

**AN EXAMINATION OF OUTCOMES ON ADOLESCENTS AND YOUTH IN
THE CREATIVE MENTORING PROGRAM**

by

Margo Price

A thesis submitted to the Faculty of the University of Delaware in partial
fulfillment of the requirements for the degree of Master of Science in Human
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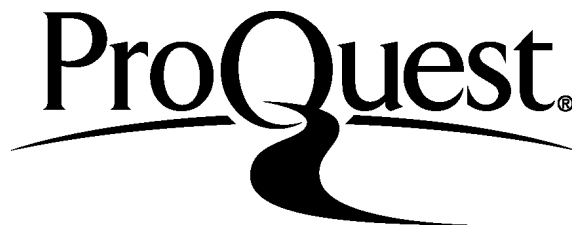
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ABSTRACT

Adolescents and youth face a multitude of challenges as they navigate their teen years. Among these challenges are low levels of self-esteem and wavering enthusiasm towards academics and school. School-based mentoring programs have been an increasingly popular means of intervention to curb these challenges. The field has seen extensive research in examining a variety of programs, from individual school-based mentoring programs to nationally known programs such as Big Brothers Big Sisters. However, there has been no study to date that has examined the impact of a statewide mentoring initiative. Creative Mentoring, a statewide mentoring initiative in Delaware, provides mentoring in school-based programs throughout Delaware. Upon examination, it was found that the longer students participated in the Creative Mentoring program, the higher the students' levels of self-esteem and the more positively mentors influenced students' perception of academics. Girls, in particular, experienced higher levels of self-esteem as a result of participating in Creative Mentoring. These findings support previous research that school-based mentoring programs are effective and necessary. Additionally, the findings suggest that there is a positive correlation between students who participated in the Creative Mentoring program in 2013-2014 and the students' levels of self-esteem and their perceptions of their academics.

Chapter 1

INTRODUCTION

Youth and adolescents of today face a multitude of challenges in their daily lives. American adolescents, especially those entering high school, are increasingly pressured to perform well academically, apply to colleges and universities, and succeed in both higher academics and in the work force (Arnett, 1999). Additionally, students enrolled in secondary schools (i.e., middle and high schools) are particularly susceptible to a host of challenges, such as the physical and emotional changes associated with puberty (Arnett, 1999). These changes are often characteristic of the adolescent developmental period, and may increase students' inclination towards dropping out of school. Furthermore, it is not uncommon for adolescents' relationships with parents or other primary caregivers to become somewhat strained, further increasing their likelihood of dropping out of school (Steinberg & Morris, 2001). In the 2013-2014 school year, the national high school dropout rate averaged 6.5%, whereas the average dropout rate for the state of Delaware in the same year was 2.1%, compared to 3.9% in 2011-2012 and 2.9% in 2012-2013 (Child Trends, 2015). Although the school drop out rates in Delaware were lower than the national average in the 2013-2014 school year, and have continued to decrease each year, that percentage still accounts for approximately 800 students. These students cited

personal, academic, and economic reasons (Breithaupt, Purnell, & Peoples, 2015) as their explanation for leaving school. It is imperative then, that researchers continue to examine why students are leaving school, and what programs may be implemented to encourage students to stay in school. The Delaware Department of Education reports that 35% of students who dropped out were enrolled in the 9th grade (Breithaupt et al., 2015). For even the most supported adolescent, however, the pressures and expectations of earning a secondary education can be daunting. Fortunately, there are people such as mentors who wish to help and support adolescents, helping them to strengthen their relationships with other adults, increase their levels of self-esteem, or assist them academically.

A number of studies have been conducted on school-based mentoring programs that are unique to an individual school, while other studies broaden their reach to focus on programs that are encompassed under nationally known mentoring programs, such as Big Brothers Big Sisters (e.g. Bayer, Grossman, & DuBois, 2013; Herrera, DuBois, & Grossman 2013; Rhodes, Grossman, & Resch, 2002; Schwartz, Rhodes, Chan, & Herrera, 2011). Although there has been empirical support for the extent to which mentoring has served as a positive influence on adolescents and youth (e.g. DuBois et al., 2002; Herrera et al., 2013; Herrera, Grossman, Kauh, Feldman, & McMaken, 2007; Herrera, Grossman, Kauh, & McMaken, 2011; Karcher, 2008), no study to date has focused specifically on school-based mentoring programs that all operate under a single statewide mentoring initiative, such as Creative Mentoring in Delaware. The Creative Mentoring program provides resources, training, and support

to school-based mentoring programs throughout the state of Delaware year-round. It is important to focus specifically on a statewide mentoring program, as such programs are likely to provide standard practices for all those involved to follow. In doing so, the skills of the mentor can be cultivated to meet the needs of the mentee in the most effective ways possible, while also engaging in mentoring best practices. Given what we know regarding the effectiveness of school-based mentoring programs, it is possible that research involving school-based mentoring programs will increase the amount of empirical support suggesting the effectiveness of these programs, contribute to lower dropout rates at the secondary level, and inspire more individuals to serve their communities by becoming mentors themselves. Additionally, past research has shown that the longer a student is mentored, the more positive the outcomes (Grossman & Rhodes, 2002). Therefore, the purpose of this study is to examine the relationship between the length of time that a student was mentored within the Creative Mentoring program, a state wide mentoring initiative specific to Delaware, and the outcomes, self-esteem and the mentor's influence on the student's perception of academics, on youth and adolescence who participate in the program in the 2013-2014 school year.

Connecting Generations, Inc. and Creative Mentoring

Creative Mentoring is a program of Connecting Generations that supports school-based mentoring programs throughout the state of Delaware (www.connecting-generations.org). Creative Mentors are trained volunteers who spend 30-60 minutes

each week with their mentee during the school day, in the mentee's school. Pending a background check and completing training, any adult over the age of 18 is eligible to become a Creative Mentor. Additionally, some Creative Mentoring programs in elementary schools support mentoring relationships between high school students and elementary school students. Mentors are supported by in-school program coordinators. The role of the program coordinator is to schedule mentoring sessions, support the mentoring pairs in whatever capacity is needed, keep an open line of communication between the mentor, teachers, and parents, and identify students within the school who want or need a mentor. Typically, students in the Creative Mentoring Program are those with high behavioral referrals, frequent absenteeism or tardiness, or low grades; however, these are not required traits of a potential mentee in order to be assigned a mentor. Some students also request to be involved in their school's Creative Mentoring program, while others are referred to the program by their parents or teachers. Student participation is voluntary, however, students cannot participate in the program without a signed parent permission form. Students are matched with trained mentors based on similar interests or hobbies, when possible. In the 2013-2014 school year, 71 schools throughout Delaware hosted a Creative Mentoring Program. These 71 schools make up approximately 37% of the total number of schools in the state of Delaware (Delaware Department of Education, 2015). Although 876 students ranging from kindergarten to twelfth grade completed the Creative Mentoring End of the Year survey at the conclusion of the 2013-2014 school year, the total number of students

who participated in the program that year is unable to be determined, as the number of mentoring pairs for each school-based program vary greatly.

Chapter 2

THEORY AND LITERATURE REVIEW

Theoretical Frameworks

Positive youth development theory (Lerner, Almerigi, Lerner, & Theokas, 2005) and Bandura's (1971) Social Learning Theory are two lenses that can be used to examine the effects of school-based mentoring programs on outcomes relative to youth development.

