

2017

## Comparing first-generation and continuing-generation college students' self-efficacy, campus involvement, and academic performance

Kaylin Nichole Upah  
*University of Northern Iowa*

*Let us know how access to this document benefits you*

Copyright ©2017 - Kaylin Nichole Upah

Follow this and additional works at: <https://scholarworks.uni.edu/hpt>



Part of the [Higher Education Commons](#)

---

### Recommended Citation

Upah, Kaylin Nichole, "Comparing first-generation and continuing-generation college students' self-efficacy, campus involvement, and academic performance" (2017). *Honors Program Theses*. 262. <https://scholarworks.uni.edu/hpt/262>

This Open Access Honors Program Thesis is brought to you for free and open access by the Student Work at UNI ScholarWorks. It has been accepted for inclusion in Honors Program Theses by an authorized administrator of UNI ScholarWorks. For more information, please contact [scholarworks@uni.edu](mailto:scholarworks@uni.edu).

**Offensive Materials Statement:** Materials located in UNI ScholarWorks come from a broad range of sources and time periods. Some of these materials may contain offensive stereotypes, ideas, visuals, or language.

COMPARING FIRST-GENERATION AND CONTINUING-GENERATION COLLEGE  
STUDENTS' SELF-EFFICACY, CAMPUS INVOLVEMENT, AND ACADEMIC  
PERFORMANCE

A Thesis Submitted  
in Partial Fulfillment  
of the Requirements for the Designation  
University Honors

Kaylin Nichole Upah  
University of Northern Iowa  
May 2017

This Study by: Kaylin Nichole Upah

Entitled: Comparing First-Generation and Continuing-Generation College Students' Self-Efficacy, Campus Involvement, and Academic Performance

has been approved as meeting the thesis or project requirement for the Designation University Honors

---

Date

---

Dr. Kristin Woods, Honors Thesis Advisor, Director, Student Success & Retention, Student Affairs

---

Date

---

Dr. Jessica Moon, Director, University Honors Program

## Abstract

In order to highlight potential differences between first-generation college students (FGS), defined as neither parent having completed a Bachelor's degree, and continuing-generation students (CGS), this study compares FGS and CGS in terms of self-efficacy, campus involvement, and academic performance measured by grade point average (GPA) during their first year at a university. In order to investigate these relationships, this study utilizes University of Northern Iowa (UNI)'s 2015-2016 Mapworks data. Mapworks is a voluntary survey that first-year students, including freshmen and transfer students, complete during the fall and spring semesters. A total of 1549 first-year students participated in the 2015-16 survey, and 646 self-identified as FGS while 903 self-identified as CGS. This study used t-tests to compare FGS and CGS in terms of their responses to the self-efficacy and campus involvement Mapworks questions as well as their official GPAs in the fall and spring semesters. Results showed there is a statistically significant difference between FGS and CGS in terms of students' expected GPA, intent to be involved in a student organization, fall GPA, and spring GPA.

*Keywords:* first-generation, continuing-generation, college, self-efficacy, campus involvement, grade point average

Comparing First-Generation and Continuing-Generation College Students'  
Self-Efficacy, Campus Involvement, and Academic Performance

As a resident assistant and summer orientation staff member, I have seen how each student's transition to the University of Northern Iowa (UNI) is unique and influenced by a number of factors. One factor that may contribute to a student's transition is whether the student is a first-generation college student (FGS) or continuing-generation college student (CGS). For an FGS, neither parent has completed a Bachelor's degree, while a CGS has at least one parent who has completed a Bachelor's degree or higher.

All students, whether they are FGS or CGS, enter college with differing amounts of cultural capital. Bourdieu (1973) defined cultural capital as an "inherited capital of relationships and skills" (p. 97). A student who has more cultural capital has more resources such as parents with Bachelor's degrees who can help them succeed than a student with less cultural capital. In essence, cultural capital is the use of culture as a resource, and it gives people an edge as it is passed down through each generation (Lareau & Weininger, 2003). In comparing FGS to CGS, CGS possess more cultural capital when entering college as a result of their guardians' informal cultural knowledge of college as well as their guardians' more active role in helping them through college (Lareau & Weininger, 2008). This fosters a cycle of inherited cultural capital for CGS; however, FGS have no such capital to inherit from their family. Because CGS have at least one guardian with a college degree, they already have a role model of someone who has succeeded in college. This may allow CGS to feel more confident in their academic ability, be more motivated to join student organizations, and achieve a high grade point average (GPA). The lack of cultural capital among FGS may account for differences in their adjustment compared to CGS. Because FGS do not have a parent with a Bachelor's degree, they may feel less confident

in their academic ability, less motivated to join student organizations, and more likely to achieve a low GPA.

The purpose of this study is to discover if FGS differ from their CGS peers in terms of self-efficacy, campus involvement, and academic performance measured by GPA in their first year at a university. This study is important in determining areas in which FGS may need additional support from UNI in areas related to self-efficacy, campus involvement, and academic performance.

