 SAMPLE

The sample for this study consists of both mentors and mentees participating in a citywide initiative to connect adults in the community with public school children through local mentoring agencies. As analysis at the match level is central to this study, the dataset being used for this project matches the mentor survey and mentee survey, resulting in one case per mentoring pair. Therefore, *only* mentoring pairs for which a survey was collected for *both* the mentor and the mentee are included in the dataset. Pairs for whom just a mentor survey or just a mentee survey was completed are excluded from the sample.

The sample consists of 119 mentor-mentee pairs. All mentees were in 6^{th} or 7^{th} grade in a medium-size urban public school district. Mentors were volunteers, above the age of 18 and had completed background clearances. Mentors were placed at one of eight of the mentoring sites. Mentoring sites were coordinated by four mentoring agencies, which provided mentor supervision. All mentors were required to participate in a 3-hour program-wide training session prior to meeting the mentee. One of the agencies required mentors to participate in an additional training at their site. Mentees also attended a 60 minute in-school orientation prior to enrolling in the program. Mentors and mentees met once a week, at the designated site, during the school year. Mentoring times varied by site: some met in school during a free period, while others met after school. The length of the mentoring session ranged from 30 – 50 minutes.

This sample was attractive for several reasons: first, this citywide initiative is representative of a mentoring movement nationwide. The mentoring initiative under study targets urban public school children who tend to be low-income and of minority background, thus it is

reflective of program ideology and design across the country. Second, while the program under study may reflect national trends and philosophies, it is innovative in scope and purpose. Initially, the mentoring program sought to find a caring adult mentor for *each* sixth grader in the city's public school district. While this is still an aspiration, the program also specifically targets youth who are identified as at-risk for school failure or behavioral delinquency. The mentoring initiative involves a three-way collaboration between a medium-sized urban public school district, four local mentoring agencies, and the local chapter of a national organization to help fundraise and catalyze community change. Furthermore, the program's goals go beyond the development of a positive relationship with a caring adult and include acquisition of knowledge about future careers and corresponding post-secondary schooling. By guiding students through career development and providing them with information about different occupational paths, the program aims to influence mentees' educational trajectories by inspiring them to finish high school and pursue college. Third, there was tremendous variability in program implementation. As there were 8 different sites, coordinated by 4 different agencies, implementation varied by how matches were paired, how mentees were recruited, how mentors were selected and how closely the curriculum was followed. Additionally, each school site named a different district person to coordinate and oversee the program, thus serving as a liaison between the program and the school. Often, this was a school counselor, but not exclusively. The individual named to this position did not have "role specific training" and so the differences across sites existed due to the nature of this person's background, professional experiences, and level of involvement. This variability in program context and procedures allows for higher external validity. Generalizations can be made more easily about the role of the mentors in predicting relationship and youth

outcomes, since the program design and implementation factors cannot be held as constants. Finally, this sample was ideal for pragmatic purposes. The researcher has access to both mentor and youth data. The data are coded so the level of analysis can be the mentor-mentee match. Therefore, relationship experiences can be analyzed through examining the characteristics of the individuals involved in the match. As such, existing data could address research questions of interest.

3.5 RESEARCH HYPOTHESES

Figure 7 illustrates how this study hypothesizes the relationships between the explanatory and outcome variables. The variables in the below model are grounded in literature and theory, as explained in Section 3.6. The hypothesized relationships inform the data analysis, described later in this chapter.

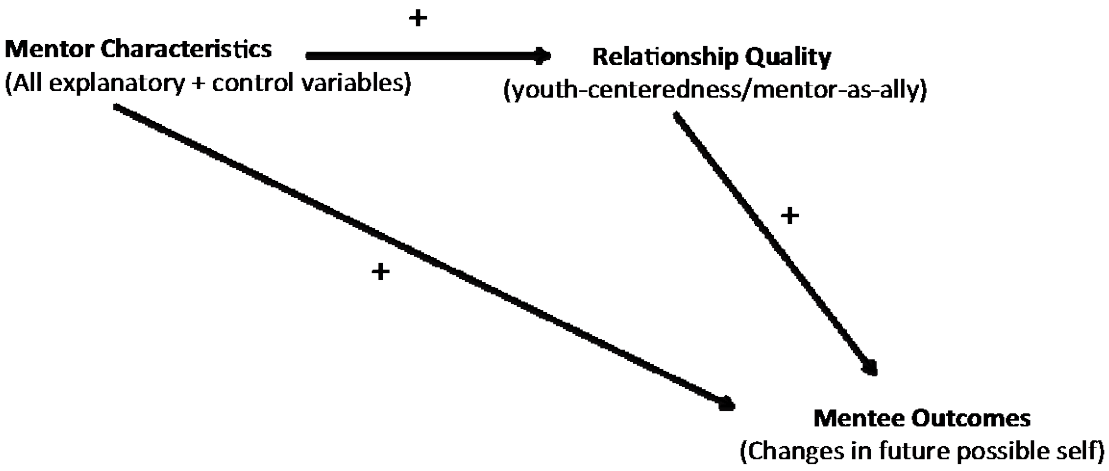

Figure 7: Theoretical Model

The model predicts that mentor characteristics can directly affect mentee outcomes and relationship quality. The Relationship Quality and Possible Self variables represent outcome variables in the model. However, Relationship Quality is theorized to be an intermediary outcome to changes in the youth's perception of his/her possible self. The hypothesis is that targeted youth outcomes are facilitated by the development of a high-quality mentoring relationship. In other words, the youth's future self can be most influenced, once a strong relationship is accounted for. This is in accordance with evidence from developmental style interactions: matches that are most successful in achieving goals and accomplishing tasks are those in which a solid relationship between the adult and youth is established, and the youth is receptive to the adult's input (Morrow & Styles, 1995, p. viii). The model also allows for the possibility that mentor characteristics may directly affect targeted youth outcomes, and the relationship quality is not necessarily essential. In this case, other variables are important in achieving youth outcomes. Specific mentor characteristics (motivation, education and experiences) have not yet been examined as to their direct effect on youth outcomes. As is discussed in the literature review and again in section 3.6, human capital and teacher quality theories suggest a positive relationship between mentor education/related experience and youth outcomes. Therefore, the model intentionally investigates these relationships as well.

3.6 RESEARCH VARIABLES

Drawing the connection between theory and research hypotheses

The research variables of interest include: demographic statistics for both mentor and mentee populations; explanatory variables (mentor motivation, education attainment, experience in content area and with youth); and varying degrees of outcome variables. Changes in the mentee's future possible self are conceptualized as the targeted youth outcome. Relationship quality is conceptualized as a possible intermediary outcome that mediates the possibility for mentor characteristics to affect mentee outcomes.

3.6.1 Demographic Statistics & Control Variables

Demographic statistics serve two purposes in this study: 1) to describe the sample and provide a richer understanding of the populations under study; and 2) as potential control variables, thus allowing the possibility for removing confounding variables. Demographic statistics can be obtained for both mentors and mentees and will be retrieved from the survey instruments[4]. Table 1 lists the available participant demographic statistics.

[4] Please see Appendices A & B for a copy of the Mentee & Mentor Survey Instruments.

Table 1: Mentor/Mentee Demographic Statistics

Mentor/Mentee Demographic Statistics
Sex
Age
Socio-Economic Status
Race
Mother education level (mentee only)
Same-Sex Pairs
Same-Race Pairs
Current occupation (mentor only)
Total jobs held (mentor only)
different career fields (mentor only)
Years as a mentor to the student (mentor only)
Mentoring site

The demographic statistics are available at the individual level and able to be paired at the match level. Thus, these variables can be included in the analytic model. Since literature suggests some of these demographic variables may affect the targeted outcome variables, their role as potential control variables can be explored. Mentor characteristics such as race, age and class can specifically influence one's level of education, and their experiences in college and career advising and in working with youth. The background of a mentor can also affect his/her motivation for mentoring. The number of years the adult has mentored the youth is included as a control as some literature suggests the length of the relationship is directly related to youth outcomes, with shorter relationships and early termination resulting in potentially harmful effects on youth (DuBois & Neville, 1997; Grossman & Rhodes, 2002). As such, mentor class is also a control variable since it has been found to affect the length of a relationship; lower class mentors terminate sooner than mentors of a higher socio-economic status (Grossman & Rhodes, 2002). Mentor sex serves as a control as it has been found to affect interaction styles. Males,

specifically, tend to have more developmental relationships, which research shows leads to higher quality relationships (Morrow & Styles, 1995). Mentee characteristics such as race and sex are also related to interaction styles and receptivity to the relationship. Theoretical and empirical research has explored the effects of race and sex on mentoring outcomes, as well as effects of same race and same sex matches (Cohen & Steele, 2002; DuBois, et al., 2011; DuBois, et al., 2002; Jekielek, et al., 2002; Ogbu, 1990; Rhodes, et al, 2002; Sanchez & Colon, 2005). Many of the conclusions reached, especially regarding race, are mainly ideological. However this study finds that warrant strong enough to control for these characteristics. The mentee mother education variable is included as research establishes mother education as positively correlated with youth outcomes, including their health (Case, Lubotsky, & Paxson, 2002), education attainment (Ermisch & Francesconi, 2001), and educational aspirations/achievements (Sewell & Shah, 1968). Finally, the mentoring site is controlled for as there were eight different sites with extreme variability across sites. Therefore, it is important to eliminate site implementation as a confounding variable.

3.6.2 Explanatory Variables

The Mentor Characteristics variable in the theoretical model is comprised of all explanatory variables. Table 2 lists the explanatory and control variables of interest.

Table 2: Mentor Characteristic Variables Detailed

Mentor Characteristics		
Explanatory Variables		
Motivation	1	Values Subscale: Average Score
	2	Understanding Subscale: Average Score
	3	Reactivity Subscale: Average Score
	4	Self-Esteem Subscale: Average Score
Education	5	Highest Education Degree
Experience w/ Program Content	6	Experience advising about college
	7	Experience advising about careers
Experience w/ Youth	8	Experience working with youth
	9	Experience working with youth at-risk for school failure
	10	Experience serving as a mentor
Control Variables	11	Mentor Race
(all non-ordinal data as dummy variables)	12	Mentor Age
	13	Mentor Class
	14	Mentor Sex
	15	Mentee Race
	16	Mentee FRPL eligibility
	17	Mentee Sex
	18	Same-Sex Pairs
	19	Same-Race Pairs
	20	Mentee Mother Education Level
	21	Mentoring Site
	22	Years as a Mentor

Since the study is primarily concerned with how mentor variation influences youth outcomes of mentoring programs, the explanatory variables all reflect characteristics and experiences by which mentors may differ. In this way, we can determine if there are certain mentor attributes that are important, or more effective in achieving the desired relationship and youth outcomes. The explanatory variables include: mentor initial motivation to volunteer;

mentor educational attainment; mentor experience with program content[5]; and mentor experience working with youth.

Mentor Motivation to Volunteer. Functional analysis suggests that the reasons individuals choose to volunteer or mentor may influence desired youth outcomes. The theory asserts that, "acts of volunteerism that appear to be quite similar on the surface may reflect markedly different underlying motivational processes" (Clary, et al., 1998, p. 1517). If the functions served by volunteerism manifest themselves differently in relationship dynamics, there could be important implications for mentor recruitment and retention (Clary, et al., 1998; Esmond & Dunlop, 2004; Fact Sheet, 2006). If program directors know that certain motivations to volunteer more often lead to high-quality relationships, it would be worthwhile to recruit mentors who evidence these characteristics. If programs know what motivates their mentors to volunteer, they can create support structures that continue to fulfill these motivational needs to increase the likelihood mentors will want to stay involved.

In order to better capture the reasons why people volunteer, Clary and colleagues (1992; 1998) developed the Volunteer Functions Inventory (VFI) to reflect the possible psychological and social functions of volunteerism (p. 1519). In 2004, Esmond and Dunlop created the Volunteer Motivation Inventory (VMI), an adaptation of the VFI. The VFI includes the original VMI scales that did not correlate strongly with any of the new scales Esmond and Dunlop proposed. The final instrument contains ten unique volunteer motivations. This study chose a subset of the VMI subscales to measure mentor motivation. The four subscales used in this study

[5] For the program under study, curriculum content involves college and career knowledge

are the Reactivity, Self-Esteem, Values and Understanding scales. Reactivity and Self-Esteem are new to the VMI scale, while Values and Understanding are original to the VFI scales.

- **Values:** individual volunteers as an expression of their values of altruism and humanitarian concern for others.
- **Understanding:** individual volunteers to learn more about the world and exercise knowledge, skills and abilities that might go unpracticed.
- **Self-Esteem:** individual volunteers to boost ego growth and development (Clary, et al., 1998); to increase their feelings of self-worth and self-esteem (Esmond & Dunlop, 2004).
- **Reactivity:** individual volunteers out of a need to 'heal' and address their own past or current issues.

These four were selected as they were perceived to be most related to mentoring, a specific form of volunteerism. Two of the scales (Values and Understanding) are more other-oriented. These can reflect a mentor's desire to help those they perceive to be less privileged and to perhaps foster their own understanding of complex issues by learning from others. The Reactivity and Self-Esteem scales reflect volunteering for more self-oriented reasons. Self-identifying as a mentor allows the possibility that an individual is motivated by intrinsic reasons. Some may be inclined to mentor because it makes them feel good about themselves and feel important or helps them deal with problems in their own lives. Including scales that reflected both other-oriented and self-oriented motives for mentoring was purposeful in that they allow for mentoring to be conceived as fulfilling functions that originate from quite different positions. Choosing subscales instead of the whole instrument allowed the researchers to target the inquiry as well as make the resulting data more manageable.

Each of the scales is measured using a 5 point-likert scale where 1 is 'strongly disagree' and 5 is 'strongly agree'. Each individual will have a total of four scores that correspond to each of the four motivation functions assessed by this inventory. The highest scale reflects the

motivation of greatest importance to the participant while the lowest score reflects the motivation of least concern (Edmonds & Dunlop, 2004, p. 73). Participants will receive 5 points for each 'strongly agree' response, 4 points for each 'agree' response, 3 points for each 'undecided' response, 2 points for each 'disagree' response and 1 point for each 'strongly disagree' response.

The VFI is one of the few measures of volunteer motivation that has undergone extensive reliability and validity testing (Edmonds & Dunlop, 2004). In order to assess validity, Clary, et al (1998) tested the predictive appeal of the VFI. They found that recruitment advertisements that were most persuasive and the volunteer experiences that were most satisfying corresponded with the respondent volunteer's highest motivation subscale. That is the participants found the advertisements most persuasive and the experiences most satisfying when they matched their personal motivations (Clary, et al., 1998). This demonstrates the validity of the VFI as a functionally oriented measure of motivations for volunteerism (Clary, et al., 1998, p. 1524). Psychometric testing for validity of the VMI is not apparent. However, arguments for face validity exist. Constructing the VMI also involved many stages of testing individual items to be sure the items are clear, straightforward, and unique from previous subscales. Though testing the VMI and VFI was largely done through volunteer self-reporting, a limitation of the design, researchers conclude the resulting subscales are robust in their capability of measuring ten unique volunteer motivations (Edmonds & Dunlop, 2004, p. 47). Table 3 lists the items for each motivation subscale as well as Cronbach's Alpha Reliability coefficient, all of which are fairly high (Esmond & Dunlop, 2004).

Table 3: Motivation Subscales and Cronbach's Alpha (Esmond & Dunlop, 2004).