Positive Youth Development Theory (PYD)

Positive youth development theory (PYD) holds that if youth and adolescents have the necessary positive resources available to them, such as a mentoring program in school, they will be less likely to engage in delinquent or negative behaviors, and more likely to succeed in life (Lerner et al., 2005). PYD occurs when there are positive, supportive, or empowering assets, such as programs, individuals, or resources available to people during the years of their youth, which is the phase of human development when they are most easily influenced (Lerner et al., 2005). The Creative Mentoring Program is one such method of employing PYD, and what Lerner et al. (2005) consider, "The five C's: competence, confidence, connection, character, and caring" (p. 12). These five elements are said to emerge within youth when they have

engaged in a positive relationship with an older, caring adult, through activities that teach and encourage the building of skills, and the opportunity to engage in peer-leadership activities (Lerner et al., 2005). As mentors are caring adults who have the opportunity to provide youth and adolescents with a positive and supportive relationship, mentoring is, indeed, one such way to engage PYD. Creative Mentoring Programs are designed in such a way that positive youth development occurs. Youth and adolescents are paired with mentors who share similar hobbies, interests, or backgrounds. These mentors then encourage the mentee to perform well in school and in all other aspects throughout development.

Social Learning Theory

Albert Bandura's Social Learning Theory, in its simplest form, states that environments largely influence the actions and behaviors of individuals (Bandura, 1971). Mentors can create an environment within the mentoring relationship, during which he or she can model positive behaviors, such as a respect for education and others, which may positively influence the mentee and encourage them to succeed, rather than become involved and entwined in delinquent behaviors. These behaviors can be demonstrated through the activities done and behaviors exhibited during mentoring sessions. For example, Callahan and Kyburg (2005) write about mentoring gifted youth and their struggle to fit in or be socially accepted by their peers, therefore leading to lower levels of self-esteem. Matching gifted youth with an adult of similar gifts or common interests, they suggest, will allow the student to experience a positive model in the form of a mentor (Callahan & Kyburg, 2005). According to Social

Learning Theory, the youth may improve his or her social skills or experience increased levels of self-esteem by connecting with someone else with similar gifts or talents, especially within the context of the school environment (Bandura, 1971). Creative Mentoring encourages mentors to act as positive role models for their mentees. The program emphasizes that effective and positive role modeling draws attention to actions, ideas, and values that often lead to happiness and success in school and life (Creative Mentoring, 2008).

Literature Review

School-Based Mentoring Programs

Mentors can arise naturally, for example, in the form of a family friend or older relative, or formally within organized programs. Formal mentoring programs, especially those that are community or school-based, have become a popular means of intervention (Rhodes & DuBois, 2008). These programs provide interventions for adolescents and youth who may be considered “at risk,” that is, youth who exhibit or possess characteristics or behaviors that may lead to negative outcomes such as dropping out of school, delinquency, or lower prospects for future employment (Herrera et al., 2013). School-based mentoring programs, such as the statewide mentoring initiative Creative Mentoring, are unique in that the mentoring occurs within the school, either during the school day or immediately after school. School-based mentoring programs offer a different way of providing support for the mentees

in social, academic, and behavioral areas (Herrera et al., 2011). Adolescents and youth are often identified as potential mentees due to their experiences with unstable home lives, exhibiting disruptive behaviors to gain more attention in class or at home, or simply because they were identified as possibly being able to benefit from one-on-one time with a caring, compassionate adult (Creative Mentoring, 2013). Unfortunately, adults within the school setting sometimes negatively stigmatize students who receive mentoring. For example, they may be thought of as delinquent or difficult (Creative Mentoring, 2013). However, not all students who receive or need mentoring fall within this category. Creative Mentoring (2013) cautions program coordinators to avoid negatively labeling students who have been selected to participate in the mentoring program as “bad,” or “difficult.” In fact, if a student has had too many disciplinary infractions, he or she may not benefit from a mentoring relationship, as a higher level of support might be needed (Creative Mentoring, 2013). Creative Mentoring suggests that the school-based program coordinators consider where a student falls on the Positive Behavior Support triangle. All public schools in the state of Delaware hosts Positive Behavior Support (PBS) programs in partnership with the Delaware Department of Education and the University of Delaware’s Center for Disabilities Studies (Delaware Positive Behavior Support, 2015). These programs are designed to create better and more productive learning environments in schools by supporting positive behaviors exhibited by students. PBS programs also provide more effective methods for managing problematic behaviors of students by enrolling them in intervention or prevention programs within the school environment, such as a

school-based mentoring program. PBS programs show that 80% of students have 0-1 discipline referrals, 15% have 2-3 referrals, and 5% have 4 or more referrals every school year (Creative Mentoring, 2013; Delaware Positive Behavior Support, 2015). According to Creative Mentoring (2013), students who fall within the 95% of students with discipline referrals are those who exhibit more positive outcomes after their involvement in a school-based mentoring program.

In the context of school-based mentoring programs, mentoring pairs meet during the school day or within the parameters of an after-school program, often times in a designated mentoring area. School-based programs also allow for a more specified focus on academics. Portwood and Ayers (2005) point out that, more often than not, students are selected for mentoring programs in their schools because of falling or failing grades. As found by Herrera et al. (2007), students who participated in a school-based mentoring program also improved academic performance, as mentors and mentees also have access to teachers and other academic resources during mentoring sessions. This has the potential to help tremendously for those students who are chosen to participate in the mentoring program due to low rates of success in academics. For example, mentors may communicate with program coordinators about a problem that their mentee might be having with homework. In turn, the program coordinator can seek out the mentee's teacher for further explanation or to support the mentee in receiving additional academic support.

School-based programs offer a wealth of advantages for the mentee and also for the mentoring relationship itself. Mentoring programs have the potential to

improve the overall school climate, especially if teachers from that school also serve as mentors (Delaware Positive Behavior Support, 2015). Teachers who mentor former students within their school are able to connect with their mentee's current teachers, thereby creating an open line of communication across grade levels between teachers that may not have otherwise existed. By doing so, the network of support surrounding the student becomes even stronger, thereby creating a higher likelihood of academic success. In other instances, school-based mentoring programs may provide mentors from outside of the school community the opportunity to connect with the mentee's teacher, allowing the two to create an even stronger base of support for the mentee as a student. School-based mentoring programs may also improve the school climate by providing mentors to students who may have behavioral issues in the classroom. Such was the hypothesis and findings of Herrera et al. (2007) who conducted a study of the nationally known mentoring program Big Brothers Big Sisters and their school-based programs. As mentors typically serve as positive influences on their mentees, students with behavioral problems in the classroom may experience reduced problem behaviors as a result of having a mentor (Herrera et al., 2007). Fewer problems within the classroom can lead to a more positive experience for both students and teachers.

The Importance of Length of Time of a Mentoring Relationship

There are a number of characteristics that are representative of a successful mentoring relationship. Among these characteristics are dosage, which encompasses amount, intensity, and duration of the mentoring relationship. Dosage is viewed as one

way to examine whether the length of time of a mentoring relationship will have an effect on mentoring outcomes when considering varying forms of mentoring (i.e. community based or school-based programs) (Karcher, Juperminc, Portwood, Sipe, & Taylor, 2006). According to Karcher et al., (2006), “amount” refers to the total amount of face to face mentoring time logged by the pair, “intensity” refers to emotional depth of the interactions during the mentoring time, and “duration” refers to total length of time of the mentoring relationship. Similar to findings provided by Herrera et al. (2013), Karcher et al. (2006) also found that the dosage of mentoring affected the quality of the mentoring relationship, therefore leading to longer-lasting mentoring relationships.

