A NEW ERA OF FIRSTS:

THE IMPACT OF PEER MENTOR RELATIONSHIPS

ON FIRST-GENERATION COLLEGE STUDENTS

by

S.D. Weldin

A thesis submitted to the Faculty of the University of Delaware in partial fulfillment of the requirements for the degree of Honors Bachelor of Arts in Communication with Distinction

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ABSTRACT

From the initial college application process to graduation, first-generation college students (FGCS) are often navigating higher education with little or no guidance. Previous literature has demonstrated differences in financial security and academic confidence between FGCS and continuing-generation students (CGCS), along with some research exploring the potential peer mentors may have to support FGCS. This study examines peer mentor relationships' impact on FGCS confidence and the gap between FGCS and CGCS. The initial findings suggest the potential for successful peer mentor relationships to improve the experience of FGCS. Avenues of future research are discussed based on the study.

Chapter 1

INTRODUCTION

From imposter syndrome to the persistent worry of an immense financial burden, first-generation college students (FGCS) experience different struggles while pursuing higher education. Without parents, siblings, or peers to guide them, even yearly things that should be simple, like completing the Free Application for Federal Student Aid (FAFSA), can feel suffocating. There is a wide variety of support for students, available on most college campuses, including mentor programs, but often accessing appropriate services presents another set of challenges for FGCS to navigate. The purpose of my thesis is to analyze the importance of peer mentors, specifically for first-generation college students. While exploring previous research, I found that most studies conducted on peer mentoring programs in the past three years have had two primary focuses: how peer mentors can improve FGCS overall experience and how the mentors themselves benefit from the leadership position. This study focuses on FGCS confidence and self-efficacy in navigating the myriad tasks of college life.

Previous Research

Of the previous research collected, similar themes and feelings about higher education were identified within FGCS, including their confidence with various aspects of college and their motivation for pursuing a degree. From exploring the associated financial burden (Bevins, 2022; Plaskett, Bali, Nakkula, & Harris, 2018) to

the sense of familial duty within their education (Ahmed et al., 2021), FGCS are assumed to share many experiences during the initial stages of their college career. Although most studies establish a sense of similarity between FGCS, there are a few key aspects that build the foundation of FGCS research.

Style of Mentorship

Most of the conducted research focused on one of two mentoring styles: one-on-one peer mentoring or group mentoring. For the one-on-one peer mentoring, it was common for the FGCS to be intentionally paired with a mentor to explore the mentorship effects. Whether the mentor be paired with students based on them sharing their major (Ahmed et al., 2021), similar experiences (Bevins, 2022), or come from the same area (Plaskett et al., 2018), pairing mentors resulted in effective mentorship experiences. Research performed by Bevins (2022) and Plaskett et al. (2018), suggested that FGCS benefited from peer mentor relationships, especially when their mentor was of a similar background. Not only does previous research suggest that one-on-one mentorship elicits a positive improvement for FGCS, but a study by Ahmed et al. (2021) suggested that peer mentoring may be one of the most important types of mentorships. Ahmed et al. compared the potential improvement in academic success and confidence within FGCS after mentorship from a peer, a faculty member, or an academic coach. The differences between groups implied that direct mentoring was most beneficial for FGCS, especially if the mentor was a peer or faculty member. Mentors were able to develop a stronger interpersonal relationship with their mentee if they were a peer or faculty member, which boosted the FGCS overall confidence to a greater extent than if the pair had no relationship.

Although many studies support the notion that one-on-one mentorship reaps significant positive benefits, one point of research performed in 2023 focused primarily on group mentoring. When one peer mentor is placed in a classroom of first-year students at a university, all students benefit academically including FGCS and students of color (Dixon et al., 2023). This study did not compare the impact of group versus one-on-one mentoring. Drawing upon previous research focusing on different mentoring styles, it is important to identify which mentoring style FGCS receive with the understanding that different styles can be advantageous in improving FGCS financial and academic confidence.

Focus on Peer Mentors

Alongside the shared experience of FGCS and comparing different styles of mentoring, a sizeable amount of research focuses on the changes within the peer mentors rather than the FGCS; in a peer mentoring relationship, both parties benefit. Peer mentors gain valuable skills relating to leadership, communication, academic confidence, interpersonal relationships, and networking (Dixon et al., 2023). If mentors actively engage in helping their mentees, they will become more confident in their own education-based or relationship-based abilities.

