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## Retention of First-Generation College Students: Exploring the Effect of Mental Health

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## ABSTRACT

The retention of First-Generation College Students is an issue faced across different universities in the United States. FGCS are faced with various challenges that impact their enrollment in post-secondary institutions and these challenges are presented as the factors that affect retention in this study. This study attempts to analyze the three factors that affect the retention of FGCS which are mental health, financial well-being, and social support. Drawing participants, from a post-secondary program run by the Workforce Solutions of West Central Texas who attend colleges in West Central Texas. This study used a cross-sectional survey design to collect and analyze data from 12 students. The findings show that out of the three examined factors, psychological well-being had a moderating effect on the outcome variable retention risk which supported hypothesis one. The other two factors had no impact on the study, although social support could be significant if sample size was bigger.

The major limitation to this study was the sample size. However, the limitations in the study findings imply the need for services that support the psychological well-being of FGCS. It also implies the need for further research to be conducted for a more specific conclusion and is reflective of a larger sample size.

Retention of First-Generation College Students: Exploring the Effect of Mental Health

A Thesis

Presented to

The Faculty of the School of Social Work

Abilene Christian University

In Partial Fulfillment

Of the Requirements for the Degree

Master of Science in Social Work

By

Yana sue Hendricks

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This thesis, directed and approved by the committee for the thesis candidate Yana sue Hendricks, has been accepted by the Office of Graduate Programs of Abilene Christian University in partial fulfillment of the requirements for the degree

Master of Science in Social Work



Assistant Provost for Residential Graduate Programs

Date

4/27/2022

Thesis Committee



Kyeonghee Jang (Apr 27, 2022 14:37 CDT)

Dr. Kyeonghee Jang, Chair



Dr. Stephanie Hamm



Dr. Tom Winter

I dedicate this research to all the First-Generation College Students

## ACKNOWLEDGMENTS

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## CHAPTER I

### INTRODUCTION

#### **Problem Statement**

Blackwell and Pinder (2014) claim that higher education is an important path that leads to various opportunities, social mobility, and economic progress in the United States. Therefore, acquiring a college degree increases the chance of a career and the ability to self-support. Although earning a higher degree is very important, the path that leads to this success is different for each individual due to different life circumstances.

Although attaining a higher education degree is a dream and educational milestone that students look forward to achieving as a path for their wellbeing, first-generation college students (FGCS) face different barriers that makes it difficult to reach the path of success. FGCS have more barriers than non-first-generation college students (non-FGCS) to retention. Such barriers include mental health issues, financial strain, and lack of social support (Stebbleton & Soria, 2014). Mental health and the ways it impacts FGCS will be the main focus of this study.

#### **Previous Research**

There are agencies that have implemented programs that are designed to help address the problems of academic retention in FGCS. Workforce Solutions of West Central Texas is one of them. It is an entity of the state that focuses on getting Texans into the workforce, which encompasses providing childcare (with grants), career

education, job placement and vocational rehabilitation for people with cognitive barriers. (Reeves, 2020).

Furthermore, this agency partners with rootEd Alliance, a collaborative philanthropic entity that creates a path to a stronger future for students in rural America. This path leads to the exposure and access to college and career opportunities to both high school and college students to improve postsecondary and career outcomes. To achieve this, this organization formed a holistic model that supports students starting in high school through college and beyond. This program serves the students by providing resources such as financial aid assistance to the low-income students, academic counseling, and career opportunities (Reeves, 2020).

To aid a better understanding on the factors that affect retention regardless of the resources provided by agencies like the Workforce Solutions of West Central Texas, a literature review was conducted, which found that retention of FCGS is impacted by social support, financial strain, school dropout ideation and mental health. Blackwell and Pinder (2014), suggest that mental health problems such as depression and anxiety are on the rise in the United States and are major barriers to wellbeing of young adults in higher education.

In spite of such efforts to help FGCS, there is a lack of attention to addressing mental health problems among this population and how and why the problems are associated with their retention in college. Particularly, there is a gap in literature on the effect of mental health on the retention of FGCS.

## **The Present Study**

To bridge the research gap identified above, this study explores factors of the retention of FGCS with an emphasis on mental health. This study seeks to answer the following research question: What factors affect the retention of first-generation college students? The answers to the research question will provide insight for agencies that help FGCS and campuses to focus more on the factors that affect the retention of FGCS, with ample focus on their mental health.

CHAPTER II  
LITERATURE REVIEW

**Search Strategies**

In order to explore what has been done to answer the overarching questions for this literature review that explores historical, contextual, theoretical, and empirical backgrounds of the related topic, this study used a systematic method of identifying research articles in scientific journals. The initial search was made during September 2021. Additional searches have been done during the research period when relevant. Systematic search procedures were employed.

To identify relevant literature, various search engines or databases were used. The sources include Google Scholar, EBSCO, ACU Brown Library, *British Journal of Psychology*, *Journal of College Psychotherapy* and *Journal of College Counseling*. The reviewed materials were found by the combination of different search terms. Search terms were identified by using the databases' thesaurus/subject terms both by a specialist librarian and the researcher.