Scale	Items	Alpha
Reactivity	I like to help people because I have been in difficult positions myself	0.7257
	Volunteering gives me a chance to try to ensure people do not have to go through what I went through	
	I often relate my volunteering experience to my own personal life	
	Volunteering helps me deal with some of my own problems.	
Self-Esteem	I volunteer because I feel that volunteering is a feel-good experience	0.7128
	I volunteer because volunteering makes me feel like a good person	
	I volunteer because volunteering makes me feel important	
	I volunteer because volunteering makes me feel useful	
	I volunteer because volunteering keeps me busy	
Values	I volunteer because I am concerned about those less fortunate than myself	0.7393
	I volunteer because I am genuinely concerned about the particular group I am serving	
	I volunteer because I feel compassion toward people in need	
	I volunteer because I feel it is important to help others	
	I volunteer because I can do something for a cause that is important to me	
Understanding	I volunteer because I can learn more about the cause for which I am working	0.8095
	I volunteer because volunteering allows me to gain a new perspective on things	
	I volunteer because volunteering lets me learn through direct hands-on experience	
	I volunteer because I can learn how to deal with a variety of people	
	I volunteer because I can explore my own strengths.	

Mentor Educational Attainment. This explanatory variable is grounded in human capital theory and seeks to examine if the level of mentors' education affects the achievement of desired relationship and youth outcomes. This variable is determined by mentor response on the survey instrument to the following item:

- What is the highest degree you have completed?

Possible responses include High School, Associates, Bachelors, Masters, Professional/Doctorate. Before determining the potential significance of this variable, it will be important to investigate variability. If the majority of mentors indicate the same highest educational degree, it may not be worthwhile to explore the effects of education.

Mentor Experience with Program Content. As the program under study involves a curriculum surrounding college and careers, this study seeks to investigate if experience in these subject areas affects achievement of relationship and youth outcomes. As such, it is grounded in teacher-quality and human capital theories. This variable is determined by mentor response on the survey instrument to the following items:

- Before the program began, how much experience did you have advising others about college?
- Before the program began, how much experience did you have advising others about careers?

Responses are measured using a 4-point likert scale where 1 is 'no prior experience' and 4 is 'extensive prior experience'.

Mentor Experience with Youth & Mentoring. This explanatory variable is grounded in human capital theory and seeks to examine if prior experience mentoring and working with youth, especially youth of similar background to those targeted by the program affects the achievement of desired relationship and youth outcomes. This variable is determined by mentor response on the survey instrument to the following items:

- Before the program began, how much experience did you have working with youth?
- Before the program began, how much experience did you have working with youth identified as being at-risk for school failure?
- Before the program began, how much experience did you have serving as a mentor?

Responses are measured using a 4-point likert scale where 1 is 'no prior experience' and 4 is 'extensive prior experience'.

The individual items comprising the education, experience with content and experience with youth scales were all developed by the researchers. A limitation of this study is that there is no psychometric validity established for these items. Therefore there is no measure or data that guarantee the items test what they intend to. However, despite this limitation, it is believed that arguments for face validity exist. The language of the items was discussed at length by the researchers. The ultimate wording reflects items that are straightforward (i.e. what is your highest educational degree?) with choices that guide the respondents to answer in ways intended by the researchers. The language is also precise and specific, hoping to minimize possibilities for confusion. For example, "experience working with youth" is additionally qualified as

"experience working with youth identified as being at-risk for school failure." The language used in the final items was accepted among researchers without debate as it was agreed they were measuring what was intended.

3.6.3 Outcome Variables

The outcome variables of interest are measured using *mentee self-reported responses* on the mentee survey instrument[6]. Youth responses were used to gauge outcomes as it is believed that the mentees are key program stakeholders and so their perceptions of program value/worth will better help practitioners understand and determine what matters in a mentor. Since programs are designed to positively affect the *youth,* this study wanted to use the youth voice to help answer the research questions.

Table 4: Relationship Quality Variable Detailed

Relationship Quality	
Intermediary and/or Intervening Outcome Variable	
Relationship as Youth-Centered + Mentor-as-Ally Scales Total Score	(1 - 60)

Mentee Perception of High-Quality Relationship. Two separate scales combine to measure this variable: Perception of Relationship as Youth-Centered and Perception of Mentor as an Ally. Certain items on the survey ask youth about the degree to which they perceived the relationship being about their needs, interests and goals. Three items pertained to this particular

[6] Please see Appendix A for a copy of the Mentee Survey Instrument

scale and their total responses will indicate the level to which the youth believe the relationship is youth-centered, a key indicator of high-quality relationships (Jekielek, et al., 2002; Morrow & Styles, 1995; Nakkula & Harris, 2005). The survey instrument also includes items that ask youth about their mentors and the different ways their mentor may have helped, guided or supported them. A total of seven survey items pertain to this particular scale. Together, these items make up the Mentor-as-Ally scale. A mentor serving an advocacy role to youth is another indicator of high-quality relationships (DuBois, et al., 2011). A likert scale of one through six (strongly disagree to strongly agree) for the ten items results in a total possible score of 60. Youth responses to these survey items will provide a final score resulting in each youth's perception of a high-quality relationship.

Both of these scales are grounded in work done by others. Most especially, the scales developed by Jean Grossman and Amy Johnson (1999) provided the individual items for the relationship quality variable. These scales were developed with data from the 1995 Big Brother Big Sister Evaluation (Tierney & Grossman, 1995). The scales continue to be used for large-scale evaluations of successful mentoring programs, including Big Brother Big Sister. Notably, the program's recent national impact study conducted by Herrera, et al., 2007 used the youth-centered relationship scale and youth emotional engagement scale to measure similar match-related outcomes of interest to this study. This study borrowed items from their overall relationship quality scale, youth disappointment scale, youth-centered scale and youth emotional engagement scale. The scales were not taken in their entirety for the mentee survey used in this study due to time and space limitations. Additionally, some of the language of the items was adapted in order to be more age appropriate and relevant to this particular mentee population.

While psychometric established validity for these scales could not be found, a limitation of the study, it is believed the arguments for face validity exist. Face validity of the adapted items is argued as the wording of the items was discussed at length among multiple researchers to debate likely interpretations. The language used in the final items was accepted without debate as it was agreed they were measuring what was intended.

Table 5: Relationship Quality Scales

Outcome Variable	Data Points	Items on the Instrument	Metric
Mentee Perception of Relationship as Youth-Centered	We talk about things that matter to me.	Youth Survey #1	Likert Scale: 1(Strongly disagree…6 (Strongly agree)
	My mentor helps me to feel good about myself.		Likert Scale: 1(Strongly disagree…6 (Strongly agree)
	My mentor does all the talking when we meet.		Likert Scale: 1(Strongly disagree…6 (Strongly agree)
Mentee Perception of Mentor-as-Ally	My mentor has a lot of good ideas about how to solve a problem.	Youth Survey #1	Likert Scale: 1(Strongly disagree…6 (Strongly agree)
	When my mentor gives advice, s/he makes me feel kind of stupid.		Likert Scale: 1(Strongly disagree…6 (Strongly agree)
	My mentor praises me and encourages me to do well.		Likert Scale: 1(Strongly disagree…6 (Strongly agree)
	My mentor helps me challenge myself to succeed.		Likert Scale: 1(Strongly disagree…6 (Strongly agree)
	I feel close to my mentor.		Likert Scale: 1(Strongly disagree…6 (Strongly agree)
	I have a lot in common with my mentor.		Likert Scale: 1(Strongly disagree…6 (Strongly agree)
	I think my mentor understands me.		Likert Scale: 1(Strongly disagree…6 (Strongly agree)

Since the above variable scales are combined, the individual items are grouped in a way that is unique to this study. As such, the reliability of the scale is not known. Therefore, it is important to obtain correlation data for the variable. A reliability analysis produces a Cronbach's alpha that signifies strength of correlation between scale items. A Cronbach's alpha of .7 indicates relative strength of correlation. The Cronbach's alpha for the Relationship Quality Scales is .891.

Table 6: Possible Self Variable Detailed

Possible Self Outcome Variable	
Perception of Future Possible Self Scale Total Score	(1-24)

Mentee's Perception of Future Possible Self. As a goal of the program is to influence mentees' educational trajectories by introducing them to information about college and careers, this study examines the extent to which the mentee's perception of his/her future possible self has been positively influenced. Items on the survey instrument about the role of the mentor in helping the mentee understand the different career possibilities available and the necessary education for these careers were combined to form this scale. A likert scale of one through six (strongly disagree to strongly agree) for the 4 items results in a total possible score of 24. Youth responses to these survey items will provide a final score resulting in each youth's perception of changes to his/her future possible self.

The Hemingway Measure of Adolescent Connectedness, developed by Michael Karcher (2003) was referenced to create the items for the Possible Self Scale. The Hemingway Measure contains 15 subscales that measure connectedness to self, connectedness to others and connectedness to society. All items were subjected to content analysis and a construct validity in which different interpretations of items were discussed, resulting in an expanded version, and ultimately accepted by adolescents in the focus groups with little debate (Karcher, 2011, p. 6-7). Within the "connectedness to self" dimension, the subscale of a 'future self' served to ground the possible self outcome variable. Individual items on the scale were adapted to fit the specific education and career goals of the program under study.

Table 7: Possible Self Scale

Outcome Variable	Data Points	Items on the Instrument	Metric
Changes in Mentee's Perception of Future Possible Self	Showed me more possibilities for careers than I knew about before.	Youth Survey #2	Likert Scale: 1(Strongly disagree...6 (Strongly agree)
	Helped me find a career that I am interested in.		Likert Scale: 1(Strongly disagree...6 (Strongly agree)
	Helped me understand what education I need for the career I am interested in.		Likert Scale: 1(Strongly disagree...6 (Strongly agree)
	Helped me see why what I am doing in school now matters for what I want to do in life.		Likert Scale: 1(Strongly disagree...6 (Strongly agree)

Similar to the Relationship Quality Scale, the Possible Self Outcome Variable scale is comprised of items that are grouped in a way that is unique to this study. The reliability analysis on this scale produced a Cronbach's alpha of .821.

3.7 DATA ANALYSIS

Data are primarily analyzed using the SPSS computer program. The first data analysis procedure was running frequencies on the various variables. It is important to run this test first as it checks for data-entry errors. Additionally, since nearly all the data originated from likert scale metrics, frequencies determine whether certain categories can be collapsed. Lastly, frequencies provide descriptive statistics that produces a profile of the sample population. As such, frequency analysis helps to better understand the demographics of the mentor and mentee populations.

Some initial summary statistics for the research variables can be captured through running correlations. While this procedure does not suggest causal relationships, it can provide

interesting information about the bi-variate relationships and the significance of individual variables. Correlations results may prove helpful to informing future calculations.

Multiple regression will best examine the relationship between the explanatory and outcome variables. This method is justified for both technical and conceptual reasons. First, the different items that comprise the outcome variable scales were summated to get a total score, and are thus continuous in nature. While the researcher could dichotomize continuous data, it is preferred for the data to be conceptualized as continuous. If the outcome variables were converted to categorical data (i.e. a relationship is high-quality or not), the 'shades of gray' that are likely to exist would disappear. Treating the outcome variables as a continuous scale will help the researcher understand the degrees of difference that result from the predictor variables. As such, when data are continuous in nature, a multiple regression test that combines several predictor variables in one equation is run (Gravetter & Wallnau, 2009). The Ordinary Least Squares (OLS) regression will estimate the true population relationship between the multiple variables.

Second, the research questions conceptually make an argument that the relationship between variables is predictive; this study seeks to determine if the explanatory variables *predict* the outcome variables. The research questions include several explanatory variables, thus also necessitating a multiple regression equation.

Third, the theoretical model (Figure 7) that hypothesizes the relationships between variables resembles that of a path analysis. The model includes 'paths' between the explanatory and outcome variable that are both direct and indirect. Figure 8 represents the direct effect and indirect effect model hypothesized by the path analysis.

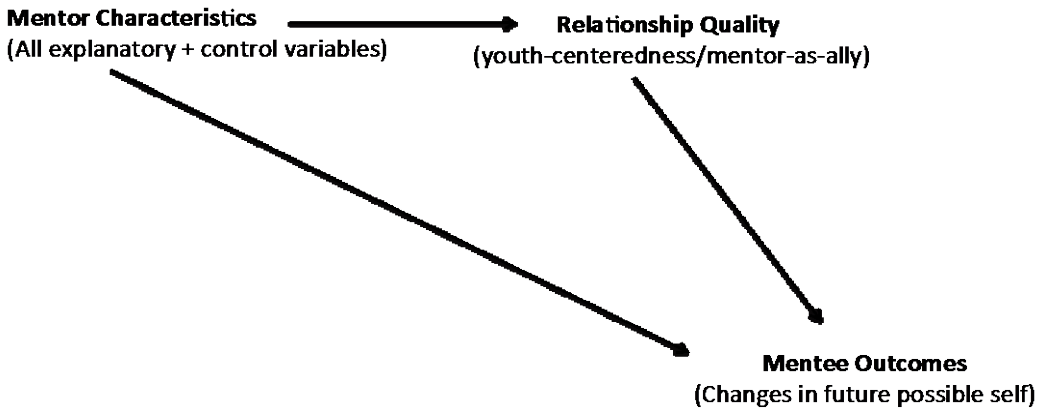

Figure 8: Path Analysis: Direct and Indirect Effect Model

The model requires assessing "the net effect of each of two variables on a third variable, that is, the effect of each independent variable holding constant the other independent variable" (Treiman, 2009, p. 25). Specifically, this study hopes to determine the net effect of the mentor characteristics variables as well as the relationship quality variable on the possible self outcome variable.

According to the path analysis, the model demands the following regression tests:

1. Mentor Characteristics + Relationship Quality → Mentee Outcomes (Possible Self)

2. Mentor Characteristics → Relationship Quality

Several assumptions are present in these equations. First, the mentor characteristics variable represents all the explanatory variables (mentor motivation, education and experience). Figure 9 depicts a more detailed path analysis that expands the mentor characteristic category into its individual parts and connects each pathway to its respective research question.

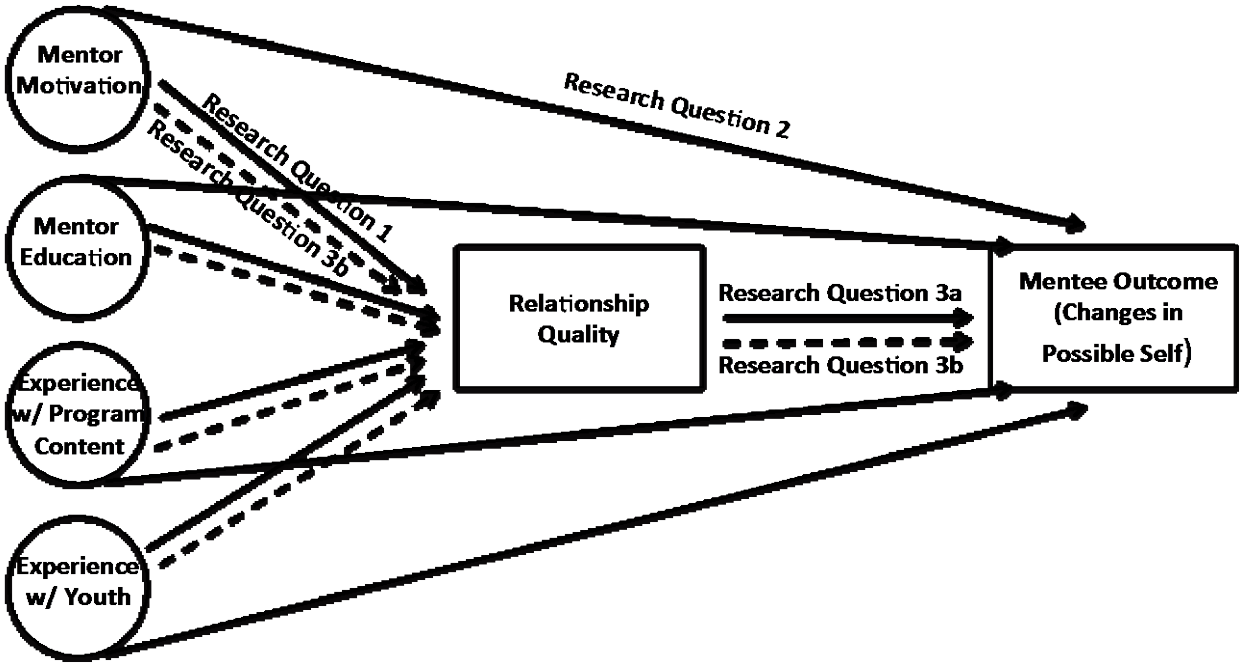

Figure 9: Path Analysis Expanded

The regressions will produce a beta value (β) for each relationship (represented by the various arrows in the figure). When all mentor characteristics are entered into the regression equation together, it becomes possible to determine the relative contribution of the different explanatory variables and if one is responsible for more of the prediction than the others. Additionally, when entered as a group, the explanatory variables control for each other. With this procedure however, one must be cautious of multicollinearity, or high correlation among the independent variables. If this occurs, the regression coefficients have large standard errors and are unstable (Treiman, 2009).