A few studies focused on upperclassmen FGCS fulfilling the role as a peer mentor for FGCS beginning their college career. FGCS who serve as peer mentors frequently have similar motivation behind pursuing the leadership position. In a 2013 dissertation, Price found that many FGCS decide to become peer mentors due to the desire to give back as a form of service, familial obligation, or as an act of validation to be able to help other FGCS succeed; this study also discussed the intrapersonal and professional development that peer mentors undergo during the process. A more

recent study performed by Hirsch et al. (2021) indicates that FGCS develop their skills in leadership, empathy, and communication when FGCS are in the peer mentor position. The peer mentors were encouraged to use the Five Practices of Exemplary Leadership model. After the mentorship experience FGCS peer mentors said that they felt more confident in their leadership skills, specifically the FGCS mentors resonated with encouraging the heart and the relational aspects of being a mentor. Previous research that focused on FGCS as peer mentors displayed an increase in leadership, interpersonal, and professional skills after acting as a mentor.

Research Focus

After analyzing past studies that analyzed peer mentor and FGCS relationships, the overall trends have been about the benefits of one-on-one mentoring, FGCS as the peer mentor, and the financial or academic struggle within FGCs. I planned to research current FGCS at the University of Delaware and analyze their experience with a peer mentor. Knowing that one-on-one mentoring increases confidence and develops skills more efficiently, it would be useful to know what style of mentoring FGCS received while in college. Based on the recent insight into the peer mentor development, this study shifted the focus back from peer mentors to FGCS. There are many struggles that FGCS face when entering college that has not been touched on previously. Preceding research had a central theme of analyzing financial and academic improvements after peer mentorship even though many studies recognize the interpersonal benefits from mentorship. Through this study, I expanded on the personal aspects of the college experience as well as the monetary and educational aspects, including other contributing factors to the entire college experience such as FGCS ability to connect with other students and manage a healthy work life balance.

Since there are established similarities between FGCS, such as having to spend time working alongside their classes to afford their education, it is essential to explore if FGCS share experiences in other areas of their life.

Chapter 2

METHODS

Research Goals

The main goal of this research is to gain insight into the first-generation college student experience and determine if peer mentoring creates a positive impact. Three main hypotheses were developed to guide the study:

H #1: Identifying as a first-generation college student will affect initial confidence levels in each category.

H #2: First-generation college students who have a peer mentor relationship will have increased confidence post experience compared to their initial levels.

H #3: Continuing-generation college students will have higher initial confidence levels than first-generation college students after peer mentor relationships.

Research Design

To evaluate these hypotheses, I developed a survey to collect quantitative and qualitative responses. The survey was intentionally open to collecting responses from all students at the university but designed to identify FGCS and those who had peer mentoring experiences regardless of generational college status. An online survey distribution was chosen for advantages such as high reach to potential participants, low cost, and general ease of use for participants. All survey questions were reviewed by members of the thesis committee. The complete study and survey instrument received IRB approval before distributing.

Survey Implementation

Survey data was collected in two rounds. First, I created the survey as a Google Form, then sent it to classmates and different organizations on campus with a known first-generation population. Each participant was encouraged to share the survey with their peers to enact a snowball sample. This sampling style was effective at targeting participants that attended the university and matched the target characteristics of my research. Following the distribution of the initial survey, I uploaded the same questionnaire to SONA, a specific survey collection website for universities in order to reach a larger audience. The specific SONA collection I used targets students in Communication and has a reach of approximately 1000 students. Those who participated in the online SONA survey also had the opportunity to earn credit through the system, depending on decisions made by specific professors. The Google Form was closed when the SONA survey was uploaded to minimize duplicate participants.

The surveys consisted of 25 questions including five general demographic information; a check to see if the participant is/was a FGCS; four questions on peer mentoring, determining if the participant had a peer mentor and the style of mentoring; eight questions about confidence before and after having a peer mentor relationship, if any; and seven subsequent questions eliciting qualitative responses about the participants college experience. Many of the questions included a "Does not apply" choice to ensure that the results were actively selected, rather than defaulted due to no other option. For example, if a student never had a peer mentor, they were not forced to answer the questions about their peer mentor relationship which decreases the likelihood of response bias. I also incorporated an attention check question to eliminate inattentive or inauthentic participants; this resulted in discarding two

individual's responses (see Appendix B, Section 5 on page 35 for details of the attention check questions).

