

First-Generation, Income-Eligible Peer Mentor Study

Introduction

In 1965, the U.S. Department of Education passed legislation that identified first-generation, income-eligible college students as an at-risk population (Martin, 1999). By “first-generation, income-eligible,” the U.S. Department of Education meant students who would be the first in their family to graduate from a four-year college or university, and who had family incomes that were under 150% of the poverty level. The taxable income for a family of four should not exceed \$31,800 in 2008 to be eligible.

Statement of the Problem

Despite the long history of mentoring in academic environments, little research to support its effectiveness exists (Blackwell, 1996). The research that has been done focuses mainly on the impact of the mentoring relationship on the mentee; it considers mentoring as a positive experience because of the growth and development the mentees enjoy (Good, Halpin & Halpin, 2000). Perhaps such a focus on mentees seems reasonable in programs that employ professional mentors to initiate novices or students, but many educational mentoring programs that have been implemented with the idea of helping mentees attain a certain skill or reach a goal have included peer mentors, individuals who are themselves students or participants in the educational program in which they mentor. Despite the proliferation of peer mentoring programs, little research has been conducted to consider the peer mentor and his or her role in a mentoring relationship. Mentoring administrators who consider a mentoring relationship only from the perspective of the mentee fail to recognize that mentoring can also benefit the peer mentor. Failure to acknowledge this concept implies that administrators are not utilizing mentoring to its full potential. When administrators recognize mentoring relationships as reciprocal, mentoring can be used more efficiently as a developmental, retention, and recruiting strategy, which also would be more cost-effective.

This study focuses on at-risk peer mentors in a mentoring program and examines to what extent their grade point average (GPA), retention, graduation rate, and leadership abilities are affected by interacting in a mentoring relationship. Since this study demonstrates positive effects, then administrators in mentoring and student development programs may be able to use this information as they develop their programs and the long-term goals for the programs, mentees, and peer mentors.

Significance of Research

For the last 11 years, a midwestern university’s Student Support Services (SSS) has maintained a peer mentoring program. This is a federally funded program that helps first-generation college and university students who meet a lower-income eligibility criterion navigate their way through the academic pipeline and earn a bachelor’s degree. The SSS peer mentors provide friendship and academic- and college-success tutoring, facilitate small learning sessions in classes, and serve as positive role models to the mentees.

The hypothesis is that these are reciprocal relationships that also benefit the mentors. In short, the mentors appear to enjoy many opportunities to grow in an academic environment, develop skills and competencies, and practice leadership. Those working in programs utilizing peer mentors may begin to re-conceptualize their program goals for mentors, moving mentoring from the view of an opportunity to help mentees to the view of an opportunity to encourage mentees to become mentors and leaders, which changes their destiny and gives them a more active voice in society. For example, many administrators of developmental and mentoring programs look outside of their at-risk population for tutoring and mentoring support. Recognizing and creating opportunities for at-risk students to become mentors is a concept that is not implemented in many programs today. A model where mentees have an opportunity to become leaders, receive leadership training, and see themselves through the eyes of others could have far-reaching implications toward student success. Gartner and Riessman (1993) stated that developmental programs have been recognized as ... “peripheral and remedial activity” (p. 2). The process of students (mentees) becoming leaders is a concept that could be built into programs. In addition, the development of students (mentees) becoming leaders could be used as a retention and recruitment strategy since the research has proven successful. In view of the fact that SSS is a national program, the results of this research will be shared with other SSS and developmental programs across the country, thereby encouraging more programs to utilize mentoring as a tool to develop leaders.

Definitions

SSS-Eligible Criteria: The criteria the participants must meet are the following. The participants must complete UNIV 1010: Freshman Seminar and UNIV 1020: Career Exploration and Development courses with a grade of BA or better. They must also have a GPA of 2.5 or better and pass the interview process. The interview process consists of a meeting with the Program Services Coordinator. The students must bring their resume and references, and answer questions about themselves and SSS. The successful candidates will be enthusiastic about both SSS and the mentoring program. They will be caring, good communicators, and understand the goals of SSS.

01. Non-Eligible Students are regularly admitted Western Michigan University (WMU) Students who are not classified as part of an at-risk population according to SSS criteria.
02. Eligible Students are WMU students who are eligible for the SSS program.
03. SSS-Eligible Non- Participants are WMU students who are eligible for the SSS program but have chosen not to be a part of the program, or were not selected because the program has reached its capacity.
04. SSS Participants are WMU eligible students who have been admitted to the SSS program.
05. SSS Participants: Mentor Ineligible are SSS participants who have not met the criteria to become mentors.
06. SSS-Eligible Mentors are SSS participants who have met all the criteria to become mentors, and the interview opportunity still exists.
07. SSS-Eligible Non-Mentors are SSS participants who have met all the criteria, but have decided not to apply for the position of SSS peer mentor.
08. SSS Peer Mentors are SSS participants who meet the criteria and are selected to be peer mentors in the SSS program.