The criteria for inclusion were that the articles were written in English, had been peer-reviewed, and reported on the implementation of services in social work. The search was limited by date to “on or after” January 1, 2004, covering a 17-year time period. Relevant literature was also obtained using a manual so-called chain search, which means that the lists of references in the retrieved articles were searched. These articles were carefully scrutinized with a focus on the mental health aspect of the related content.

Those retrieved are from peer reviewed sources that have been analyzed by the authors in relation to addressing and answering the research question of the study.

### **Retention Among FGCS**

According to Blackwell and Pinder (2014), higher education leads to a path of great opportunities, social mobility, and economic progress; however, this path is very unique for every individual. The opportunity to earn a degree is different for everyone, which of course comes with different challenges and difficulties. A recent study (Pratt et al., 2019) identified that about 71% of FGCS are more likely to drop out than their non-FGCS counterparts, and these factors affect the graduation rate of FGCS, which is about 13% versus 33% of non-FGCS.

The word *first-generation* has many connotations, but according to Wang and Castaneda-Sound (2008), *first-generation students* are individuals for whom neither one of the parents or guardians possesses a four-year college degree. This population of students is more likely to drop out of college because of the various barriers that they face and significant effect on their retention.

First-generation college students are the first in their families to get a degree. On the basis of unequal opportunities, according to Jenkins et al. (2013), FGCS face different challenges than non-FGCS, such as adjusting to their college environments, different living situations, and general academic anxieties. Therefore, these challenges can lead to a low retention rates.

According to Babineau (2018), 60% of students enrolled in post-secondary institutions are FGCS, and 40% are non-FGCS whose parents have a bachelor's degree. This is not surprising because based on the barriers faced by FGCS, there is an

expectation that they are more likely to enroll more in two-year colleges than in four-year colleges. However, it is evident that the proportion of first-generation students who enroll in a higher education institution is lower compared to the general population.

### **Barriers to Retention Among FGCS**

A recent study (Pratt et al., 2019) focused on the factors that affect the retention of FGCS. These factors include the demographic characteristics of these students (such as their family size and income), the transition from high school, and the motivation and persistence to complete their degree. However, this study recognized that the emotional welfare of FGCS is very important in overcoming a lot of obstacles before college, which includes a healthy self-esteem and emotional wellbeing. FGCS Students and non-FGCS are susceptible to challenges in school, but FGCS have unique stressors that make them more susceptible to certain factors that influence their retention such as the lack of social support from family, peers, etc. (House et al., 2020).

### **Mental Health on the Retention of FGCS**

Mental health is a condition of an individual's well-being that focuses solely on a person's psychological health. According to Wang and Castaneda-Sound (2008), "mental health is generally defined as an individual's subjective perception of his or her psychological health or quality of life" (p. 101).

Nordstrom et al. (2014) discovered that academic self-esteem mediated the relationship between academic adjustment and retention which stems from being in a new environment and away from familiarity. Therefore, self-esteem plays a role in an individual's acceptance and coping skills to various stimuli or responses. According to Wang and Castañeda-Sound (2008), low self-esteem and low academic self-efficacy both

adversely affect a student's mental health, leading to symptoms such as anxiety and depression.

Self-esteem is an individual's confidence and their ability to achieve tasks. According to Wang and Castañeda-Sound, (2008), "self-esteem is an evaluation of one's worth and this feeling of self-worthiness gradually develops over time on the basis of self-competence and achievement" (p. 102), which can be based on feedback given by others. Academic-self efficacy, on the other hand, focuses on the ability of an individual to perform expected tasks as it relates to their education. Therefore, self-esteem and academic self-efficacy work hand in hand because when an individual is confident in their abilities, it influences their academic performance and outcomes (Wang & Castañeda-Sound, 2008). Students who are psychologically well are able to tackle various academic tasks given to them without the fear of failure creeping in. However, it is important to analyze the various mental health illnesses that can arise from the fear of failure and inadequate support on first-generation students.

Mental health seems to have associations with other barriers among FGCS and affect their retention. House and colleagues (2020) claim that various barriers among FGCS do not only affect their mental health but also puts them in the high-risk category of students that drop out of college. Jenkins et al. (2013) report that FGCS are more likely than non-FGCS to suffer from PTSD and depression. Lack of family support, social support, academic stress, and financial aid all contribute to this. Miller and Tatum (2008) report that the lack of family support to has been shown as a factor, that influences the mental health of a FGCS. Therefore, family support can influence a student's self-esteem, as it motivates the feelings of accomplishment, joy, and success. It also helps avoid the

feelings of fear and failure that can weigh a FGCS down, resulting in depression and anxiety.

### **Social Support on Retention**

FGCS are prone to vulnerability at a new educational environment, and this comes with overwhelming feelings that limit social support. According to Jenkins et al. (2013), FGCS “may experience social economic stressors as well as lower available material support because of scarcity of financial and other resources within their social networks” (p. 131). These stressors can introduce a form of negative response to their social environment, limiting the thought that they can exist amongst the others comfortably without any judgment.

Many FGCS are students who fall in the high-risk category from high school that required extra support and coaching in order to graduate (House et al., 2020). Therefore, in being away from that comfortable environment, there is a need for supportive relationships with students, teachers, and counselors to introduce that sense of familiarity.