Participant Characteristics

All participants either currently attend or are alums of the University of Delaware. After the two surveys were completed, I combined the results for a total of 192 responses, and 43 of said participants were FGCS. All FGCS participants were considered valid, but two of the continuing-generation students' data were discarded from the analysis having failed to correctly answer the trap question. The final total of participants is n=190, with 43 (22.8%) identified as FGCS and 147 (72.2%) continuing-generation students; 17 of the FGCS had a peer mentor for at least one year of their college experience.

Of the total 190 valid participants, the current undergraduate academic year distribution is as follows: 21 first-year students (11.05% of total population), 56 second-year students (29.47%), 59 third-year students (31.05%), 51 fourth-year students (26.84%), two students were enrolled for more than four years (1.05%), and one participant was an alumnus (0.53%). Of the specific FGCS sample, there were two first-year students (4.7% of FGCS population), 10 second-year students (23.3%), eight third-year students (18.6%), 21 fourth-year students (48.8%), one student were enrolled for more than four years (2.3%), and one participant was an alumnus (2.3%).

The ages of participants ranged from 18 to 28 years old. In the entire sample population, 17 participants were 18 years old (8.9% of total population), 36 participants were 19 years old (18.9%), 55 participants were 20 years old (28.9%), 58 participants were 21 years old (30.5%), 16 participants were 22 years old (8.4%), and eight participants were over the age of 22 (4.2%). In the FGCS specific sample, three

students were 18 years old (7% of FGCS population), six students were 19 years old (14%), seven students were 20 years old (16.3%), 18 students were 21 years old (41.9%), five students were 22 years old (11.6%), and four students were over 22 years old (9.3%).

Of the total population, the distribution of average household income per year is as follows: five households were below $19,999 (2.6% of total population), three households were between $20,000 and $29,999 (1.6%), nine households were between $30,000 and $39,999 (4.7%), 10 households were between $40,000 and $49,999 (5.3%), seven households were between $50,000 and $59,999 (3.7%), 11 households were between $60,000 and $69,999 (5.8%), 26 households were between $70,000 and $79,999 (13.7%), 22 households were between $80,000 and $99,999 (11.6%), 83 households were between $100,000 and $149,999 (43.7%), seven households were above $150,000 (3.7%), and seven students were either unsure or preferred not to answer (3.7%). Of the FGCS population, the distribution of average household income per year is as follows: two households were below $19,999 (4.7% of FGCS population), three households were between $20,000 and $29,999 (7%), six households were between $30,000 and $39,999 (14%), one household was between $40,000 and $49,999 (2.3%), three households were between $50,000 and $59,999 (7%), three households were between $60,000 and $69,999 (7%), six households were between $70,000 and $79,999 (14%), six households were between $80,000 and $99,999 (14%), seven households were between $100,000 and $149,999 (16.3%), zero households were above $150,000 (0%), and four students were either unsure or preferred not to answer (9.4%).

For the distribution of race and/or ethnicity, participants were asked to type in their response rather than check a box. The distribution for the total population is as follows: 148 participants wrote “white” and/or “Caucasian” (77.9% of total population), 10 participants wrote “black” and/or “African American” (5.3%), nine wrote “Asian” and/or a specific Asian ethnicity (4.7%), three wrote “South Asian” including “Indian” and “Pakistani” (1.6%), 14 wrote “Hispanic” and/or “Latino/a” (7.4%), one wrote “Pacific Islander” (0.5%), and five typed “n/a” (2.6%). Three of the students added “mixed race” and/or “biracial” to their entry (1.6% of total population). The distribution for the FGCS population is as follows: 24 participants wrote “white” and/or “Caucasian” (55.8% of FGCS population), six participants wrote “black” and/or “African American” (14 %), two wrote “Asian” and/or a specific Asian ethnicity (4.7%), zero wrote “South Asian” including “Indian” and “Pakistani” (0%), nine wrote “Hispanic” and/or “Latino/a” (20.9%), one wrote “Pacific Islander” (2.3%), and one typed “n/a” (2.3%). Of the total FGCS population, three included “mixed race” and/or “biracial” in their entry (7% of FGCS population).