Literature Review

Authors often describe mentors as guides and helpers to the mentee (Bond, 1999; Parkay, 1988; Wallace & Abel, 1997). But this definition, like much of the research on mentoring, fails to describe mentoring as a reciprocal relationship that has an effect on both the mentor and the mentee. This research, therefore, moves into uncharted waters and provides an analysis of the ways in which assessment can be used to clarify the effect upon the mentor, the factor currently not addressed by the literature.

According to Bond (1999), both the mentor and the mentee benefit from the mentoring relationship. The mentee learns skills and accomplishes goals and objectives. The mentor may feel a heightened sense of satisfaction and confidence and improve his or her listening and interpersonal skills.

Two studies, one by Good, Halpin, and Halpin (2000) and one by Rhyan (1995), that discussed the mentoring experience and identified the benefits to the mentee, mentioned in their conclusions and summaries that the mentors also benefited from the mentoring relationship. Good, Halpin, and Halpin discussed a study that was completed at a large southeastern university with freshmen engineering minority students who had peer mentors. acting as both mentors and academic tutors, the peer mentors helped the freshmen with math and study skills, shared experiences about their own freshman year, and attended movies and bowling outings with the freshmen. The intent of the program was to increase retention for minority engineering students. To gather information about the program's intent, administrators asked the peer mentors to keep journals. Entries in the mentors' journals disclosed that the mentors recognized their own academic growth, improved study skills, critical thinking, and a better understanding of engineering concepts. Mentors also wrote in their journals that they had developed good communication and leadership skills and had developed more self-confidence and self-satisfaction. While reading through the journals, the program coordinator observed mentor comments on personal and academic growth.

Good, Halpin, and Halpin (2000) continued their inquiries of the minority freshmen engineering students. The researchers did not have a cohort group, but they were able to look at trends. The mentors' mean GPA increased from 2.62 to 2.76, and 80% of the students persisted and graduated. Previous studies indicated that minority engineering student retention for the first year was 35.6 percent. The Good, Halpin, and Halpin (2000) study is very convincing because the mentors' comments were unsolicited. Although Good, Halpin, and Halpin concentrated on the benefits to the mentors in their study, they did state that mentoring relationships provided an "exchange of benefits" (Good, Halpin, and Halpin, 2000, Conclusion section, ¶ 3), which is a good indication that they believed the relationship to be reciprocal.

Another good example of a study that identified a reciprocal relationship is Rhyan's (1995) 12-week qualitative study of a peer mentoring program for nine fifth-grade students that was developed to observe their discipline problems and behavior in an art environment. The goal of the study was to see if the mentoring reduced unacceptable behavior and developed positive interaction and behavior among the mentees by 80%. Mentors were required to keep weekly log entries. Rhyan discovered from reviewing entries in weekly logs that the peer mentors felt important, useful, and helpful and had learned new skills. Ryan also noted that the goals of the study were accomplished. Again, this study inadvertently discovered that both the mentee and the mentor benefited from a mentoring relationship.

Research Design and Methodology

The research model and design for this study involved use of both quantitative and qualitative methods. The quantitative longitudinal study utilized data from the 1998–99 through 2005–06 academic years. The data consist of

student names, addresses, social security numbers, and end-of-year CGPAs. GPA and retention and graduation rates are computed at the end of each academic year by determining the total number of students graduated or remaining versus the total number of students who started as freshmen at the university, starting with the 1998 cohort. This study compares *Peer Mentors* and four other student groups: *Non-Eligible*, *SSS Non-Participants*; *SSS Participants*; *Mentor Ineligible*; and *SSS-Eligible Non-Mentors*.

Quantitative Method

There were over 33,000 students used in this research project from which the samples were originally drawn from each cohort year. A filter (< 2004) was used in the SPSS program to drop students who started in 2004 and subsequent academic years. These students were eliminated from all computations because they did not have a full four years to graduate before the close of the study. CGPA and years to graduate (Yrs To Grad) for all retained students who graduated were calculated. Table 1 below illustrates the comparative groups by starting cohort year from 1998–2003 (2004 and 2005 have been filtered out).