The second assumption present in the regression equations is that for the mentor characteristic variables that are categorical in nature, the researcher can construct dummy variables. Dummy variables allow researchers to analyze the role of categorical variables in

determining the outcomes (Treiman, 2009). The following explanatory and control variables will be constructed as dummy variables: mentor experience college advising; mentor experience career advising; mentor experience with program content; mentor experience with youth; mentor experience with youth identified as at-risk of school failure; mentor experience serving as a mentor; and race, age, class, sex and mentoring site for both mentors and mentees. While originally, the experience items were continuous in nature as they originated from a likert scale, indicator variables will assist in facilitating a more precise data analysis. Third, obtaining a Z score for the Relationship Quality and Possible Self outcomes will allow for the comparison between these two variables. For example, with standardized outcome variables, one can analyze the extent to which one explanatory variable, such as mentor educational attainment, predicts relationship quality compared to the extent to which it predicts changes in the possible self. If Z scores are not computed for the outcome variables, comparisons cannot be made.

The chosen methods of analysis hope to provide information on the strength of the selected explanatory variables in predicting the outcome variables. By doing so, this study will contribute to both the literature and practitioners' understanding of 'what matters' in a mentor, according to those for whom the program was designed: the youth.

3.8 LIMITATIONS

There are several limitations to the study. First, the sample only includes program participants and mentor-mentee matches that lasted the entire year. Therefore this was not a true experiment

as there was no control group. Furthermore, any matches that did not last the entire year, due to the mentor or mentee leaving the program prematurely, were not in the dataset. Having information on matches that did not last would have been useful in comparing the explanatory variables across those that survived and those who did not. With the dataset only containing matches that survived, analysis is just occurring on 'successful' matches, making it even more of a selective sample. The resulting outcome variables were quite homogeneous in nature (high relationship quality scores and strong perceptions of changes in possible selves), reflecting the "success" of these matches. Furthermore, the mentor sample was fairly homogeneous among predictor variables such as levels of experience with program content and youth. The resulting sample size was 119 matches. Considering the large number of variables, this is a fairly small sample size on which to extrapolate. Therefore, it is hard to determine if the small number of significant variables, and the small coefficients are a response to conceptual or methodological issues. Second, data were only collected from mentors and mentees after program participation. The lack of a pre/post design, which would include participant data collected prior to program initiation, means there is not a baseline from which to measure mentee growth. Therefore, the outcome variables specifically rely on mentee reflection and a retrospective analysis on how they have grown and changed as a result of their mentor. The intermediary outcome variable of relationship quality is not affected as much by this limitation as is the change in possible self outcome variable. Third, this is not a longitudinal study and so all data were immediate; it was collected a year after being in the program for most of the participants. Data on mentor impact and influence may not be apparent so soon after program completion. Sometimes, it takes years to recognize the impact a mentor has had and the benefits of participating in such a program.

Furthermore, for those mentees who did acknowledge changes in his her possible self, there is no way of learning for how long these changes last. In other words, the lasting impact of the program is unknown. Fourth, all data collected are quantitative in nature. Some of the explanatory variables were assessing mentor previous experience that were hard to convert to quantitative measures, while not losing meaning. For example, understanding mentors' level of experience as "minimal" and "moderate" does not allow for strong interpretations of these distinctions, by the survey respondent or the researcher. Since the majority of the responses fell in these categories, they could not be collapsed into less subjective groups such as "some" or "none" for the analysis and still accurately reflect the sample. Therefore, this study recognizes that quantitative reporting might miss information that qualitative data could have captured.

4.0 RESEARCH FINDINGS

This chapter presents the research findings of the study. The first section reports on mentor and mentee characteristics to offer a richer description of both populations. The second section discusses the relationships among the independent variables and dependent variables. Finally, the multiple regression results are detailed.

4.1 DESCRIPTIVE STATISTICS

The questionnaires were distributed to 119 mentor-mentee matches. Mentoring activity occurred at eight different school sites. The participating pairs were fairly evenly distributed across sites, with no more than 25% of the population at any one site. The majority of the matches, 65.5%, were together for one academic year when the questionnaire was administered. The remaining 34.5% had just completed their second academic year working together.

For the majority of the variable categories, data are available for 100% of the sample. There are very few missing data. The one exception is the ‘mentee mother education’ variable, for which about 20% of the mentees either did not know, or did not complete this question. This

variable was not used beyond descriptive purposes, so the missing data will not affect the calculations.

4.1.1 Characteristics of the Participants

The below sections describe the populations more fully by: (a) Sex, (b) Race, (c) Socio-Economic Status, (d) Age, (e) Mentee Mother Education Level, and (f) Occupation Statistics (mentor population level only).

A. Sex of the Participants

As Table 8 illustrates, the majority of both the mentor and mentee populations are female. Of the 119 mentors, 67.2% are female. Of the 119 mentees, 63.9% are female. Due to this consistency among population sex, 88.2% of the mentor-mentee matches were same-sex.

Table 8: Distribution of Participants by Sex

Sex	Mentor Sample (n=119)	Mentee Sample (n=119)
Male	32.8%	36.1%
Female	67.2%	63.9%
Total	100%	100%

B. Race of the Participants

The findings presented in Table 9 show that mentors and mentees differ by race. While the majority of the 119 mentors identified as White (77.3%), the majority of the 119 mentees

(72%) identified as Black. This disparity among population race resulted in just 37% of the matches to be same-race pairs.

Table 9: Distribution of the Participants by Race

Race	Mentor Sample (n=119)	Mentee Sample (n=119)
White	77.3%	25.4%
Black	19.3%	72.0%
Other	3.4%	2.5%
Total	100%	100%

C. Socio-Economic Status of the Participants

Socio-Economic Status (SES) was measured differently for the mentors and mentees. The mentors were asked to indicate their socio-economic background when they were growing up. The questionnaire intentionally asked about mentor childhood socio-economic status, rather than current class status, as it allowed for additional sources of commonality between mentor and youth mentee. For example, if the survey only asked about the current SES of a mentor, then it would not capture information about any mentors who grew up in low-income households (a source of commonality with the mentee populations), if they were now higher-income adults. The socio-economic status of the mentees are indicated by eligibility for free and reduced priced lunch, a measure school districts use to gauge the income level of their students. Tables 10 and 11 evidence mentor SES and mentee SES, respectively.

Table 10: Mentor SES Background

Income Range	Frequency	Percent
Low Income	11	9.2%
Low to Middle Income	45	37.8%
Middle to Upper Income	53	44.5%
Upper Income	10	8.4%
Total	119	100%

Table 11: Mentee SES by Free & Reduced Price Lunch Eligibility

Free & Reduced Price	Frequency	Percent
Eligible FRPL	104	87.4%
Not eligible FRPL	15	12.6%
Total	119	100%

D. Ages of the Participants

The mentoring program under study was designed for 6th grade students. Therefore, the majority of the participating mentees, 65.5%, were in 6th grade over the course of the mentoring year. About one-third of the mentees, 34.5%, were in their second year of the program, and so were in 7th grade at the time of survey administration.

The mentors were fairly evenly distributed across different age ranges. The most frequent age group, containing 28 of the mentors (23.5%) were between the ages of 51-60. The next most frequent age groups were those mentors between 23-30 and 41-50. Both of these age ranges contained 26 mentors, or 21.8% of the mentor population. Table 12 illustrates the distribution of mentor age across all given ranges.

Table 12: Distribution of Mentors by Age

Mentor Age Range	Frequency	Percent
18-22	2	1.7%
23-30	26	21.8%
31-40	15	12.6%
41-50	26	21.8%
51-60	28	23.5%
61 or older	22	18.5%
Total	119	100%

E. Mentee Mother Education Level

The mentee survey asked mentees about their mother's education level. As Table 13 indicates, about 20% of the mentees were unsure, or did not answer the question.

Table 13: Mentee Mother Highest Education Level

Mentee Mother Highest Education Level	Frequency	Percent
Did not finish High School	9	7.8%
Finished High School	24	20.9%
Went to college, did not finish	17	14.8%
Finished College	45	39.1%
Not Sure	20	17.4%
Missing	4	3.4%
Total	119	100%

F. Occupation Statistics for Mentor Population

Since the program under study placed special emphasis on helping mentees identify careers, and develop career goals, the mentor survey sought to learn more about the mentors' career history and background.

First, mentors were asked how many jobs they had held since high school. Their responses ranged from holding zero jobs to holding 23 jobs. On average, mentors had held 5.42 jobs since high school. Next, mentors were asked the number of career fields these reflected in order to gauge the diversity of each mentor's occupational history. Responses ranged from zero different career fields to 12 different career fields. On average, mentors had held jobs in 2.57 different career fields. Mentors were also asked about their current occupation. There was huge variety among their responses. Some of the fields/positions more frequently mentioned include higher education, attorneys, program and non-profit administration, and human resources.

4.1.2 Predictor and Outcome Variable Summary Statistics

The following tables provide summary statistics for the predictor and outcome variables. Frequencies for categorical variables are reported in separate tables in order to provide a more detailed description of the data. As Table 14 indicates, the highest motivation subscale was Values. The means for the outcome variables (relationship quality and possible self) are located on the upper end of the ranges. This suggests that the mentees believed they had fairly high quality relationships, and saw changes in their future possible self.

Table 14: Summary Statistics for Predictor and Outcome Variables

Variable	Mean	Standard Deviation	Range
Motivation_Values	4.34	0.466	2.8-5.0
Motivation_Understanding	3.65	0.695	1.5-5.0
Motivation_Reactivity	2.75	0.885	1.0-5.0
Motivation_Self Esteem	3.08	0.732	1.2-5.0
Mentor Education	3.5	0.891	2.0-5.0
Experience College Advising	2.44	0.926	1.0-4.0
Experience Career Advising	2.5	0.919	1.0-4.0
Experience working w/youth	3.13	0.974	1.0-4.0
Experience working with youth identified as "at-risk"	2.18	1.12	1.0-4.0
Experience serving as a mentor	2.16	1.11	1.0-4.0
Total Relationship Quality Score	48.03	9.60	15-60
Total Possible Self Score	19.41	4.36	4.0-24

The mentors appear to be a fairly well educated sample. The majority of the mentors have at least a Bachelor's degree, as seen in Table 15. Almost half of the mentors have a Master's degree or higher.

Table 15: Mentor Highest Education Level

Mentor Highest Education Level	Frequency	Percent
Less than College	13	10.9%
BA	50	42.0%
MA	37	31.1%
Professional	19	16.0%
Total	119	100%

The following table comments on mentors' prior experiences. Mentors were asked about their experience advising others about college, advising others about careers, working with youth, working with youth identified as being at-risk for school failure, and serving as a mentor.

Table 16: Mentor Experience

	No prior experience	Minimal prior experience	Moderate prior experience	Extensive prior experience	Total
College Advising	16.8%	36.1%	33.6%	13.4%	100%
Career Advising	16.0%	31.9%	38.7%	13.4%	100%
Working with Youth	6.7%	21.0%	24.4%	47.9%	100%
Working with Youth identified as being at-risk for school failure	38.7%	21.0%	24.4%	16.0%	100%
Serving as a mentor	37.8%	25.2%	20.2%	16.8%	100%

As Table 16 indicates, mentor experience tends to be similar among the various categories. For example, about a third of mentors have minimal and moderate experience advising others about college and careers, while about 16% and 13% respectively have no prior experience and extensive experience in both of these categories. Where there are major differences is their experience working with youth. While almost half of the mentors (47.9%) have extensive experience working with youth, very few of these mentors have extensive experience working with youth identified as at-risk for school failure (similar population to the mentees in the given program). In fact, almost 40% have no prior experience working with these youth, or serving as a mentor.

4.2 RELATIONSHIPS AMONG PREDICTOR VARIABLES AND OUTCOME VARIABLES

Predictor and control variables were inter-correlated to determine any associations among the variables and with the outcome variables. These relationships suggest appropriate variables to control for in future calculations. As Table 17 indicates, there are several relationships among the predictor variables. The only predictor variable that is significantly correlated with an outcome variable is relationship quality with possible self total score. Table 18 shows additional relationships among the control variables. Mentor age and Years as a Mentor are significantly correlated with outcome variables. This finding is consistent with other research (DuBois & Neville, 1997; Grossman & Rhodes, 2002). Mentor-mentee pairs by race is not significantly correlated with any other variable. This finding supports research that claims matching by race is a decision based on ideology, rather than empirical findings (DuBois, et al., 2011; DuBois, et al., 2001; Jekielek, et al., 2002; Rhodes, et al., 2002; Sanchez & Cohen, 2005). All other correlations are presented in Tables 18 and 19.

Table 17: Inter-Correlations between Predictor and Outcome Variables

	Total Relationship Quality Z-Score	Total Possible Self Z-Score	Motiv. Reactivity	Motiv. Self Esteem	Motiv. Values	Motiv. Understand	Mentor Education	Exp. College Advising	Exp. Career Advising	Exp. w/ youth	Exp. w/ "at-risk" youth	Exp. as a mentor
Total Relationship Quality Z-Score	1	–	–	–	–	–	–	–	–	–	–	–
Total Possible Self Z-Score	.612**	1	–	–	–	–	–	–	–	–	–	–
Motiv. Reactivity	-.095	-.048	1	–	–	–	–	–	–	–	–	–
Motiv. Self Esteem	.013	-.093	.386**	1	–	–	–	–	–	–	–	–
Motiv. Values	.052	-.012	.249**	.315**	1	–	–	–	–	–	–	–
Motiv. Understand	.123	-.083	.426**	.506**	.416**	1	–	–	–	–	–	–
Mentor Education	-.074	.117	-.143	-.203*	-.013	-.190*	1	–	–	–	–	–
Exp. College Advising	-.127	-.065	.147	.157	.205*	.189*	.091	1	–	–	–	–
Exp. Career Advising	-.055	-.112	.089	.095	.207*	.125	.044	.798**	1	–	–	–
Exp. w/ youth	-.034	.057	-.039	.058	.097	-.027	-.033	.282**	.294**	1	–	–
Exp. w/ "at-risk" youth	.037	.143	.142	-.005	.166	.066	.137	.457**	.417**	.593**	1	–
Exp. as a mentor	-.004	.029	.152	.090	.313**	.161	.155	.581**	.552**	.340**	.550**	1

Note: N= 119 mentor-mentee matches. **p < .01, *p < .05

Table 18: Inter-Correlations between Control and Outcome Variables

	Total Relationship Quality Z-Score	Total Possible Self Z-Score	Mentor Age	Mentor SES	Mentor Sex	Years as Mentor	Mentee Sex	Mentee FRPL Eligibility	Mentee Mother's Education	Same Race Pairs	Same Sex Pairs
Total Relationship Quality Z-Score	1	--	–	–	--	–	--	–	–	–	--
Total Possible Self Z-Score	.612**	1	–	–	--	–	--	–	–	–	--
Mentor Age	-.218*	-.190*	1	–	--	–	--	–	–	–	--
Mentor SES	.001	-.003	-.057	1	--	–	--	–	–	–	--
Mentor Sex	-.080	-.142	.054	-.177	1	–	--	–	–	–	--
Years as a Mentor	.216*	.075	.095	-.031	.016	1	--	–	–	–	--
Mentee Sex	-.147	-.146	-.032	-.104	.742**	-.044	1	–	–	–	--
Mentee FRPL Eligibility	-.012	.089	-.086	-.006	.058	.062	.189*	1	–	–	--
Mentee Mother's Education	.061	.069	.002	-.068	-.202*	-.014	-.175	-.051	1	–	--
Mentor-Mentee Pairs by Race	-.016	-.101	.029	-.047	-.016	.042	-.033	.024	-.109	1	--
Mentor-Mentee Pairs by Sex	.135	-.027	-.093	-.010	-.023	.119	-.214*	-.097	-.071	.010	1

Note: N= 119 mentor-mentee matches. **p < .01, *p < .05

4.3 MULTIPLE REGRESSIONS

Multiple regressions were calculated from the entire sample to answer the research questions. Specifically, the regressions sought to determine: (a) if mentor characteristics including motivation, education and experience predict relationship quality. This is articulated in Research Question 1 and explored by the mentor characteristics → relationship quality pathway; (b) if mentor characteristics including motivation, education and experience predict changes in the mentee's future possible self. This is articulated in Research Question 2 and explored by the mentor characteristics → mentee's possible self pathway; and (c) if relationship quality predicts changes in the mentee's future possible self, or if once it is accounted for, mentor characteristics influence changes in the mentee's possible self. These are articulated in research question 3, and explored by the relationship quality → mentee's possible self pathway and the mentor characteristics → relationship quality → mentee's possible self pathway, respectively.