Furthermore, the decision on what college to apply to is a challenging decision that many high schoolers have to make. However, according to Malone (2013), “studies show that students’ access to college information and their sources for such information greatly vary depending on their demographic circumstances” (p. 3). This suggests that the two-year or four-year institutions to which FGCS apply should be demographically suitable and should promote an ample amount of support in their respective environments. Also according to Wibrowski et al. (2017), “first-year full-time college students who registered for studies at public four-year institutions of higher education in

2011 showed an average retention rate of 79%, with retention rates ranging from 61% to 95% depending on school selectivity” (p. 318).

Furthermore, social adjustment is associated to social support because FGCS do not only face a new environment with no familiar support, but they also have to adjust to the new lifestyle of their environment. Awang et al. (2014) explain that social adjustment depends on the internal and external support that a student receives, which stimulates and encourages the student’s involvement; therefore, the higher the social support, the better the adjustment will be. Thus, a student’s adjustment to their environment creates a space for a positive experience and performance that continues to aid a better transition that will bring about resilience and continued adaptation.

### **Financial Strain on Retention**

Financial strain is a significant barrier of FGCS and therefore impacts their retention. Stebleton and colleagues (2014) discovered that unique stressors such as financial distress affect the retention of FGCS more than mental health. Further, Stebleton et al. (2014) discovered that FGCS are more likely to work part-time or full-time jobs, which can lead to depression and stress because they are preoccupied with their educational expenses and academic expectations with little or no stress.

Income and education go hand in hand, which is why a lot of FGCS are more likely limited to two-year public institutions than their peers who can afford four-year colleges (Pratt et al., 2019). Financial aid status is reflective upon a student’s family income, which determines what institution a first-generation student will attend. As a barrier that affects retention, many students who are financially strained end up dropping out of college out of fear that they are putting stress on their family. However, a lot of

them are able to work outside of school hours to increase their income, which can have a negative effect on their academics, particularly if they not only work to assist with their education but work to help feed their family. Further, according to Joo et al. (2009), working full-time can become a risk factor, as it makes it difficult for students to complete their college education. This explains that being a primary source of income for the family while trying to help pay for college can be a disadvantage on academic retention. First-generation students who are the primary bread winners for the family end up choosing their family over their education, which leads to a higher dropout rate (Joo et al., 2009).

### **Conclusion of Literature Review**

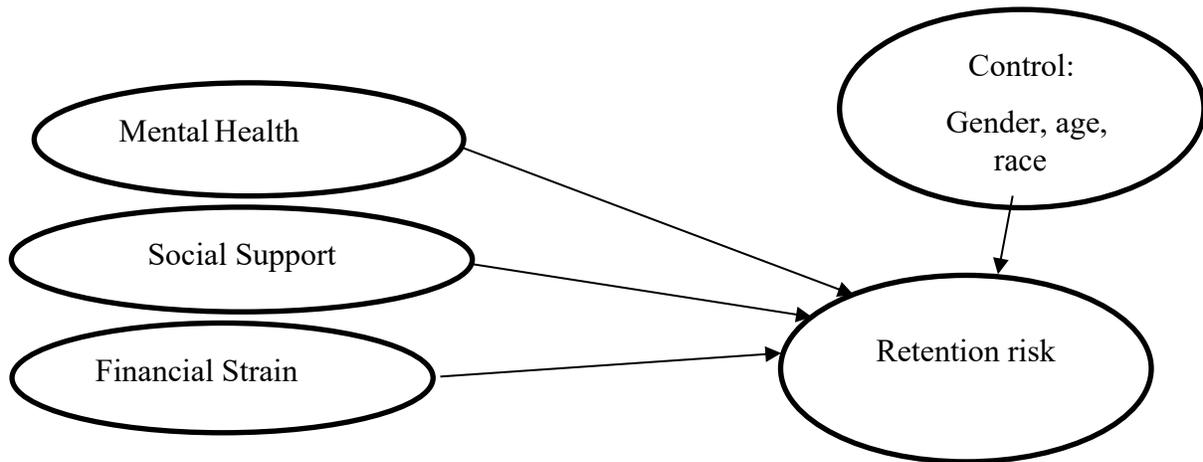
The literature review has found that FGCS experience different stressors that can threaten academic retention, which includes adjusting to their new environments and overcoming the general academic anxieties faced by all students. Furthermore, this literature review analyzes the various barriers to the retention of FGCS, as it reviews factors such mental health as well as social support and financial strain. Although previous research presents mental health as a factor that affects the retention of FGCS, there is little research that examines the effects of mental health on retention.

To bridge the research gap, this study seeks to answer the following research question: What factors affect the retention of First-Generation College Students? To answer this question, this study has incorporated the literature review into a distinct conceptual model that presents the effects of mental health, social support, and financial strain on the retention of FGCS (See Figure 1). Some demographic characteristics (e.g.,

gender, age, race) are included in the research model as controls that include the following hypotheses.