Rhodes and DuBois (2008) suggest that, while it is important to understand that mentoring programs affect youth, it is also crucial to understand *how* youth are impacted by these relationships. In order to fully understand how the mentoring relationships affect youth, however, one must first consider the development of the mentoring relationship. Thomas Keller (2005) likens the mentoring relationship to that of a human life, composed of several stages, and after a time, it comes to an end. These stages include: contemplation, the beginning of the relationship; initiation, during which time the mentor and mentee begin to get to know each other; growth and maintenance, which Keller identifies as the bulk of the mentoring relationship, and during which time the relationship grows and is maintained through a mutual trust and enjoyment of each other (Keller, 2005).

Research has shown that the length of time of a mentoring relationship has an effect on outcomes, such as the student's levels of self-esteem and the mentor's influence on the student's perception of academics (Grossman & Rhodes, 2002; Grossman, Chan, Schwartz, & Rhodes, 2012; Grossman & Johnson, 1999; Rhodes & DuBois, 2008). Specifically, Grossman and Rhodes (2002) hypothesized that the effects of mentoring on, for example, the student's levels of self-esteem, would strengthen with time through the mentoring relationship. The authors also examined what characteristics exist in a mentoring relationship that allowed it to last. Ultimately, they found that students who were in mentoring relationships for at least one year improved in academic, psychosocial, and behavioral outcomes. In contrast, mentoring pairs that were terminated within the first three months showed negative effects on the mentees.

Additionally, the authors found that mentors who were older and had more established jobs or higher incomes were part of a mentoring relationship that lasted longer. These characteristics may lead to longer mentoring relationships because the mentors themselves are more established in their own lives and are able to provide more constant mentorship to the mentee. An additional analysis of the Big Brothers Big Sisters data (Grossman, et al., 2012) collected by Herrera et al. (2011) found that students who engaged in mentoring relationships that lasted at least 24 weeks, approximately one full school year, benefitted more academically than those youth who were not mentored at all. In an earlier study of Big Brothers Big Sisters (Grossman & Johnson, 1999), the authors divided the groups of mentoring

relationships into groups based on how long each mentoring relationship lasted. They found that students who were in a mentoring relationship for more than twelve months reported higher confidence in their academics and achieved higher grades (Grossman & Johnson, 1999).

In examining the quality of the mentor-mentee pair based on mentor and mentee reports, Herrera et al. (2013) found that both mentors and mentees reported strong, or high quality, relationships. The quality of these mentoring relationships largely depended on match length, how many times the mentoring pair met, and for how long the pair met (Herrera et al., 2013). In the Herrera et al. (2013) study, more than half of the mentor-mentee matches lasted for at least one year.

DuBois, Portillo, Rhodes, Silverthorn, and Valentine (2011) suggest that one way for mentoring programs, whether they are community or school-based, to avoid the negative outcomes of short-lived relationships is to determine the length of time that a mentoring relationship may last at the beginning of the relationship, therefore allowing both the mentor and the mentee to prepare for the termination of the relationship when the time comes. By having a clear time frame for the mentoring relationship, both the mentor and the mentee can establish their expectations for the time that they have together, and still be able to have a successful mentoring relationship (DuBois et al., 2011). The final stage of the mentoring relationship is decline and dissolution, which refers to the time when the relationship may become less important to one or both parties (decline), and eventually comes to an end (dissolution) (Keller, 2005). Keller (2005) notes that, “Although relationships may be

marked by defining moments [...] the model [of the stages of a mentoring relationship] is not meant to imply that mentoring relationships pass through clearly demarcated stages” (p. 86). It is here that the mentee will begin to grow closer to the mentor, and also begin to show signs of any positive effects of the mentoring experience. He also acknowledges that not all mentoring relationships will follow the same timeline. It is likely then, that the majority of effects that the mentoring relationship might have on an adolescent or youth would be during the growth and maintenance stage. Although Keller outlines the cycle of a typical mentoring relationship, it is still important to recall that these relationships are most effective when their life cycle is at least 24 weeks (Grossman et al., 2012).

Given the importance of length of time to the mentoring relationship, it is essential that researchers continue to address its impact. This study seeks to explore the importance of length of time of a mentoring relationship on two outcomes: mentee’s level of self-esteem and the mentor’s influence on the student’s perception of academics.

Self-Esteem

Often, adolescents find themselves struggling with having positive levels of self-esteem, especially during the middle school years (Rhodes et al., 2003). Rhodes et al. (2003) hypothesized that white adolescent girls from lower socioeconomic homes and who are in the racial minority within their schools are at the greatest risk for declining levels of self-esteem while in middle school. In their study of roughly 1,800

middle-school students, the authors found that students in higher socioeconomic status urban schools experienced less of a decline of self-esteem, while students in lower socioeconomic urban schools experienced a sharper decline of self-esteem. Although the study was conducted throughout the mid-1990s and did not study mentoring relationships, it provides insight on how school-based mentoring programs might be used as an intervention, especially in lower socioeconomic schools. In their implications for future research, Rhodes et al. (2003) suggest that, without interventions, such as a school-based mentoring program, these declining levels of self-esteem in adolescents may very well lead to difficulties in the future for the adolescent. These difficulties include emotional or psychosocial difficulties, a decline or even failure in academics, and an increase in delinquency and, later, unemployment. Among other variables, Karcher (2008) examined the effects school-based mentoring programs on self-esteem, which was measured in his study via a self-esteem questionnaire. Karcher (2008) found that among girls who had lower levels of self-esteem in middle school, the presence of a mentor in their lives was positively related to levels of self-esteem. Karcher (2008) specifically notes that girls in high school showed the greatest increase in their levels of self-esteem. Further, Converse and Lignugaris/Kraft (2009) found that, when compared with their peers who did not have mentors, mentored students' levels of self-esteem were significantly higher than their non-mentored peers. Findings from the aforementioned studies suggest that school-based mentoring programs positively influence students' levels of self-esteem.

Furthermore, with higher levels of self-esteem, students are more likely to succeed in academics and are less likely to engage in delinquent behaviors (Rhodes et al., 2003).