The predictor variables pertaining to mentor experience were entered as indicator variables. Indicator variables will allow future analyses and discussion to be more precise. The significant controls were entered into the regression equation. While there were upwards of 20 control variables thought to be plausibly important (see Section 3.6.1), only 3 of them proved to be significant when regressed along the outcome variables, Mentor Age, Years as a Mentor, and School 6[7]. These relationships are echoed by the correlations (see Table 18) in which only two of the control variables, Mentor Age and Years as a Mentor, significantly correlate with the

[7] See Appendix D for multiple regression statistics

outcome variables. Furthermore, the fit of the full model (R^2), when the three significant controls were included in the equation was .513. This is approximately equal to the fit of the model when all 20 possible controls were entered into the equation, .543. Involving the least number of variables is an important consideration due to the small sample size and danger in reducing the degrees of freedom. The comparable R^2 helps justify the decision to include 3 control variables.

The following sections detail the results for the multiple regressions along each pathway of analysis. Relationships are considered significant at the $p < .1$, $p < .05$ and $p < .001$ levels. All three levels are included due to the small sample size.

4.3.1 Mentor Characteristics → Relationship Quality Pathway

In the mentor characteristics → relationship quality path, the data were analyzed using mentor characteristics as the regressors, controlling for mentor age, the years as a mentor, and School 6.

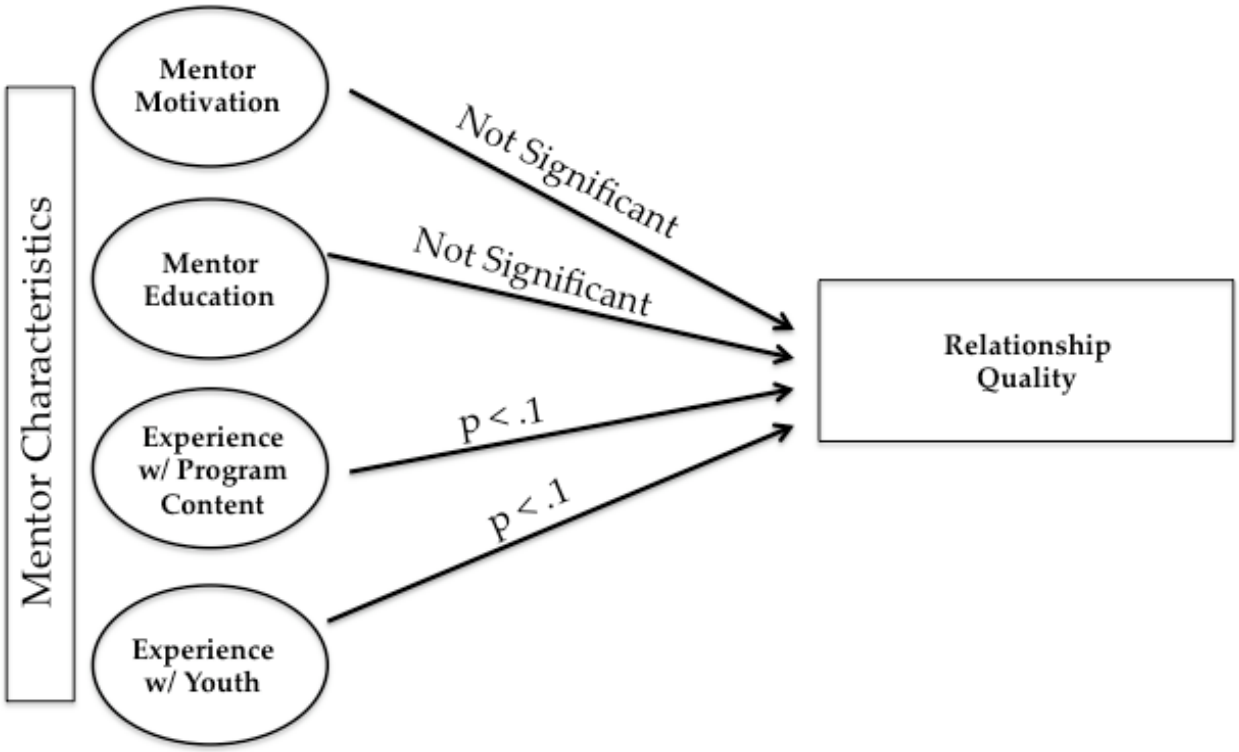

Figure 10: Expanded Illustration of Multiple Regression on Mentor Characteristics to Relationship Quality Pathway

As Figure 10 illustrates, the analysis of the mentor characteristics → relationship quality pathway results in significant regression equations. *Minimal experience college advising* was positive and significant at the $p < .1$ level. *Minimal experience working with youth identified as at-risk for school failure* was negative and significant at the $p < .1$ level. Additionally, *the number of years the mentor has served as a mentor* to the mentee was positive and significant at the $p < .05$ level. *School 6* was negative and significant at the $p < .1$ level. The regression table for all analyzed pathways is included at the conclusion of this chapter.

4.3.2 Mentor Characteristics → Changes in Mentee Possible Self Pathway

In the mentor characteristics → changes in mentee possible self path, the data were analyzed using mentor characteristics as the regressors, controlling for mentor age, the years as a mentor, and School 6.

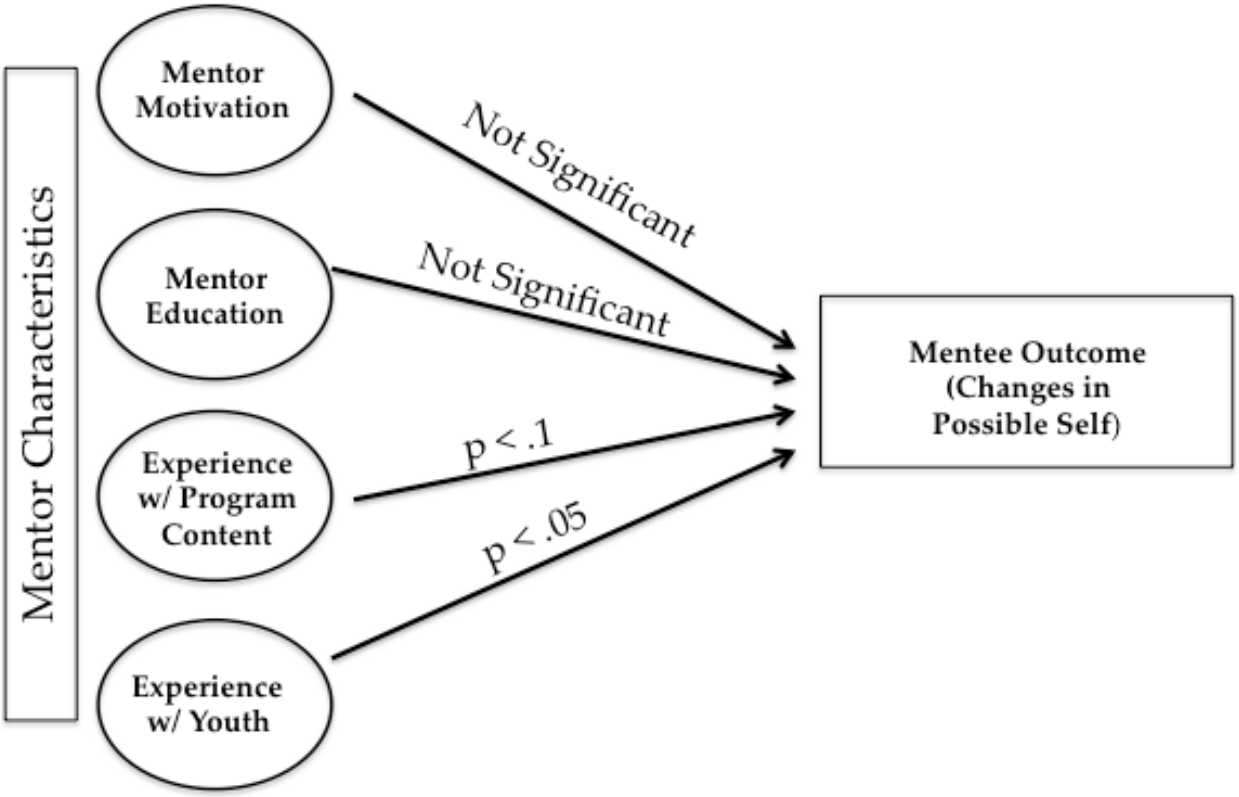

Figure 11: Illustration of Regression on Mentor Characteristics to Mentee Possible Self Pathway

The findings reveal that some of the mentor characteristics in this pathway are significant. Specifically, *no experience career advising* was positive and significant at the $p < .1$ level, and *minimal experience working with youth identified as at-risk for school failure* was negative and significant at the $p < .05$ level.

4.3.3 Relationship Quality → Changes in Mentee Possible Self Pathway

In the relationship quality → changes in mentee possible self pathway, the data were analyzed using the total relationship quality score (1-60) as the regressor, controlling for mentor age, the years as a mentor, and School 6. As Figure 12 illustrates, this pathway is significant. Relationship quality is positive and significant in predicting changes in the mentee's future possible self.

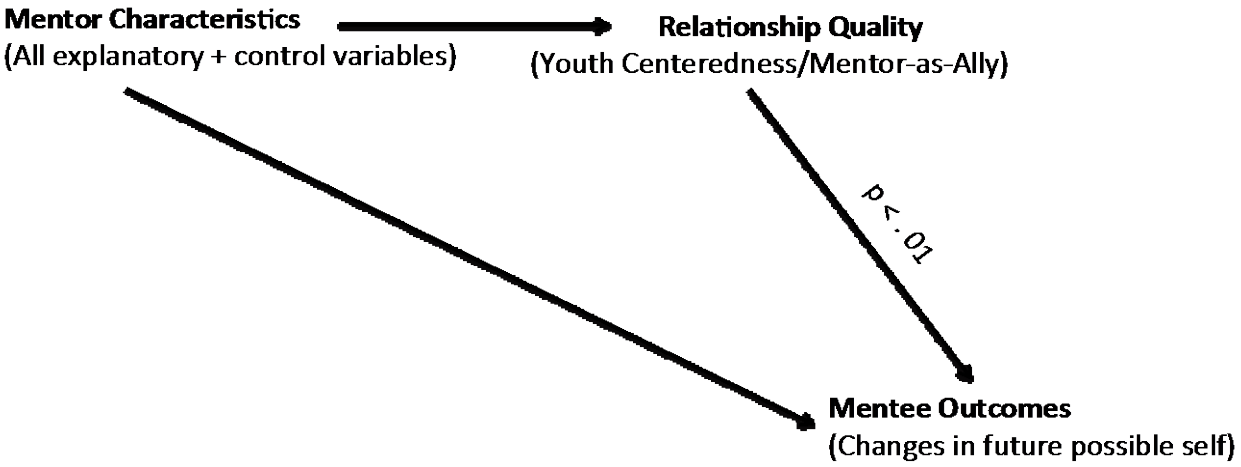

Figure 12: Illustration of Multiple Regression on Relationship Quality to Mentee Possible Self Pathway

4.3.4 Mentor Characteristics → Relationship Quality → Changes in Mentee Possible Self Pathway

This final pathway seeks to determine if mentor characteristics predict changes in the mentee possible self once relationship quality is accounted for. Data were analyzed using mentor

experience/expertise variables as regressors, and including the relationship quality total score in the regression, as well as controlling for mentor age, the years as a mentor, and School 6. Figure 13 illustrates the significance of the individual variables included in the pathway analysis.

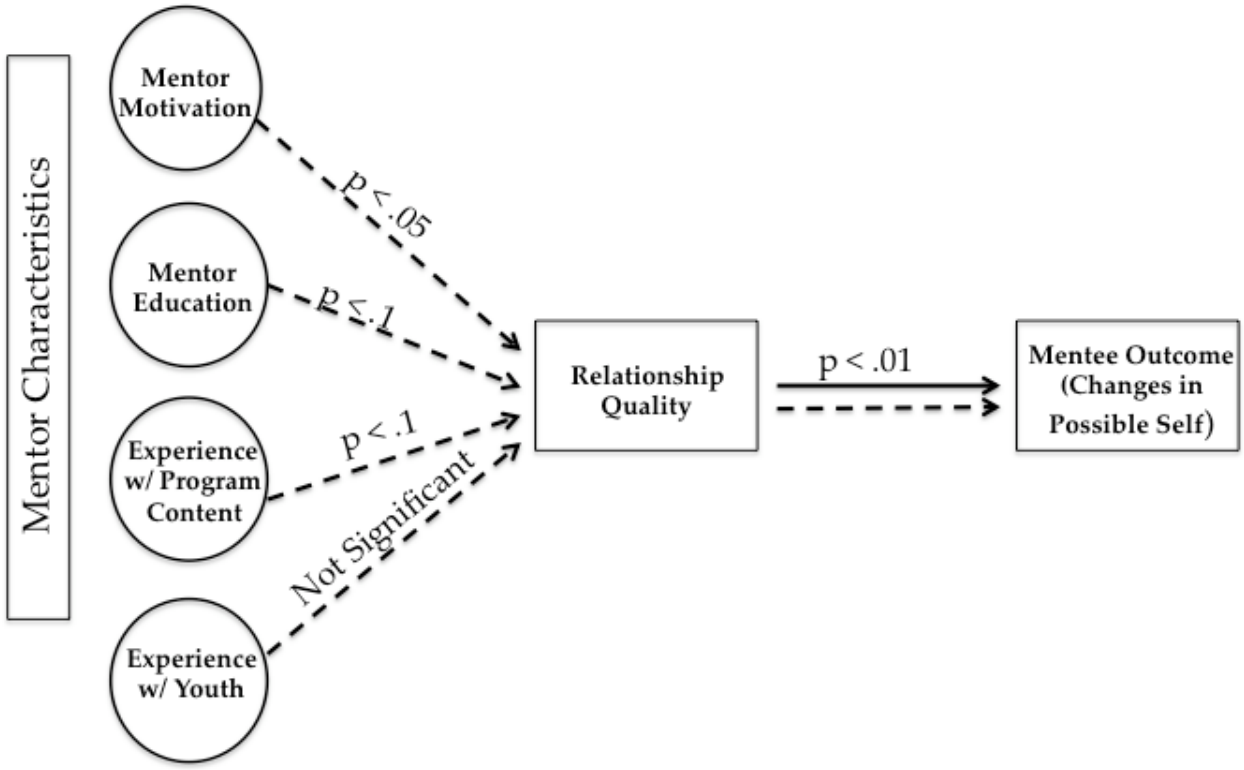

Figure 13: Illustration of Multiple Regression on Mentor Characteristics and Relationship Quality to Mentee Possible Self Pathway

When all mentor experience/expertise variables and relationship quality were included as regressors on the mentee possible self outcome variable, several proved significant. The *Understanding Motivation Subscale* was negative and significant at the p <.05 level. *Mentor Education* was positive and significant at the p < .1 level. *No Career Advising Experience* was positive and significant at the p < .05 level, while *Moderate Career Experience* was positive and

significant at the $p < .1$ level. *Relationship Quality* remained positive and significant at the $p < .01$ level.