Table 1

Group Level by Starting Cohort Years

Group Level	Group Level Starting Cohort Years						Total
	1998	1999	2000	2001	2002	2003	
Non-Eligible	172	196	210	217	297	273	1365
Eligible Non-Part	97	111	129	123	176	161	797
Participant	27	38	39	26	49	42	221
Eligible Non-Mentor	5	3	5	16	11	8	48
Mentor	5	6	5	7	3	6	32
Total	306	354	388	389	536	490	2463

Female participants made up 66% and male participants 34% with an age range from 18 to 19. Five ethnicities were represented by the participants in this study. Caucasian is represented at 85.4%. African American is represented at 10.3%. Hispanic is represented at 2.4%. Asian is represented at 1.5%, and American Indian/Pacific Islander is represented at .4%.

Five colleges and an “other” category were used to describe the career paths that the participants selected when they entered the university. Participants may have changed major and college, but that information was not considered in this study. The College of Engineering is represented at 6%; Business at 23%; Education at 11%; Arts and Sciences at 15%; and other and non-degree programs at 45%. The distribution of gender, ethnicities, and college resulted primarily because these were the ratios in the mentor groups that were used for matching.

Data Collection and Analysis Procedures

The SSS participants were identified from the SSS attendance records. The entire population was used, approximately 60 students who were recruited as freshmen from each cohort year. A data file of SSS non-participants was created, which was extracted from computer print-outs from the Department of Admissions and Financial Aid. Once it was established who qualified for SSS but did not receive services (SSS non-participants) in any cohort year (1998–2005), those students were extracted from the university’s freshmen population, leaving remaining students who did not qualify for SSS to form the non-eligible student population. Student records are housed in the university’s student information system. From the population of students who did not qualify for SSS, five small randomly matched samples of the non-eligible student groups and three small randomly matched samples of the SSS non-participants student group were drawn from the students who did qualify for SSS. The replication of the sample groups was done so that the sample sizes would be similar, thereby maintaining a reasonable balance of the design. All the random sampling was done using a matched-comparison technique (software), which was created by Dr. Edward Applegate and Dr. Warren Lacefield. Both Dr. Applegate and Dr. Lacefield are professors at Western Michigan University in the Department of Education Leadership, Research, and Technology.

A random-matching algorithm program (written using the SAS statistical programming language) was designed so that the study’s demographic variables of ethnicity, gender, age, and college could be evenly matched in all the comparative groups using the mentor group as the control. As a result, random-matched samples were drawn from each group-level population, thereby creating a reasonably balanced design and controlling potential demographic variation effects through random selection. The data were placed into an SPSS database, which was used to generate descriptive statistics and to run analyses of variance based on generalized linear and logistic ANOVA models.

The research design included three separate models of increasing sophistication; however, Model Two, which involved a Five-Group, One-way, Generalized Linear or Logistic ANOVA is the only model that will be displayed for this abstract application. (The linear-normal model was used to analyze Yrs to Grad and CGPA at graduation. A binary-logistic model was used to analyze Grad Status (Rate).)

Model Two examined effects on the dependent variables Grad Status, Yrs To Grad, and CGPA also as a function of the independent variable Group, which this time was divided into five levels (Non-Eligible, SSS-Eligible Non-Participant, SSS Participant Non-Mentor Eligible, SSS Mentor-Eligible Non-Participating, and SSS Mentor). This model provided opportunity to examine mentor effects.

Qualitative Method

Description of the Qualitative Sample

Description of the Focus Group and the Structured Interview Participants

There were 13 participants in the entire study (5 focus group participants and 8 structured interview participants). Eighty-five percent of the participants were female ($n = 11$), and 15% were male ($n = 3$). Thirty-one percent of the participants ($n = 4$) were African American, and 69% ($n = 9$) were Caucasian. The class level for the participants ranged from sophomore to senior. The average length of time a participant served in the SSS program as a mentor was 2.92 years. Thirty-one percent ($n = 4$) were in the College of Business, 46% ($n = 6$) in Education, 15% ($n = 2$) in Health and Human Services, and 8% ($n = 1$) were in the College of Arts and Sciences. The graduated mentors had been graduated from the university for an average period of 4.83 years from the time of the interviews.

Data Collection and Analysis Procedures

Pilot Test

A pilot test (structured interview) was done with two of the current peer mentors. This was an opportunity to: (1) test the interview questions, (2) determine the time requirements, and (3) practice using the digital voice recorder. There were no changes made to the original questions.