Mentor's Influence on Student's Perceptions of Academics

School-based mentoring programs have resulted in mentees holding more positive perceptions about their academics and the importance of academic success (Grossman & Johnson, 1999), due to the influences of their mentors. Several mentoring programs were evaluated in the study 'The Role of Risk: Mentoring Experiences and Outcomes for Youth with Varying Risk Profiles', (Herrera et al., 2013). The primary purpose of the study was to evaluate whether mentoring programs had a positive effect on the youth. Herrera et al. (2013) examined academic attitudes using a pre-test posttest model. The authors administered questionnaires to the mentees at the beginning of the mentoring relationship and after 13 months of having a mentor. The authors found that, after 13 months of taking part in a mentoring program, youth reported that they had a more positive attitude towards school and their ability to do well in school because they had a mentor. Likewise, Rhodes et al. (2002) and Bayer et al. (2013) examined the ways in which mentoring relationships influenced the mentee's academic outcomes. They found that mentoring had a direct effect on the students' grades (Bayer et al., 2013; Rhodes et al., 2002) and attendance (Rhodes et al., 2002). Rhodes et al. (2002) attributed these improvements to positive role modeling on behalf of the mentor, tutoring, and encouragement, while Bayer et al. (2013) attributed this improvement to the mentee's perception of "closeness" of the

mentoring relationship, showing that the mentor had a positive influence on the mentee's attitudes towards school. Bayer et al. (2013) further explain that the mentors in their study were not trained as academic tutors, nor was there a set curriculum for them to follow, therefore, this may explain why some, not all, of the mentoring pairs in their study reported higher academic achievement. Additionally, Converse and Lignugaris/Kraft's (2009) evaluated a middle school-based mentoring program that focused solely on at-risk students. The study examined mentoring relationships in a middle school that lasted 18 weeks (Converse & Lignugaris/Kraft, 2009), and compared students who were mentored to students who were not mentored at the end of the 18-week period. Improvement in attitudes towards school was found among those adolescents who were mentored. With more positive attitudes towards school and academics, students may be more likely to be successful both in and out of school.

Other Variables Influencing Mentoring

Several studies that focus on the effects of mentoring have noted that, while students who have had mentors yield more positive outcomes than those who did not have mentors, there are differences within those mentored groups (Carlson, Uppal, & Prosser, 2000; DuBois et al., 2002; Karcher, 2008). The most notable differences within the groups of students who were mentored are differences between boys and girls, and whether the student was in early adolescence (grades 5-8) or later adolescence (grades 9-12).

Gender. Karcher (2008) hypothesized that gender would moderate the reported levels of mentee self-esteem following a period of having a mentor, specifically, that the student's level of self-esteem would be different between boys and girls based on how long he or she was mentored. In line with their hypothesis, the author found that girls in high school reported higher levels of self-esteem due to having a mentor, compared to boys who were also mentored (Karcher, 2008). However, findings from the literature appear to be mixed at best regarding the effects of gender, as Rhodes, Roffman, Reddy, and Fredriksen (2004), reported that girls also experience more decline in self-esteem as a result of being mentored than boys do during their early adolescent years. Nevertheless, Karcher (2008) found that girls reported higher levels of self-esteem and greater support from friends, while the boys in high school in this study did not seem to show any benefits from having a mentor, and actually reported declining levels in their connectedness to their teachers. It is likely that the difference between boys' and girls' levels of self-esteem are due to societal expectations placed on girls or boys (i.e., the need to fit in or look a certain way), as well as the overall difference in maturity levels between boys and girls (Karcher, 2008).

Early versus late adolescence. Much can be said for where an individual is in their development over the life course, and how that impacts them. Adolescents are particularly susceptible to a wealth of changes, both emotionally and physically (Arnett, 1999). They are at a developmental stage where they are experiencing shifts in relationships with their parents and peers, and shifting from elementary school into middle and high school (Darling, 2005; Steinberg & Morris, 2001). Karcher (2008)

also suggested that the age of the mentee might have an effect on how much he or she benefits from having a mentor. He cites DuBois et al., (2002)'s study in explaining that boys in early adolescence were more likely than girls to identify their mentors as a significant adult in their life. Similarly, Karcher (2008) found that boys early in adolescence benefited more overall from having a mentor than boys in later adolescence.

Chapter 3

METHODS

The Present Study

The present study examines the relationship between the length of time that a student is mentored and the student's levels of self-esteem and the mentor's influence on the student's perception of academics. Unlike previous studies, however, this study focuses solely on a statewide mentoring initiative that is specific to the state of Delaware. This study uses data from end of the year surveys from the Creative Mentoring Program. The survey is conducted at the end of the school year, regardless of the length of time the students in the program have had a mentor. A copy of the survey is included in Appendix 1. Surveys are distributed to students (mentees), mentors, parents of mentees, and teachers of mentees. This study focused on surveys completed by students in grades five through twelve at the end of the 2013-2014 school year. In a study performed on early adolescent girls, Carlson et al. (2000), define their early adolescent sample as girls in grades 6-8. Early adolescence as it pertains to the Creative Mentoring study encompasses grades 5-8; late adolescence includes adolescents in grades 9-12.

Research Questions

This study addressed two primary research questions. Additional questions examined the moderating effects of gender and whether the student was in early adolescence (5th-8th grade) or late adolescence (9th-12th grade).

1. What is the association between the length of time that a student has had a mentor and the student's self-esteem?

- a. Does the relationship between the length of time of time that a student has had a mentor and the student's level of self-esteem differ between girls and boys?
- b. Does the relationship between the length of time that a student has had a mentor and the student's level of self-esteem differ between students in early adolescence verses students in late adolescence?

2. What is the association between the length of time that a student has had a mentor and the student's perception of academics?

- a. Does the relationship between the length of time that a student has had a mentor and the mentor's influence on the student's perception of academics differ between girls and boys?
- b. Does the relationship between the length of time that a student has had a mentor and the mentor's influence on the student's perception of academics differ between students in early adolescence versus students in late adolescence?

Hypotheses

It was hypothesized that the longer a student is mentored: 1) The higher the levels of her or his self-esteem; and 2) The more positive influence on the student's perception of academics. It was also hypothesized that the moderating variables of gender and early or late adolescence will impact the student's levels of self-esteem and the mentor's influence on the student's perception of academics such that, the longer a girl is mentored, the higher her levels of self-esteem (Karcher, 2008) when compared to boys, and the longer a student in early adolescence is mentored, the more positive the mentor's influence on the student's perception of academics (DuBois et al., 2002).

Participants and Procedures

At the end of every school year, all Creative Mentoring school-based programs are asked to administer a voluntary survey to students who participated in the program, mentors, teachers of the mentees, and parents of the mentees. For students to participate in the program, parents of the students signed a mandatory parent permission form allowing their children to participate. This form included permission for the student to complete the end of the year survey. As this study focuses on the responses of the mentees who completed the survey at the end of the 2013-2014 school year, the additional surveys completed by mentors, parents, and teachers were not included in this study. A complete copy of the survey can be found in the Appendix. Overall, surveys were completed by 876 students ranging in age from kindergarten through twelfth grade, using the online survey tool Survey Monkey. The

survey is used by Creative Mentoring to evaluate the progress of mentoring within each of its school sites, based on the responses of mentees, mentors, parents, and teachers. The data is also used by the organization as foundational when applying for funding and grant proposals.

The sample in this study consists of 276 students in grades 5 through 12 who participated in the Creative Mentoring program in the 2013-2014 school year and who completed the End of the Year Survey. Upon IRB approval from the University of Delaware, the collected data was imported into SPSS (23). To protect the identity of the students in the study, all identifying information was removed. Sample descriptives of gender and the number of years students were mentored are reported in Table 1. The mean number of years that a student had a mentor was $M=2.16$ years, $SD=1.6$. Additional demographic information, such as race, age, or socio-economic status was not collected in the survey.

Measures

Length of time of the mentoring relationship. Length of time of the mentoring relationship was determined by a question on the survey, which asks, “How many years has the student been mentored?” Responses of “less than a year,” or other non-numeric responses, were coded as missing data, and were not factored into calculating the mean number of years a student was mentored as there was no exact values given. Responses of “less than a year” were coded as missing because this study focused on students who participated in the Creative Mentoring program for the entirety of the

2013-2014 school year. Not all student in grades five through twelve responded to this question, while other answers were vague, for example, “a few months,” or “a couple of months.” These responses did not give an exact timeline for how long the student was mentored, and therefore were not used when factoring the mean number of years that a student was mentored.