To conclude this chapter, Figure 14 compiles the results presented in Figures 10-14, and thus summarizes the findings from the various regressions. Table 19 includes regression statistics on the entire sample, for all pathways analyzed in this chapter.

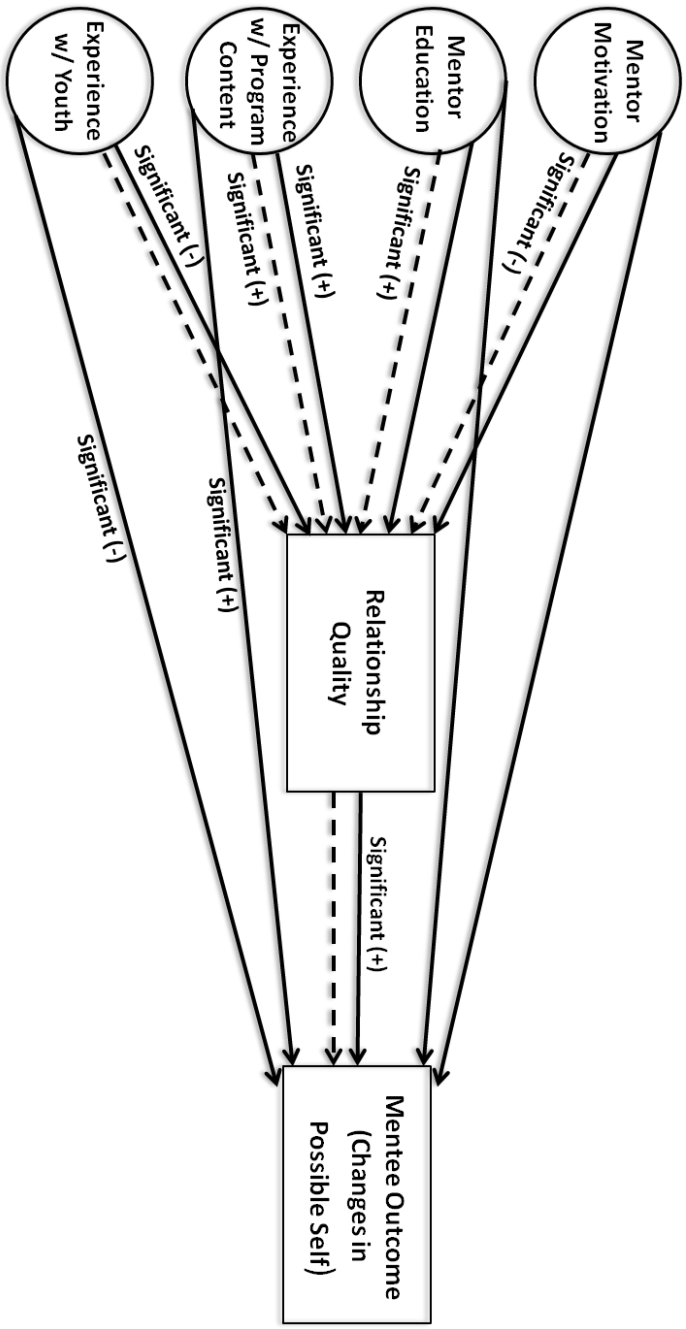

Figure 14: Summary of Pathways with Significant Explanatory Variables

Table 19: Multiple Regressions for all Pathways

Mentor Characteristics ➔ Relationship Quality Pathway	Unstandardized Coefficients		Standardized Coefficients
	B	Std. Error	Beta
(Constant)	-.251	(1.187)	
Experience with Program Content			
No College Advising Experience	.026	(.699)	.010
Minimal College Advising Experience	.865†	(.459)	.414
Moderate College Advising Experience	.237	(.387)	.112
Extensive College Advising Experience	Omitted		
No Career Advising Experience	.260	(.640)	.096
Minimal Career Advising Experience	-.277	(.466)	-.129
Moderate Career Advising Experience	-.006	(.377)	-.003
Extensive Career Advising Experience	Omitted		
Experience with Youth			
No Experience Working w/ Youth	.215	(.437)	.054
Minimal Experience Working w/Youth	.237	(.286)	.096
Moderate Experience Working w/Youth	.029	(.253)	.012
Extensive Experience Working w/Youth	Omitted		
No Experience Working w/ at-risk Youth	-.318	(.402)	-.154
Minimal Experience Working w/ at-risk Youth	-.649†	(.363)	-.265
Moderate Experience Working w/ at-risk Youth	-.433	(.326)	-.187
Extensive Experience Working w/ at-risk Youth	Omitted		
No Experience as a Mentor	-.157	(.388)	-.076
Minimal Experience as a Mentor	.276	(.343)	.120
Moderate Experience as a Mentor	.151	(.319)	.061
Extensive Experience as a Mentor	Omitted		
Mentor Motivation			
Motiv. Reactivity	-.144	(.121)	-.127
Motiv. Self Esteem	-.135	(.158)	-.098
Motiv. Values	.035	(.234)	.016
Motiv. Understand	.238	(.173)	.165
Mentor Education	-.096	(.111)	-.085
Years as a Mentor	.471*	(.200)	.224
Mentor Age	-.077	(.070)	-.110
School 6	-.707†	(.401)	-.167
R^2 = 2.83			
N = 119			

Note: † $p < .1$, *$p < .05$, **$p < .01$

Mentor Characteristics ➔Mentee Possible Self Pathway	Unstandardized Coefficients		Standardized Coefficients
	B	Std. Error	Beta
(Constant)	.813	(1.260)	
Experience with Program Content			
No College Advising Experience	-.739	(.740)	-.278
Minimal College Advising Experience	.391	(.506)	.188
Moderate College Advising Experience	.066	(.430)	.031
Extensive College Advising Experience	Omitted		
No Career Advising Experience	1.223†	(.677)	.451
Minimal Career Advising Experience	.252	(.514)	.117
Moderate Career Advising Experience	.409	(.422)	.199
Extensive Career Advising Experience	Omitted		
Experience with Youth			
No Experience Working w/ Youth	.066	(.466)	.017
Minimal Experience Working w/Youth	-.135	(.313)	-.054
Moderate Experience Working w/Youth	-.108	(.269)	-.047
Extensive Experience Working w/Youth	Omitted		
No Experience Working w/ at-risk Youth	-.476	(.426)	-.231
Minimal Experience Working w/ at-risk Youth	-0.935*	(.385)	-.383
Moderate Experience Working w/ at-risk Youth	-.450	(.357)	-.192
Extensive Experience Working w/ at-risk Youth	Omitted		
No Experience as a Mentor	.000	(.423)	.000
Minimal Experience as a Mentor	.106	(.377)	.046
Moderate Experience as a Mentor	.147	(.348)	.059
Extensive Experience as a Mentor	Omitted		
Mentor Motivation			
Motiv. Reactivity	.038	(.131)	.033
Motiv. Self Esteem	-.123	(.171)	-.090
Motiv. Values	-.031	(.248)	-.014
Motiv. Understand	-.144	(.183)	-.100
Mentor Education	.089	(.118)	.077
Years as a Mentor	.195	(.211)	.093
Mentor Age	-.110	(.075)	-.157
School 6	-.088	(.425)	-.021
R^2 = .201			
N = 119			

Note: † $p < .1$, *$p < .05$, **$p < .01$

Relationship Quality ➔Mentee Possible Self Pathway	Unstandardized Coefficients		Standardized Coefficients
	B	Std. Error	Beta
(Constant)	-2.843	(.491)	
Relationship Quality	.065**	(.008)	.627
Years as a Mentor	-.118	(.161)	-.057
Mentor Age	-.036	(.054)	-.052
School 6	.280	(.322)	.066
R^2 = .384			
N = 119			

Note: † $p < .1$, *$p < .05$, **$p < .01$

Mentor Characteristics ➔ Relationship Quality ➔ Mentee Possible Self Pathway	Unstandardized Coefficients		Standardized Coefficients
	B	Std. Error	Beta
(Constant)	-2.530	(1.080)	
Relationship Quality	.070**	(.009)	.673
Experience with Program Content			
No College Advising Experience	-.797	(.580)	-.300
Minimal College Advising Experience	-.373	(.409)	-.179
Moderate College Advising Experience	-.259	(.340)	-.123
Extensive College Advising Experience	Omitted		
No Career Advising Experience	1.096*	(.532)	.404
Minimal Career Advising Experience	.624	(.406)	.290
Moderate Career Advising Experience	.589†	(.332)	.286
Extensive Career Advising Experience	Omitted		
Experience with Youth			
No Experience Working w/ Youth	-.013	(.365)	-.003
Minimal Experience Working w/Youth	-.193	(.246)	-.077
Moderate Experience Working w/Youth	-.097	(.211)	-.042
Extensive Experience Working w/Youth	Omitted		
No Experience Working w/ at-risk Youth	-.224	(.336)	-.109
Minimal Experience Working w/ at-risk Youth	-.476	(.308)	-.195
Moderate Experience Working w/ at-risk Youth	-.041	(.285)	-.017

Extensive Experience Working w/ at-risk Youth	Omitted		
No Experience as a Mentor	-.025	(.332)	-.012
Minimal Experience as a Mentor	-.210	(.299)	-.092
Moderate Experience as a Mentor	-.061	(.274)	-.025
Extensive Experience as a Mentor	Omitted		
Mentor Motivation			
Motiv. Reactivity	.100	(.103)	.088
Motiv. Self Esteem	.011	(.135)	.008
Motiv. Values	-.043	(.194)	-.020
Motiv. Understand	-.303*	(.145)	-.211
Mentor Education	.167†	(.093)	.146
Years as a Mentor	-.134	(.171)	-.064
Mentor Age	-.045	(.059)	-.065
School 6	.396	(.339)	.094
R^2 = .513			
N = 119			

Note: † $p < .1$, *$p < .05$, **$p < .01$

5.0 DISCUSSION

This section discusses the findings as they relate to each research question. By organizing this chapter around the research questions, the discussion addresses the purposes of the study.

5.1 ANALYZING THE AFFECT OF MENTOR CHARACTERISTICS ON RELATIONSHIP QUALITY

The first research question asks if specific mentor characteristics, including mentor initial motivation to volunteer, educational attainment, experience with program content and experience with youth can predict high-quality relationships. As previously identified, the pathway from mentor characteristics to relationship quality included mentor characteristics significant at the $p < .05$ and $p < .1$ levels. However, very few of the mentor characteristics are significant in predicting relationship quality. Furthermore, closer analysis of the findings reveals difficulties in drawing conclusions about this pathway due to little variation among mentor characteristics (the mentor population appears fairly similar in the characteristics measured) and among relationship quality (most of mentees indicated fairly high-quality relationships with their mentors). The

analyses below discuss each explanatory variable and its significance in predicting relationship quality.

Research has sought to understand *what* motivates individuals to volunteer, but the effect of different motivators on relationship and youth outcomes is not apparent. Functionalist theory suggests that the different functions served by mentoring manifest themselves in the unfolding dynamics (Clary, et al., 1998, p. 1517). Accordingly, this study investigated if certain motivations either positively or negatively affected mentor-mentee relationship quality, a central priority for mentoring programs. This study did not find any of the motivational subscales (Values, Understanding, Reactivity and Self-Esteem) to be significant in affecting the degree to which the mentee perceived the relationship as high-quality. These findings are surprising in that relationship quality was measured by the degree to which the mentee perceived the relationship to be youth-centered, and the degree to which the mentor was an ally. Both the Self-Esteem and Understanding subscales reflect mentoring for self-interested reasons, in which case we would expect the relationships with mentors primarily motivated by these functions to not be as youth-centered, and thus relationship quality to suffer. While these findings suggest mentor motivation is not a significant predictor of relationship quality, the limited variation among mentor motivation and relationship quality scores in this sample does not allow this study to draw such conclusions. The majority of the mentors, 81.5%, were primarily motivated by the Values function, "the firmly held belief it is important for one to help others…helping for the sake of helping" (Esmond & Dunlop, 2004, p. 74). The mean for this subscale of 4.34 (out of a possible 5), was the highest among subscales, making it the most important motivator. Even though this motivation was not significant in predicting relationship quality, interestingly, the average

relationship quality score (47.9) was the lowest for those primarily motivated by the Values function. The relationship quality scores were highest among those motivated primarily by the Self-Esteem and Reactivity subscales (52 & 49, respectively). However, just one mentor was primarily motivated by each of these functions. With more variation among mentor motivation, findings could more accurately report to what extent different motivations predict relationship quality. While there may have been little variation among highest motivational subscale, it is important to recognize that all the subscales were strongly correlated with each other at the $p < .01$ level. This is consistent with Esmond and Dunlop's findings (2004) that suggest the motivations to volunteer identified by the VMI are not independent to one another (p. 38). As the relationship quality scores fell on the higher end of range, it does not appear that the combination of functions served by mentoring is harmful to relationship development, but rather beneficial.

The mentor's education level was also not significant in predicting relationship quality. These findings are inconsistent with the general premise of human capital theory: education improves one's capabilities (Schultz, 1961). However, human capital theory has not tended to define "capability" by relationship development, but rather by worker productivity (Becker, 1994; Black & Lynch, 1996). Therefore, this study extended the theory to determine if education allowed mentors to be more "productive" as measured by developing high-quality relationships with their mentees. While this variable was not significant in predicting relationship quality, it is interesting to note the bell-shaped pattern of the relationship quality scores when analyzed by mentor education level. The mentors with the least education (less than a college degree) resulted in the lowest average relationship quality score, 47.54. The average relationship quality score increases to 49.24 for relationships where the mentor has a BA degree. However, the average

score decreases in relationships where the mentor has a master's (47.32) and then decreases even further for those who have a professional degree (46.58). While all averages are still on the high end of the range (1-60), it is interesting to note that those with more education do not have the highest scores, however nor do those with the least education. Similar to mentor motivation, there was also little variation among mentor education level in the sample. As nearly all of the mentors, 89.1%, had a BA, master's or professional degree, they reflect a very well-educated group. Even though the findings show that having *more* education (i.e. a master's or a doctoral degree over solely a bachelor's degree) does not mean a mentor will be more likely to have a high quality relationship, it is difficult to draw the conclusion that education is not significant as the sample included a combination of highly educated mentors with corresponding high relationship quality scores.

In evaluating the affects of mentor experience on relationship quality, previous experience advising others about careers was not significant in leading to higher quality relationships. However, previous experience advising others about college was significant. Specifically, the relationships where mentors had minimal experience advising others about college were most likely to be perceived by mentees as high-quality. This regression was significant at the $p < .1$ level, and resulted in a positive beta value of .865. In this instance, human capital theory, which values *more* experience, is not supported. However, these findings are consistent with relationship development theories. As Morrow & Styles (1995) assert, relationships where mentors utilize a developmental approach are those that are most positive. Developmental relationships focus on the youth, and prioritize relationship development as the main goal. It is possible that mentors who have more experience advising others about college

adopt a prescriptive, or task-oriented, approach to mentoring. Their experience compels them to focus their time on completing the curriculum, and instilling core knowledge into the youth. Unlike developmental relationships, prescriptive relationships are not centered around the youth and his/her interests, but more on the goals of the mentor. Mentors with higher levels of experience in program content may have higher and more specific goals than mentors who are not as familiar with program content. It is unclear why minimal experience college advising was significant and minimal experience career advising was not. Speculation can suggest that college is a more immediate goal and so assumed to be more relevant to the youth, and so therefore it may be a topic that is discussed in more detail than that of careers. The "task" of college advising may be perceived as being more imminent than the "task" of career advising. Those with minimal levels of college advising experience may not take on this task as much as they do the priority of building relationships with their mentees.