## **Literature Review**

### **Defining FGS vs. CGS**

The definition of an FGS varies, but for the purpose of this study, an FGS is defined as a student with neither parent having completed a Bachelor's degree. A CGS is a student who has at least one parent or guardian with a completed Bachelor's degree. CGS can be said to have built-in college support systems because their guardians know how college works from personal experience. Guardians who have gone to college themselves and belong to a social network with other college-educated parents feel more comfortable providing college advice to their students than guardians who have neither college experience nor a network of parents with college degrees (Lareau & Weininger, 2008). The guardians of CGS tend to know how to answer most of their students' college-related questions, and this might allow CGS to form clear expectations as to how to succeed upon arrival on campus. According to Bourdieu (1998), CGS can be said to have a better "feel" for the game" (p. 25) than their first-generation peers. This is because CGS are born into the game, know the history of the game, and can anticipate their future within the game. These advantages allow CGS to enter college with a greater amount of cultural capital than FGS.

**Self-Efficacy**

Academic self-efficacy is defined as one's "belief in one's ability to perform the tasks necessary for success in school" (Wang & Castaneda-Sound, 2008, p. 103). In terms of collegiate academics, the Mapworks survey given to first-year students at UNI defines self-efficacy as one's certainty that they can do well on all problems and tasks assigned in a course, do well in one's hardest course, and persevere on class projects even when there are challenges. A student's level of self-confidence is most important in adjusting during the first year of college (Inkelas, Daver, Vogt, & Leonard, 2007; Ramos-Sanchez & Nichols, 2007). If students enter college with low levels of self-confidence and self-efficacy, they may struggle to adjust. Research has shown FGS tend to report lower levels of self-efficacy than CGS at the beginning of college (Ramos-Sanchez & Nichols, 2007; Wang & Castaneda-Sound, 2008). Since FGS are often less prepared for college classes, possess less cultural capital, and struggle to integrate in terms of academics and social life, it makes sense that FGS view tasks with less confidence than CGS (Ward, Siegel, & Davenport, 2012). FGS' view that they are somehow less likely to succeed than their CGS peers contributes to how they perform. Byrd and MacDonald (2005) found that FGS often "internalize the view that they are inadequate for college" (p. 33) and are surprised when they succeed, for they often do not consider their efforts satisfactory for college. If FGS enter college with less academic self-efficacy than CGS, they may doubt their ability to overcome obstacles and perform well in terms of GPA.

**Campus Involvement**

Whether or not a student is an FGS or a CGS, campus involvement is important because it often correlates with higher levels of academic persistence and success, and students can establish a group identity on campus and feel connected (Jackson, Miller, Frew, Gilbreath, &

Dillman, 2011). The idea of belonging to a group may be especially important for FGS to feel supported and have people to turn to for advice. Unfortunately, FGS often view their college environment as less supportive than do CGS (Pike & Kuh, 2005). This may contribute to why FGS are less engaged in campus activities than CGS (Mehta, Newbold, & O'Rourke, 2011; Pascarella, Pierson, Wolniak, & Terenzini, 2004; Pike & Kuh, 2005).

There are a couple of possible reasons to explain these lower levels of engagement. One idea is that FGS are more likely than CGS to attend college part-time, live off campus, and work off campus (Engle & Tinto, 2008), so they tend to have significantly lower levels of extracurricular involvement, athletic participation, and volunteer work (Pascarella et al., 2004). The second idea relates to the effects of cultural capital on FGS. According to Pike and Kuh (2005), FGS may be less involved on campus because they are unaware as to why it is important to be involved or how to become involved. CGS have parents who can explain to them why it is important to be involved on campus and connect with peers, but FGS lack this cultural capital, and they tend to feel less socially satisfied in college (Mehta et al., 2011). This is especially true for FGS who are also ethnic minority students, for they are in a “double jeopardy” situation, leaving them feeling even more isolated from their peers because they feel excluded because of their status (Ward et al., 2012, p. 53). If FGS students do not possess the knowledge or confidence to become involved on campus, they will likely feel more alone than CGS who become involved and garner even more cultural capital through additional campus connections.

### **Academic Performance**

If a student believes they cannot succeed, they will likely struggle to remain academically motivated and stay on track in their coursework. Even when FGS have completed their first year of college, they report lower levels of self-efficacy than CGS (Ramos-Sanchez & Nichols, 2007),



which could explain why some researchers have found that FGS tend to lack persistence in their courses. Ishitani (2003) found that FGS are more likely never to finish their degrees compared to CGS, and FGS who stay in college to complete their degrees are more likely to need more time to finish than CGS. While degree completion is one measure of academic success, GPA is another. Mehta et al. (2011) discovered that FGS also struggle academically in terms of having lower GPAs and lower levels of academic satisfaction than CGS. Despite these results, there is not a clear consensus as to whether or not CGS outperform FGS in regards to academics. Dumais and Ward (2010), for example, found that whether a student is an FGS or CGS does not ultimately affect their academic performance in terms of GPA or degree completion. Regardless of how an FGS performs academically compared to a CGS, Clauss-Ehlers and Wilbrowski (2007) discovered that academic strategy programs are not enough to support FGS in academic success; rather, for FGS to succeed in areas such as degree completion and GPA, they may need programs to prepare them for the psychological challenges that accompany college.

In this study, I want to explore how FGS and CGS compare in terms of self-efficacy, campus involvement, and academic performance in their first year at UNI. While there is already research in these three areas, no previous studies have shown how FGS and CGS compare across these three areas using the same data set for a particular school. In addition, no previous studies have been performed comparing FGS and CGS in these three categories at UNI. Therefore, this is a significant study for UNI and other universities because it shows how FGS and CGS compare in the areas of self-efficacy, campus involvement, and academic performance, which may lead universities to consider how they might better meet the needs of their FGS population.