Self-Esteem. The self-esteem variable was created using five items from the end of the year survey. The questions asked students to respond to the following: “My mentor makes me feel more confident;” “my mentor makes me feel smart;” “my mentor makes me feel excited about my future;” “my mentor makes me feel better about myself;” “my mentor makes me feel important or special.”

These items were determined after running an exploratory factor analysis on the items chosen from the survey that most closely related to students’ self-esteem. The results showed that the Kaiser-Meyer-Olkin was $KMO = .795$, which lies within the “middling” range (Hutcheson & Sofroniou, 1999). All KMO values were above 0.5, which is an acceptable limit (Field, 2013). Five items were retained; Cronbach’s alpha for this variable is .74, which suggests an acceptable level of reliability between the survey questions (Kline, 1999). These items allowed the students to respond with “Yes,” “No,” or “Not Sure.” For the purposes of this study, only “Yes” or “No” responses were included in the analyses. Responses of “Not Sure” and unanswered questions were not included in the analyses because it was not possible to determine whether some students intentionally did not choose “yes” or “no” or if they were truly unsure about how to respond.

Mentor's Influence on Student's Perception of Academics. The mentor's influence on student's perception of academics variable was created using nine items. The first three items asked the student to respond "Yes," "No," or "Not Sure" to the following: "My mentor helped me with my homework;" "I enjoy school more because I have a mentor;" "I am doing better in school because I have a mentor." The remaining six items are coded as 1=answered, and 0=not answered. These questions asked students what they did with their mentor during mentoring sessions: "Read, Do math, Do homework," and how the student feels the mentor has helped them to improve their grades: "Encouraging me;" "studying with me;" "explaining my work in a new way."

These items were selected to compute this variable after completing an exploratory factor analysis on the nine items chosen from the survey that most closely related to academics. The results showed that the Kaiser-Meyer-Olkin was $KMO=.774$, which lies within the "middling" range (Hutcheson & Sofroniou, 1999). All KMO values were above 0.5, which is an acceptable limit (Field, 2013). All nine items were retained, and reliability was computed, resulting in a Cronbach's alpha of .74, which suggests an acceptable level of reliability among the survey questions that make up this variable (Kline, 1999). Three of the items allowed the students to respond with "Yes," "No," or "Not Sure." Only "Yes" and "No" responses were included in the variable. Responses of "Not Sure" and unanswered questions were not included in the analyses because it was not possible to determine whether the student intentionally did not answer the question or if they were truly unsure about how to

respond. As the questions for this variable are measured on different scales, the items were standardized to z-scores so that they could all be measured on the same scale (Field, 2013). From there, the z-scores were summed and a composite was created.

Early versus Late Adolescence and Gender. The early versus late adolescent variable was computed using the mentee's reported grade. Grades 5-8 constitute as early adolescence, while grades 9-12 represent late adolescence. Gender was determined by the student response to the survey question "Gender." Response options were "Male," or "Female."

Centering the Predictor Variables. Length of Time variable was centered around the mean of the length of time students were mentored ($M=2.16$ years), then multiplied by the variables gender and early or late adolescence. This was done in order to make the interpreting of the main effects easier. According to Field (2009), centering variables is important when the model contains an interaction term, or moderating variable, because it makes the intercept for lower order effects, such as gender or placement in adolescence, easier to interpret.

Analytic Strategy

This study used multiple regression analyses in order to explore the relationships between the length of time of mentoring relationship and the levels of the mentees' self-esteem and mentor's influence on the student's perception of academics. Multiple regression was used specifically because each outcome variable was on a continuous scale, and the two predictor variables were both continuous and

categorical. The analyses used ordinary least squares (OLS) regression because the data consists of a continuous predictor and continuous outcomes. The R^2 demonstrates how close the data are to the fitted regression line. It also explains how much variance in the dependent variable is accounted for by the independent variables. Multiple regression analyses evaluated the outcome variables of mentees' self-esteem and mentor's influence on the student's perception of academics based on the length of time that the student was mentored, the student's gender, and whether the student is in early adolescence or late adolescence. The first multiple regression model has "self-esteem" as the outcome variable, while the second multiple regression model has "mentor's influence on the student's perception of academics" for the outcome variables to examine the correlation between the length of time that a student was mentored and how having a mentor changed their perception of academics. Simple slope analysis shows the relationship between the predictor variable, length of time that the student has been mentored, and the outcome variables, self-esteem and mentor's influence on the student's perception of academics.

In order to explore the effects of gender and whether the student was in early or late adolescents on the student's level of self-esteem and their perceptions of academics, two moderating variables were created using the independent variable length of time that the student has been mentored and the control variables adolescent gender and early or late adolescence. The length of time variable was centered around the mean ($M=2.16$). The interaction variables were created by multiplying the centered length of time by the adolescent gender, and then by the variable "Early Or

Late Adolescence,” indicating whether the mentee was in early adolescence (grades 5-8, coded as 0) or late adolescence (grades 9-12, coded as 1). The moderating variables, “centered length of time x gender” and “centered length of time x early or late adolescence,” were then included in the regression models. Additional regression analyses were completed to examine the moderating effects of the students’ gender and placement in adolescence on the outcome variables. Each model contained the centered length of time variable as the independent variable and the student’s levels of self-esteem and mentor’s influence on the student’s perception of academics as the respective dependent variables. The models used the student’s gender and whether they were in early or late adolescence as control variables. Additionally, each model was run using “centered length of time x early or late adolescence” or “centered length of time x gender” as the moderating variables.

Missing data was not factored into the variable composites. As the questions that make up each variable did not require answers, not all of the subjects responded to every single question. However, all respondents’ complete responses were used when calculating each new variable. The missing data (either unanswered questions or questions in which the respondents answered “Not Sure”) was recoded as 3 and labeled as “missing values” in SPSS. Although there were 305 students who completed the survey in grades five through twelve, only 276 students indicated that they were mentored for at least one year. The missing data includes 29 students who either did not answer the survey question or indicated that they were mentored for less

than one year, but did not elaborate on an exact length of time that they were mentored.

Chapter 4

RESULTS

Two multiple regressions were performed, using “Length of Time,” as the independent variable, and controlling for “early versus late adolescence,” and “adolescent gender.” Additional multiple regression analyses were performed to examine the moderating effects using the “centered length of time that a student was mentored” as the independent variable, and controlling for “early versus late adolescence,” and “adolescent gender.”

Length of Time of the Mentoring Relationship

Of the 276 students who reported the length of time they were mentored, approximately 40% of the students reported being mentored for 1 year, 25.6% reported having a mentor for 2 years; the remaining 35.2% of the students reported having a mentor anywhere from 3 to 9 years. The mean number of years a student was mentored was 2.16 years, ($SD= 1.6$). Table 1 shows the reported length of time that students had a mentor.