For the distribution of gender, participants were asked to type in their response rather than check a box. Of the total participants, 140 identified as “female” or “woman” (73.7% of total population), 45 identified as “male” or “man” (23.7%), three identified with non-cisgender (1.6%), and two declined to answer (1.1%). Of the three non-cisgender individuals, one identified as trans-binary and two identified as trans-nonbinary. Of the FGCS population, 28 identified as “female” or “woman” (65.1% of total population), 12 identified as “male” or “man” (27.9%), three identified with non-cisgender (7%). Of the three non-cisgender individuals, one identified as trans-binary and two identified as trans-nonbinary.

For the distribution of sexuality, participants were asked to type in their response rather than check a box. Of the total population, 155 participants identified as “straight” or “heterosexual” (81.6% of total population), 13 identified as “bisexual” (6.8%), three identified with other LGBT+ terms (1.6%), ten used terms that described gender rather than sexuality (5.3%), and nine declined to answer (4.7%). Of the FGCS population, 32 participants identified as “straight” or “heterosexual” (74.4% of total population), 5 identified as “bisexual” (11.6%), two identified with other LGBT+ terms (4.7%), three used terms that described gender rather than sexuality (7%), and one declined to answer (2.3%).

Chapter 3

RESULTS

All participants were asked to rank their confidence on a scale from 0 to 5, with five being the most confident, in four different categories while entering college: ability to financially afford college, ability to maintain a healthy work/life balance, ability to succeed academically, and ability to connect with other students. Participants who had a peer mentor relationship at one point in their college career were asked to rank their confidence post peer mentor experience. There were 17 FGCS and 63 continuing-generation college students (CGCS) who had a peer mentor relationship at least once in their college experience.

Table #1: Initial Confidence

Sample Group	**Average confidence in ability (standard deviation)**			
	Financial	**Work/life**	**Academic**	**Connection**
All participants	3.33 (1.25)	3.36 (1.32)	3.85 (1.02)	3.79 (1.14)
All CGCS	3.5 (1.18)	3.61 (1.22)	3.89 (0.98)	3.92 (1.05)
CGCS w/ peer mentor	3.48 (1.19)	3.77 (1.21)	3.94 (1.01)	4 (1.05)
All FGCS	2.77 (1.32)	2.77 (1.33)	3.72 (1.14)	3.37 (1.33)
FGCS w/ peer mentor	2.47 (1.23)	2.53 (1.28)	3.53 (1.07)	3.29 (1.21)

Table #2: Confidence Post-Peer Mentor Relationship

Sample Group	**Average confidence in ability (standard deviation)**

	Financial	Work/life	Academic	Connection
CGCS w/ peer mentor	3.77 (1.3)	3.87 (1.12)	4.26 (0.91)	4.3 (0.95)
FGCS w/ peer mentor	2.29 (1.26)	3.19 (1.05)	3.73 (1.16)	3.6 (1.40)

Participants who identified as having a peer mentor relationship at least once in their college career were asked to label the experience. All questions were displayed with "check all that apply." The questions asked participants what year they were enrolled in college when they had a peer mentor, what style of mentorship they received, whether it was formal or informal, and if the mentor was assigned to them. Mentorship style was differentiated through if the participant had one-on-one or a group mentor. Formal mentorship was defined as, "structures mentoring system; example being a program, workshops, or one-on-one advice sessions" and informal mentorship was defined as, "natural relationships; example being friends, siblings, classmates."

Of the FGCS who had a peer mentor relationship, 10 experienced mentorships in their first year, four in their second year, five in their third year, three in their fourth year, and one after their initial four years; these numbers do not add up to 17 since four FGCS had a peer mentor for multiple years. Of the CGCS who had a peer mentor relationship, 53 experienced mentorships in their first year, 31 in their second year, 15 in their third year, two in their fourth year, and two after their initial four years; these numbers do not add up to 63 since 28 CGCS had a peer mentor for multiple years.

Of the FGCS who had a peer mentor relationship, 12 received one-on-one mentorship, five received group mentorship, two were unsure of the form of mentorship, and two of the FGCS received both forms of mentorship. Of the CGCS who had a peer mentor relationship, 31 received one-on-one mentorship, 28 received

group mentorship, 16 were unsure of the form of mentorship, and 12 CGCS received both forms of mentorship.

Of the FGCS who had a peer mentor relationship, eight received formal mentoring, eight received informal mentoring, and one received either a mix or a different form. Of the CGCS who had a peer mentor relationship, 24 received formal mentoring, 28 received informal mentoring, and 11 received either a mix or a different form.