### **Research Questions**

To better understand the relationships between FGS and CGS in terms of self-efficacy, campus involvement, and academic performance, I have divided my research into the following questions:

RQ1: How do FGS and CGS compare in terms of self-efficacy?

RQ2: How do FGS and CGS compare in terms of campus involvement?

RQ3: How do FGS and CGS compare in terms of academic performance measured by GPA?

### **Methodology**

#### **Instrumentation**

Mapworks is an online student adjustment survey distributed annually to all first-year students at the UNI in the fall and spring semesters. Students participate in the survey voluntarily, and there are incentives for students who complete the survey. The survey is divided into modules, and certain modules, such as Academic Background, ask students to self-report demographic and academic profile information, while others, such as Self-Efficacy and Campus Involvement, ask students to rank their answers to questions on a scale of 1 to 7. This study utilizes results from the 2015-2016 Mapworks survey. The Mapworks survey questions examined in this study are listed in the appendix.

To determine whether a first-year student is FGS or CGS, this study depends on students' responses to the following question in the Academic Background module: "Which best describes the highest level of education achieved by a parent or legal guardian?" An FGS is any student who selected one of the following responses: "High School diploma or less," "Some college," or "Completed an Associate's degree." A CGS is any student who selected either of the following

responses: “Completed a Bachelor’s degree” or “Completed a Graduate or Professional degree.” The students who selected “Don’t know or not applicable” or “Prefer not to answer” are not included in this study.

To address RQ1 and measure students’ academic self-efficacy, this study uses students’ responses to the following questions in the Self-Efficacy module: “To what degree are you certain that you can: Do well on all problems and tasks assigned in your course? Do well in your hardest course? Persevere on class projects even when there are challenges?” For each of these questions, students are asked to rate their certainty on a scale of 1 (not at all certain) to 7 (absolutely certain). In addition to the Self-Efficacy module, this study examines students’ responses to the following question in the Academic Background module: “What do you think your GPA will be this term?” The following options are available for student to select: “GPA of 3.50 or higher (Mostly As),” “GPA of 3.00 to 3.49 (Mostly Bs),” “GPA of 2.50 to 2.99 (Some Bs and Cs),” “GPA of 2.00 to 2.49 (Mostly Cs),” or “GPA less than 2.00 (Lower than Cs).”

To address RQ2 and measure students’ campus involvement, this study uses students’ responses to the following questions in the Campus Involvement module: “During this term, to what degree do you intend to: Participate in a student organization? Hold a leadership position in a college/university student organization?” For each of these questions, students are asked to rate their certainty on a scale of 1 (not at all) to 7 (extremely).

To address RQ3 and compare FGS and CGS in terms of GPA, this study utilizes students’ official UNI GPAs for both the fall 2015 and spring 2016 semesters. This study uses the GPAs students earned in each respective semester at UNI; therefore, the spring GPA is not cumulative.

## **Participants**

A total of 1,549 first-year students voluntarily participated in the 2015-16 Mapworks survey and answered the question to self-identify as FGS or CGS. Of these 1,549 students, 646 self-identified as FGS and 903 self-identified as CGS. The 71 students who preferred not to answer or did not know have not been included in this thesis.

## **Procedures**

In order to access UNI's 2015-16 Mapworks data and students' official GPAs, I received permission from the UNI's Institutional Review Board (IRB) for the use of existing data and the office of Institutional Research & Effectiveness (IRE). Students were assigned random identification numbers, and their responses to the Mapworks questions were linked with their GPAs for both the fall 2015 and spring 2016 semesters and de-identified.

## **Analysis**

The data collected from Mapworks and IRE were entered into an Excel spreadsheet and transferred into the Statistical Packages for the Social Sciences (SPSS) for statistical analysis. Using independent samples *t* tests, each individual question from the Self-Efficacy and Campus Involvement modules was analyzed. Independent samples *t* tests find statistically significant differences between an independent variable with two levels (e.g., FGS vs. CGS) on some dependent variable (e.g., self-efficacy, campus involvement, or GPA). In total, this study uses the results from four *t* tests to compare FGS and CGS in terms of self-efficacy, two *t* tests to compare FGS and CGS in terms of campus involvement, and two *t* tests to compare FGS and CGS in terms of their fall and spring GPAs.



## Results

### Research Question 1 (RQ1):

*How do FGS and CGS compare in terms of self-efficacy?*

*RQ1A: On a scale of 1 (not at all certain) to 7 (absolutely certain), to what degree are you certain that you can: Do well on all problems and tasks assigned in your course?* Table 1 below shows the descriptive statistics that correspond to RQ1A.