Self-Esteem

A multiple regression analysis was completed using self-esteem as the dependent variable and length of time that a student was mentored, gender, and whether the student was in early or late adolescence as independent variables. Table 2 shows the percentage of responses from the sample for each survey question that was used to compute the self-esteem variable. Results showed that, when controlling for the student's gender and whether the student was in early or late adolescence, the number of years that a student is mentored was found to be positively associated with the student's levels of self-esteem ($b = .165, p \leq .01$). Upon interpreting the statistical significance of the regression analysis, it was found that for every one year that a student was mentored, the student's level of self-esteem increased by .165, when controlling for the student gender and whether the student was in early or later adolescence. R^2 is reported as .066, suggesting that approximately 7% of the variance is accounted for by the variables in the model. The model and results for the student's levels of self-esteem variable are shown in Table 3.

Mentor's Influence on Student's Perception of Academics

A multiple regression analysis was completed in order to test the hypothesis that length of time that a student was mentored had a significant, positive relationship with mentor's influence on the student's perception of academics. Table 4 shows the percentage of responses from the sample for each survey question that was used to compute the mentor's influence on the student's perception of academics variable.

Mentor influence on the student's perception of academics was included in the regression model as the dependent variable, while gender and whether the student was in early or late adolescence as control variables. Results showed that, when controlling for the student's gender and whether the student is in early or late adolescence, the number of years that a student is mentored was found to be positively associated with the student's perception of academics ($b = .179, p \leq .01$). When interpreting the regression analysis, it was found that for every one year that the student is mentored, the student's perception of academics will increase by .179, when controlling for the student's gender and whether the student was in early or later adolescence. R^2 is reported as .131, which means that 13.1% of the variance is accounted for by the variables in the model. The model and results for the "mentor's influence on student's perception of academics" variable are shown in Table 5.

Moderating Variables

To test the hypothesis that student's gender would moderate the association between length of time that a student was mentored and the student's levels of self-esteem, a regression model was created that included the student's self-esteem as the dependent variable and the length of time that a student was mentored as the independent variable. The control variables included were whether the student was in early or late adolescence and the student's gender. It was found that gender had a moderating effect on self-esteem ($b = .173, p < .05$), such that for every one year that a girl was mentored, her level of self-esteem will increase by .173. Figure 1 shows the

difference between boys and girls' levels of self-esteem. The model and results for the moderating variable are shown in Table 6. Findings suggested that girls report more positive beginning levels of self-esteem overall, and those levels only increased the longer the girls were mentored. R^2 is reported as .08, suggesting that 8% of the variance is accounted for by the variables in the model. While boys also show increasing levels of self-esteem, the initial average of reported levels of self-esteem were lower than girls, and did not increase as drastically between having been mentored for a short length of time and a long length of time. There were no statistically significant results when examining the moderating effects of the student's gender on the mentor's influence on the student's perception of academics.

The regression model to examine moderating effects of whether the student is in early or late adolescence on the student's levels of self-esteem and mentor's influence on the student's perception of academics did not yield any significant results.

Post-hoc analysis showed that there was a positive relationship between the predictors (length of time that the student has been mentored, student's gender, and where they are in adolescence) and the outcome (self-esteem and mentor's influence on the student's perception of academics).

Chapter 5

DISCUSSION

Using data from the Creative Mentoring end of the year surveys from the 2013-2014 school year, the current study explored the relationship between the length of time that a student was mentored and the student's levels of self-esteem and mentor's influence on the student's perception of academics. Additionally, this study examined the moderating variables of gender and whether the student was in early (grades 5-8) or late (grades 9-12) adolescence.

The students who participated in the Creative Mentoring school-based program in the 2013-2014 school year exhibited higher levels of self-esteem the longer they were mentored. Additionally, the mentors were shown to be a positive influence on the students' perceptions of academics the longer that they were with their mentor. There were also differences between girls and boys and their levels of self-esteem: the longer that girls were mentored, the higher their levels of self-esteem when compared to boys. These findings are consistent with previous research (Bayer et al., 2013; Herrera et al., 2007; Karcher, 2008; Rhodes et al., 2002).

Consistent with the findings of this study, the literature suggests that school-based mentoring program result in positive outcomes for adolescents, such as more positive levels of self-esteem and a more positive perception of academics (DuBois et

al., 2002; Herrera et al., 2011; Herrera et al., 2013; Schwartz et al., 2011).

Additionally, researchers have found that longer mentoring relationships yield more positive results (Grossman et al., 2012; Grossman & Johnson, 1999; Grossman & Rhodes, 2002; Rhodes & DuBois, 2008).

Self-Esteem

The findings suggested that the longer a student is mentored, the higher her or his levels of self-esteem. Previous research has shown that students, especially those in their adolescent years, often struggle with maintaining positive levels of self-esteem (Rhodes et al., 2003). Students with low or declining levels of self-esteem are at risk for emotional or psychosocial difficulties, declining success in academics, and engaging in delinquent behaviors (Rhodes et al., 2003). The findings from the present study align with Rhodes et al.'s (2003) implications for future research that interventions, such as school-based mentoring programs, help to curb declining levels of adolescents' self-esteem. Not only does mentoring prevent declining levels of self-esteem, it has been found to increase student levels of self-esteem, as found by the present study and Karcher (2008) and Converse and Lignugaris/Kraft (2009). Students who are given the opportunity to participate in programs that are based in positive youth development, such as school-based mentoring programs, are given the opportunity to engage in a positive relationship with an older, caring adult who will help them to realize their full potential (Lerner et al., 2005) and increase the student's levels of self-esteem.

Mentor's Influence on Student's Perception of Academics

Positive correlations were also found between the length of time of the mentoring relationship and the mentor's influence on the student's perceptions of academics. Longer mentoring relationships were related to more positive attitudes towards school and academics overall. Research shows that mentoring has a direct effect on students' grades and attendance in school (Bayer et al., 2013; Rhodes et al., 2002). Moreover, students in longer lasting mentoring relationships exhibited improvement in their attitudes towards school versus their peers who were not in mentoring relationships (Converse and Lignugaris/Kraft, 2009; Herrera et al., 2013). As students engage with mentors who show positive attitudes towards school and academics, their mentors positively influence them, as is consistent with social learning theory (Bandura, 1971). Consistent with previous research, students in longer-lasting mentoring relationships within the Creative Mentoring program reported more positive perceptions of academics.

The findings for academic perceptions in the present study were closely aligned with those of Herrera et al., (2013)'s study on youth who participated in a Big Brothers Big Sisters mentoring program. Students in both the present study and Herrera et al., (2013)'s study reported more positive perceptions towards school and academics following at least one year of mentoring. In line with Bandura's (1971) social learning theory, mentors influenced their mentees to view academic-related activities as important through the activities that were reported in the end of the year survey (doing math, reading, and doing homework). Additionally, mentors have

positively influenced their mentee's perception of academics through encouraging their mentees to do well in school, studying with them during mentoring sessions, and explaining work in new or different ways. Mentoring has also been shown to impact student academic outcomes (Bayer et al., 2013; Rhodes et al., 2002). However, the present study did not have access to student academic records, and therefore could not determine the impact of mentoring on students' grades.

Influence of Gender and Early Adolescence

As found in previous research, gender has been found to moderate the self-esteem outcome variable (Karcher, 2008). In the present study, girls showed more positive levels of self-esteem, and those levels of self-esteem only increase for those girls who have been mentored for an extended period of time. These results are consistent with Karcher's (2008) findings that girls reported more positive levels of self-esteem than boys because they participated in a school-based mentoring program. Steinberg and Morris (2001) report that higher levels of self-esteem correlate with parental approval, peer support, and academic success, therefore, it is possible that the present study and Karcher's (2008) study share similar findings because the girls in both studies already have stronger support networks than their male classmates in the mentoring programs.

