Student perceptions of the impact of participation in community college mental health counseling on retention, graduation, and transfer

By

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# Student perceptions of the impact of participation in community college mental health counseling on retention, graduation, and transfer

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This dissertation examined community college transfer students' perceptions of how mental health concerns interfere with academics, the ability to stay in school, graduate, and transfer to a 4-year university. The study also examined if community college transfer students perceive that mental health counseling improves their ability to stay in college, graduate from community college, and overcome barriers that interfere with the ability to transfer to a 4-year university. The study employed descriptive statistics and one-way between subjects ANOVAs to examine the effects of demographic characteristics and presenting mental health concerns on the ability to remain in community college, graduate from community college, and transfer to a 4-year university. Eta squared post hoc test revealed medium to large effect sizes. The participants were 65 transfer students consisting largely of white, female community college graduates between the ages of eighteen and twenty-four from a mid-sized, southeastern United States university. Significant findings for differences in perceptions were found based on students' presenting concerns for counseling and demographics.

# **DEDICATION**

Kandi, you are my soul and inspiration. Without your support, I would never have finished. You challenge me to continue growing and changing, and I am happier for it. Thank you. Hudson, you are my pride and joy. You provide so much inspiration and a desire to not only be the best father I can be, but also be the best person possible. To all my family and friends, thank you for your support. I thank God for both challenging and blessing me. I have grown in my faith because of this experience.

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#### CHAPTER I

INTRODUCTION TO MENTAL HEALTH CONCERNS AND MENTAL HEALTH COUNSELING'S IMPACT ON RETENTION, GRADUATION, AND TRANSFER

#### Introduction

Two-year public institutions of higher learning experienced a 45.3% attrition rate in the 2014-2015 academic year. This is the highest attrition rate of any public or private higher education institution group surveyed by ACT.org in 2015 (ACT, 2015). Studies show that counseling can reduce attrition. To utilize mental health counseling in a community college setting effectively, one must understand how it affects the students. Gerdes and Mallinckrodt (1994) and Bray, Braxton, and Sullivan (1999) found that socioemotional adjustment was as good or better a predictor of retention than academics. Being able to impact students' lives outside of the classroom appears to have an impact on retention. This is supported by Turner and Berry (2000) who found that 70% of students reported personal issues impacting their academics, and 20% were considering withdrawing from college due to personal problems. Porter (2011) reports that students in a 2-year institution were more likely to stay if they were receiving counseling compared to the general student population. Porter (2011) found an overall retention rate of 76% for the students who received counseling compared to a 62.7% retention rate for the general population of students (Fisher & Engemann, 2009). McKenzie, Murray, Murray, and Richelieu (2015) found that students who utilized counseling services

experienced a significant improvement in academics using self-report measures. Mehr and Daltry (2016) found that students who utilize counseling services showed a significant difference in social involvement and mental health when comparing transfer student to non-transfer students.

Tinto (1993) reports more than a quarter of all students entering higher education will leave by the end of their first year. This is especially concerning for community colleges. Fanshawe College, a 2-year college in Canada, shows the positive impact of mental health counseling. First-year students in the study had a 7.9% higher retention rate than students who did not participate in mental health counseling their first year (Porter, 2011). While this research specifically addresses the effects of mental health counseling services for community college students, Fisher and Engemann (2009) specifically point out the gap in the literature between community colleges and universities. Fisher and Engemann (2009) note there is more American literature on attrition and retention in community colleges than in Canadian community colleges, but how mental health barriers and counseling affect retention and transfer concerning community colleges is lacking.

This research examined the perceptions of community college transfer students concerning the impact of mental health counseling on their decision to remain enrolled and graduate from a community college and to transfer to a 4-year institution. Research shows the impact mental health counseling has on retention, transfer, academics, and social adjustment for transfer students and students in general (Bishop & Walker, 1990; Chin-Newman & Shaw, 2013; Gerdes & Mallincrkrodt, 1994; Illovsky, 1997; Lee, Olson, Locke, Michelson, & Odes, 2009; Mehr & Daltry, 2016; Monaghan & Attewell,

2015; Turner & Berry, 2000). However, understanding if the students themselves perceived counseling as beneficial or impactful for their retention and transfer is lacking currently.

Although theories about retention have existed for decades, Tinto's (1975) work Leaving College: Rethinking the Causes and Cures of Student Attrition where he proposes his student integration model may mark one of the most studied and influential theories in the field of retention in higher education (Demetriou & Schmitz-Sciborski, 2011). Tinto's theory, in brief, argues that students who increase their commitment to their chosen institution by successfully integrating into the academic and social systems of the institution are the most likely to accomplish their goal of graduation (Tinto, 1975). Napoli and Wortman (1998) and Tinto (1975) note differences between the population of students at community colleges and those at universities. However, Napoli and Wortman (1998) assert that Tinto's (1993) theory for retention holds true for the community college student population also. Tinto's theory helped to establish a theoretical framework that student retention was, in part, influenced by the student's social integration into the institution. Counseling centers offer students assistance with adjustment concerns in general and social adjustment more specifically so they can navigate the social atmosphere of community colleges.