Experience working with youth identified as at-risk for school failure was also significant in predicting relationship quality. The relationships whose mentors had minimal experience working with youth identified as being at-risk for school failure were less likely to be perceived as high-quality relationships. The negative beta value of .649 was significant at the $p < .1$ level. Mentors with less experience working with similar youth then, are less likely to have high-quality relationships with youth. Interestingly, experience working with youth (any youth) was not considered to be significant. This further confirms the importance of specific experiences. While experience with similar populations is not content or knowledge specific, as is supported by teacher quality theories, this form of experience and expertise clearly facilitates high-quality

relationships. Experience working with similar youth may result in mentors having more confidence in their abilities as a mentor, as well as greater comfort in the mentoring relationship.

Finally, the findings indicate that the number of years the mentor was a mentor to the mentee was significant in predicting high quality relationships. The positive beta value of .471 is significant at the $p < .05$ level. This supports previous research (DuBois & Neville, 1997; Grossman & Rhodes, 2002) that finds the length of mentoring relationships is important in achieving mentee outcomes. At the time of this study, the mentors had either mentored for one or two years. The 12 month mark also is consistent with the literature that indicates relationships longer than 12 months lead to increases in many outcome categories. For mentors that had completed their second year with the mentee (n=41), the average relationship quality score was 50.88, over four points higher than those completing their first year (n=78). Also, there was less variation among the two-year relationships with the minimum score of 22 being seven points higher than the minimum score of the one-year relationships. This finding is also intuitive in that relationships take time, and those who have been with their mentor for longer feel more comfortable with them and also may have established more trust. Similar to working with youth at risk for school failure, this variable suggests there is value in a specific, similar experience with youth that leads to higher relationship quality. Experience serving as a mentor was not significant, but experience serving as a mentor to *this* mentee was significant. Unfortunately, this sample does not contain matches that lasted less than one year. This additional information would be helpful as literature has also found matches that last less than 3 months show declines in outcome areas.

In sum, mentor characteristics that appear *positive* and significant in affecting relationship quality are: 1) minimal experience advising others about college and 2) years as a mentor to the mentee. Minimal experience working with youth identified as at-risk for school failure was *negative* and significant in affecting relationship quality. While the other characteristics (motivation, experience career advising, working with youth and serving as a mentor) were not significant, it is still telling as the findings indicate these are not as important for mentoring programs who aim to produce high-quality relationships between the participating youth and adults.

5.2 ANALYZING THE EFFECT OF MENTOR CHARACTERISTICS ON MENTEE POSSIBLE SELF OUTCOME

The second research question asks if specific mentor characteristics, including mentor initial motivation to volunteer, educational attainment, experience with program content and experience with youth can predict changes in the mentee's future possible self. This pathway represents a direct path from mentor characteristics to the mentee outcome, and does not include relationship quality in the regression.

On average the mentees perceived positive changes in their future possible selves. There was thus little variation among this outcome variable. A mean score of 19.41 is located on the upper end of the range (maximum score is 24). This indicates mentees mostly agreed their mentors helped them to identify possible future careers and to understand how and why school

matters in pursuing these careers. These findings are positive overall; mentees believe they are acquiring good information about how to connect current interests and pursuits to future aspirations, a literacy that is lacking among many youth who prematurely narrow their education and career options (Lapan, 2004).

As previously identified, two of the mentor characteristics included in this pathway were significant. *No career advising experience* was significant at the $p < .1$ level and resulted in a positive beta value of 1.223 and *minimal experience with youth at-risk for school failure* was significant at the $p < .05$ level and resulted in a negative beta value of -.935.

Conceptually, these findings only in part support human capital or teacher quality theories. These theories suggest that the mentors' level of experience and education would be important variables in predicting the degree to which mentees perceived changes in their future possible self. Specifically, more education and similar experiences working with youth and in career/college advising would presumably increase the mentor's ability to help their mentee understand and internalize information about these future endeavors. This hypothesis was in accordance with research on teacher quality that evidences students whose teachers have educational degrees in their specific subject matter perform better. It was expected mentees whose mentors had specific content knowledge would have higher future possible self scores. However, this study found that mentors with *no* experience offering career advice were more likely to positively influence the mentee's possible self. And since no other variables were positive and significant in predicting this pathway, the reported changes in mentees' future possible selves were seemingly regardless of mentor expertise. While these findings contradict human capital and teacher quality theories, they are aligned with Morrow & Styles (1995)

conclusions which suggest that a primary focus on a "task" at hand, in this case college and career advising, is not the most productive. Rather, they argue, "behavioral change does not occur unless there is a solid relationship between the adult and the youth, and the youth is receptive to the adult's input" (p. viii). So, even if mentors were extremely skilled and knowledgeable in the program content area, arguably this on its own will not result in better youth outcomes. Perhaps the mentors who had no experience career advising were most likely to predict higher mentee possible self scores because their focus was not on achieving a task related to their expertise, but on the task of building a relationship with their mentee.

However, similar to the mentor characteristics → relationship quality pathway, the mentees with mentors who had *minimal experience with youth at-risk for school failure* were less likely to perceive positive changes in the future possible self. This confirms teacher quality and human capital theories that suggest specific experiences can help individuals become more competent and capable in their work. It is surprising that those mentors with no experience did not also negatively predict this outcome. However, perhaps mentors with no experience were more likely to enter this relationship not knowing what to expect, and thus tailored their efforts to the individual, focusing on his/her mentee, thus using a developmental approach. Those mentors who had just minimal experience with similar youth may have assumed all youth characterized as "at-risk for school failure" are the same, and thus they can offer their advising in very general ways. With no other characteristics significant in this pathway, the findings suggest that the mentor domains measured in this research question do not adequately explain the positive mentee outcomes: high scores on the mentees' perception of positive changes in their future possible self.

5.3 ANALYZING THE EFFECT OF RELATIONSHIP QUALITY ON MENTEE POSSIBLE SELF OUTCOME

Once relationship quality was treated as an additional explanatory variable, certain mentor characteristics were then significant in predicting the possible self outcome. Therefore, relationship quality was an important omitted variable, that when excluded in Research Question 2, resulted in biased findings. Furthermore, in the regression that included all other explanatory variables, the coefficient on relationship quality was positive and significant.

Evidence of relationship quality as a predictor of youth outcomes is not surprising; it is consistent with possible selves theory, and the overall premise of mentoring programs. One's future possible self, or the self one imagines becoming, is strongly influenced by "important others" (Markus & Nurius, 1986; Oyserman, et al., 1995). It can be assumed that strong relationship quality between mentor and mentee, is an indicator that the mentor has become an "important other" to the mentee. Positive relationships between mentors and mentees allow for the trust necessary to influence possible selves. Without this positive relationship, it would be hard for the mentor's advice and encouragement to be valued and furthermore internalized by the mentee. Parental relationships have already been established as important mediators for mentoring outcomes (Rhodes, Grossman, & Resch, 2000). These findings confirm the role of mentor-mentee relationship quality as an intermediary outcome to an ultimate outcome of influencing positive identity development among youth.

In this way, these findings also support the main premise of mentoring programs. Mentoring programs were not created to *solely* develop relationships between youth and adults.

In other words, mentoring programs do not hope to cultivate relationships just for relationship's sake. Rather, mentoring programs hope to cultivate relationships because of the numerous benefits that occur as result of positive relationships between adults and youth. Research has established that the greater the emotional closeness between the mentor and mentee, the stronger linkages to greater perceived youth benefits (DuBois & Neville, 1997; Rhodes, et al., 2006). For some programs, these ultimate outcomes are improved academic outcomes, for others they are improved behavioral outcomes. In this study, relationship quality explained how mentors were able to influence mentee's positive self concept and help them identify their goals and aspirations for the future.

While it was encouraging to see that these findings support the literature on the value and centrality of relationship quality to youth outcomes, the findings also extended the current understanding of the role of the mentor. When relationship quality was included as an additional explanatory variable, other mentor characteristics became significant in predicting the mentee future possible self outcome. Importantly, these mentor characteristics were not significant as explanatory variables in the model where relationship quality was excluded. When relationship quality is accounted for, or held constant, the findings show that certain mentor domains significantly predicted the future mentee possible self outcome. Moderate career advising experience and mentor education became positive and significant predictors once relationship quality was accounted for. Mentors with no career advising experience remained significant and positive in predicting mentee future possible self. The mentor motivation for the Understanding function was negative and significant in predicting mentee future possible self outcome. To illustrate the significance of this pathway, we can imagine two mentoring matches, each with the

same relationship quality score. Mentees who had mentors with no or moderate career advising experience, or with more education, recognized more changes in their future possible self. Those who had mentors motivated by the Understanding motivation recognized less changes in their future possible self. Therefore, even if strong relationship quality is present, these mentor characteristics become important in further facilitating the ultimate outcome.

Interestingly in this regression, those with no career advising experience more strongly predicted this outcome, and at a more significant level than those with moderate career advising experience. If a mentor had no career experience, the mentee's future possible self score is likely to increase by 1.096 points, compared to just .589 points if the mentor had moderate career experience. This is surprising, as taking relationship quality into account, research (and intuition) would suggest that the more experience the mentor has in these specific content areas, the more qualified he/she would be in covering the curriculum and explaining it to the mentee. It is possible that those with no experience advising others may have been less confident in their abilities and as a result invested more time and energy into the program by reviewing the curriculum and preparing for mentoring sessions. It is also possible these mentors approached the relationship not as an "expert", but as someone who was learning along with the student. Moderate levels of experience may allow the mentor to have confidence in his/her ability, but not so much so that the mentor believes him/her to be an expert who does not need to prepare or devote additional energy to the mentoring sessions.

The Understanding motivation subscale negatively affected the mentee possible self outcome, with relationship quality taken into account. The Understanding subscale describes a situation where a volunteer is "particularly interested in improving their understanding of

themselves, or the people they are assisting" (Esmond & Dunlop, 2004, p. 75). Reasons include "I volunteer because I can learn more about the cause for which I am working", "I volunteer because volunteering allows me to gain a new perspective on things", "I volunteer because it lets me learn through direct hands-on experience", "I volunteer because I can learn how to deal with a variety of people", and "I volunteer because I can explore my own strengths". Mentees whose mentors have higher scores on this scale are not as likely to develop an understanding of different careers and their required educational pathways. While the coefficient is small (-.303), it is still significant at the $p < .05$ level, and so worth discussing. Many of the reasons cited by the understanding motivation subscale for mentoring are focused on the mentor's needs. If mentoring is designed to primarily impact youth, and influence their trajectory, perhaps it is not as important for the mentor to be focused on what he/she can learn, but rather what the mentee can learn. It seems that by the mentor focusing on how he/she can benefit, the mentee is not benefitting.

Mentor education level also becomes significant once relationship quality is accounted for. Mentors with more education will result in higher mentee future possible self scores. This supports human capital theory in suggesting education becomes important in predicting mentor quality, as measured by youth outcomes. This coefficient is also small (.167), but its significance is noteworthy. While mentor education may not affect a mentor's ability to develop relationships with his/her mentee, once relationship quality is accounted for, it does appear to be an important variable in helping mentees learn more about college and careers. This makes sense as those mentors with more education have more relevant experiences they can share with the mentee.

Evidence of this first hand knowledge, and proof of their success, may also build their credibility, allowing them to be even more effective in sharing this knowledge.

5.3.1 Analyzing relationship quality as a mechanism to understand which mentor characteristics affect mentee future possible self

In combining Research Questions 1 and 3, findings indicate that relationship quality is positive and significant in predicting changes in the mentee possible self, and so the characteristics that predict relationship quality now become important to helping our understanding of mentor quality, measured by mentee future possible self outcome score. Accordingly, mentors who have minimal college advising experience and mentors who have mentored the mentee for longer may also positively influence changes in a possible self since these characteristics are more likely to predict stronger relationships. Mentors with minimal experience with youth identified as being at-risk for school failure may be less likely to influence the mentee's possible self since they negatively affected relationship quality. So while these characteristics at first only appeared to affect relationship quality, because relationship quality was positive and significant in predicting the mentee future possible self outcome, they, too, can influence the future possible self outcome. In this way, relationship quality is serving as a mechanism to understand which mentor characteristics can influence targeted youth outcomes. Figure 15 illustrates these relationships between mentor characteristics and the mentee possible self outcome, knowing that relationship quality is positive and significant.

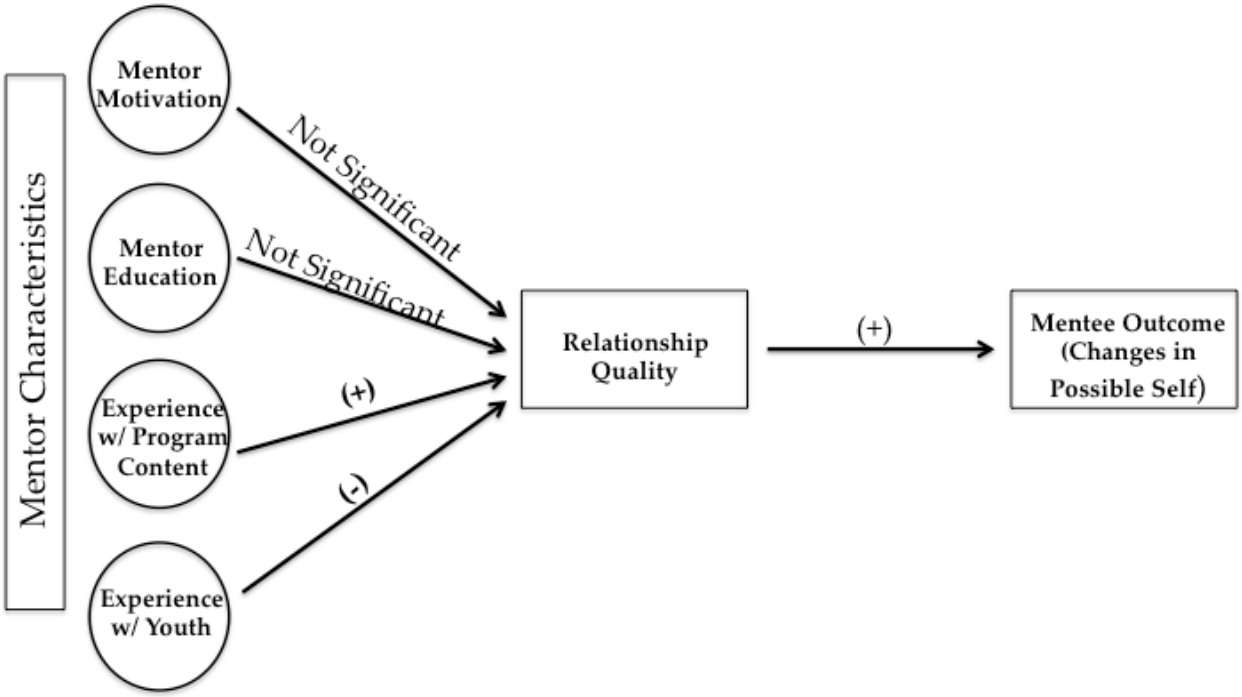

Figure 15: Relationship Quality as a Mechanism for Mentor Characteristics to Affect Mentee Future Possible Self

6.0 CONCLUSIONS, IMPLICATIONS & RECCOMENDATIONS

The main focus of this study was to determine if mentor experiences and expertise affect the quality of the relationship with the mentee and changes in the mentee's future possible self. Even though mentoring programs depend on mentors to realize their theory of change, close examination of how variability among this input affects relationship and youth outcomes is lacking in the literature. In fact, investigation of how mentor characteristics affect mentoring outcomes has been suggested on several occasions (Hamilton, 1991; Grossman & Rhodes, 2002; Rhodes, et al., 2002; Rhodes, et al., 2006). This study examined the relative roles of four mentor domains hypothesized to have potential impact on relationship and mentee outcomes: mentor motivation; mentor education; mentor experience with program content and mentor experience with youth.