Of the FGCS who had a peer mentor relationship, 12 mentors were assigned to the student, three mentors were unassigned, and three students had a mix of assigned and unassigned. Of the CGCS who had a peer mentor relationship, 38 mentors were assigned to the student, 12 mentors were unassigned, and 13 students had a mix of assigned and unassigned.

Alongside labeling how the mentorship was conducted, participants who identified as having a peer mentor were asked if their peer mentor relationship influenced their confidence in of the four tested categories. The question was complemented by a write-in response; to analyze the feedback, I coded the responses and labeled them based on if the peer mentor relationship influenced a positive or negative change, see Table #3. Due to the write-in format, not all participants responded to this question.

Table #3: How Students Labeled Peer Mentor Influence

Generation of student	**# of students who expressed a change in confidence based on peer mentor experience (%)**	
	Positive Influence	**Negative/No Influence**
FGCS w/ mentor	6 (35.3%)	8 (47.1%)

CGCS w/ mentor	37 (58.7%)	14 (22.2%)

Analysis

To compare my survey data, I utilized a two-tailed test format to compare differences between the confidence levels of two groups within my sample; this test was performed using an unpaired *t* test with a significance threshold of $p<0.05$ and 95% confidence. My three hypotheses assumed that FGCS would have lower confidence than continuing-generation students when entering college and that peer mentor relationships would increase confidence post-experience.

First, I used the two-tailed format to test the hypothesis that FGCS would have less confidence than CGCS in all categories when entering college. There is a statistically significant difference between initial confidence in financial, work/life balance, and connection ability between FGCS and CGCS, see Table #4.

Table #4: Two-Tailed t Test: Initial FGCS vs CGCS

Confidence Category	t	df	Standard Error of Difference	P Value
Financial	1.4792	188	0.211	0.0006
Work/Life	5.0357	188	0.216	0.0001
Academic	0.9602	188	0.176	0.3382
Connection	2.8096	188	0.194	0.0055

To test the hypothesis that having a peer mentor would positively impact FGCS, I sectioned the data into initial and post for FGCS who had a peer mentor relationship and compared the data in all confidence categories. Having a peer mentor

relationship was proven not statistically significant in all confidence categories, see Table #5. I used the same method of sectioning to compare the initial and post confidence levels for CGCS that had a peer mentor experience. There was no statistical significance in any category, see Table #6.

Table #5: Two-Tailed t Test: Initial FGCS vs Post Peer Mentor FGCS

Confidence Category	t	df	Standard Error of Difference	P Value
Financial	0.4138	32	0.428	0.6818
Work/Life	1.6423	32	0.401	0.1103
Academic	0.5301	32	0.383	0.5997
Connection	0.68	32	0.45	0.5014

Table #6: Two-Tailed t Test: Initial CGCS vs Post Peer Mentor CGCS

Confidence Category	t	df	Standard Error of Difference	P Value
Financial	1.3358	124	0.222	0.1841
Work/Life	0.491	124	0.208	0.6243
Academic	1.8924	124	0.172	0.0608
Connection	1.6525	124	0.179	0.101

To test the final hypothesis that the initial confidence of CGCS would be higher than FGCS who had a peer mentor experience, I compared all CGCS initial scores to FGCS post peer mentor relationship. The tests proved that the financial

confidence between the initial CGCS compared to FGCS post peer mentor was statistically significant, see Table #7.

Table #7: Two-Tailed t Test: Initial CGCS vs Post Peer Mentor FGCS

Confidence Category	t	df	Standard Error of Difference	P Value
Financial	3.9552	162	0.305	0.0001
Work/Life	1.3702	162	0.308	0.1725
Academic	0.6153	162	0.255	0.5392
Connection	1.1343	162	0.279	0.2584

Chapter 4

DISCUSSION

H#1 Discussion

In consideration of the three hypotheses, the conducted survey and data analysis only provided support for the first hypothesis. Three of the four initial confidence levels were statistically significant between FGCS and CGCS; this provides reasonable defense that students who identify as FGCS enter college with less confidence than CGCS to succeed financially, balance work alongside life, and connect with other students. The single category that was not proven statistically significant between FGCS and CGCS was the academic confidence level. This is notable since many previous studies have focused on the disparity between academic success while this study did not indicate the same findings. This study used a survey system, SONA, that allowed students to receive extra credit in their associated courses for their participation; there may be an unidentified connection between students who are high achieving academically to those who would take the survey for extra credit. There should be further examination between the academic confidence levels between FGCS and CGCS since this study may have been skewed towards participants having higher levels of confidence in their success due to the distribution model.