#### **Problem Statement**

The research problem was evaluating the perceptions of community college transfer students regarding the role of mental health counseling in overcoming barriers to retention in a community college, graduation from a community college, and transfer to a 4-year university, as well as differences among students based on demographic

characteristics and presenting concerns. The research that does exist supports positive effects of mental health counseling on retention and overcoming barriers such as social adjustment. Some literature examined the effects of specific counseling presenting concerns concerning how it affects the students' retention, graduation, and transfer. A student perceptions survey on how specific presenting concerns affected students in community college and the students' perceived improvement due to participation in counseling was not found in the previous literature. Current research does not examine students' perceptions of mental health counseling on their decisions to remain in community college and eventually transfer to a 4-year institution to further their education. If students were connecting mental health counseling with improved retention and transfer, this may impact how community colleges utilize, fund, and market counseling. Also, some of the research that exists was not current or was mixed with academic and career counseling as well. The mixing of services can convolute the results when trying to determine the effects of mental health counseling on retention and transfer

# **Purpose of the Study**

The purpose of this study was to examine community college transfer students' perceptions about mental health counseling's impact on student retention in community college, graduation from a community college, and transfer to a 4-year institution. This study also examined community college transfer students' perceptions of personal and mental health barriers to retention, graduation, academics, and transfer to a 4-year institution. The current study also examined students' perceptions of the impact of counseling on specific presenting concerns to counseling. The main purposes of this

study were two-fold. First was to identify possible barriers to retention, graduation, and transfer from community college. The second was to identify if mental health counseling was perceived as helping to remove barriers. An important aspect to measuring these goals was to examine student perceptions concerning the impact of barriers and counseling. This study employed a self-report survey presented to community college transfer students through email of one mid-sized university in Mississippi to measure the transfer students' perceptions. The survey offered insights into populations in community college that most benefit from mental health counseling and if students connected mental health concerns as impacting their retention, graduation, and transfer to a 4-year institution. Previous research examined the impact mental health counseling had on student retention and transfer but did not examine the perceived effectiveness from the students' point of view and how they felt counseling experiences helped them in overcoming barriers and continuing their pursuit of postsecondary education. This study examined community college transfer students' perceptions of the effect mental health counseling had on the students' decision or ability to remain enrolled or transfer to further their education.

# **Research Questions**

Question 1: What are the perceptions of community college transfer students regarding the role of personal/mental health concerns as barriers to community college retention, community college graduation, academics and transfer to a 4-year institution according to a client perceptions survey?

Question 2: What are the perceptions of community college transfer students regarding the role of personal/mental health counseling on community college retention,

community college graduation, and transfer to a 4-year institution according to a client perceptions survey?

Question 3: To what extent are there differences in perceptions of personal/mental health barriers and counseling based on demographic factors including age, gender, ethnicity, GPA, graduation from community college, classification of year in college, the classification of year in school when transferred, number of counseling sessions attended, work status during college, and presenting concerns on community college retention, community college graduation and transfer to a 4-year institution according to a client perceptions survey?

#### **Definition of Terms**

- 1. Community college is defined as an institution of higher learning that is "regionally accredited to award the associate in arts or the associate in science as its highest degree," which includes "comprehensive two-year colleges as well as many technical institutes, both public and private" (Cohen & Brawer, 2008, p. 5).
- 2. Mental health counseling refers to "the provision of direct counseling interventions to students whose personal problems interfere with their ability to function in the academic environment" (Sharkin, 2004, p. 99).
- 3. Retention is "a measure of the rate at which students persist in their educational program at an institution, expressed as a percentage. For 4-year institutions, this is the percentage of first-time bachelors (or equivalent) degree-seeking undergraduates from the previous fall who enroll in the current fall. For all other institutions, this is the percentage of first-time degree/certificate-seeking students from the previous fall who either re-

enrolled or completed their program by the current fall" (U. S. Department of Education, 2016, p. 23).

### **Overview of Methods**

This study surveyed a convenience population of community college transfer students at a mid-sized university in Mississippi. A survey created by the author based on client satisfaction surveys from college mental health counseling centers, peer-reviewed questions about perceptions gathered information about demographic characteristics. barriers to students continuing their education, and perceptions of the effectiveness of mental health counseling for retention, graduation, and transfer to a 4-year institution. The university Institutional Review Board (IRB) granted permission for human studies. Only community college transfer students at a Mississippi university received the online survey. Means, standard deviations, population size, and percentages were used to present information about the first two research questions. Analysis of Variance (ANOVA) and descriptive statistics about means, standard deviations, population size, and percentages were used to provide statistical analysis of students' perceptions of the effectiveness of mental health counseling based on demographic characteristics and presenting concerns for the third research question. Table 1 summarizes the research questions, the survey's organization and statistical analysis used for each research question. Please see Appendix A for the *Client Perceptions Survey*.

Table 1

Overview of Research Questions, Survey, and Statistics

	Cumparting Intervious/Curry	
	Supporting Interview/Survey	
Research Question	Questions	Statistical Analysis
RQ 1: Students' perception	12-16	Descriptive statistics
of role of personal/mental		(mean, standard
health concerns as barriers		deviation, percentage,
		and population size)
RQ 2: Students' perception	17-19	Descriptive statistics
of role of counseling		(mean, standard
_		deviation, percentage,
		and population size)
RQ 3: Students' perception	1-11 (demographic	Descriptive statistics
of barriers and counseling's	characteristics)	(mean, standard
impact based on	17-20 (perceptions)	deviation, percentage,
demographic characteristics	,	and population size)
and presenting concerns		ANOVA

# **Delimitations of the Study**

The delimitations of the study were as follows:

- 1) The survey in this study was modified from client satisfaction surveys and a survey questionnaire about transfer students in California. It used questions about perceptions of counseling's effects on retention. No pre-existing survey of transfer students' perceptions about the effectiveness of mental health counseling on retention was available.
- 2) The study was limited to community college transfer students only.
- 3) The study relied on self-reports and subjective reporting by students.
- 4) This study used a convenience population of community college transfer students.