Since high quality relationships are well established in leading to mentee outcomes, this study wanted to know *what is it* about mentors that can help cultivate high quality relationships. This study did not look at mentor factors such as race, class and gender in predicting mentee outcomes. These characteristics have been studied before (DuBois, et al., 2002a; Dubois, et al., 2011; Grossman & Rhodes, 2002; Rhodes, et al., 2002), and met with mixed results. Furthermore, while understanding how characteristics such as these can impact relationship

dynamics, they are fairly genetic and thus static. This study wanted to look at acquired characteristics that if programs knew mattered, could then recruit, select, train and retain their mentors based on these. Knowing if mentor gender, race and class matters can be important to motivate mentor recruitment among more diverse populations. But the current reality is that the mentor population reflects a certain demographic: White, female, relatively high SES. If this is the demographic most involved in volunteerism, then we also must learn how to capitalize on this population, and learn more about what experiences and expertise individuals bring with them that can lead to more effective mentoring, and train in the areas that are lacking.

While this study was unique in its focus on the mentor specifically, it also differs from previous research by using mentee perceptions to determine to what extent these characteristics contributed to the outcomes of interest. The most significant research looking at mentor characteristics and relationship quality uses *mentor perception* to measure relationship quality (Karcher, Nakkula, & Harris, 2005). As stated in the introduction, this study maintains the belief that mentoring programs are designed for the benefit of the children. Accordingly, the opinions of the mentees become important indicators of a program's merit and worth. The pressing question then becomes, are there mentor characteristics that can greatly impact how the *mentee* perceives relationship quality and achievement of other intended benefits? This chapter seeks to answer this question by drawing conclusions from the current study, discussing the implications and suggesting recommendations for future research.

So, what did the mentees have to say?

On both of the outcome measures, 1) relationship quality and 2) changes in future possible self, the mentee reports were overwhelmingly positive. Relationship quality was measured by the extent to which mentees perceived the relationship as youth-centered and their mentor as an ally. The average relationship quality score was 48.03 out of a possible 60, and the median and mode both 50. Mentee future possible self was measured by the extent to which mentees perceived changes in their understanding of educational and career aspirations. The average possible self score was 19.41 out of a possible 24. The median was 20, and the mode a perfect 24.

The fact that the measures of central tendency for both outcomes are located on the upper ends of the ranges indicate several mentee beliefs about their mentors: mentors had good ideas about how to solve problems, mentors offered praise and encouragement, mentors helped mentees challenge themselves and feel good about themselves and they helped them identify different careers and explain how school was important in pursuing those careers. They also reflect affirmative answers to statements such as "I feel close to my mentor" and "I have a lot in common with my mentor." If mentor effectiveness is measured by mentee experiences, one could argue these mentors were high-quality. The mentees enjoyed being with their mentors and recognized the mentors' influence on their education and career aspirations. Together, these findings suggest the mentoring relationships contributed to the mentee's social and emotional development, cognitive development and identity development, three inter-related processes mentoring hopes to affect (Rhodes, et al., 2006). Even though these findings reflect immediate perceptions and so do not guarantee long-term effects, cultivating such positive responses from

mentees after just one or two years is no small feat, and one for which mentors should be commended.

Who were the mentors that helped achieve such positive mentee experiences?

In order for programs to reproduce positive findings, such as those found in this study, it is important to know more about *how* these outcomes transpired. With this research focusing on the mentor as the program input of interest, it asks, were there certain characteristics/experiences that allowed mentors to be more effective in this role? This study examined mentors along four domains: initial motivation to mentor; education level; experience with program content (i.e. college and career advising); and experience with youth (in general, specifically with those identified as being at-risk for school failure, and serving as a mentor). In many of the domains, the mentors were similar to each other.

In sum, mentors were highly educated, had minimal-moderate prior experience in career and college advising, extensive experience working with youth in general, but no-minimal experience working with youth identified as being at-risk for school failure, and little experience serving as a mentor. "Values" (helping for the sake of helping) was considered the most important motivation.

It is difficult to determine if the mentors in this sample are representative of the formal mentoring population, as to my knowledge no national studies have surveyed mentors by experience levels. However, the mentor education level in this sample is similar to that of the mentor population captured by the Big Brother Big Sister impact study (Tierney, Grossman, & Resch, 1995). In both samples, over half of the population has a Bachelor's degree or higher.

This sample however has a far higher percentage of mentors with graduate degrees (47%), than the Big Brother Big Sister mentor sample (12.3%). The mentors in this sample are also representative of the volunteer population surveyed by Esmond and Dunlop (2004), who also found that Values was considered the most important motivation. Interestingly, the importance of the different motivations indicated by mentors surveyed in this study corresponds exactly with the general volunteer population. For both populations, Values is considered the most important motivation, followed by Understanding, Self-Esteem and Reactivity. Among this sample's mentors and the general volunteer population, only the average score for the Reactivity function is below 3.0, Esmond and Dunlop's benchmark for an unimportant motivation. As mentioned previously, this suggests that those who mentor, similar to those who volunteer in other capacities, are not motivated by a need to make sure "others don't have to go through what I went through". The relative unimportance on this motivation reflects the quite different backgrounds of those who choose to mentor, and those who are mentored. As is clear in analyzing this study's program participants as well as participants in other programs such as Big Brothers Big Sisters, there are clear differences in racial, income and family education backgrounds among mentors and mentees (Tierney, Grossman & Resch, 1995). Mentors tend to be White, and from higher income and more highly educated backgrounds than those they are mentoring. These findings suggest then that they are not motivated by the disadvantages in their background, but perhaps, the privilege.

Were any of these characteristics more important in predicting mentee perceptions?

Table 20 summarizes the effects of the explanatory variables on both relationship quality and the mentee possible self outcome. The (+) sign indicates a positive and significant effect, while a (-) sign indicates a negative and significant effect. The direct effect columns reflect findings from Research Questions 1 & 2. The indirect effect column suggests the effects of mentor domains once relationship quality is accounted for (Research Question 3), as well as the extension of plausibly important mentor domains knowing that relationship quality is positive and significant in effecting the mentee possible self outcome (Research Questions 1 & 3).

Table 20: Summary of Explanatory Variables Effects

Explanatory Variable	Direct Effect: RQ	Direct Effect: PS	Indirect Effect: PS
Motivation_Values			
Motivation_Understanding			✔ (-)
Motivation_Reactivity			
Motivation_Self-Esteem			
Mentor Education			✔ (+)
Exp w/ College Advising	✔ (+ minimal prior experience only)		✔ (+ minimal prior experience only)
Exp w/ Career Advising		✔ (+ no prior experience only)	✔ (+ no and moderate prior experience
Exp w/ Youth			
Exp w/ At-Risk Youth	✔ (- minimal prior experience only)	✔ (- minimal prior experience only)	✔ (- minimal prior experience only)
Exp as Mentor			
Relationship Quality	n.a.	✔ (+)	n.a.
Years as a Mentor	✔ (+)		✔ (+)
Mentor Age			
School 6	✔ (-)		✔ (-)

Minimal prior experience college advising and the number of years the mentor mentored the mentee yielded positive effects on relationship quality. Meanwhile, minimal prior experience working with youth identified as at-risk for school failure, and those mentors at School 6, negatively affected relationship quality, as perceived by the youth. These are especially important considerations as relationship quality significantly predicted the desired program outcome, mentees perceiving positive changes in their future possible self. Therefore, the

significant predictors of relationship quality are important not just in achieving the intermediary outcome, but also presumably in facilitating the targeted long-term youth outcome. These variables then produce direct effects on relationship quality, and indirect effects on changes in mentee future possible self.

The findings reveal perceived relationship quality as a significant intermediary outcome. On their own, only no career advising experience and minimal experience with youth at-risk for school failure directly affected mentee perceptions in changes in their future possible self. We must also apply caution here, as relationship quality, a variable positively associated with the possible self outcome, and which resulted in changes of coefficients on the other explanatory variables when added to the regression, was omitted in the direct effect model and thus the results are biased. However, once relationship quality was accounted for, several of the mentor characteristics became significant in affecting the outcome variable. Mentor education and moderate prior experience career advising was positive and significant in affecting mentee changes in their future possible self. The Understanding motivation was negative and significant in affecting mentee changes in their future possible self. No prior experience career advising remained positive and significant once relationship quality was accounted for.

Most importantly, this study confirmed an inter-dependent relationship between relationship quality and future mentee outcomes. Few mentor characteristics seemed to predict relationship quality in itself, or future mentee outcomes by themselves. Once relationship quality was accounted for, mentor characteristics become important in that they can either positively impact the desired youth outcome, or negatively impact it.

Implications for mentoring programs: addressing the "so what" factor.

Programs are already aware that strong, close relationships between adults and youth can lead to powerful, positive mentee outcomes. This logic is present in mentoring programs' theory of change: their program, and the resulting relationships, will yield the desired youth outcomes. This study further confirms the role relationships can play in affecting positive mentee outcomes. With positive relationship development as a necessary intermediary outcome to achieving other targeted youth outcomes, programs' priorities should be to help cultivate strong, positive relationships between mentors and mentees. The results of this study can offer more precise recommendations by suggesting that certain mentor experiences and expertise are more likely to facilitate high relationship quality, while others are not significant. Programs can use these findings to inform their mentor recruitment strategies and selection.

The mentors' motivations for mentoring did not seem to affect relationship quality. While some programs may wish to find mentors who come from similar backgrounds as their mentees, the youth perceptions of relationship quality were high despite the fact the Reactivity function was the least important to their mentors. While there was not a lot of variation among motivations, which may reflect the little variation among mentor demographics, the data still indicates none of the motivations were significant in predicting relationship quality. This suggests mentor motivation may be less important for mentor recruitment (as it is not clear this motivation leads to higher-quality mentors), but influential for mentor retention. As the most important motivation for the participating mentors was the Values function, programs would be wise to provide feedback that details progress in this area. If mentors heard periodically from program staff, or their mentees, that they are indeed "helping" and "making a difference," this

may encourage them to continue serving as a mentor as they see their efforts fulfilling the main function they are hoping mentoring will satisfy. These findings confirm the importance of mentor retention, as those mentors who participated in the program longer, mentoring the same mentee were more likely to predict high-quality relationships, and thus also affect positive changes in the mentees future possible self. For these reasons, many mentoring programs mandate a minimum commitment from the mentors. If programs really wanted to benefit youth in lasting ways, perhaps they could consider extending the minimum commitment. Informal, or natural mentors, do not decide when they are "done" being a mentor, or when they are "terminating" the relationship. Rather, this is something the mentee decides, or is decided upon together. Friends of the Children, a mentoring program founded in 1993, hires mentors as employees and requires a three year commitment. This reflects an aggressive strategy to ensure mentor commitment and retention. It is understandable that all programs do not have the funds or means to incorporate this structure. Addressing mentors' needs for volunteering is another possible strategy to improve mentor retention.

Mentoring programs should focus recruitment efforts on finding individuals who have had previous experience working with youth similar to those who will be participating in their program. Even though the mentoring pool may be small, programs do not want to risk jeopardizing relationship quality, and these findings suggest that those mentors with minimal experience working with similar youth had an adverse affect on relationship quality and the possible self outcome. If it is difficult to find mentors who have had experience working with similar youth (indeed only 16% of this mentor population reported having extensive experience working with similar youth), programs could incorporate the voices of those who are

experienced into their training or professional development models. Mentors may benefit from hearing about the experiences of more veteran mentors, or having a mentor of their own to debrief and dialogue with over their first few months in the role.

While experience working with similar youth appears important in facilitating relationship development, experience with program content does not appear necessary. In fact, those with no to minimal experience with program content were most predictive of high-quality relationships and higher possible self scores. However, given the indirect effect of education and moderate advising experience on achieving the mentee possible self outcome, programs would be wise to look for these attributes in their recruitment phase. For example, while education, moderate experience career advising and the Understanding motivation did not affect relationship quality, once relationship quality was in place, these characteristics mattered. Mentors with more education, and those less motivated by their own learning needs will further extend the impact relationship quality has on achieving changes in the mentee future possible self.

Lastly, research findings evidencing the inter-dependence of relationship quality and targeted youth outcomes should continue to shape mentoring programs' goals. Mentoring programs are not designed to solely develop relationships between youth and adults. The relationship in it of itself is not enough, but rather is created to promote positive youth outcomes. However, programs can also not expect/communicate mentors' primary responsibility as achieving targeted youth outcomes such as academic success, behavioral progress or positive identity development. This study showed that the direct path from mentor characteristics to either outcome was the least significant. Rather, it was the path in which the relationship quality was

already accounted for, and understood as an intermediary variable that lead to the most mentor characteristics being significant in influencing the targeted youth outcome of changes in the possible self. In other words, even if high quality relationships are present, certain mentor domains can be beneficial or harmful in their ability to achieving the targeted youth outcome. Therefore, mentoring programs need to look at their mentors by their ability to develop high quality relationships with youth *and* their ability to affect longer term outcomes. One or the other is *not enough*, and will not allow the program to fulfill its maximum potential and ethical responsibility to the youth it is serving.

Recommendations for Future Research

Some mentoring literature tends to evaluate programs by looking just at the mentee outcomes, almost assuming a positive relationship existed. Other studies look at how strong relationships are built. This study confirms the role of relationship quality as an essential, intermediate outcome. But there are still questions about what mentor characteristics achieve positive relationship quality. If we knew more about what lead to relationship quality, then we would have more variables that would indirectly also lead to longer term, positive youth outcomes.

Future research should thus pay more attention to the mentor characteristics that lead to relationship quality. Since it seems well established, both by this study and others, that relationship quality is significant in leading to other intended outcomes, it would be worthwhile to investigate other possible mentor domains that are important to facilitating positive relationship development. Rhodes, et al. (2006) present a conceptual model that portrays close

mentoring relationships, but the mentor attributes that are most likely to yield these close mentoring relationships are not identified. Many domains selected in this study did not significantly predict relationship quality. However, youth still perceived high-quality relationships with their mentors. Therefore, further questions concerning what it is about these mentors that allows for these close relationships are needed. While this study may have advanced our understanding in ruling out *what doesn't matter*, finding out what does matter still remains a mystery. Future research can both look more specifically at the domains studied here, such as inquiring as to the specific experience mentors had with program content (informal, formal) and their specific education (particular majors and degrees, rather than just level of degree). Since working with similar youth was an important variable, learning more about how previous experiences help to develop mentors' abilities would be worthwhile. Future research can also draw upon additional theories to hypothesize other mentor domains that might matter in predicting relationship quality.

Second, a larger sample size is essential to more soundly confirming the conclusions drawn from this study. This larger sample size will most likely contain more variation among the mentor population and mentee outcomes. A longitudinal study would also be helpful in understanding if the outcomes produced last over time, and in understanding the degree to which changes in the future possible self were lasting and thus influential in future trajectories. The longitudinal study would also ideally include matches that "broke up" mid-program so characteristics of "unsuccessful" matches could be analyzed and compared to those that last for the intended program duration.

The addition of case studies among the pairs that ranked both highest and lowest in the relationship quality and possible self outcomes would also be revealing. From the case studies, we could learn more specifically about the aspects that lead to these outcomes. Qualitative data could produce anecdotal evidence that explains *how* mentor backgrounds and techniques lead to the mentee perceptions, as well as an expanded understanding of *why* mentees perceived their mentors as they did and *what* they most appreciated or resented about them.

Returning to the question…are good intentions enough?