Selection of the Participants—Focus Group (Current Mentors)

Five current mentors participated in the focus group. All were given information about the dissertation topic and sent consent forms. The session lasted approximately 45 minutes. An interview protocol was utilized to ensure the research questions were adequately covered while allowing for free conversation within a topic area. Because the peer mentors were currently working for or had worked for the researcher, an interviewer was hired to conduct both the focus group and structured interviews. The first five mentors were selected to participate in the focus group, and the next two were asked to participate in the structured interviews, which were to serve as a pilot test. The researcher and the student interviewer did not feel the need to change any of the questions per the pilot test.

Mentors were told they could leave at any time they felt uncomfortable. They could also ask questions to clarify any information that was presented to them, and their identity would not be disclosed to the researcher. They were also informed that the session was being taped with a voice recorder.

The student interviewer presented four topic areas: leadership, self-worth, self-esteem, self-confidence, and a one-word catch-all response at the end of the session. The group was given a definition of each topic area and then presented with several questions about the topic to ascertain if the mentors felt that participation as a mentor had an impact on them regarding the previously mentioned topics.

Selection of the Participants—Structured Interview Graduated Mentors

Approximately 30 mentors graduated from the midwestern university. A random sample was selected by placing all the mentors' names in a container and making a selection. Mentors were sent information letters and consent forms. They could show their interest and willingness to participate by sending the consent forms and all questions to the student interviewer, who had been asked to assist. Six graduated mentors confirmed by sending consent forms to the student interviewer. All the structured interviews were done by phone including the two current mentors' structured interviews (pilot test).

The student interviewer identified herself, and took a few minutes to explain that the interview was being taped and that the participant could stop the interview at any time. The student interviewer asked if the participant had any questions, and then the questioning started. The same protocol was used for both the focus group and the structured interviews. Open-ended questions were used and the participants had plenty of time to ask questions and respond. Once the structured interviews and focus group were concluded, the audio files were transcribed for accurate recording of the interviews.

Results and Findings quantitative

This section presents the results of the quantitative elements of this mixed-methods investigation. The quantitative research questions and accompanying hypotheses are examined. Research Question: The questions guiding this research is the follows: A. In what ways and to what extent do SSS peer mentors' grade point averages, retention, and graduation rates differ from the following: 1. Non-Eligible students, 2. SSS-Eligible Non-Participants, 3. SSS-Participants: Mentor Ineligible, 4. SSS-Eligible Non-Mentors

Model Two—Five-Group, One-Way, Generalized ANOVA

The second model, which is the main model to support the hypothesis for this study, is illustrated below. This model looks at the five comparative groups and analyzes the mentor effect. A binary-logistic ANOVA is used for Grad Status, and a linear-normal model is used for the other two dependent variables. Note also that group level, which is identified in the tables and charts in Models Two as SSS Participants, represents the sub-group SSS Participant: Mentor Ineligible.

For Model Two, the null hypothesis put forward to operationally define the graduation rate was stated as follows: H_0 : The peer mentors' Graduation Rate will equal that of the Non-Eligible Students, SSS Non-Participants, SSS Participants: Mentor Ineligible, and SSS-Eligible Non-Mentors. All participants were given start dates and placed in cohort groups within each of the five categories. By 2008 (last data-collecting date) either the student had or had not graduated. The chart below illustrates the graduation rate of the SSS Peer Mentor group when compared to the other groups. The mentors' graduation rate surpassed all other groups, including the Non-Eligible (not at-risk) student group. The Wald Chi-Square Test was used to compare the behavior of the five groups when analyzing graduation rates. There was a significant difference ($X^2_{(df=4)} = 11.831, p < .019$) with .005 effective size and observed power of .82 between the five groups, indicating that the null hypothesis can be rejected. Table 2 illustrates that significant difference, and table 3 presents the descriptive statistics.

Table 2

Tests of Model Effects: Graduation Rate

Source	Test of Model Effects			Partial Eta Sq	Observed Power.
	Wald Chi-Square	Type III df	Sig.		
Grplvl	11.831	4	.019	.005	.82

Table 3

Descriptive Statistics for Graduation Rate

Years Taken to Graduate						
Group Level	Non-Eligible	Eligible Non-Part	Participant	Eligible Non-Mentor	Mentor	Total
Mean	4.55	4.61	4.64	4.71	4.48	4.58
N	755	408	111	28	25	1327
Std. Deviation	0.81	0.88	0.80	0.76	0.71	0.83