5) This study questioned students during the fall of 2017. The study was a cross-sectional study that could be influenced by the larger sociopolitical climate and culture of the region.

# **Significance of the Study**

According to Tinto (1993) a quarter of all students entering college left in the first year, and 45% of students in community colleges in 2014 dropped out (ACT, 2015).

Research does exist concerning retention at community colleges (Hagan, 2009); however, little research exists specifically addressing the perceived impact of mental health counseling on retention, graduation at community colleges, and transfer to 4-year institutions.

This study focused on community college students' perceptions of mental health counseling on retention, graduation, and transfer. Each department of a college or university must demonstrate how it helped carry out the mission of the institution and was effective at its mission at the same time (Sharkin, 2004). Higher education is facing higher costs and reduced budgets in the current political and educational climates. As a result, more accountability is placed on the higher education system at every level, and departments such as college mental health centers are no exception (Giddan & Weiss, 1990). Increasingly, administrators have looked at retention data from counseling centers as a way for the institution to aid students in obtaining their educational goals (Sharkin, 2004).

Community college and university officials such as presidents, vice-presidents, or any division and department leader charged with student retention could benefit from understanding how mental health counseling has an impact on the institution's retention

and removal of barriers to educational goal attainment. Past research focused on counseling's impact on retention from a clinical standpoint, but research has not studied students' perceptions of mental health counseling as a tool to help fulfill personal needs and educational goals.

This study intended to demonstrate the impact of mental health counseling on community college student retention, graduation, and transfer to a 4-year institution. Currently, five Mississippi community colleges have mental health counseling on campus, and another offers limited services. Community college administrators may use this study to evaluate the effectiveness of mental health counseling on their campuses from a retention and student goal attainment standpoint. Community colleges and 4-year institutions may use counseling staff during recruitment fairs to advertise the services. The three significant aspects of this study were to understand community college transfer students' perceptions of the impact of mental health counseling on 1) removing barriers to community college retention, 2) transfer to a 4-year institution, and 3) helpfulness for different student populations and presenting concerns.

Tinto's (1993) theory of student retention asserts that a student's fit and adjustment to the social and learning environment were determining factors for retention. Research by Gerdes and Mallinckrodt (1994), Turner and Berry (2000), and Bishop and Walker (1990) supports the theory that adjustment is an important factor for retention and even a predictor of retention. The research suggests that social adjustment is as important a factor in retention as is academic success (Bishop & Walker, 1990). However, prior research did not measure the impact of mental health counseling from the student's

perspective and did not demonstrate if students attributed changes or adjustment in their lives to the mental health counseling they sought.

#### CHAPTER II

# REVIEW OF THE LITERATURE

#### Introduction

Chapter II is a review of the literature concerning the impact mental health counseling has on retention and transfer of community college students. There is sufficient literature that shows the impact of mental health counseling on retention (Bishop & Brenneman, 1986; Bishop & Walker, 1990; Illovsky, 1997; Porter, 2011; Turner & Berry, 2000). According to Tinto (1993), more than a quarter of all students entering colleges and universities decided to leave school by the end of the first year, and over 40% did not finish. Community colleges have a duty to their students to provide resources for them to be successful and obtain their educational goals. Kessler, Foster, Saunders, and Stang (1995) found that 86% of students with mental disorders left college before graduation as opposed to 45% of the general population of students (Kuh, Kinzie, Buckley, Bridges, & Hayek, 2006). This chapter presents research on retention, transfer and how social adjustment and transition was impacted by counseling, which in turn impacted retention at the postsecondary level.

### **Mental Health Issues in College Students**

Salzer (2012) studied how mental illness affected college students compared to the general student population including how mental illness affected graduation and perceived discrimination. Salzer surveyed 449 current and former students with mental

illnesses from 357 colleges and universities in the U.S. from July 2005 to July 2006. The sample of students included those diagnosed with a serious mental illness. Of the participants, 73% were prescribed psychiatric medication, 89% received personal counseling, and 68% had at least one psychiatric hospitalization (Salzer, 2012). The researcher used an online survey to access this population. The survey assessed demographic characteristics, psychiatric history, and scales from the College Student Experiences Questionnaire (CSEQ) 4<sup>th</sup> edition. The sample included 449 former and current college students, with most participants being former students. Most participants were female (79%) and white (89%). Two multivariate analysis of variance (MANOVA) were used to analyze the differences between current and former students with mental illness. The results indicated that current students were more engaged on campus, with the dependent variables being engagement with various areas of the institution. ANOVA analysis indicated that current students were more engaged with campus organizations, but no differences were found concerning engagement with faculty and campus facilities. Salzer (2102) also found that current students were more satisfied with their college experience. Salzer used a t-test to determine how current and former students with mental illness were different compared to a normed sample. Current and former students with mental illness were less involved with certain areas of campus such as facilities (e.g., gym and student union), and they had fewer positive relationships with peers, faculty, and administrators. Overall current students were more satisfied with their college experience (Salzer, 2012). MANOVAs indicated that students who graduated were more involved on campus than those who did not graduate. ANOVAs indicated that students who graduated were more involved with faculty, use of campus facilities,