Table 1

	N	Mean	Std. Deviation	Std. Error Mean
CGS	458	5.60	.954	.045
FGS	312	5.49	1.033	.058

An independent-samples t-test was conducted to compare self-efficacy in terms of doing well on problems and tasks assigned in a course in CGS and FGS conditions. This test was found to be statistically non-significant for CGS ( $m=5.60$ ,  $sd=.045$ ) and FGS ( $m=5.49$ ,  $sd=1.033$ ) conditions; ( $t(768)=1.519$ ,  $p > .05$ ). The mean of CGS ( $n=458$ ) for this question ( $m=5.60$ ,  $sd=.045$ ) was not significantly different from the mean of FGS ( $n=312$ ) for this question ( $m=5.49$ ,  $sd=1.033$ ), with both groups answering the question with a mean close to 5.5. The mean of 5.5 is out of 7, with 7 being absolutely certain of doing well on all problems and tasks in an assigned course. A score of 5.5 is considered high and means both CGS and FGS on average believe they can do well on all problems and tasks in an assigned course.

*RQ1B: On a scale of 1 (not at all certain) to 7 (absolutely certain), to what degree are you certain that you can: Do well in your hardest course?* Table 2 below shows the descriptive statistics that correspond to RQ1B.

Table 2

	N	Mean	Std. Deviation	Std. Error Mean
CGS	459	5.33	4.537	.212
FGS	310	4.95	1.261	.072

An independent-samples t-test was conducted to compare self-efficacy in terms of doing well in one's hardest course in CGS and FGS conditions. This test was found to be statistically non-significant for CGS ( $m=5.33$ ,  $sd=4.537$ ) and FGS ( $m=4.95$ ,  $sd=1.261$ ) conditions; ( $t(767)=1.415$ ,  $p > .05$ ). The mean of CGS ( $n=459$ ) for this question ( $m=5.33$ ,  $sd=4.537$ ) was not significantly different from the mean of FGS ( $n=310$ ) for this question ( $m=4.95$ ,  $sd=1.261$ ), with both groups answering the question with a mean close to 5. The score of 5 is out of 7, with 7 being absolutely certain of doing well in one's hardest course. A score of 5 is considered moderately high and means both CGS and FGS on average believe they can do moderately well on all problems and tasks in an assigned course.

*RQ1C: On a scale of 1 (not at all certain) to 7 (absolutely certain), to what degree are you certain that you can: Persevere on class projects even when there are challenges?* Table 3 below shows the descriptive statistics that correspond to RQ1C.

Table 3

	N	Mean	Std. Deviation	Std. Error Mean
CGS	458	5.71	.997	.047
FGS	312	5.96	5.371	.304

An independent-samples t-test was conducted to compare self-efficacy in terms of persevering on class projects even when there are challenges in CGS and FGS conditions. This test was found to be statistically non-significant for CGS ( $m=5.71$ ,  $sd=.997$ ) and FGS ( $m=5.96$ ,  $sd=5.371$ ) conditions; ( $t(768)=-.959$ ,  $p > .05$ ). The mean of CGS ( $n=458$ ) for this question ( $m=5.71$ ,  $sd=.997$ ) was not significantly different from the mean of FGS ( $n=312$ ) for this question ( $m=5.96$ ,  $sd=5.371$ ), with both groups answering the question with a mean close to 6. The score of 6 is out of 7, with 7 being absolutely certain of persevering on class projects even when there are challenges. A score of 6 is considered high and means both CGS and FGS on average believe they can persevere on class projects even when there are challenges.

*RQ1D: What do you think your GPA will be this term?: GPA of 3.50 or higher (Mostly As); GPA of 3.00 to 3.49 (Mostly Bs); GPA of 2.50 to 2.99 (Some Bs and Cs); GPA of 2.00 to 2.49 (Mostly Cs); GPA less than 2.00 (Lower than Cs).* Table 4 below shows the descriptive statistics that correspond to RQ1D.

Table 4

	N	Mean	Std. Deviation	Std. Error Mean
CGS	902	.74	.710	.024
FGS	644	.97	.727	.029

An independent-samples t-test was conducted to compare self-efficacy in terms of expected GPA for the term in CGS and FGS conditions. There was a significant difference in the scores for CGS ( $m=.74$ ,  $sd=.710$ ) and FGS ( $m=.97$ ,  $sd=.727$ ) conditions;  $t(1544)=-6.290$ ,  $p < .001$ ). The mean of CGS ( $n=902$ ) for this question ( $m=.74$ ,  $sd=.710$ ) is significantly different from the mean of FGS ( $n=644$ ) for this question ( $m=.97$ ,  $sd=.727$ ), with CGS having a lower mean, meaning CGS on average expect to have a higher GPA than FGS. FGS, on the other hand, have a significantly higher mean than CGS, meaning FGS on average expect to have a lower GPA than CGS.

### **Research Question 2 (RQ2):**

*How do FGS and CGS compare in terms of campus involvement?*

*RQ2A: On a scale of 1 (not at all) to 7 (extremely), to what degree do you intend to: Participate in a student organization?* Table 5 below shows the descriptive statistics that correspond to RQ2A.

Table 5

	N	Mean	Std. Deviation	Std. Error Mean
CGS	446	5.14	4.850	.230
FGS	299	4.43	2.000	.116

An independent-samples t-test was conducted to compare campus involvement in terms of intent



to participate in a student organization in CGS and FGS conditions. There was a significant difference in the scores for CGS ( $m=5.14$ ,  $sd=4.850$ ) and FGS ( $m=4.43$ ,  $sd=2.000$ ) conditions; ( $t(743)=2.378$ ,  $p < .05$ ). The mean of CGS ( $n=446$ ) for this question ( $m=5.14$ ,  $sd=4.850$ ) is significantly different from the mean of FGS ( $n=299$ ) for this question ( $m=4.43$ ,  $sd=2.000$ ), with CGS having a higher mean, meaning CGS on average have a greater intent to participate in a student organization than FGS. FGS, on the other hand, have a significantly lower mean than CGS, meaning FGS on average have a lesser intent to participate in a student organization.