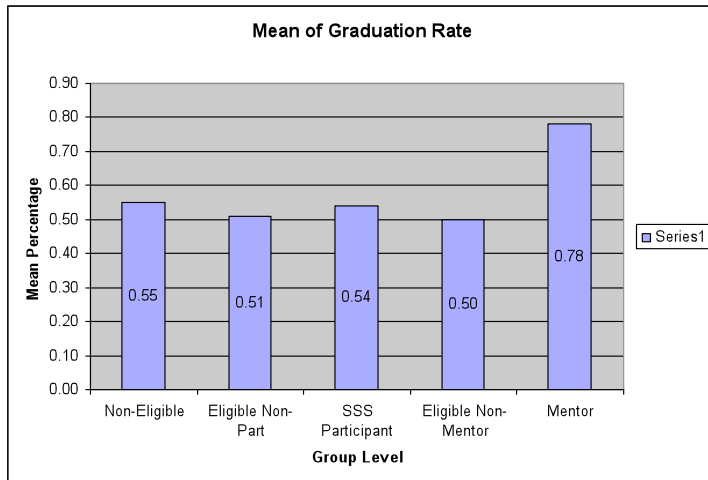
To further investigate the significant difference between the Mentor group and the other groups, a series of one-degree-of-freedom, simple orthogonal contrasts was run. These comparisons were important because a significant difference would indicate that the mentors as a group experienced a higher graduation rate than the other specific comparative groups. Table 4 shows a significant difference between the Mentor and the Non-Eligible groups ($p < .0021$ two-tail and $p < .0010$ one-tail). Since the alternative hypothesis is directional, the two-tail significance test for the X^2 becomes a one-tail significance test (equivalent to a directional t-test) and can be divided by 2. There was also a significant difference when comparing Mentors to Non-Participants ($p < .0003$ two-tail and $p < .0001$ one-tail). There were also significant differences when comparing Mentors to Participants: Mentor Ineligible ($p < .0005$ two-tail and $p < .0003$ one-tail), and Mentors to Eligible Non-Mentors ($p < .0523$ two-tail and $p < .0260$ one-tail). The chart below illustrates the difference in the comparative groups.

Table 4

Planned Comparison of the Mentor Group to the Other Four Levels Using Simple Contrasts

Individual Test Results						
Grouping Level Simple Contrast	Contrast Estimat	Std. Error	Wald Chi-Square	df	2-Tail Sig.	1-Tail Sig.
Level Non-eligible vs. Level Mentor	-0.228	0.074	9.426	1	0.0021	0.0010
Level Eligible Non-Part vs. Level Mentor	-0.269	0.075	12.829	1	0.0003	0.0001
Level Participant vs. Level Mentor	-0.279	0.080	12.027	1	0.0005	0.0003
Level Eligible Non-Mentor vs. Level Mentor	-0.198	0.102	3.765	1	0.0523	0.0260

Chart 4
Mean of Graduation Rate



The Wald Chi-Square Test was used to test mean differences among the five groups when analyzing Yrs To Grad. There was no significant difference ($X^2_{(df=4)} = 2.997, p < .558$) with .002 effect size and .242 observed power between the five groups, indicating that the null hypothesis cannot be rejected. Table 5 displays this significant difference. There was, however, a positive trend between the mentors and the other groups that could be seen in the chart below. This difference indicated that the mentors tended to graduate sooner than did other groups. Table 6 displays the descriptive statistics.

Table 5

Test of Model Effects: Years taken to Graduate

Source	Wald Chi-Square	Type III df	Sig.	Partial Eta Sq	Observed Power
Grplvl	2.997	4	.0558	.002	.242

Chart 5

Mean Years to Graduate

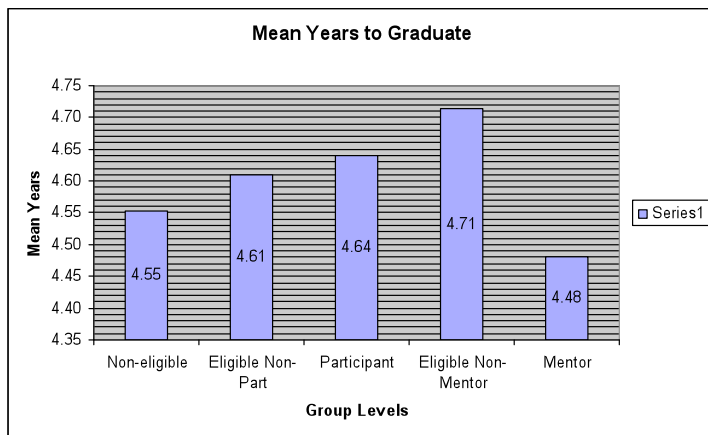


Table 6

Descriptive Statistics for Years Taken to Graduate

Years Taken to Graduate	Non-Eligible	Eligible Non-Part	Participant	Eligible Non-Mentor	Mentor	Total
Group Level						
Mean	4.55	4.61	4.64	4.71	4.48	4.58
N	755	408	111	28	25	1327
Std. Deviation	0.81	0.88	0.80	0.76	0.71	0.83