Limitations

The present study is not without limitations. First, only a limited number of control variables were included in the study. For instance, other important controls such as race/ethnicity or students' socioeconomic background may influence the mentor-mentee relationship. Past research has shown that mentoring seems to have more positive effects on youth from lower socio-economic backgrounds compared to youth from higher socio-economic backgrounds (DuBois et al., 2011). Future research should aim to include more control variables; as such inclusion is likely to yield more accurate interpretation of the findings. The only demographic information that could be drawn from the data was the students' gender and whether they were in early adolescence or late adolescence, which was determined by the student's reported grade level.

The present study was based on secondary data analysis. As such, the data did not include students' grades, academic records, or attendance records. The lack of academic records, as previously stated, hindered the present study from examining the impact of mentoring on the students' grades. It was also not possible to determine how participation in the mentoring program affected the student's attendance in school. The survey also did not allow for the respondents to answer using a numeric value when asking how long he or she had been mentored. The question allowed for answers to be typed in using words or numbers, and did not give specific time frames as a response option if students were mentored for less than one year. When

interpreting the data, this response option limited the sample size to students who reported to being mentored for at least one year.

A typical Creative Mentoring program encourages mentoring matches to meet for up to one hour each week (Creative Mentoring, 2013). However, the survey did not ask for how long each mentoring pair met each week, nor did it ask precisely how many times each mentoring pair met. Previous research does show that dosage plays an integral role in the quality of the mentoring relationship (Karcher et al., 2006), and leads to longer-lasting mentoring relationships. It may be beneficial for future research for the Creative Mentoring survey to ask students to report how many times and for how long they met with their mentor in a school-year, as the level of dosage combined with the length of the mentoring relationship may yield stronger correlations between how long a student has been mentored and the positive outcomes.

Finally, surveys were only administered at the end of the school year, thereby only capturing the students' reports of their mentoring experience after the mentoring occurred. Ideally, surveys could be administered at both the beginning and end of the school year to students in the mentoring program, as it would allow for comparisons between the pre- and post-mentoring outcomes. Despite the limitations, it is important to note that the present study is specific to a single state wide mentoring initiative rather than a nation-wide program. While there have been a multitude of studies that focus on the effects of mentoring within the context of schools, none have focused on mentoring programs that are offered in schools throughout one state. The Creative Mentoring Program is unique to Delaware and has not yet been replicated in schools

in neighboring states. In the event that the Creative Mentoring program is replicated in schools in neighboring states, another evaluation of the outcomes may be conducted to see if the program produces similar relationships between length of mentoring and students' self-esteem and the mentor's influence on students' perceptions of academics to those found in Delaware.

These findings are consistent with both positive youth development theory and social learning theory. Creative Mentoring, as a school-based mentoring program, has been shown to increase students' levels of self-esteem; students reported that their mentor made them feel more confident, one of the five C's of PYD (Lerner, 2005). Additionally, mentors in the Creative Mentoring program model an appreciation for academic success, thereby instilling a more positive perception of academics within the mentees. By role modeling an appreciation for academics, mentors are applying the core elements of Bandura's social learning theory (Bandura, 1971).

Implications

School-based mentoring programs offer a multitude of benefits to students who may be struggling in academics, struggling with low or declining levels of self-esteem, or simply need the positive influence of a caring adult in their lives (Herrera et al., 2011; Herrera et al., 2013; Rhodes & DuBois, 2008). In line with previous research, findings from the current study suggests that the length of time that a student is mentored positively impacts the student's levels of self-esteem and the level of influence that the mentor has on the student's perception of academics, (Bayer et al.,

2013; Grossman & Rhodes, 2002; Herrera et al., 2013; Karcher, 2008; Rhodes et al., 2000; Schwartz et al., 2011). Practitioners and researchers alike should be aware that the length of a mentoring relationship is dependent on several factors: the strength of the relationship (i.e., closeness and levels of trust) (Grossman & Rhodes, 2008); the way in which the mentor and the mentee are matched (preferably, based on common interests) (Connecting Generations, 2012); and the amount of supports provided to the mentoring pair by the program coordinator (Connecting Generations, 2012).

Additionally, school-based mentoring programs have the potential to reach far more students than community-based mentoring programs. School-based programs have resources available that might not otherwise be accessible, such as academic supports and enrichment, designated spaces set aside just for mentoring to occur, and program coordinators who are available to all mentoring pairs. Students are also required by law to attend school, therefore ensuring that, most of the time, they will be present at school on days when mentoring is scheduled.

These combined elements, in addition to proper training of mentors and ample support from the school in which the program is housed, all have the potential to allow for adolescents and youth to experience mentoring in a positive way, thereby creating young people with high levels of self-esteem who look up to their mentor and enjoy spending time with them and who are more committed to academic success.

It may benefit Creative Mentoring and Connecting Generations, Inc. to include more specific survey questions that ask students about their demographic information, such as race or ethnicity, and their academics, such as whether or not their grades

improved in core subjects (math and English). An examination of the mentor surveys, parents of mentee surveys, and teachers of mentee surveys would yield further insight into the positive effects of the Creative Mentoring program, as analyses on those surveys provide yet another lens into how the program is supporting students.

TABLES

Table 1

<i>Descriptives of Sample</i>			
	<u>Gender</u>	<u>Frequency</u>	<u>Percent</u>
	Female	178	58%
	Male	127	42%
Total		305	100%

<i>Number of Years Students Were Mentored</i>			
	<u>Number of Years</u>	<u>Frequency</u>	<u>Percent</u>
	1	120	43.5
	2	78	28.3
	3	43	15.6
	4	16	5.8
	5	2	.7
	6	8	2.9
	7	4	1.3
	8	4	1.3
	9	1	.3
	Total	276	90.5
Missing	System	29	9.5
Total		305	100

$M=2.16$ $SD=1.6$

Table 2

<i>Survey Questions and Mentee Responses: Self-Esteem</i>	
<u>Survey Question</u>	<u>Percentage of Responses from Mentees</u>
My mentor makes me feel more confident	76%
My mentor makes me feel smart	64%
My mentor makes me feel excited about my future	63%
My mentor makes me feel better about myself	73%
My mentor makes me feel important or special	63%

$M = 3.4$ $SD = 1.6$

Table 3

Predictors of Self-Esteem

Variable	<i>b</i>	Self-Esteem	
		SE (<i>B</i>)	β
How many years have the student been mentored?	.172	.212	.165*
Adolescent Gender	.302	.193	.092
Early or Late Adolescence	.618	.202	.181*

Notes. $R^2 = .066$; * Significant at $p < .05$

Table 4

Survey Questions and Mentee Responses: Mentor's Influence on the Student's Perception of Academics

<u>Survey Question</u>	<u>Percentage of Responses from Mentees</u>
My mentor helps me with my homework	50%
I enjoy school more because I had a mentor	80%
I am doing better in school because I had a mentor	73%
We read during mentoring sessions	28%
We do homework during mentoring sessions	38%
We do math during mentoring sessions	23%
My mentor helped me to improve my grades by encouraging me	77%
My mentor helped me to improve my grades by studying with me	36%
My mentor helped me to improve my grades by explaining my work in a new way	51%