**Figure 1**

*A Conceptual Model of the Retention Risk of FGCS*



Drawing from this model, the following hypotheses are as presented:

- Hypothesis 1: FGCS with anxiety and depression issues are more susceptible to drop out of college than those without anxiety and depression.
- Hypothesis 2: FGCS with low levels of perceived social support are more susceptible to drop out of college than those with a high level of social support.
- Hypothesis 3: FGCS with low levels of financial security are more susceptible to drop out of college than those with high level of financial security.

## CHAPTER III

### METHODOLOGY

The purpose of the study was to examine the retention of first-generation college students (FGCS), while exploring factors of their retention with a focus on mental health. This study was designed to know if the effects of mental health led to a higher chance for school dropout ideation in comparison to the other factors.

#### **Research Design and Sample**

To examine the retention in FGCS, this study explored three factors using a cross-sectional survey design. A cross-sectional survey design should be considered when a researcher measures the outcome and exposure in a study with participants at the same time (Setia, 2016). The participants in this study were 18 years of age and older, all enrolled in two- or four-year colleges in the state of Texas.

This study gained the ACU Institutional Review Board approval on December 14, 2022 before the survey was administered (see Appendix A). The survey was administered online through Qualtrics after an informed consent was sent via email to the participants. The participants gave their informed consent online after reviewing the purpose of study, confidentiality, and the risks of participating in the study.

#### **Measurements**

The participation outcomes of this study were measured by the following measurements: retention, mental health, social support, and financial strain.

## **Retention Risk**

Although retention is the major variable of interest in this study, time constraints made it impossible to find a valid measurement tool for retention during this thesis project. Therefore, school dropout ideation was measured in place of retention. Dropout ideation was measured by the statement, “I feel like dropping out of school,” with response options from 1 (strongly disagree) to 5 (strongly agree). While this is not an actual measurement for retention, dropout ideation seems to be a logical indicator of such risk. A high score indicates a strong consideration of dropping out of school and therefore a need for support.

## **Mental Health**

The mental health of the participants was measured by using the Patient Health Questionnaire 4 (PHQ-4). The PHQ-4 is a brief screening scale that was used to measure the participants’ depression and anxiety (Kroenke et al., 2019). The original scale (i.e., PHQ-9) was developed for screening patients for anxiety and depression. This nine-item measurement has been replaced by the PHQ-4, a shorter version that has been validated (Lowe et al., 2010). The PHQ-4 is a brief screening scale that consists of two subscales that include two items for each depression (PHQ-2) and anxiety (GAD-2) (Kroenke et al., 2009) and is considered a reliable and valid tool for college-aged students. The PHQ-4 has a Likert scale that ranges from 0 (not at all) to 3 (nearly every day). The anxiety subscale (GAD-2) includes the first and second statements, and the depression subscale (PHQ-2) includes the third and fourth statements:

- “feeling nervous, anxious or on edge”
- “not being able to stop or control worrying”

- “feeling down depressed or hopeless”
- “little interest or pleasure in doing things”

The PHQ-4 total score ranges from 0 to 12, with four different categories that represent *psychological distress*: None (0-2), Mild (3-5), Moderate (6-8) and Severe (9-12). Higher scores indicate anxiety and depression.

### **Financial Strain**

Financial strain was measured using the financial well-being scale, created by Norvilitis et al. (2003). In spite of the name, this study conceptualizes the measurement as financial strain based on the questions included in the scale. This scale is comprised of eight items that the developers designed to measure financial confidence and security. Because there is a lack of information regarding validation of this scale, this scale’s internal consistency was a concern. However, the researcher chose this measure because this is one of the better scales that includes open-ended questions that can be used to examine the financial strain of each participant and because each statement includes questions that require specific answer ratings to show its validity.

The participants responded to each statement by rating it on a Likert scale that ranges from 1 (strongly agree) to 5 (strongly disagree). Financial strain is measured by higher number showing the disagreement and the lesser number showing an agreement with each statement. Some of these statements include, “I am uncomfortable with the amount of debt I am in,” and, “I think a lot about the debt I am in.” Financial strain will be measured by the final score, which will be achieved by the sum of all the responses. The mean score of the answers will be calculated. A higher value indicates a higher financial wellness and therefore a lower financial strain.

## **Social Support**

Social support was measured using the Multidimensional Scale of Perceived Social Support (MSPSS), which was developed by Zimet et al. (1988). The MSPSS consists of 12 questions that measure an individual's perception of the support received from family, friends, and significant others. Some of these statements include, "There is a special person who is around when I am in need," "I have a special person who is a real source of comfort to me," and "I get the emotional help and support I need from my family."

The participants responded to each statement asked by rating it on a Likert scale ranging from 1 (very strongly disagree) to 7 (very strongly agree). Social support was measured by summing up the 12 items. The total ranges from 12, which is the lowest, to 84, which is the highest. The scores on this scale can be interpreted as being low, moderate, or high. The mean of the score was collected. A higher value indicates low social support and therefore the need for social support.

The MSPSS measurement scale has been found to be valid and reliable. Its high internal consistency is supported across different samples and has been demonstrated as 0.84, 0.87, and 0.91 (Wongpakaran et al., 2011).

## **Demographic Information**

Students were asked for basic demographic questions such as their gender, age, and race. They were also asked for their classification, such as freshman, sophomore, junior, or senior.