organizations and administration. Of the respondents, 74% report perceived discrimination most of the time or sometimes (Salzer, 2012). A follow-up analysis employing Tukey's honestly significant difference (HSD) indicated that students who reported perceived discrimination most of the time correlated with less institutional engagement in the areas of use of campus facilities, fewer relationships and less satisfaction (Salzer, 2012). The researcher proposed that students with mental illness experience more disruption in key areas such as engagement and satisfaction which may lead to lower education attainment (Salzer, 2012).

Gerdes and Mallinckrodt (1994) surveyed incoming students at a large northwestern university. All students were from the high school graduating class of 1985. Researchers mailed 387 incoming students surveys to assess students' expectations concerning adjustment to college, and follow-up surveys assessed for college adjustment. The Anticipated Student Adaptation to College Questionnaire (ASACQ) was used as the pretest while follow-up surveys used the Student Adaption to College Questionnaire (SACQ). Six years after enrollment, the students' transcripts were assessed for enrollment status, graduation, and academics. A total of 208 students completed the study. After six years 145 students (70%) graduated and 4 students (2%) were still enrolled. The findings show that students significantly overestimated their academic, social and personal/emotional adjustment. Gerdes and Mallinckrodt (1994) found that emotional and social adjustment was as good as or better at predicting attrition than academic adjustment. The study presented a way to look at attrition and retention through adjustment and how to identify students at risk of attrition early in the admissions process.

## **Mental Health Counseling and Retention**

Several studies have shown a relationship between mental health counseling during college and retention of students. Past studies examined the impact of mental health counseling on retention, GPA, adjustment, and involvement of the students while in higher education. The following studies will summarize and describe this relationship between mental health counseling and retention. The following will present evidence of the impact of mental health counseling on student retention.

Bishop (2016) conducted an archival study to examine the relationship between mental health counseling and retention; it included 429 full-time, first-year students at a small, public liberal arts college in the northeast United States. Bishop obtained a record of the class of 2006 from the college's Office of Institutional Research and coded information to ensure anonymity about if a student attended counseling and how many sessions were attended. Students were separated into high-risk or low-risk categories. A student was placed in the high-risk category if his or her GPA was 2.99 or below, family income was \$35,000 or less, and parents did not have a 4-year degree. A Chi-Square analysis revealed that low-risk students who attended counseling were retained at a significantly higher rate than high-risk students (Bishop, 2016). High-risk students who used counseling services versus high-risk students who did not use counseling services did not graduate at a higher rate over a 6-year period according to a Chi-Square analysis (Bishop, 2016). A Cox regression analysis could not predict persistence at the institution based on the students' risk level. A Chi-Square analysis did not reveal any significant difference between greater numbers of sessions attended by high-risk students and

retention (Bishop, 2016). Bishop (2016) proposed in his recommendation to conduct a similar study at a larger and more diverse institution. This study was conducted at a small institution with an 80% retention rate, which is higher than the national average by 22% according to the U.S. Department of Education (2016).

McKenzie et al. (2015) studied the degree to which college students identified academic concerns in counseling as well as determined the impact counseling services have on problem acuity and distress levels. The researchers examined archival data obtained from 129 university students in the United Kingdom who attended counseling. The study was a quasi-experimental within and between-participants design which utilized descriptive statistics to measure the pre-test and post-test. The researchers examined the reliable change and clinically significant change based on the Clinical Outcomes in Routine Evaluation-Outcome (CORE-OM). Reliable change on the CORE-OM was a score of 4.8 or higher. The CORE-OM also measured clinically significant change with a score of 10 or less, which indicated a move from the clinical population to the general healthy population. The CORE-OM is a 34 question self-report measure which yields an overall psychological distress level. The results of the study showed that 91% of students classified academics as being a problematic issue. Concerning reliable change, 67% of students who indicated academic concerns exhibited reliable change versus 50% of students who did not identify academic issues. Forty percent of students in both groups indicated a clinically significant change at post-test. McKenzie et al. (2015) concluded that counseling had an impact in improving academic issues but did not measure to what extent counseling improved academics, which the researchers acknowledge as a limitation of the study.

Turner and Berry (2000) conducted a longitudinal study examining students at a mid-sized western land-grant university during August 1991-May 1996. The total number of students in the clinical group was 2,365, and the average enrollment for the general population for the university each year was 13,405. The clinical group and the general population group were the comparison groups for the study. All data used in the 6-year longitudinal study were archival or self-report. Turner and Berry (2000) used an Initial Contact Form and Client Satisfaction Survey for the clinical sample. The Initial Contact Form gathered information about the students' presenting concerns, the effects of the presenting problem on academic progress, as well as considerations on withdrawal from school. The Client Satisfaction Survey was developed to measure 12 areas including academic performance and retention. The researchers also employed the assistance of the Office of Registration and Records to confirm retention and graduation over the six years. Retention was categorized into annual retention rates, eventual retention rates, graduation rates, and total retention rates (Turner & Berry, 2000). Annual retention was the year-to-year retention. Eventual retention rates were students who dropped out but returned during the time of the study. Graduation rates were students who received a degree during the time of the study. The total retention rate was the total of all the measures mentioned above. Turner and Berry (2000) found that a mean of 70% of the clinical sample reported personal problems affecting academic progress on the Initial Contact Form and nearly 20% were considering withdrawing from the university due to personal difficulties. An average of 60.7% reported counseling helped academically, and 43.8% reported counseling played a part in deciding to reenroll (Turner & Berry, 2000). As for the four retention rates, Turner and Berry (2000) found