$M = .08$; $SD = 4.9$

Table 5

Predictors of Mentor's Influence on Student's Perception of Academics Analysis

Variable	<i>b</i>	Mentor's Influence on Student's Perception of Academics	
		SE (<i>B</i>)	β
How many years have the student been mentored?	.566	.179	.179*
Adolescent Gender	.926	.563	.093
Early or Late Adolescence	3.180	.589	.307**

Notes. $R^2 = .131$; * Significant at $p < .05$; ** significant at $p < .001$

Table 6

Predictors of Gender as Moderating Variable

Variable	<i>b</i>	Gender as moderating variable	
		SE (<i>B</i>)	β
How many years have the student been mentored?	.043	.087	.041
Adolescent Gender	.298	.192	.091
Early or Late Adolescence	.615	.201	.180*
Length of time (centered) x gender	.252	.122	.173*

Notes. $R^2 = .080$; * Significant at $p < .05$

FIGURES

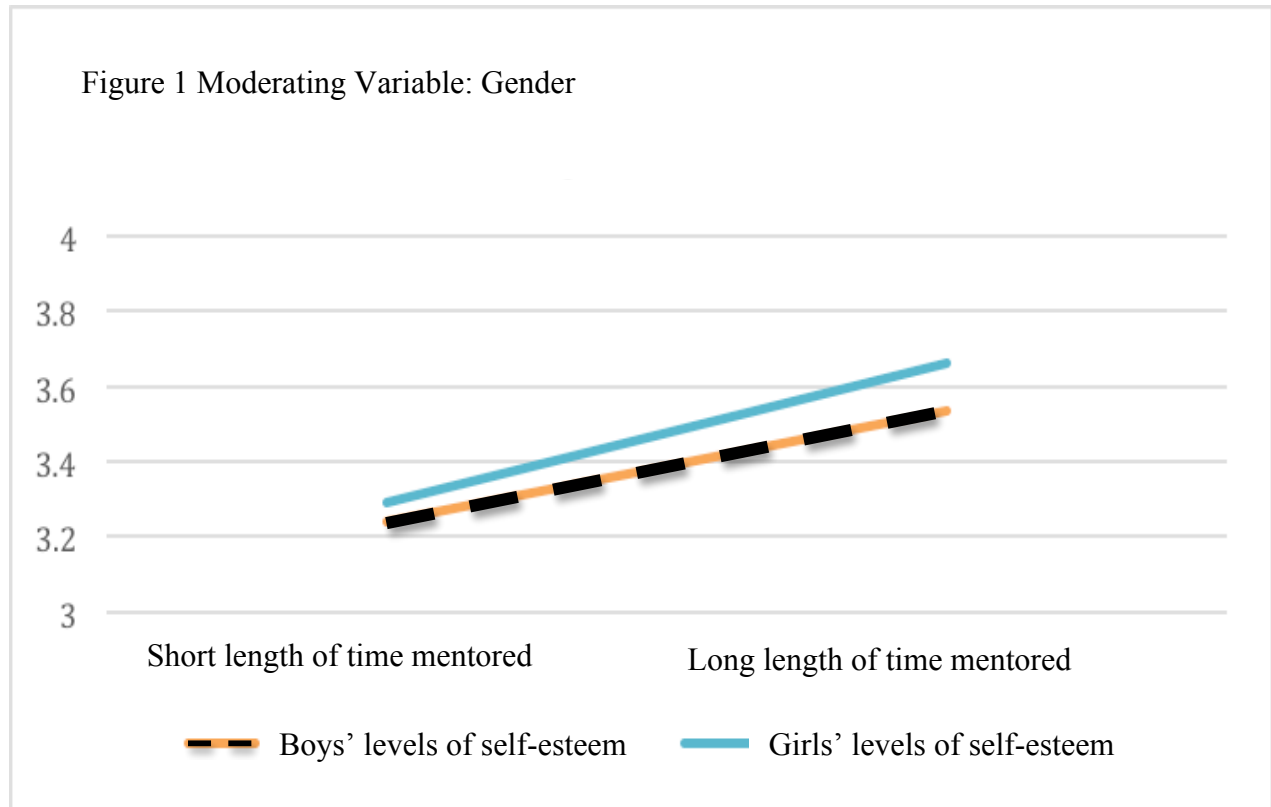


Figure 1 This figure illustrates the increase in student's levels of self-esteem over time from being mentored.

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Appendix A

CREATIVE MENTORING SURVEY



Mentee Survey 2013 - 2014

Thank you for being a part of the mentoring program this year. Please fill out the survey below. Your answers are very important and will help us make our program even better!

1. Name:

2. Gender:

☐

Male

☐

Female

3. School Name:

4. Teacher's Name (or Home Room Teacher):

5. Grade:

☐

K

☐

5

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10

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1

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6

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11

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2

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7

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12

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3

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8

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4

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9

6. Mentor's Name:

7. Mentor's Gender:

- ☐ Male
- ☐ Female

8. Is the student's mentor a high school student?

- ☐ Yes
- ☐ No

If Yes, from what high school?

9. How many years have the student been mentored?

10. If more than one, has the student had the same mentor?

- ☐ Yes
- ☐ No



Mentee Survey 2013 - 2014

11. Please consider how you feel about your mentor and the mentoring relationship and check the column that shows how much you agree with the following statements.

	Yes	No	Not Sure
I enjoy spending time with my mentor.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I learn new things from my mentor.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My mentor helps me with my homework.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I can talk with my mentor about anything.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I enjoy school more because I have a mentor.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am doing better in school because I have a mentor.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I can depend on my mentor.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

12. Please tell what you do with your mentor during your mentoring sessions: (check all that apply).

<input type="checkbox"/> Talk	<input type="checkbox"/> Play games (board games or computer)
<input type="checkbox"/> Read	<input type="checkbox"/> Do math
<input type="checkbox"/> Do homework	<input type="checkbox"/> Go to the library
<input type="checkbox"/> Do arts and crafts	<input type="checkbox"/> Eat lunch

13. My mentor makes me feel: (check all that apply)

<input type="checkbox"/> More confident
<input type="checkbox"/> Smart
<input type="checkbox"/> Excited about my future
<input type="checkbox"/> Better about myself
<input type="checkbox"/> Important/Special
<input type="checkbox"/> Other:
<input type="text"/>

14. My mentor has helped me improve my grades by: (check all that apply)

- ☐ Encouraging me
- ☐ Studying with me
- ☐ Explaining my work to me in a new way
- ☐ My mentor has not helped me improve my grades
- ☐ Other:



Mentee Survey 2013 - 2014

High School Students Only:

15. Because my mentor volunteers to spend time with me, I now think I want to be a volunteer to help someone else.

- ☐ Yes
- ☐ No

16. How sure are you that you will:

	Very Sure	Mostly Sure	Not Really Sure	Not Sure at All
Finish high school	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Go to college/trade school	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Finish college/trade school	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Do well in the world	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Appendix B

PERMISSION TO USE DATA

From: Jennifer Marek <jmarek@connecting-generations.org> April 18, 2016
To: Margo Price <mgo@udel.edu>

Hi Margo,

Please accept this email as permission to use the Connecting Generations end of year surveys. We are excited to see your finished thesis and wish you all the best.

Thank you and please contact me with any questions.

Jen Marek
Director of Mentoring

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Connecting Generations, home of the Creative Mentoring and Seasons of Respect programs

We connect generations in ways that help children and adults build purposeful, fulfilling and self-directed lives.