## **Ethical Consideration**

Major ethical consideration of the survey included voluntary participation in the study, privacy, and confidentiality. These concerns were addressed by obtaining the participants' informed consent to participate in the research prior to completing the survey. The consent form included information about the purpose and procedures, potential benefits of the study, provision of confidentiality, and the contact information of the researcher in case they had questions and concerns. All participants were made aware of their voluntary participation and given the right to withdraw from the survey at any time. Participants were also made aware that they would not be given any incentives for the completion of the survey and that it has no impact on their academics. In addition, the survey was considered anonymous because it did not collect identifiable information, and the researcher only analyzed aggregated data. Given the nature of this study, it has been approved by the ACU Institutional Review Board (IRB) as exempt research. For more information on the letter see Appendix A. Although the survey did not include identifiable information, the researcher made the effort to comply with ethical issues regarding the data storage. The data were stored in a secure password-protected Google Docs file. The data will be accessed by the principal investigator and the thesis chair. After the data were utilized for the study, it will be deleted within two years.

## **Data Collection**

Data were collected via an online survey using the ACU account of Qualtrics, which is a platform for creating and distributing web-based surveys. The researcher sent the Workforce Solutions of West Central Texas personnel solicitation email that includes a link to the Qualtrics survey. The email addresses of the potential participants will be

accessed by the agency personnel who will send out the solicitation letter to the 200 students enrolled in the program who meet the inclusion criteria. After one week the survey was closed and the data were downloaded from Qualtrics.

The study data were collected from January 25, 2022, to February 11, 2022. Out of the 200 contacted participants, 17 completed the informed consent process and participated in the survey. There were five respondents who did not answer most of the questions, and after deleting those cases from the data, the working sample included 12 responses, an overall response rate of 3.10%.

### **Data Analysis**

This study data were analyzed using SPSS, a statistical software. The study instruments include the measurement scales PHQ-4, school dropout ideation, financial well-being scale, and the Multidimensional Scale of Perceived Social Support (MSPSS). The original survey developers suggested calculating the sum score, which will result in a composite variable. A composite variable, according to Song and colleagues (2013), is “made up of more than three indicators that are highly related to one another and includes scales, single or global ratings, or categorical variables” (p. 2). They claim that using composite variables is a common practice for certain purposes such as “addressing multicollinearity for regression analysis or organizing multiple highly correlated variables into more digestible or meaningful information” (p. 2). The answers to related questionnaires were categorized into a composite variable by taking the mean of the scores of them.

As a preliminary analysis, a series of reliability analyses were performed to check the internal consistency of each scale. The internal consistency indicates the extent to

which all the items or indicators measure the same construct and the inter-relatedness of the items with each other (Tavakol & Dennick, 2011). Cronbach's alpha is a widely used tool for assessing the internal consistency of a scale. This value refers to "the extent to which correlations amongst items in a domain may vary. There may be some error associated with the average correlation found in any particular sampling of items" (Nunnally, 1978, p. 206). Nunnally argued that the Cronbach's alpha level should be at least .70 in order to indicate minimally sufficient internal consistency. considered to be indicative of minimally adequate internal consistency. Although there are different reports about the acceptable values, this value is generally used for a cut-off value. The following section provides information including what indicators were included in each scale and its Cronbach's alpha.

## CHAPTER IV

### FINDINGS

#### Participants

Table 1 presents descriptive statistics informing the participants' demographic background. The study participants in this sample were FGCS freshmen in colleges across Texas, ages 18 and older. The study participants in this sample included slightly more female (50.0%) than males (41.7%). Respondents were mostly White (66.7%), and four respondents were classified as other (33.3%).

**Table 1**

*Characteristics of the Sample (N =12)*

Variable	Category or Range	<i>N or M</i>	<i>% or SD</i>
Gender	Male	5	41.7
	Female	6	50.0
	Prefer not to say	1	8.3
Classification	Freshman	12	100.0
Race	White	8	66.7
	Other	4	33.3

#### Descriptive Statistics of Major Variables

##### Psychological Distress

For this variable, Table 2 presents the data for the original items along with the reliability test results and the calculated composite value based on the reliability test results. Psychological distress was measured using four items from the PHQ4 scale. The response to each question was on a four-point Likert scale that ranged from 1 ("Not at

all”) and 4 (“Nearly every day”). A reliability test for the four items yielded the Cronbach’s alpha .784, which is higher than a widely used cut-off point of .7. Therefore, the scores on the four items were summed to generate a composite value to measure mental health issues. The distribution of this composite variable has a mean of 7.17 with a standard deviation of 3.10., ranging from 0 to 12. Author Kroenke et al. (2009) provides the criteria of psychological stress as following: None (0-2), Mild (3-5), Moderate (6-8), and Severe (9-12). Based on the criteria, this group seems to have moderate level of psychological distress.