*RQ2B: On a scale of 1 (not at all) to 7 (extremely), to what degree do you intend to: Hold a leadership position in a college/university student organization?* Table 6 below shows the descriptive statistics that correspond to RQ2B.

Table 6

	N	Mean	Std. Deviation	Std. Error Mean
CGS	448	4.63	12.076	.571
FGS	297	5.25	14.727	.855

An independent-samples t-test was conducted to compare campus involvement in terms of intent to hold a leadership position in a college/university student organization in CGS and FGS conditions. This test was found to be statistically non-significant for CGS ( $m=4.63$ ,  $sd=12.076$ ) and FGS ( $m=5.25$ ,  $sd=14.727$ ) conditions; ( $t(743)=-.628$ ,  $p > .05$ ). The mean of CGS ( $n=448$ ) for this question ( $m=4.63$ ,  $sd=12.076$ ) was not significantly different from the mean of FGS ( $n=297$ ) for this question ( $m=5.25$ ,  $sd=14.727$ ), with both groups answering the question with a mean close to 5. The score of 5 is out of 7, with 7 being extremely likely to hold a leadership position in a college/university student organization. A score of 5 is considered moderately high and means both CGS and FGS on average believe they are somewhat likely to hold a leadership position in a college or university student organization.

**Research Question 3 (RQ3):**

*How do FGS and CGS compare in terms of academic performance measured by GPA?*

*RQ3A: In the fall 2015 semester, how do FGS and CGS compare in terms of academic performance measured by GPA?* Table 7 below shows the descriptive statistics that correspond to RQ3A.

Table 7

	N	Mean	Std. Deviation	Std. Error Mean
CGS	903	3.094	.787	.026
FGS	646	2.797	.865	.034

An independent-samples t-test was conducted to compare fall 2015 GPA in CGS and FGS conditions. There was a significant difference in the scores for CGS ( $m=3.094$ ,  $sd=.787$ ) and FGS ( $m=2.797$ ,  $sd=.865$ ) conditions;  $t(1547)=7.024$ ,  $p < .001$ . The mean of CGS ( $n=903$ ) for fall GPA ( $m=3.094$ ,  $sd=.787$ ) is significantly different from the mean of FGS ( $n=646$ ) for fall GPA ( $m=2.797$ ,  $sd=.865$ ), with CGS having a higher mean, meaning CGS on average have a higher fall GPA than FGS. FGS, on the other hand, have a significantly lower fall GPA than CGS.

*RQ3B: In the spring 2016 semester, how do FGS and CGS compare in terms of academic performance measured by GPA?* Table 8 below shows the descriptive statistics that correspond to RQ3B.

Table 8

	N	Mean	Std. Deviation	Std. Error Mean
CGS	877	3.069	.859	.029
FGS	600	2.719	.975	.040

An independent-samples t-test was conducted to compare spring 2016 GPA in CGS and FGS conditions. There was a significant difference in the scores for CGS ( $m=3.069$ ,  $sd=.859$ ) and FGS ( $m=2.719$ ,  $sd=.975$ ) conditions;  $t(1475)=7.271$ ,  $p < .001$ . The mean of CGS ( $n=877$ ) for

spring GPA ( $m=3.069$ ,  $sd=.859$ ) is significantly different from the mean of FGS ( $n=600$ ) for spring GPA ( $m=2.719$ ,  $sd=.975$ ), with CGS having a higher mean, meaning CGS on average have a higher spring GPA than FGS. FGS, on the other hand, have a significantly lower spring GPA than CGS.

## Discussion

### Research Question 1

In regards to how FGS and CGS compare in terms of self-efficacy, the statistical tests performed showed that there was no statistically significant difference between FGS and CGS in terms of to the degree to which they believe they can do well on all problems and tasks assigned in their course, do well in their hardest course, and persevere on class projects even when there are challenges. This is important because it does not support the initial hypothesis of this thesis that FGS have lower levels of self-efficacy than CGS in their first year at UNI. These findings contradict previous research that found that FGS have lower levels of self-efficacy than CGS (Ramos-Sanchez & Nichols, 2007; Wang & Castaneda-Sound, 2008). I expected that because FGS enter college with less cultural capital than CGS, they would have less self-efficacy in terms of academics. The majority of both FGS and CGS, however, answered the three self-efficacy questions with answers ranging from a 5-6 out of 7 (absolutely certain) in regards to the degree that they are certain they can do well and persevere. Therefore, first-year students on average enter UNI with a relatively high degree of academic self-efficacy, regardless if they are FGS or CGS.

Ward et al. (2015) found that FGS approach tasks with less confidence than CGS, but perhaps FGS enter UNI with the belief that they have the potential to do well in their courses overall. This may be due the fact that UNI is relatively small compared to the two other state

universities in Iowa, and as a result, there is a lower student to faculty ratio. Perhaps the smaller size contributes to both FGS and CGS at UNI feeling they have the opportunity to get to know their professors and receive their help and guidance when they encounter obstacles compared to students at other institutions.