that counseled students persisted the first year at a 70.9% rate compared to the general population of 58.6%. The eventual retention rate over the course of the study was 77.2% for the clinical sample compared to 67.9% for the general population. In a cross-sectional analysis, general population retention rates were compared to clinical group retention rates each year of the five academic years. The researchers used the test for comparing two binomial proportions for the four areas of retention examined (annual, eventual, graduation and total retention). The graduation rate did not experience a significant difference. The total retention rate was significantly higher at 87.9% for the clinical population compared to 81.1% for the general population. The average annual retention rate was 85.2% for the clinical population compared to 73.8% for the general population. However, the researchers did not find a significant difference for freshmen compared to the general population. Turner and Berry (2000) appear to build upon the work of Bishop and Walker (1990) which supports the idea that counseling may influence students' decision to remain in school by addressing emotive, social and personal issues.

Bishop and Walker (1990) examined the students' perceptions of personal counseling effects on decision-making in college. According to Bishop and Walker (1990), during the 1986-1987 academic year, 1,040 students presented to the Center for Counseling and Student Development at the University of Delaware for personal counseling. Counselors identified 187 students (18%) who were at risk for attrition by using a 30-minute assessment. One year later, enrollment status for each student was collected, and a client satisfaction questionnaire was mailed to each client. Bishop and Walker (1990) found that 150 (80.2%) were still enrolled and 37 (19.8%) were not enrolled one year later. A total of 62 (33.2%) students responded to the client satisfaction

survey. Of the respondents, 50 (80.6%) were enrolled one year later, and 12 (19.4%) were not enrolled. The client satisfaction survey allowed for students to indicate influences counseling had on decision-making. The most commonly indicated were: "provided someone to listen to me," "helped me organize my thinking," and "provided personal support for me in dealing with my problems" (Bishop & Walker, 1990, p. 89). The students who indicated academics were a major reason for seeking counseling indicated the following: "provided someone to listen to me," "provided personal support for me in dealing with my problem," and "helped me deal with the fear of failure" (Bishop & Walker, 1990, p. 89). As the authors indicated in their discussion, the retention may not be as much an academic preparedness issue as once thought but a personal preparedness one (Bishop & Walker, 1990). This research was also supported by Gerdes and Mallinckrodt (1994) who take it a step further claiming that social adjustment is as a good or better a predictor of attrition as academic concerns.

Wilson, Mason, and Ewing (1997) examined the correlation between the amount of counseling received and retention. The research was conducted at the Iowa State University, which is a large land-grant university with approximately 25,000 students, between January 1993 and January 1994. Their research found that students who participated in counseling showed higher retention or graduation two years later than students who were either asked to wait for services or did not arrive for their first appointment. Students who participated in up to seven sessions had a 14% higher retention or graduation rate two years later. The researchers sampled 562 students who requested counseling services. Students who requested mental health counseling services, which excluded academic problems and learning disabilities, were categorized

into four categories. Category 1 was any student who requested services but did not attend any sessions. Category 2 was students who attended 1-7 sessions. Category 3 was students who attended 8-12 sessions. Category 4 was students who attended 13 or more sessions. Using a 2 x 4 Chi-Square analysis, the researchers found a trend that the number of sessions improves the chances of retention. Also, a follow-up, standardized logistic regression analysis confirmed the apparent association between sessions attended and the probability of retention. Students in Category 1 who did not receive counseling reported a 65% overall retention rate. Students in Categories 2 and 3 demonstrated a 79% retention rate, while Category 4 demonstrated an 83% retention rate. The retention rates show that students in Category 2 enjoyed a 14% higher retention rate than students who did not receive counseling (Wilson et al., 1997). Also, students in Category 3 reported a 14% higher retention rate than students who did not participate in counseling, and students in Category 3 who received between 8 and 12 sessions were retained 4% less than Category 4 students. The researchers also applied an ANOVA to 312 participants to control for pretreatment factors of high school rank and ACT score. Researchers reported that neither high school rank nor ACT score demonstrated pretreatment effects among groups (Wilson et al., 1997). The researchers pointed out there were diminishing effects on each session after the sixth (Wilson et al., 1997).

Bishop and Brenneman (1986) conducted a study which assessed the effectiveness of counseling services provided by the University of Delaware during the fall of 1984. The researchers employed a quasi-experimental method using the records of 577 students who requested counseling that semester; 122 students were identified by the interviewing counselors in a 30-minute interview as considering dropping out of college

completely, transferring colleges, or concerned about failing (Bishop & Brenneman, 1986). The following semester the researchers collected academic information on each of the 122 students with retention related concerns. Results indicated that 24.6% of the students were on academic probation, and 13.9% did not re-enroll in classes. Of students who sought counseling services, 86% remained enrolled the following semester (Bishop & Brenneman, 1986), but the researchers did not compare this percentage to the general student population retention rate.