H#2 Discussion

The second hypothesis, regarding the assumption that student confidence levels would increase after experiencing a peer mentor relationship, was not supported

in this study. When comparing FGCS and CGCS initial and post peer mentorship confidence levels, neither group was statistically significant. To understand possible explanations of this data, I observed the FGCS and CGCS *t* tests independently.

For the FGCS who had a peer mentor, nearly half of the group identified that their peer mentor experience was negative or did not contribute to their confidence levels, see Table #3 on page 18. The reasoning behind coding the negative influence and no influence together was due to a need to isolate the individuals who had a positive impact with their peer mentor. Some respondents wrote that their peer mentor made no effort to contribute to their success while others wrote that the mentor rarely interacted with them; if participants identified their peer mentor of having no influence, any positive changes in confidence could be attributed to an outside source rather than the peer mentor, which is what this study is focused on measuring. The survey data showed it was more common for FGCS to raise or maintain their initial confidence levels post peer mentor relationship, some students had a decrease in confidence, with one participant rating their confidence levels at "0" while their initial confidence was higher. Having a peer mentor alone does not contribute to the confidence of FGCS; the relationship needs to have depth and continuous efforts to help the mentee for there to be a visible change in confidence.

The consideration that the peer mentor experience provided to some FGCS was not influential does not easily translate to CGCS. Although 47.1% of FGCS did not believe their peer mentor relationships impacted their confidence, 58.7% of CGCS wrote that their peer mentor was helpful and improved their esteem related to college. This raises the question of why CGCS did not see a statistically significant change post peer mentor experience. Although there was an increase in confidence level in

each of the four categories, the initial averages for CGCS with a peer mentor started at a high rate of confidence. If individuals already have assurance that they will succeed as they enter college, the increase in confidence after having a peer mentor may not be as significant compared to students who have an uncertain start.

The tests performed on FGCS and CGCS that compared confidence prior to and after their peer mentor experiences were not statistically significant; the consideration of possible poor mentorship and the difficulty to raise levels if already confident present a limitation of this study. Since peer mentorship was not regulated between participants, results may vary if this study was performed again but with an active mentorship system in place. Although not statistically significant, the average confidence level after having a peer mentor relationship increased in all categories for CGCS, and FGCS increased in academic, work life balance, and ability to connect with other students. The raw data shows potential for a more significant effect of peer mentorship on all students, especially concerning FGCS since the financial confidence decreased after mentorship which was an unpredicted anomaly.

H#3 Discussion

The collected data did not support the third hypothesis; the difference between CGCS initial confidence and FGCS post peer mentorship experience was not statistically significant in each category besides financial confidence. This means that after FGCS have a peer mentor experience, their confidence levels in academic performance, work life balance, and ability to connect with the community may be more similar to CGCS when they enter college.

To put the results into perspective, I will refer to both H #1 and H #3. Since the first hypothesis was supported, it can be assumed that CGCS begin their college

experience will more confidence than FGCS; however, since H #3 was not supported, the data indicates that, only after the assistance of a peer mentor, can FGCS be on the same level of confidence as CGCS. Subsequently, it can be inferred that FGCS requires a proper foundation of support to feel as confident about various aspects of college compared to CGCS.

Potential Bias and Limitations

As a FGCS and past peer mentor myself, there is inherent potential bias within the study. Throughout my bachelor's degree, I have had many mentor interactions that have increased my confidence and taught me keys to university success. Thus, I pursued this research to analyze if peer mentors could be a positive influence for other FGCS. Due to my background that is directly connected to this area of research, there could be potential research bias.

One area of bias relates directly to the participants. Access to the survey was largely distributed to students within one major at one university. Although the initial round of survey distribution had access to all majors, that survey made up less than 20% of the total participants and education focus was not asked on the survey. Of the total participants, 43.7% of total participants had a family income of $100,000 to $149,999, 77.9% of total participants identified as white, and 73.7% identified as female. With such large portions of the participants being in similar demographic segments, the data may be skewed towards people with similar experiences creating a form of selection bias. If this study were to be replicated, it may be beneficial to include more diverse demographics to enhance the ability of the research to have real-world validity.