Related to self-efficacy, the statistical test performed showed there was a significant difference between FGS and CGS in terms of their expected GPAs. FGS on average expected to have a lower GPA compared to CGS. While the expected GPA question on the Mapworks survey is not categorized in the Self-Efficacy module, it could be argued that it is a measure of students' academic self-efficacy since self-efficacy is defined as one's belief in their capability to complete tasks to succeed in school (Wang & Castaneda-Sound, 2008). This is important because FGS enter college with the self-imposed expectation that they will not perform as well academically as their CGS peers.

These results suggest that UNI could help FGS feel more psychologically prepared for college rather than simply offering academic resources. It is interesting how FGS and CGS on average both expect to do well and persevere in their courses despite obstacles, but perhaps this reveals that students have unrealistic expectations in regards to just how difficult their courses will be. In addition, it does not necessarily fit that FGS on average believe they can do well on all tasks assigned in a course, do well in their hardest course, and persevere on projects when there are challenges, yet they expect to achieve a lower GPA on average than CGS. There seems to be an incongruity in how FGS believe they can perform and what their actual grades will be. FGS have confidence in their abilities to endure and persevere through obstacles, but they do not have confidence in their final results. One way to explain this might be that FGS have overcome numerous challenges in their courses in high school, yet they still received low GPAs. More

research would be needed in this area. To address academic self-efficacy in college, Clauss-Ehlers and Wilbrowski (2007) found academic strategy programs are not effective in helping FGS achieve high GPAs. Therefore, if UNI offered a workshop to help FGS psychologically prepare for the challenges they may face in their courses, this may be more beneficial than general academic tips or advice.

### **Research Question 2**

In regards to how FGS and CGS compare in terms of campus involvement, the statistical tests performed showed that there was a significant difference between FGS and CGS in the degree to which they intended to participate in a student organization. The mean for CGS was 5.14 on a scale of 1 (not at all likely) to 7 (extremely likely) for their intent to become involved, while the mean for FGS was only 4.43. This is important because it supports the initial hypothesis that CGS on average are more likely to become involved on campus than FGS. This aligns with previous research that found FGS are less engaged in terms of campus involvement than CGS (Mehta et al., 2011; Pascarella et al., 2004; Pike & Kuh, 2005). It is important for all students to become involved on campus in some way because it correlates with higher levels of academic persistence and success (Jackson et al., 2011). However, because FGS are more likely than CGS to attend college part-time, live off campus, and work off campus (Engle & Tinto, 2008), it may be more difficult for them to find time to get involved. In addition, FGS' lack of cultural capital may contribute to them either not knowing how to get involved or not knowing the benefits of involvement.

There was not a statistically significant difference between FGS and CGS in the degree to which they intended to hold a leadership position in a college/university student organization. The mean for CGS was 4.63 on a scale of 1 (not at all likely) to 7 (extremely likely) for their

intent to hold a leadership position in a student organization, and the mean for FGS was 5.25. Considering first-year students participated in the survey, and it would be unlikely for a first-year student to hold a leadership position in a student organization when they have just arrived on campus, these results are rather surprising. Perhaps FGS and CGS have an unrealistic view of leadership positions at a university compared to leadership positions in high school. For example, there is often more time and options for students to hold leadership positions in high school. Since FGS and CGS take Mapworks in their first year of college, they might not yet realize that holding a leadership position in a university organization takes much more effort and commitment than many high school positions, and they might not yet know there are not as many opportunities for first-year students to hold leadership positions when they first arrive on campus.

These results suggest that UNI could make an extra effort to encourage FGS to become involved in student organizations on campus and reach out to them to help them feel connected. While UNI currently offers programs to FGS such as Jump Start, which is an extended orientation program that aims to help underrepresented students transition to college, perhaps additional steps need to be taken throughout the school year to check in with FGS to ensure they know how to become involved and are aware of what opportunities are available to them. There is a student organization on campus called First Generation Students. Although this group is important for supporting FGS at UNI and connecting FGS to each other, FGS should also be encouraged to join the same groups as CGS to prevent FGS from feeling stigmatized for their status or isolated from their peers.

**Research Question 3**

In regards to how FGS and CGS compare in terms of academic performance measured by GPA, the statistical tests performed showed there was a significant difference between FGS and CGS in terms of both their fall 2015 and spring 2016 GPAs. In fall 2015, the mean GPA for CGS was 3.094, while the mean GPA for FGS was 2.797 on a 4.00 scale. In spring 2016, the mean GPA for CGS was 3.069, while the mean GPA for FGS was 2.719 on a 4.00 scale. As the data shows, FGS had statistically lower GPAs than their CGS peers on average in their first and second semesters at UNI. This is consistent with research that has found FGS to have lower GPAs than CGS (Mehta et al., 2011); however, these findings are contrary to studies that have found no significant difference between FGS and CGS in terms of GPA (Dumais & Ward, 2010).

While these findings in regards to GPA were statistically significant, it is important to note that GPA is only one measure of academic success. It seems significant, though, that FGS had statistically lower self-expected GPAs on the Mapworks survey and had statistically lower official GPAs during their first and second semesters of college. Perhaps due to a lack of cultural capital, FGS on average enter college with the mindset that they will achieve lower GPAs, and as a result, their expectations become reality. Since a link has been found between campus involvement and academic success (Jackson et al., 2011) and FGS did not intend to become involved in student organizations to the same extent as CGS, this may also contribute to FGS having lower GPAs on average than CGS. For example, if CGS on average are involved in at least one student organization, this could help them better manage their time and meet more people who could potentially offer them academic advice on a specific class or professor.