**Table 2**

*Psychological Distress: Descriptive Statistics and Internal Consistency*

	<i>N</i>	<i>Min</i>	<i>Max</i>	<i>M</i>	<i>SD</i>
Mental Health (Cronbach’s $\alpha=.784$ )	12	2.00	12.00	7.17	3.10
Feeling nervous, anxious or on edge	12	0	2	1.83	0.94
Not being able to stop controlling or worrying	12	0	2	1.92	0.90
Feeling down, depressed, or hopeless	12	0	3	1.75	0.97
Little interest or pleasure in doing things	12	0	3	1.67	1.15

**Financial Well-Being**

Table 3 presents information from the responses given by the students on their financial well-being. They responded to 10 items included in the financial well-being scale, on a Likert scale that ranged from 1 (“Strongly disagree”) to 5 (“Strongly agree”). However, because there were some missing data, only 10 cases were included in the reliability analysis. The analysis of the 10 items found an acceptable internal consistency (Cronbach’s alpha =.762). Therefore, the scores on the 10 items were averaged to generate a composite value to measure financial wellness. By using a mean score that is not impacted by missing data, the composite score for all 12 cases can be used. The

distribution of this composite variable has a mean of 2.76 with a standard deviation of 0.75. Based on the criteria, this group seems to have a high level of financial well-being.

**Table 3**

*Financial Wellness: Descriptive Statistics and Internal Consistency*

	<i>N</i>	<i>Min</i>	<i>Max</i>	<i>M</i>	<i>SD</i>
Cronbach's $\alpha=.762$	12	1	3.88	2.76	0.75
FinWell1	10	1	4	2.00	0.94
FinWell2	10	1	5	2.10	1.37
FinWell3	10	1	5	3.00	1.33
FinWell4	10	1	5	2.80	1.48
FinWell5	10	1	5	2.70	1.25
FinWell6	10	1	4	2.60	0.97
FinWell7	10	1	5	2.70	1.25
FinWell8	10	1	5	3.00	1.56
FinWell9	10	1	5	2.80	1.48
FinWell10	10	1	5	3.10	1.10

**Social Support**

Table 4 presents the descriptive statistics informing the participants' social support level. A reliability test for the 12 items yielded the Cronbach's alpha .956. Therefore, the scores on the 12 items were summed up to generate a composite value to measure social support. The distribution of this composite variable has a mean of 60.25 with a standard deviation of 15.10. Zimet et al. (1988) provide the criteria of social support as a higher value indicating the need for social support. Based on the criteria, this group seems to have moderate level of social support.

**Table 4***Social Support: Descriptive Statistics and Internal Consistency*

	<i>N</i>	<i>Min</i>	<i>Max</i>	<i>M</i>	<i>SD</i>
Cronbach's $\alpha=.956$	12	41	84	60.25	15.10
SS1	12	1	4	5.00	1.54
SS2	12	1	5	5.17	1.64
SS3	12	1	5	4.92	1.78
SS4	12	1	5	4.83	1.53
SS5	12	1	5	5.33	0.99
SS6	12	1	4	5.42	1.44
SS7	12	1	5	4.92	1.68
SS8	12	1	5	4.83	1.80
SS9	12	1	5	4.92	1.38
SS10	12	1	5	5.17	1.40
SS11	12			5.08	1.51
SS12	12			4.67	1.56

**Factors of Retention Risk**

A multiple regression analysis was performed to test the following hypotheses:

- Hypothesis 1: FGCS with anxiety and depression issues are more susceptible to drop out of college than those without anxiety and depression.
- Hypothesis 2: FGCS with low levels of perceived social support are more susceptible to drop out of college than those with a high level of social support.
- Hypothesis 3: FGCS with low levels of financial security are more susceptible to drop out of college than those with a high level of financial security.

As mentioned in the Research Methods chapter, the retention of students could not be measured for this thesis project. Instead, this study measured retention risk by asking students to respond to a statement (“I feel like dropping out school”). The students responded on a Likert scale that ranged from 1 (“Strongly disagree”) to 5 (“Strongly agree”). Table 5 presents the results of a regression model that includes the three factors of retention risk: psychological distress, financial wellness, and social support. Even with the small number of valid cases ( $n = 12$ ), the results indicate that the overall regression model was statistically significant ( $R^2 = 0.847$ ,  $F = 14.708$ ,  $p < .001$ ) explaining the variance in depression by 84.7%. In this model, Psychological Distress was the only significant factor (Beta = 0.879,  $t = 4.838$ ,  $p = .001$ ). Students who had a higher level of psychological distress had a higher risk of dropout. Hypothesis 1 was supported. The other two factors included in this model was not statistically significant factors. Hypotheses 2 and 3 were not supported.

**Table 5**

*Multiple Linear Regression (MLR) Model of Retention<sup>a</sup> (N = 12)*

Factor	<i>B</i>	<i>SE</i>	<i>Beta</i>	<i>t</i>	<i>p</i>
(Constant)	2.385	1.751		1.362	0.210
Psychological Distress	0.382	0.079	0.879	4.838	0.001
Financial Wellness	0.125	0.265	0.069	0.471	0.650
Social Support	-0.008	0.016	-0.087	-0.496	0.633
				<i>R Square</i>	0.847
				<i>F</i>	14.708
					<0.001

*Note: <sup>a</sup> It is measured by dropout ideation: Question “I feel like dropping out of school”*

*(1=strongly disagree to 5=strongly agree)*

To explore why some hypotheses were not supported, the correlation matrix (Table 6) was examined. Although social support was negatively correlated with the

outcome variable ( $r = -0.607, p = 0.018$ ), its effect on the outcome in the regression model (Table 6) disappeared when the other factors were considered. Its effect may be confounded in the regression model due to a high correlation between social support and psychological distress ( $r = -0.588, p = 0.022$ ). In this sample study, financial wellness was not associated with retention risk in any way.