The third null hypothesis concerning CGPA is: H_0 : The peer mentors' mean grade point average will equal that of the Non-Eligible Students, SSS-Eligible Non-Participants, SSS-Participants: Mentor Ineligible, and SSS-

Eligible Non-Mentors. A linear-normal ANOVA was used to test this hypothesis. A CGPA was computed only for students who graduated. Chart 6 and Table 6 illustrate the success of the SSS Peer Mentors when compared to the other groups. The mentors' mean CGPA was higher than all other groups including the Non-Eligible student group. The Wald Chi-Square Test was used to compare differences between the five groups when analyzing CGPA. There was a significant difference ($X^2_{(df=4)} = 18.359, p < .001$ with a .014 effective size and an observed power of .946 between the five groups, indicating that the null hypothesis cannot be rejected. This information is illustrated in Table 6

Table 6

Test of Model Effects for Cumulative GPA

Test of Model Effects: Cumm GPA

Source	Wald Chi-Square	Type III df	Sig.	Partial Eta Sq	Observed Power.
Grplvl	18.359	4	.001	.014	.946

To identify the source of the significance difference in CGPA, a simple 1-df pairwise contrasts were performed. These comparisons were important because they indicated that the mentors did better academically than other specific comparative groups. Table 7 shows a significant difference between the Mentor and the Non-Eligible group ($p < .0087$ two-tail and $p < .0045$ one-tail). There is a significant difference when comparing Mentors to Non-Participants ($p < .0010$ two-tail and $p < .0005$ one-tail). There is also a significant difference when comparing Mentors to Participants: Mentor Ineligible ($p < .0700$ two-tail and $p < .0350$ one-tail). However, the comparison of Mentors to Eligible Non-Mentors was not significant ($p < .2405$ two-tail and $p < .1200$ one-tail) although trending in the hypothesized direction. Table 8 displays the descriptive statistics, and the chart below shows the comparative differences.

Table 7

Planned Comparison of the Mentor Group to the Other Four Levels Using Simple Contrasts

Individual Test Results						
Grouping Level Simple Contrast	Contrast Estimat	Std. Error	Wald Chi-Square	df	2-Tail Sig.	1-Tail Sig.
Level Non-eligible vs. Level Mentor	-0.219	0.084	6.874	1	0.0087	0.0045
Level Eligible Non-Part vs. Level Mentor	-0.279	0.085	10.827	1	0.0010	0.0005
Level Participant vs. Level Mentor	-0.165	0.091	3.283	1	0.0700	0.0350
Level Eligible Non-Mentor vs. Level Mentor	-0.133	0.113	1.378	1	0.2405	0.1200

Chart 6

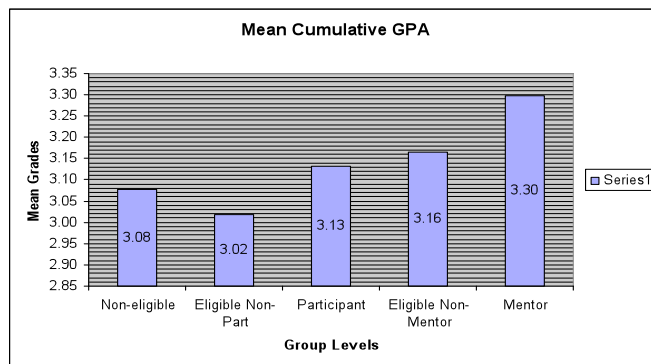


Table 8

Descriptive Statistics for Cumulative GPA

Cumulative GPA at graduation						
Grouping Level	Non-Eligible	Eligible Non-Part	Participant	Eligible Non-Mentor	Mentor	Total
Mean	3.08	3.02	3.13	3.16	3.30	3.07
N	755	408	111	28	25	1327
Std. Deviation	0.43	0.39	0.43	0.42	0.26	0.42

Model Two Summarized

This second model was the main model to support the hypothesis and analyze the mentor effect. Analyzing mean differences among the five group levels (Non-Eligible, Eligible Non-Participant, Participant: Mentor Ineligible, Eligible Non-Mentor, and Mentor) revealed significant differences in Grad Rate ($p < .019$). Analyzing the five group levels in regards to Yrs to Grad showed no significant difference ($p < .558$). However, when examining CGPA, A significant difference was noted ($p < .001$).