There could be possible response bias within the survey. Although I limited the risk of inattentive participants through a “trap” question, participants may still give answers they assume I was looking for, also known as social desirability bias. If a participant inferred I was wanting to prove that peer mentors make an impact in FGCS, they may respond to the survey to give the data they assume is desired. There is also potential response bias within the rating of confidence; people may interpret the scale differently, resulting in potential discrepancies between data and overall responses.

A limitation of the study was that it was conducted fully online. By using SONA, only students who had access to a reliable computer and Wi-Fi would be able to complete the survey. Although the university has open access to computers in the library, this may be a limiting factor for some students.

One of the most notable limitations lies in the lack of ability to meet with participants in a focus group setting. Although the original study plan included meeting with FGCS in person or over video call to hear their authentic experiences, due to a delay in thesis schedule and lack of volunteers within the participant pool. If this study was replicated or advanced, I would recommend beginning focus group meetings sooner than anticipated for adequate time finding participants and coding the qualitative feedback.

Future Applications

This research tested and analyzed three hypotheses about the experience of FGCS. Considering the initial gap in confidence between FGCS and CGCS, the findings encourage a more comprehensive peer mentoring system for students. Although the second hypothesis about FGCS confidence improving post peer

mentorship experience was not statistically significant, the average confidence levels displayed an increase. To elaborate on potential benefit of a peer mentor for FGCS, universities should provide a one-on-one mentoring opportunity for students to improve their overall experience.

When observing the findings of this study, FGCS initial confidence in their ability to finance college, manage a healthy work/life balance, and create connections was significantly lower than their CGCS counterparts. Noticing this, more emphasis should be placed on these aspects of the FGCS experience. With previous studies focusing on FGCS financial and academic differences, this study indicates that FGCS also struggle with various social aspects of college. By building relationships with FGCS, peer mentors can influence FGCS confidence with the non-monetary experiences associated with college.

Within this study, many FGCS that had a peer mentor relationship stated that they did not have a positive mentoring experience; this suggests that there is potential for growth if the peer mentor system is improved. When peer mentoring is successful, there is a higher possibility of FGCS thriving in their college career. Even though FGCS may start their higher education journey with less confidence than CGCS, tailored peer mentoring can minimize this gap. By recognizing the disadvantages FGCS face when starting college and establishing systems that properly support them, there is potential for lasting success within FGCS. With proper support from peer mentors, FGCS have the foundation needed to confidently pursue and complete their degree.

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Appendix A

IRB EXEMPTION APPROVAL

Institutional Review Board
210H Hullihen Hall
Newark, DE 19716
Phone: 302-831-2137
Fax: 302-831-2828

DATE:	November 17, 2023
TO:	Sophia Weldin
FROM:	University of Delaware IRB
STUDY TITLE:	[2103423-1] Peer Mentor Impact on First-Generation College Students
SUBMISSION TYPE:	New Project
ACTION:	DETERMINATION OF EXEMPT STATUS
EFFECTIVE DATE:	November 17, 2023
REVIEW CATEGORY:	Exemption category # 2(ii*)*

Thank you for your New Project submission to the University of Delaware Institutional Review Board (UD IRB). According to the pertinent regulations, the UD IRB has determined this project is EXEMPT from most federal policy requirements for the protection of human subjects. The privacy of subjects and the confidentiality of participants must be safeguarded as prescribed in the reviewed protocol form.

This exempt determination is valid for the research study as described by the documents in this submission. Proposed revisions to previously approved procedures and documents that may affect this exempt determination must be reviewed and approved by this office prior to initiation. The UD amendment form must be used to request the review of changes that may substantially change the study design or data collected.

Unanticipated problems and serious adverse events involving risk to participants must be reported to this office in a timely fashion according with the UD requirements for reportable events.

A copy of this correspondence will be kept on file by our office. If you have any questions, please contact the UD IRB Office at (302) 831-2137 or via email at hsrb-research@udel.edu. Please include the study title and reference number in all correspondence with this office.

INSTITUTIONAL REVIEW BOARD

www.udel.edu

Appendix B

SURVEY QUESTIONS

KEY INFORMATION
Important aspects of the study you should know about first;

Purpose: The purpose of this study is to analyze the potential benefits peer mentors have for first generation college students (FGCS). Data will be used to support my thesis.