The purpose of a study by Illovsky (1997) was to compare the retention rates of students who received some style of counseling (e.g., career counseling, academic counseling, and personal counseling) to students who did not receive any counseling services. Using a quasi-experimental method, Illovsky compared 580 students who used the university counseling center to the university's general population of approximately 10,633 students. For both groups, basic demographic characteristics were gathered including major, classification, grades and academic status. However, the students who utilized the counseling center were also given a primary diagnosis based on the Diagnostic and Statistical Manual of Mental Disorders 4<sup>th</sup> edition (DSM-IV). In this study, the counseling center provided academic, career and personal counseling. Students who received counseling were compared to the general population in the areas of GPAs using a 4-point scale and retention at the beginning of the semester and the end of the semester. Illvosky (1997) reported improvements in grades for students receiving services for certain diagnoses such as academic, family issues, misconduct, physical problems (e.g., insomnia, stress, disabilities) and problems with self (e.g., self-esteem, grief, homesickness). However, there was no significant improvement in GPAs for

students receiving services for career concerns, addictions, mood, personality disorders, relational issues or certain types of trauma. As for effect on retention, 75% of students who attended counseling were retained compared to 68% of the general population. Of freshman who attended counseling, 75% were retained compared to 65% of the general population. There was a larger gain among seniors with 74% of the counseled students retained compared to 60% of the general population. Counseling did not affect retention for sophomores, and retention remained the same for juniors (Illovsky, 1997).

Porter (2011) studied a sample of students from Fanshawe College in Canada to examine the utilization rates and retention rates of students with probable disabilities. confirmed disabilities and no disabilities. She examined records of 416 full-time students who received mental health counseling while attending an Ontario, Canada, community college with a population of over 12,000 students. Students in the sample were categorized into three main groups: Confirmed Disability (CD), Probable Disability (PD), and No Disability (ND). Students in the CD group were diagnosed with a disorder and registered with the school as having a disability of the psychological/psychiatric nature. Students were in the PD group if they reported symptoms which probably met the criteria for a diagnosis of a mental health related disorder but were not registered with the school's disabilities services office. Demographic data, GPA, and enrollment status were also collected. The researcher gathered the data during the 2008-09 academic year and chose to use the general population retention rate of 62.7% found by Fisher and Engemann (2009) at the same college as the retention baseline. She reported that students who attended counseling had an overall retention rate of 76.0% compared to 62.7% for the general population. A student was considered retained if he or she

graduated during the academic year being studied or if he or she enrolled full-time at the college during the next academic year (Porter, 2011). The study broke the results down further into first-year students in level 1 courses and a separate group of students in level 2. The study found that level 1 students had a retention rate of 70.3%, and level 2 students had a retention rate of 83.3%. Therefore, this study demonstrated an increase of retention of 7.6% for level 1 students and 20.5% for level 2 students. Significance was found in retention rates for both levels for students who participated in counseling (Porter, 2011). The study found that the CD group had an 81.9% retention rate and the ND group had a 75.9% retention rate; however, the PD group demonstrated only a 67.4% retention rate (Porter, 2011).

Lee et al. (2009) studied only first-year students and transfer students admitted to a large public university located in the northeastern United States during the 2004-05 and 2005-06 academic years. The researchers examined how counseling affected retention and academic performance when controlling for precollege academic performance variables. The second part of the study examined the relationships within the Counseling Group (the group which received counseling in their first year of school were considered the Counseling Group and all others were the Non-Counseling Group). The researchers controlled for pre-college performance by controlling for high school GPA, verbal SAT and math SAT scores (Lee et al., 2009). Counseling services provided were psychiatric, group therapy, individual therapy or some combination thereof. Academic performance in college was measured by traditional calculation of GPA on a 4-point scale and by credit discrepancy. Credit discrepancy is the difference in the number of credits enrolled at the beginning of the semester and the number earned at the end (Lee et al., 2009).

Student retention was measured by determining if the student was still registered in classes the following fall semester, which would be one year from their original enrollment. After receiving permission from the college's IRB, the researchers obtained demographic information about incoming classes for only the fall of 2004 and 2005 along with academic information such as credits enrolled, GPA and enrollment status. The researchers also sought counseling attendance data and types of services utilized data (individual counseling only, both individual and group counseling, and both individual counseling and medication services). The researchers employed a hierarchical multiple regression to examine the relationship between the students' counseling experiences and academic performance while controlling for pre-college performance and found that counseling had a significant effect on retention one year later even when controlling for precollege academic performance. The researchers found that the relationship between retention and GPA was significant when not controlling for pre-college performance; however, this relationship was not significant when controlling for pre-college academic performance. The researchers found that the overall relationship between counseling experience, pre-college performance, and credit discrepancy was significant, but the individual relationships between counseling relationship and credit discrepancy were not significant when controlling for pre-college performance (Lee et al., 2009). The researchers employed a logistic regression test to examine the relationship between student retention and counseling experience. The researchers found that students in the counseling group were 3.1 times more likely than the non-counseling group to be retained, which was a significant finding. Lee et al. (2009) found, using a multiple regression analysis, the number of sessions, types of services (predictors) and increase in

GPA (variable) to be statically significant; however, the strength of the relationship was small. Although there were significant differences between different types of services offered, students participating in individual and group counseling earned higher GPA's than any other treatment or combination of treatments. Each type of service used in the study saw a significant impact on credit discrepancy. Students receiving individual and group counseling saw the greatest impact on reducing credit discrepancy (Lee et al., 2009). However, the number of sessions received and retention was not significant. College counseling improves retention for freshman and transfer students according to Lee et al. (2009), but counseling did not influence college cumulative GPA when controlling for precollege academic performance variables (e.g., high school GPA, verbal and math SAT scores).