**Table 6**

*A Correlation Matrix Between Variables Included in the MLR*

	#1	#2	#3	#4
1 Retention	1			
2 Psychological Distress	0.914***	1		
3 Financial Wellness	-0.142	-0.245	1	
4 Social Support	-0.607 *	-0.588*	-0.045	1

## CHAPTER V

### DISCUSSION

The purpose of this study was to evaluate and assess the factors that affect the retention of FGCS with an emphasis on mental health. This research was conducted with participants that attend two-year and four-year colleges in West Central Texas. Identifying and assessing these factors that affect retention is important because of the client population, so it is imperative that this research was conducted for the benefit of the students.

#### **Discussion of Major Findings**

This section discusses the findings of this research and how it relates to the discovered literature. This study includes quantitative data that analyzes each factor of retention and with a conclusion of which hypothesis was supported or not. Previous research indicated the factors that affect the retention of FGCS. Therefore, this study sought to test the following hypotheses: (1) FGCS with anxiety and depression issues are more susceptible to drop out of college than those without anxiety and depression. (2) FGCS with low levels of perceived social support are more susceptible to drop out of college than those with a high level of social support. (3) FGCS with low levels of financial security are more susceptible to drop out of college than those with a high level of financial security.

In exploring the relationship of this study findings to the analyzed literature, the first hypothesis was supported by study findings. The results indicated that the

participants showed a moderate level need for psychological wellness to avoid retention risk, so this hypothesis was statistically significant.

Furthermore, based on the literature review, social support is a factor that affects the retention of FGCS. However, the study finding for this hypothesis is not supported with the literature, which might have been as a result of various contextual factors that were in effect. These contextual factors include: the sample size, the study demographics, and the study population. Previous studies were represented by a larger sample size (House et al., 2020), unlike this study, which creates a limitation of generalizability.

The study demographics in previous studies were represented by participants of different races and classifications, unlike this study, which was predominantly represented by White participants. Although social support was not supported, the study findings indicated that this hypothesis was clinically significant, and a larger sample might have concluded its significance statistically as shown in the literature review.

Additionally, financial support showed no statistical significance to the study findings which does not correlate with the literature review. The study findings in this research show that the participants have a high level of financial wellness; however, it is possible that the study participants might be struggling, but there is no significant variance in this study. Therefore, it is possible that the demographics of the study participants affected this result unlike that of previous research. However, conducting this research on a broader demographic scale might establish a different finding for this hypothesis in relation to retention risk.

## **Implications of Findings**

This study explored and analyzed the factors that affect the retention of FGCS with the use of a conceptual model that describes the relationship between each factor and the outcome variable. Based on the result analysis, it is evident that there are implications for practice, policy and research that needs to be considered.

### **Implications for Practice and Programs**

This section focuses on the implications for practice, and even though this study did not focus on specific practices, it includes an agency—Workforce Solutions of West Central Texas—which runs a post-secondary program of which the sample size is a part. The research results have created an opportunity for programs like Workforce Solutions of West Central Texas to implement practices that gear towards a factor that affects retention, especially that of psychological distress from the research results. Implementing evidence-based practices will help improve the psychological wellbeing of the students and improve retention risk.

Furthermore, while implementing evidence-based practices, psychological wellness might be recognized and will result in a more intentional cooperation and assessing of psychological risk by practitioners. Programs should also be aware of the PHQ-4 and the Screening, Brief Intervention, and Referral to Treatment (SBIRT) screening tools and provide trainings for practitioners to utilize in order to identify and drive these interventions. Also, practitioners and people who work with students need to be aware and develop the necessary skills needed for evaluation, assessment, and the use of assessment tools to evaluate and monitor the mental health of their clients.

## **Implications for Policy**

The study results have some implications on policy practice. Based on the literature, FGCS are faced with certain challenges when it comes to education and most importantly higher education. The study results implied psychological distress; it is important that programs implement social support services that can address the levels of psychological stress on students. With the services put in place, it gives a clearer understanding to the students on how the services will be of benefit to them. It is also important that the government focuses on the difficulties faced by FGCS in order to implement laws that are more accommodating to their needs.

Policy practice should also focus on incorporating policies such as trauma-informed care, which will educate practitioners on identifying and responding to the psychological problems that their clients may have. These programs and policies would not only decrease retention risk but would create access and aid in successful program implementation.

## **Implications for Research**

Although this study includes literature about the factors that affect the retention of FGCS, there is a need for more research to be conducted to examine the correlation between these factors and how much affect they have on students. The study sample size also created an implication for this research because the study results were not generalizable, therefore requiring a larger sample size for a more accurate analysis.