Results and Findings (Qualitative)

This section presents the results of the qualitative elements of this mixed-methods investigation. The qualitative research questions and accompanying hypotheses are examined.

Qualitative Analysis

Once the participant interviews were finished and the transcripts prepared, the coding sheets were created to code qualitative data in such a way as to efficiently interpret and analyze the interview results. At the top of each page, one of the five categories was listed with a definition followed by each of the questions. Columns were created to identify “Yes and No” responses, quotes, and to summarize main themes and ideas. The structure that was chosen for the data analysis closely resembled the interview questions. It was felt this structure would provide better support to the research question. Research Question B refers to the qualitative component of the study: In what ways does SSS peer mentoring affect mentors’ development of such attitudes and skills as self-esteem, self-confidence, self-worth, and leadership ability?

The data analysis for the qualitative interviews and focus group was framed around the interview questions and identified the emergent themes. The remainder of this section will follow this format.

Leadership is the ability to make decisions, or have an impact on others. Leadership is also the ability to communicate a vision. (Definition provided to interviewees during the interviews and focus group.)

Did you have mentoring or leadership experience before becoming a SSS peer mentor?

The majority of the students who became leaders had previous leadership experience (85%, $n = 11$) said yes and (15%, $n = 2$) said no. In general, the mentors indicated that they had been involved in student government, sports, helping their friends, and volunteering.

How was the SSS mentoring experience different from your previous mentoring or leadership experience?

The mentors pointed out that the SSS mentoring experience was more structured, and they felt that they needed to be more responsible.

Have your decision-making abilities changed since becoming an SSS peer mentor?

The majority of the mentors (85% $n = 11$) said yes, and (15% $n = 2$) said no.

The mentors felt that the leadership training played an important part in their development. The training and experience as leaders made them more careful and thoughtful and better problem solvers. They also felt their decision-making ability had become quicker and more precise.

Since becoming a SSS peer mentor, how have your communication skills changed?

The majority of the mentors (92%, $n = 12$) said yes, and (8%, $n = 1$) said no. The mentors said that the training and experience helped to make them better mentors. The mentoring experience allowed them to overcome their fear of public speaking, to transcend negativity and doubt generated by others, and to communicate precisely with individuals from diverse backgrounds.

Since becoming a SSS peer mentor, has your ability to influence others changed?

Fifty-four percent ($n = 7$) said yes, and 46% ($n = 6$) said no. Many of the mentors felt that their position as a mentor gave them an edge on influencing students because students trusted them and saw them as role models. Also some students wanted to become peer mentors, and so they followed the mentors’ example. There were a few mentors who expressed doubt about why they were influential. Some mentors felt their campus involvement was the reason why they could influence others. For example, some mentors had become orientation leaders and residence-hall assistants.

Self-esteem is an evaluation of a person’s perception of their self-image. (Definition provided to interviewees during the interviews and focus group.)

Since becoming an SSS peer mentor, have your views changed on how you feel about yourself?

Sixty-nine percent ($n = 9$) said yes, and (31%, $n = 4$) said no. The mentors that said “no” revealed that they had always felt positive about themselves and the mentoring program hadn’t increased or changed that feeling. Other mentors indicated that they were proud to be a mentor and a role model.

Since becoming an SSS peer mentor, has the way the SSS students interact with you changed?

The mentors were moving from SSS participants to SSS leaders/mentors. Seventy-seven percent (n = 10) said yes, and 23% (n = 3) said no. Students recognized that the mentors were now an important component of SSS, and students would make eye contact and say hello. They were now seen by SSS students as both an authority figure and friend. Mentors who said “no” felt that SSS students just continued to be friendly.

Since becoming a SSS peer mentor, how has the way the SSS staff interacts with you changed?

Fifty-four percent (n = 7) said yes, and 46% (n = 6) said no. The mentors felt they were being treated more like professionals because the staff asked for their opinion, and expectations were higher regarding reliability and responsibility. The mentors who said “no” said that the staff didn’t change toward them. They had always been warm and supportive and continued to do so.

Self-worth is the perception that a person has value to others. (Definition provided to interviewees during the interviews and focus group.)