Bundy and Benshoff (2000) surveyed 336 community college students in North Carolina community colleges concerning their perceptions of mental health counseling. The researchers reported there was a desire to have mental health counseling on campuses and a willingness to use the services. The study also examined any differences in responses by specific demographic characteristics such as age, gender, ethnicity, relationship status, the program of study and reason for attending college. The researchers were able to survey 336 first-year students in a study skills class or entry-level English class for seven community colleges in North Carolina. Participation in the survey was voluntary and consisted of two sections of questions. The first section asked about the demographic characteristics mentioned above. The second section used a 5-point Likert scale to ask five questions about their perceptions of mental health counseling. All participants were freshmen students, and their demographic characteristics reflected the

demographic data for the previous school year in North Carolina. The researchers found that 70% of respondents indicated that "having a personal counseling center on campus would be very helpful or helpful" (Bundy & Benshoff, 2000, p. 96). This finding was statistically significant. Other findings that were noted but not statistically significant included 34% of respondents who saw an on-campus counseling center as helpful indicated that they were "likely" or "very likely" to use mental health counseling and 24% who indicated that they would attend groups or workshops (Bundy & Benshoff, 2000). The researchers also used a Chi-Square crosstab analysis to compare item 6 (perceived helpfulness of personal counseling) to the demographic information. The analysis revealed one significant finding that women (46%) compared to men (24%) were more likely to perceive mental health counseling as helpful.

#### **Influences on Transfer Students**

Mehr and Daltry (2016) focused on the mental health differences between transfer and non-transfer students and the ongoing transition of transfer students verses non-transfer students at the 4-year institution level. They studied 700 undergraduate students at a 4-year public institution in the northeast United States. This population consisted of 182 transfer students and 518 non-transfer students; women represented 71.4% of the population and men 28.1%. The population mainly consisted of Caucasians (73.4%), African Americans constituted 14%, Hispanics 1.9%, Asian Americans .3%, Pacific Islanders 4.6%, Multiracial 1% and Self-identify .3%. Researchers employed two measures including the Standardized Data Set (SDS) to gather demographic information and the Counseling Center Assessment of Psychological Symptoms-62 (CCAPS-62) to measure psychological symptoms. The CCAPS-62 uses a 5-point Likert scale to rate self

in eight clinical subscales including Depression, General Anxiety, Social Anxiety, Eating Concerns, Substance Use, Academic Distress, Hostility and Family Distress, and it also yields an overall distress index. These instruments were presented to the participants at the intake session. Results were divided into three categories of mental health, social involvement, and academics. In the mental health category, Mehr and Daltry (2016) used a MANOVA to examine the differences in subscales between transfer and non-transfer students. The researchers found significant effects in the depression scale, academic distress, family distress and distress index subscales. In the social involvement category, a one-way MANOVA indicated significant results between transfer and non-transfer students concerning social involvement. The Bonferroni correction indicated significant effects for athlete status, campus organization hours, and work hours between transfer and non-transfer students. Transfer students were less likely to be involved socially and athletically, while working more hours, compared to non-transfer students. Lastly, Mehr and Daltry (2016) found no significance between the two groups when comparing GPA by employing independent-samples t-tests for analysis. The researchers pointed out that this study only applies to students who sought out treatment versus the general student population. However, for students who seek out mental health counseling, there is a significant difference between transfer students and non-transfer students concerning their mental health and social involvement. The researchers recommend improving transfer orientation and educating students about transfer adjustment (Mehr & Daltry, 2016).

Past research focused on community college transfer students' ability to obtain a Bachelor's degree, which is lower than students who enter a 4-year institution their

freshman year, but Monaghan and Attewell (2015) found some contradictory evidence. The purpose of their study was to determine if the higher attrition rates for community college transfers holds true compared to students who entered a 4-year institution first including if transfer students receive less financial aid. This study followed approximately 13,000 students in a 6-year longitudinal study beginning in 2004. Participants were interviewed at the beginning of their college career, three years later and six years later. Researchers also obtained access to transcripts of the students from each of the colleges attended. An overlap sample of 2,040 students omitted students who did not express an ultimate goal attainment of a Bachelor's degree, were financially independent or attended selective 4-year institutions (Monaghan & Attewell, 2015). This experimental design study used a statistical model termed the Counterfactual Model of Causal Interference and propensity matching to control for observed characteristics and unmeasured confounds. Monaghan and Attewell (2015, p. 76) argued that "propensityscore matching was effective in removing effects of differences between two groups of observed characteristics." When transcript data were analyzed, students who entered a 2year institution first were 21% less likely to obtain a Bachelor's. When propensity-score matching and sensitivity analysis were used to examine the same sample, there was a 17% gap, which was also significant. However, the study found that once community college students transfer to a 4-year institution, there was not a significant difference in degree attainment. Also, if the researchers controlled for age, family income, and other demographic factors, there was no significant difference in student financial aid received by community college students once they transfer to a 4-year institution (Monaghan & Attewell, 2015). The researchers found that community college students lost credits

when transferring, which led them to recommend better articulation agreements and a study for why credits do not transfer.