**Limitations**

This study is limited because it only examined data from a single academic year, and the Mapworks data was self-reported. There is a possibility that the survey results from the 2015-16 academic year at UNI do not align with the results from previous years and is not representative of typical outcomes for FGS and CGS at UNI. There were only 1,549 students who answered whether they identified as CGS or FGS status, and this study assumed that all students answered this single question correctly and honestly. Since students self-selected their answers to the Mapworks questions, this study also assumed that all students read each question carefully and thought about their answer as opposed to simply selecting arbitrary answers to finish the survey. Although the Mapworks survey was voluntary for students to take, students were persuaded to complete it in order to be entered for a chance to win prizes. As a result, there is a chance that some students could have lied or rushed in order to finish the survey just to win a prize. Despite these obstacles, self-reported data tends to be reliable (Cassady, 2001).

**Recommendations for Future Research and Practice**

In the future, more research could be done to compare FGS and CGS throughout their entire college careers. For example, it would be interesting to see whether CGS continually achieve higher GPAs than FGS throughout their years in college. It may also be beneficial to expand this study to compare FGS and CGS in terms of retention and how long it takes them to complete their degrees, for these could be related to self-efficacy. Finally, additional research could be helpful to identify more specific measures UNI could take to meet the needs of its FGS in terms of self-efficacy, campus involvement, and academic performance.



To address FGS' lack of self-efficacy as shown through their lower expected GPAs (see table 4), UNI could offer FGS psychological preparation strategies to help them feel more confident in their belief that they can complete tasks to succeed in their college classes. As stated, this would be more beneficial to students than workshops or seminars on academic strategies such as note taking (Clauss-Ehlers & Wilbrowski, 2007). To address FGS' lower intent to participate in student organizations (see table 5), UNI could offer a session during Jump Start, an extended orientation program that first-generation may opt to participate in, that explains the benefits of involvement and how to join a student organization. In addition, UNI could have Jump Start leaders check in with their students throughout the school year to ensure FGS are taking advantage of opportunities to become involved. Addressing these two areas will also help address FGS' lower GPAs (see tables 7 and 8). If FGS enter college with higher levels of self-efficacy in regards to what they expect their GPAs to be and become involved in a student organization since involvement is connected to academic success (Jackson et al., 2011), they may earn higher GPAs. In addition to these recommendations, it may help to explore what other colleges or universities have done to support their FGS population in these areas.

### **Conclusion**

As both a resident assistant and orientation staff member, I have met numerous FGS during my time at UNI. There seems to be a common misconception among CGS, however, that there are not many FGS at UNI. However, at this study shows, 603 out of 1059 students who participated in the 2015-2016 Mapworks survey self-reported as FGS. This is significant because the data shows there is a large presence of FGS on campus, and this thesis has identified several key, statistically significant differences between FGS and CGS in regards to how they approach and perform in their first year at UNI, including their expected GPAs, intent to participate in a

student organization, and fall and spring GPAs. This thesis contributes to the body of research regarding how FGS compare to CGS during their first year at a university. This thesis is significant for UNI because it used data taken from UNI students to identify specific areas in which UNI can better prepare FGS for college in terms of self-efficacy, campus involvement, and academic performance. If UNI applies this data to offer FGS psychological support to increase self-efficacy and additional information and guidance to increase campus involvement, then FGS may also simultaneously increase their academic success as measured by GPA. As FGS continue to grow in their involvement and GPAs, the entire student body and institution will reap the benefits. As a future high school teacher, I look forward to continuing to work with FGS who are on the college track and offering them the support and advice I have gained through my research.

## References

- Bourdieu, P. (1998). *Practical reason*. Palo Alto, CA: Stanford University Press.
- Bourdieu, P. (1973). Cultural reproduction and social reproduction. In R. Brown (Ed.), *Knowledge, education, and cultural change: Papers in the sociology of education* (pp. 71-112). London: Tavistock Publications.
- Byrd, K.L., & MacDonald, G. (2005). Defining college readiness from the inside out: First generation college student perspectives. *Community College Review*, 33(1). Retrieved from [http://go.galegroup.com/ps/i.do?&id=GALE|A136387294&v=2.1&u=uni\\_rodit&it=r&p=AONE&sw=w&authCount=1](http://go.galegroup.com/ps/i.do?&id=GALE|A136387294&v=2.1&u=uni_rodit&it=r&p=AONE&sw=w&authCount=1)
- Cassady, J.C. (2001). Self-reported GPA and SAT: A methodological note. *Practical Assessment*, *Research & Evaluation*, 7(12). Retrieved from <http://pareonline.net/getvn.asp?v=7&n=12>
- Clauss-Ehlers, C.S., & Wilbrowski, C.R. (2007). Building educational resilience and social support: The effects of the educational opportunity fund program among first- and second-generation college students. *Journal of College Student Development*, 48(5). Retrieved from <https://muse.jhu.edu/article/221312>
- Dumais, S. A., & Ward, A. (2010). Cultural capital and first-generation college success. *Poetics*, 38(3). Retrieved from <http://www.sciencedirect.com/science/article/pii/S0304422X09000680>
- Engle, J., & Tinto, V. (2008). Moving beyond access: College success for low-income, first generation students. Retrieved from <http://files.eric.ed>