Like William Ayers argues about the profession of teaching (2010), this study suggests that mentoring is not a matter of technique, but primarily an act of love (p. 11). While mentors were highly educated, they did not have high levels of experience in program content, and thus were not equipped with the pedagogical techniques often required of educators. Yet, when asked about their mentors, the youth in this study recognized high-quality relationships and positive changes in their future possible selves. With relationship quality as a significant predictor of the targeted outcome, the findings support Noddings (2007): education is relation. Thus good intentions are not enough; rather the good intentions must lead to high-quality relationships. This study found that those mentors who engaged in these relations longer achieved higher-quality relationships. Indeed those mentors who had little experience relating to similar youth were less likely to establish relations, and thus the desired educational goals. Since the other mentor domains examined in this study were not significant in predicting high-quality relationships, it remains unknown if good intentions alone lead to the resulting high-quality relationships, or if an unexamined factor contributed to these positive outcomes.

However, this study did not stop at relationship development; and nor can mentoring programs. This study showed that once high quality relationships were in place, certain mentor characteristics became important in leading to positive future possible selves. Noddings (1997) argues that caring implies competence. Caring in itself is *not* competence, but caring requires that we accept a responsibility to work continuously on our competence so that the recipient of our care…is enhanced (p. 48). Similarly, Elizabeth Anderson (2007) claims competency among leaders requires the disposition to serve the interests of people from all sectors *and* the awareness and technical knowledge of how to advance these interests in respectful ways (p. 596).

Good intentions are not enough; and any mentor is not necessarily better than no mentor at all. In this study, specific domains influenced mentor competency in affecting youth outcomes. Mentors who are volunteering to learn more about themselves may not be as effective in yielding mentee outcomes, even when there is a positive relationship. Mentors who have less experience with similar youth are less likely to develop high-quality relationships. In these cases, these mentors may be considered less competent and thus not necessarily serving the youth. On the other hand, holding the relationship quality constant, mentors with higher education levels and less experience with program content are more likely to help youth identify education and career aspirations. Mentoring programs must support their mentors in delivering their acts of love, while recognizing the attributes and competencies that will enhance this love in ways that are productive.

Appendix A

MENTEE SURVEY INSTRUMENT

Your first name:_____ Your last name:_____

1. **Please circle the answer that reflects how much you agree with each statement.**

	Strongly disagree	**Disagree**	**Disagree a little**	**Agree a little**	**Agree**	**Strongly agree**
a) My mentor has a lot of good ideas about how to solve a problem.	SD	D	DL	AL	A	SA
b) When my mentor gives advice, s/he makes me feel kind of stupid.	SD	D	DL	AL	A	SA
c) I am happy with my	SD	D	DL	AL	A	SA

mentor.						
d) My mentor praises me and encourages me to do well.	SD	D	DL	AL	A	SA
e) My mentor helps me challenge myself to succeed.	SD	D	DL	AL	A	SA
f) We talk about things that matter to me.	SD	D	DL	AL	A	SA
g) My mentor helps me to feel good about myself.	SD	D	DL	AL	A	SA
h) I feel close to my mentor.	SD	D	DL	AL	A	SA
i) My mentor does all the talking when we meet.	SD	D	DL	AL	A	SA
j) I have a lot in common with my mentor.	SD	D	DL	AL	A	SA
k) I think my mentor understands me.	SD	D	DL	AL	A	SA

2. Participating in the mentoring program has… (circle one response)

	Strongly disagree	**Disagree**	**Disagree a little**	**Agree a little**	**Agree**	**Strongly agree**
a) Showed me more possibilities for careers than I knew about before.	SD	D	DL	AL	A	SA
b) Helped me find a career that I am interested in.	SD	D	DL	AL	A	SA
c) Helped me understand what education I need for the career I am interested in.	SD	D	DL	AL	A	SA
d) Helped me see why what I am doing in school now matters for what I want to do in life.	SD	D	DL	AL	A	SA
e) Made me want to do well in my classes.	SD	D	DL	AL	A	SA
f) Caused me to come to school more often that I	SD	D	DL	AL	A	SA

	Strongly disagree	Disagree	Disagree a little	Agree a little	Agree	Strongly agree
used to.						
g) Caused me to try harder in school than I used to.	SD	D	DL	AL	A	SA
h) Caused me to do my homework more regularly than I used to.	SD	D	DL	AL	A	SA
i) Caused me to try to follow the rules at school more than I used to.	SD	D	DL	AL	A	SA

3. **How has meeting with your mentor affected you?**

_____

4. **How sure are you that you will…**

	Not at all sure 0	**A little sure 1**	**Mostly Sure 2**	**Very sure 3**
a) Finish High School?	0	1	2	3
b) Go to college or other training after high school?	0	1	2	3
c) Use the Pittsburgh Promise scholarship?	0	1	2	3

5. **How true is each of these statements?**

	Not at all true 0	**A little true 1**	**Mostly true 2**	**Completely true 3**
a) My parents expect me to go to college.	0	1	2	3
b) My teachers expect me to	0	1	2	3

	Not at all true 0	**A little true 1**	**Mostly true 2**	**Completely true 3**
go to college.				
c) My mentor expects me to go to college.	0	1	2	3
d) My friends expect me to go to college.	0	1	2	3
c) My family members expect me to go to college.	0	1	2	3

6. **Who really <u>encourages</u> you to do well in school? (Put a check by all of the people who you think do this)**

	My parents
	My teachers
	My mentor
	My friends
	My family members (aunts/uncles, brothers/sisters, grandparents)

7. **What career are you interested in when you grow up?**

8. **What type of education or training does it take to pursue the career you are interested in?**

_____

9. **Would you recommend participating in this mentoring program to your friends? Check yes or no.**

_____ Yes _____ No

10. **Participating in this mentoring program was…**

_____ Very Good

_____ Good

_____ OK

_____ Not Good

11. **What is your gender?**

_____ Male _____ Female

12. Are you eligible for Free or Reduced Price Lunch at school?

_____ Yes _____ No

13. How far did your mother go in school?

_____ Did NOT finish high school

_____ Finished high school

_____ Went to college but didn't finish

_____ Finished College

_____ Not sure

Appendix B

MENTOR SURVEY INSTRUMENT

Mentor Post Survey- Mentors

Your Experiences in the Mentoring Program

Thank you for clicking on the survey link! We appreciate your willingness to provide feedback for program improvement. Researchers at the University of Pittsburgh are conducting an evaluation of the Be a 6th Grade Mentor program and are the only people who will see your identifiable individual responses. Your candid responses will be most helpful in refining the program design and implementation. Thank you!

*** 1. How many years have you served as a mentor with the Be A 6th Grade Mentor Program?**

- 1
- 2

*** 2. How many years have you been a mentor to the student you worked with this year?**

- 1
- 2

*** 3. How successful do you think the mentoring program has been in helping students explore careers and the educational pathways to get there and understand how what they are doing now in school connects to future careers?**

- Very successful
- Successful
- Moderately successful
- Slightly successful
- Not successful

*** 4. How satisfied are you with...**

	Not at all satisfied	A little satisfied	Moderately satisfied	Satisfied	Very satisfied
the match with your mentee					
the quality of the mentoring curriculum					
your overall experience as a mentor					

*** 5. How much do you agree with each of the following statements about your relationship with your mentee?**

	Strongly disagree	Disagree	Disagree a little	Agree a little	Agree	Strongly agree
I feel close to my mentee.	○	○	○	○	○	○
I am satisfied with my relationship with my mentee.	○	○	○	○	○	○
We have found some interests that we have in common.	○	○	○	○	○	○
I can see my mentee as a younger version of myself.	○	○	○	○	○	○
In getting to know each other, we realized we have had some common experiences in our lives.	○	○	○	○	○	○
My mentee looks to me as someone who gives good advice.	○	○	○	○	○	○

*** 6. Did you go with your mentee on an off-campus field trip this year?**

○ Yes

○ No

7. How important was the off-site field trip in building a strong relationship with your mentee?

- Not particularly important
- A little important
- Fairly important
- Very important
- Absolutely critical

*** 8. Please indicate whether the formal program supports and resources were adequate or inadequate for your needs in each of the following areas:**

	Adequate	Inadequate	Not applicable to me
Information about the program to make an informed decision about whether to participate			
Information about the mentee			
Training to prepare you to build a relationship with your mentee			
Training to prepare you to use the curriculum			
Activities and tasks within the curriculum			
Resources to support your work with your mentee			
Opportunities to connect with your mentee			
Support for any challenges or problems you encountered			
Interaction with your Building Champion			
Networking with other mentors			

9. Did you receive any support or resources individually, that you think would be useful to have shared with ALL mentors?

10. What 1 or 2 changes to the program could most increase its effectiveness?

*** 11. In what ways has the program affected your mentee? For each statement please indicate how much you agree. Participating in the program...**

	Strongly disagree	Disagree	Disagree a little	Agree a little	Agree	Strongly agree	Don't have enough information
Opened my mentee's eyes to more possibilities for careers than he/she knew about before.							
Helped my mentee identify a career interest.							
Helped my mentee understand what education and training is need for the career he/she interested in.							
Showed my mentee why what he/she is doing in school now matters for his/her future.							
Inspired my mentee to want to do well in his/her classes.							
Caused my mentee to come to school more often than he/she used to.							
Caused my mentee to try harder in school than he/she used to.							
Caused my mentee to do his/her homework more regularly than he/she used to.							
Caused my mentee to stop getting in to trouble in school.							

12. What would you say is the most significant way that participating in the mentoring affected your mentee?

*** 13. How effective do you feel as a mentor in supporting students in developing career aspirations and understanding how education connects to those goals?**

- Very Effective
- Effective
- Minimally effective
- Not at all effective

14. Please explain why you feel the way you do about your effectiveness as a mentor.

These questions gather a little information about your background and experiences. No one from the program will know how you individually responded. None of the information you provide will be reported with your name.

*** 15. Please indicate your gender.**

- Male
- Female

*** 16. Please indicate your age range.**

- 18-22
- 23-30
- 31-40
- 41-50
- 51-60
- 61 or older

*** 17. Please indicate your race.**

- African American
- Caucasian
- Latino
- Asian/Pacific Islander
- Native American
- Multi-racial

*** 18. How would you describe your socio-economic background when you were growing up?**

- Low Income
- Low to Middle Income
- Middle to Upper Income
- Upper Income

*** 19. Individuals initially choose to volunteer or participate in mentoring programs for a variety of reasons. For each statement please indicate how much you agree. I became a youth mentor...**

	Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree
A. Because I like to help people since I have been in difficult positions myself.					
B. Because mentoring is a feel-good experience.					
C. Because I am concerned about those less fortunate than myself.					
D. Because I can learn more about the cause for which I am working.					
E. Because mentoring gives me a chance to try to ensure people do not have to go through what I went through.					
F. Because mentoring makes me feel like a good person.					
G. Because I am genuinely concerned about the group of students that this program targets					
H. Because mentoring allows me to gain a new perspective on things.					
I. Because I often relate my mentoring experience to my own personal life.					
J. Because participating in a program like this allows me to learn through direct hands-on experience.					
K. Because I feel compassion toward people in need.					
L. Because mentoring allows me to learn how to deal with a variety of people.					
M. Because mentoring helps me deal with some of my own problems.					
N. Because mentoring makes me feel useful.					
O. Because I feel it is important to help others.					
P. Because mentoring makes me feel important.					
Q. Because mentoring keeps me busy.					
R. Because I can do something for a cause that is important to me.					
S. Because mentoring allows me to explore my own strengths.					

*** 20. What were your top 2 motivations for serving as a mentor? Please look at the list above and type in the letters of the two most significant reasons you decided to be a mentor. Enter one letter in each box.**

Top reason #1

Top reason #2

*** 21. What is the highest degree you have completed?**

- High school
- Associates degree
- Bachelors degree
- Masters degree
- Professional/doctoral degree

*** 22. What is your current occupation?**

*** 23. Since completing high school, how many jobs have you held and how many different career fields do these reflect? (Enter numbers only)**

Total # jobs

Different career fields

*** 24. Before the program began, how much experience did you have in each of the following areas:**

	No prior experience	Minimal prior experience	Moderate prior experience	Extensive prior experience
Advising others about college				
Advising others about careers				
Working with youth				
Working with youth identified as being at-risk for school failure				
Serving as a mentor				

*** 25. How much do you agree with each of the following statements about how your own experiences influenced your relationship with your mentee? If you believe something is "not applicable" to you, select strongly disagree.**

	Strongly disagree	Disagree	Disagree a little	Agree a little	Agree	Strongly agree
My prior experience as a mentor or mentee made me a more effective mentor in this program.						
My own experiences in K-12 and post-secondary education made me a more effective mentor in this program.						
The specific content I studied in my formal education helped prepare me to work with young people.						
The specific content I studied in my formal education was relevant to my mentee's interests.						
My own career experiences made me a more effective mentor in this program.						
The specific focus of my career helped prepare me to be a mentor to youth.						

Mentor Post Survey- Mentors

*** 26. In what ways did you draw on your own education and career experiences in your interactions with your mentee?**

*** 27. Please provide your name. We use this to link your responses to that of your mentee. Your responses will not be reported in conjunction with your name to anyone. Only the outside evaluators will know how you, individually, responded. All feedback to program will be anonymous.**

First Name

Last Name

Thank you for taking the time to complete this survey. A report will be completed by October and shared with the United Way at that time.

Appendix C

EXPLANATORY VARIABLES OF INTEREST

Appendix C summarizes the explanatory variables, the associated survey items and measurement scales.

Explanatory Variable	Data Points	Items on the Instrument	Metric
Mentor Motivation	Reactivity(4 items), Self-Esteem (5 items), Values (5 items), Understanding (5 items) subscales	Mentor Survey #'s 19 & 20	Likert Scale: 1 (strongly disagree)...5 (strongly agree)
Mentor Education Attainment	What is the highest degree you have completed?	Mentor Survey #21	High School, Associates, Bachelors, Masters, Professional/Doctorate degree
Mentor Experience with Program Content	Before the program began, how much experience did you have advising others about college?	Mentory Survey #24	Likert Scale: 1 (No prior experience)...4 (Extensive prior experience)
	Before the program began, how much experience did you have advising others about careers?		Likert Scale: 1 (No prior experience)...4 (Extensive prior experience)
Mentor Experience with Youth & Mentoring	Before the program began, how much experience did you have working with youth?	Mentor Survey #24	Likert Scale: 1 (No prior experience)...4 (Extensive prior experience)
	Before the program began, how much experience did you have working with youth identified as being at-risk for school failure?		Likert Scale: 1 (No prior experience)...4 (Extensive prior experience)
	Before the program began, how much experience did you have serving as a mentor?		Likert Scale: 1 (No prior experience)...4 (Extensive prior experience)

Appendix D

SIGNIFICANT CONTROL VARIABLES

The below tables illustrates the findings from the multiple regressions where the available control variables were regressors to the relationship quality outcome. Three control variables were found to have significant regression equations: years as a mentor; mentor age; and school 6. When the same control variables were regressors to the mentee possible self outcome, none were significant. However, the significant controls were included in all pathway analyses for consistency.

Control Variable	Unstandardized Coefficients	
	B	Std. Error
(Constant)	-2.457	(3.148)
Mentor Sex	.134	(.329)
Years as a Mentor	.514*	(.211)
Mentor SES	-.001	(.139)
Mentee Sex	-.333	(.350)
Mentee FRPL Eligibility	.198	(.308)
Mentee Mother's Education	.055	(.083)
Mentor Age	-.181**	(.069)
School 1	-.073	(.295)
School 2	-.284	(.343)
School 3	.071	(.516)
School 4	.214	(.402)
School 5	-.121	(.390)
School 6	-.902†	(.464)
School 7	-.142	(.379)
Mentor-Mentee Pairs by Race	.087	(.312)
Mentor-Mentee Pairs by Sex	.168	(.325)
Mentee Race: African American	1.456	(2.515)
Mentee Race: Caucasian	1.514	(2.122)
Mentee Race: Asian	2.415	(1.759)
Mentor Race: African American	.552	(.801)
Mentor Race: White	.407	(.746)
Mentor Race: Asian	-.722	(1.066)

Note: N=119. † $p < .1$, * $p < .05$, ** $p < .01$

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