Procedures: If you choose to participate, you will be asked to complete a brief 10-15 minute survey, and then have the option to participate in a 30-45 minute focus group. The survey will collect your email to ensure that there are no repeated participants. Participant identity and information will be stripped prior to analysis and kept confidential in any later writing or presentation of the research.

Duration: This survey will take about 10-15 minutes.

Risks: There are no risks and/or discomforts associated with this study that one would not experience on a normal day.

Benefits: There are no know benefits directly related to participants. Some students may be eligible for extra credit at the discretion of your professor.

Alternatives: There is no specific alternative assignment available to you if you choose not to take part in this study. Some students may be eligible for extra credit if an alternative assignment is provided at the discretion of your professor.

Costs and Compensation: If you decide to participate there will be no additional cost to you. You could be compensated with extra credit for an associated class depending upon the professors discretion.

Participation: This study is entirely voluntary. Taking part, or not, in this research study is your decision. You can decide to participate and then change your mind at any point and stop participating.

This study received IRB exemption approval on November 17, 2023.

Please carefully read the entire page above. If you have any questions, please reach out to the Principal Investigator, S.D. Weldin, at xx.

Section 1

1) Are you a first-generation college student? (FGCS are individuals who are their first in their family to pursue higher education. Please check "Yes" if: your parents did not attend any higher education past high school; if your parents may have attended, but did not complete any higher education; your parents did not complete high school or any higher education)
2) What year are you in college?
3) How old are you?
4) Out of the following, what income bracket do you or your household family most closely fall into?
    a. $0 to $19,999; $20,000 to $29,999; $30,000 to $39,999; $40,000 to $49,999; $50,000 to $59,999; $60,000 to $69,999; $70,000 to $79,999; $80,000 to $99,999; $100,000 to $149,999; $150,000+
5) What is your race/ethnicity? (The short answer textbox is to encourage self-identification. If you prefer not to answer, please put n/a.)
6) What is your gender identity and pronouns? (The short answer textbox is to encourage self-identification. If you prefer not to answer, please put n/a.)
7) What is your sexuality? (The short answer textbox is to encourage self-identification. If you prefer not to answer, please put n/a.) (What is your se)

Section 2

1) Have you had a peer mentor at any point in your college experience? Please check all that apply. (Some examples of peer mentors on our campus are mentors associated with clubs on campus, bigs in clubs/greek life, Munson Fellows, FYS leaders, etc.)
    a. First Year; Second Year; Third Year; Fourth Year; 4+ Years; Graduate+ Student; Alumni; No/Does not apply
2) If you had a peer mentor, what was the style of mentoring? (select all that apply)
    a. 1-1 Peer mentor; Group mentor; structured program; Unsure but DID have a peer mentor; No/Did NOT have a peer mentor
3) Was the mentor assigned to you? (use other if you had multiple mentors and not all were either assigned or not assigned)
    a. Yes; No; Does not apply; Other/Mix
4) Was the mentoring formal or informal? (use other if you had multiple mentors and not all were either formal or informal)
    a. Formal (structured mentoring system; example being a program, workshops, or 1-1 advice sessions); In formal (natural relationship; example being friends, siblings, classmates); Does not apply; Other/Mix
5) Please briefly explain how mentoring was established.

Section 3

Prompt: How would you rate the following from not confident at all (0) to extremely confident (5) when entering college? (including the application process)

1) Your ability to financially afford college:

2) Your ability to manage a healthy work/life balance:
3) Your ability to succeed academically:
4) Your ability to form connections with other students:

Section 4

Prompt: How would you rate the following from not confident at all (0) to extremely confident (5) AFTER having a peer mentor?

1) Your ability to financially afford college:
2) Your ability to manage a healthy work/life balance:
3) Your ability to succeed academically:
4) Your ability to form connections with other students:

Section 5

1) Did your peer mentor contribute to or focus mentoring on any of these categories? (please put n/a if you did not have a peer mentor experience)
2) If you did not have a peer mentor, do you think the support would have aided in any part of your college experience?
3) To ensure test validity, please pick the animal.
    a. Cat; Airplane; Mug; Tree

Section 6

Prompt: Focus Group Optional Participation: If you decide to participate in a focus group, available dates and times will be sent to your email a week prior to available times. Once you sign up for a time, you will be sent a zoom link.

1) Would you be willing to participate in a 30-45 minute focus group?
    a. Yes; No

2) If yes, what is your UDEL address?