gov/fulltext/ED504448.pdf

- Inkelas, K., Daver, Z. E., Vogt, K. E., & Leonard, J. (2007). Living-learning programs and first generation college students' academic and social transition to college. *Research in Higher Education, 48*(4). Retrieved from <http://link.springer.com/article/10.1007/s11162006-9031-6>
- Ishitani, T. T., 2003. A longitudinal approach to assessing attrition behavior among first generation students: Time-varying effects of pre-college characteristics. *Research in Higher Education, 44*(4). Retrieved from [www.jstor.org/stable/40197314](http://www.jstor.org/stable/40197314)
- Jackson, J. W., Miller, D. A., Frew, E. J., Gilbreath, B., & Dillman, C. (2011). Group identification and university involvement. *Journal of Applied Social Psychology, 41*(4). Retrieved from <http://onlinelibrary.wiley.com/doi/10.1111/j.15591816.2011.00736.x/abstract>
- Lareau, A., & Weininger, E. B. (2008). Class and the transition to adulthood. In A. Lareau & D. Conley (Eds.), *Social class: How does it work?* (pp. 118-151). New York, NY: Russell Sage Foundation.
- Lareau, A., & Weininger, E. B. (2003). Cultural capital in educational research: A critical assessment. *Theory and Society, 32*(5). Retrieved from <http://link.springer.com/article/10.1023/B%3ARYSO.00000004951.04408.b0>
- Mehta, S.S., Newbold, J. J., & O'Rourke, M. A. (2011). Why do first generation students fail? *College Student Journal, 45*(1). Retrieved from <http://web.b.ebscohost.com/ehost/detail/detail?sid=f36f377e>

3839-4a6c-9b2f24df59d93462%40sessionmgr105&vid=0&hid=107&b  
data=JnNpdGU9ZWWhvc3QtbGIZQ%3d%3d#AN=59618803&db=afh

Pascarella, E. T., Pierson, C. T., Wolniak, G. C., & Terenzini, P.T. (2004).

First-generation college students: Additional evidence on college experiences and outcomes. *The Journal of Higher Education*, 75(3).

Retrieved from <https://muse.jhu.edu/article/55195>

Pike, G. R., & Kuh, G. D. (2005). First- and second-generation college

students: A comparison of their engagement and intellectual development. *The Journal of Higher Education*, 76(3). Retrieved from <https://muse.jhu.edu/article/182697>

Ramos-Sanchez, L., & Nichols, L. (2007). Self-efficacy of first-generation

and non-first generation college students: The relationship with academic performance and college adjustment. *Journal of College Counseling*, 10(1). Retrieved from [http://go.galegroup.com/ps/i.do?&id=GALE|A162575829&v=2.1&u=uni\\_rodit&it=r&pAONE&sw=w&auhCount=1](http://go.galegroup.com/ps/i.do?&id=GALE|A162575829&v=2.1&u=uni_rodit&it=r&pAONE&sw=w&auhCount=1)

Wang, C.-C. D. C., & Castaneda-Sound, C. (2008). The role of generational

status, self-esteem, academic self-efficacy, and perceived social support in college students' psychological well-being. *Journal of College Counseling*, 11(2). Retrieved from [http://go.galegroup.com/ps/i.do?&id=GALE|A186225409&v=2.1&u=uni\\_rodit&it=r&pAONE&sw=w](http://go.galegroup.com/ps/i.do?&id=GALE|A186225409&v=2.1&u=uni_rodit&it=r&pAONE&sw=w)

Ward, L., Siegel, M.J., & Davenport, Z. (2012). *First-generation college*

*students: Understanding and improving the experience from recruitment to commencement.* San Francisco, CA: Jossey-Bass.

## Appendix

## Mapworks Survey Questions

## Academic Background

Which best describes the highest level of education achieved by a parent or legal guardian?

- A. High School diploma or less
- B. Some college
- C. Completed an Associate's degree
- D. Completed a Bachelor's degree
- E. Completed a Graduate or Professional degree
- F. Don't know or not applicable
- G. Prefer not to answer

## Academic Self-Efficacy

To what degree are you certain that you can:

(Response options: 1 [not at all certain], 2, 3, 4 [moderately certain], 5, 6, 7 [absolutely certain], Not applicable)

- A. Do well on all problems and tasks assigned in your courses?
- B. Do well in your hardest course?
- C. Persevere on class projects even when there are challenges?

## Expected GPA

What do you think your GPA will be this term?

- A. GPA of 3.50 or higher (Mostly As)
- B. GPA of 3.00 to 3.49 (Mostly Bs)
- C. GPA of 2.50 to 2.99 (Some Bs and Cs)
- D. GPA of 2.00 to 2.49 (Mostly Cs)
- E. GPA less than 2.00 (Lower than Cs)

## Campus Involvement

During this term, to what degree do you intend to:

(Response options: 1 [not at all], 2, 3, 4 [moderately], 5, 6, 7 [extremely], Not applicable)

- A. Participate in a student organization?
- B. Hold a leadership position in a college/university student organization?