Since becoming an SSS peer mentor, do you feel that you provide SSS students with useful information?

The mentors were asked if their services to the SSS population were useful. One hundred percent (n = 13) of the mentors agreed. Because the mentors had been freshmen, they knew that the information regarding study habits and how to adapt to the university was useful information that the freshmen valued, and many of the students thanked them and told them the information was beneficial.

Since becoming an SSS peer mentor, do you model procedures that SSS students can follow?

One hundred percent (n = 13) of the mentors said yes. The mentors felt that they gave the students nuggets of wisdom that the students could follow, such as participate in a study abroad program; volunteer to help the less fortunate and follow healthy habits regarding drugs and alcohol. Some of the mentors felt that they didn’t talk about doing drugs and alcohol, but they always modeled good behavior regarding those topics.

Since becoming an SSS peer mentor, do SSS students ask your advice?

One hundred percent (n = 13) of the mentors said yes. The staff encouraged students to go to the mentors with questions. Mentors felt that the students found them knowledgeable, experienced, and non-judgmental, and they were comfortable interacting with them. The mentors revealed the following

Self-confidence is trust in a person’s ability to understand, learn, choose, and make decisions. (Definition provided to interviewees during the interviews and focus group.)

Since becoming an SSS peer mentor, have your feelings about trusting yourself to lead others changed?

Ninety-two percent (n = 12) said yes, and 8% (n = 1) said no. The mentors felt, because of their growth as leaders/mentors, that they were able to handle indecisive groups and trusted themselves to make fair and unbiased decisions as they effectively communicated with SSS students.

Since becoming an SSS peer mentor, has the way you make choices changed?

Seventy-seven percent (n = 10) said yes, and (23%, n = 3) said no. In many instances mentors wanted input from staff members before making decisions. Most of the mentors said they considered both the SSS students and program before making decisions because they were aware of how their decisions could impact SSS.

Since becoming an SSS peer mentor, has your comfort level for interacting with different types of people changed?

Ninety-two percent (n = 12) said yes, and (8%, n = 1) said no. The mentors felt that SSS had given them the opportunity to work and interact with all kinds of people. This opportunity had taught them about customs and cultures and made them more comfortable while preparing for other life experiences.

If you could choose one word to describe your SSS peer mentoring experience, what would it be?

To better understand the mentor experience, the researcher asked if mentors could capture three years of learning, growing, and coming of age in one word. The following is what the mentors had to say:

Realization, Fun, Valuable, Empowering, Pretty Cool, Meaningful, Awesome, Life-Changing, Diversity, Eye-Opening, Enlightening, Learning Experience, Leadership were the words the SSS peer mentors used to describe their experience as mentors in the SSS program.

Qualitative Summary

The mentors’ rich responses throughout the structured interviews and focus group paint a clear picture of student success, pride, and self-confidence. These students were strongly motivated because there was an expectation that as mentors they would strive to be good role models for the SSS program and the university.

Discussion Section

The research strongly indicates that mentoring is a positive experience. The mentoring program does no harm, and mentors have a rich college experience filled with success, self-confidence, self-worth, and self-esteem. The one-word expression used was an indication that the mentoring experience was a life-changing experience for these

students. They were thankful for the experience. They grew, learned, and gave back to the program and to themselves. This was truly a reciprocal experience for the mentors, the students, and the SSS program.

Strengths of Research

A mixed study was used. As Creswell (2003) reported a mixed-methods study captures the best of both worlds. On one hand, this design allows the researcher to collect quantitative data where outcomes can be predicted. On the other hand, it allows an opportunity to glean a qualitative understanding from the point of view of the individuals in the study. In the final analysis, the researcher has a better understanding of the problem being researched.

Limitations

The research design relied on relatively small and somewhat unequal sample sizes for the peer mentors. The small size raises some concern regarding statistical power when no significant differences were noted. However, equalizing the sample sizes would have resulted in numbers too small for meaningful conclusions. The “observed power” was adequate (at or above .80) for most test where effect size were large and statistically significant...and these non-significant effects could represent Type II errors and future studies designed specially to further examine these possibilities might be in order. Finally, the 2004 and 2005 cohort group did not have a minimum of 5 years to analyze their performance, which was allowed for the other cohort years. These groups were not included in this study but will be examined in future follow-ups.

Implications for Practice and Research- A model has been developed where every student in a developmental program has the opportunity to develop their leadership skills through mentoring. Mentoring does no harm and peer mentors have an opportunity to help others as they develop their personal attributes of self-worth, self-esteem and self-confidence.

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