The study sample included only one race demographic; therefore, it is important that researchers include other race demographics in this kind of study as well as clarifying the purpose and justification for the use of race or ethnicity as a variable in

their study. This will provide a clearer understanding on why the demographic question on race is important for the study and for understanding the phenomenon under the study.

### **Study Limitations**

There are several limitations to this research that should be noted. This study used a cross-sectional data design that precludes causal interpretations of the findings, which includes the methods for gathering the study participants.

There is a gap in the generalizability of the study due to the sample size, randomization, and representation. The sample size, which was small, created a gap in research because the survey results were not representative of the actual study population sample, which would have created a better analysis of how each hypothesis affects the outcome variable. The researcher communicated with the agency that runs the program of which the participants are a part, but there was a reluctance from the participants, which has been a problem since the beginning of the research study. The study population, which includes the students in the post-secondary program at the Workforce Solutions of West Central Texas, have shown a reluctance in participation due to several factors that includes a lack of knowledge on what the program entails and its benefits. Therefore, it is important that programs elaborate on their services to students, to incorporate participation which will yield in a proper analysis of the program when evaluated.

Also, Table 2 presents information for “Psychological Distress.” With results of this study, psychological distress is supported as a factor that affects the retention risk of First-Generation College Students, which is representative of the anxiety, and depression of a student. The limitation for that includes the lack of proper services that will address this issue. As a risk to retention, it is important that an assessment tool is incorporated to

identify this factor as a risk and to provide adequate resources and services that will help alleviate and address the levels of psychological distress in FGCS.

Additionally, the subject of this research was a limitation to the study. The participation in this research was voluntary without any coercion or promised incentive. Therefore, since the sample size includes volunteered participants, it is possible that there was a hesitation to participate in the study because the topic focuses on a specific category of students that have been asked to respond to sensitive questions. This can be challenging for students to be a part of and according to McNeeley (2012), “studies have shown that respondents tend to answer inaccurately when a topic is considered sensitive or threatening” (p. 378).

The sample race demographic is also a limitation to this study. The sample size represented only one demographic of the study population, which created a lack of study generalization and the consistency due to the responses received.

Despite the limitations of this study, which are attributed to the research sample size and lack of randomization, this study’s result shows that psychological distress is a factor that affects the retention risk of FGCS and expresses the need for and importance of targeted services for this study population.

### **Conclusion**

This research study sought to examine the retention of FGCS while exploring the factors that affect retention with an emphasis of mental health. The researcher collected data through the use of a cross-sectional survey design that asked questions focusing on the variables in the study. After the data analysis, it was concluded that out of three examined factors, psychological distress was shown as having a moderate effect on

retention risk. Financial wellness had no impact on the study, nor did social support. However, future studies should be conducted in order to identify how ideation is related to drop out. Also, considering the limitations of this study listed earlier, the conclusion of this study should be interpreted with caution for research, policy, and practice. Future research is needed to continue examining the factors that affect the retention of FGCS.

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## APPENDIX A

### Institutional Review Board Approval Letter

**ABILENE CHRISTIAN UNIVERSITY**  
*Educating Students for Christian Service and Leadership Throughout the World*  
Office of Research and Sponsored Programs  
320 Hardin Administration Building, ACU Box 29103, Abilene, Texas 79699-9103  
325-674-2885



Dear Yana sue,

On behalf of the Institutional Review Board, I am pleased to inform you that your project titled

(IRB# 21-195 ) is exempt from review under Federal Policy for the Protection of Human Subjects.

If at any time the details of this project change, please resubmit to the IRB so the committee can determine whether or not the exempt status is still applicable.

I wish you well with your work.

Sincerely,

*Megan Roth*

Megan Roth, Ph.D.  
Director of Research and Sponsored Programs

Our Promise: ACU is a vibrant, innovative, Christ-centered community that engages students in authentic spiritual and intellectual growth, equipping them to make a real difference in the world.

## APPENDIX B

### Agency Approval Letter



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Providing resources for good jobs, strong employers, and a healthy regional economy.

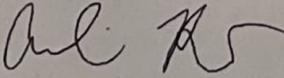
November 30, 2021

To whom it may concern:

Yana Hendricks is currently serving as a College Success Advisor at Workforce Solutions of West Central Texas to fulfill her internship requirements. Through her work in the rootEd alliance program, she has a case load of students in their first year of college that have demonstrated high barriers to persistence. Her goal, along with the program goal, is to support these students in identifying and overcoming barriers to success, while persisting through post-secondary education towards the completion of a two or four year degree.

In addition to her work, Yana has requested to conduct research focusing on the mental health of first generation college students. Yana has permission to conduct a survey of the students in the rootEd Alliance program at Workforce Solutions of West Central Texas pertaining to her research. Please contact me if you have any questions.

Sincerely,



Amelia Reeves, EdD  
Director of Career Education  
Workforce Solutions of West Central Texas  
325-795-4364

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Equal Opportunity Employer/Program. Auxiliary aids and services are available, upon request, to individuals with disabilities. These programs and services are provided under the authority of the Texas Workforce Commission. For more information, please visit the Texas Workforce Commission website at <http://www.twc.state.tx.us>