The primary focus of a study by Chin-Newman and Shaw (2013) was to understand better the barriers and obstacles faced by community college transfer students. The researchers conducted a qualitative study at a California public university. The researchers employed three 90-minute focus groups concerning issues faced by transfer students. Two focus groups were face-to-face, and one was conducted online via Skype. Participants ranged in age from 20 to 50 years and represented a variety of majors. The researchers categorized major trends into two categories of before admission into a 4-year institution and after admission. In the before admission category, participants identified concerns about being admitted and academic success. Some of the participants had taken a break in their college education and expressed concern about balancing work or raising children while in college. Others expressed concern about the loss of income or time with family. Participants were mixed in their satisfaction of transfer counseling. Some reported that they received incorrect information about transfer credits while others felt that their counselors were more than adequate for helping them navigate the admission and transfer process. In the after admission category, some participants identified navigating the university, such as Blackboard or even the structure of the university departments, was difficult. The most prominent consensus among the participants was anxiety concerning having their credits evaluated and successfully transferred, which on average took two quarters to complete (Chin-Newman & Shaw, 2013). The researchers identified the important role that counselors played in the transfer process and recommended better training and cooperation between community college and university

counselors. Also, because a significant source of stress for college transfers is credit transfer, the researchers recommended increased funding for articulation officers to stay up-to-date (Chin-Newman & Shaw, 2013).

## Mental Health Issues and Higher Education

Hartley (2013) conducted a survey of 121 undergraduate students at two Midwestern universities to study the importance of resilience to academic retention among students with mental health issues. The study compared intrapersonal and interpersonal resilience with common predictive factors for college persistence such as GPA, ACT/SAT scores, high school GPA, work hours in college, extracurricular activities, and the time to complete credit hours while also collecting demographic information about age, sex and race (Hartley, 2013). Intrapersonal resilience is the ability to use internal coping skills to overcome hardships, and interpersonal resilience is the ability to use social and familial supports as coping tools. The surveys were completed by students receiving counseling, psychiatry and disability support from their respective universities. The researcher employed several surveys combined including *The Mental* Health Inventory-5 (MHI-5), which measures current mental health perceptions, and the Connor-Davidson Resilience Scale (CD-RISC-10) to measure specific characteristics and constructs of resilient people. The Social Support Questionnaire-6 (SSQ-6) measured the fulfillment of needs by their social supports (Hartley, 2013). The results indicated that only high school GPA explained a significant amount of variance in college cumulative GPA; resilience factors which included both internal and external coping skills and tools did not significantly impact college cumulative GPA (Hartley, 2013). Psychological

distress (mental and emotional symptoms or disorders that interfere with mental or emotional wellbeing) did not affect college GPA. ACT score and hours employed each week had the most statistically significant influence on time to credits completed. There was a negative correlation between psychological distress and time to credits completed (Hartley, 2013). Regarding resilience and mental health as measured by the MHI-5, the interpersonal resilience factor of social support was not significant, which was surprising to the researcher. The interaction between intrapersonal resilience and mental health was significant (Hartley, 2013). The researcher concluded that intrapersonal resilience was more important for increased credits completed by students with higher levels of mental health distress than interpersonal resilience. Also, interpersonal resilience did not correlate to higher GPA or more credits completed (Hartley, 2013).

Breslau, Lane, Sampson, and Kessler (2008) studied mental disorders' impact on educational attainment. Between February 2001 and April 2003 professional staff from the Institute for Social Research at the University of Michigan completed 9,282 in-person interviews of a nationally representative population of the 48 contiguous United States to study the association between early-onset mental disorders and educational attainment. The researchers assessed for psychiatric diagnosis employing the World Mental Health Survey Initiative version of the Composite International Diagnosis Interview (CIDI) which captures criteria of both the ICD-10 and DSM-IV. The researchers assessed for mood disorders, anxiety disorders, substance use disorders and impulse control disorders in addition to the lifetime prevalence and age of onset of each disorder. Respondents were also asked about years of education completed, childhood adversities (traumatic events, neglect, parental mental illness, disruption in the family and parental education),

and demographic data such as age, sex, and ethnicity. A discrete-time survival analysis estimated the relationship between educational attainment and mental disorders. The Taylor-series linearization method was employed by the researchers using logistic regression equations to find the population attributable risk proportion (PARP). PARP measured the difference between the probability of educational milestone completion and people with and without mental disorders. Researchers found that the risk of educational termination was significantly associated with age, parental education, and Black or Hispanic ethnicity. Males were also significantly more likely to leave school at the primary school level as were children with oppositional-defiant disorder (ODD) and alcohol abuse. Out of 17 psychiatric disorders, 12 were statically significant for not completing high school. Compared to those with no mental disorder, people with two or more disorders were associated with significantly higher dropout rates during high school. Impulse control, substance use disorders and bipolar disorders had significantly higher rates of not entering college. There were significantly higher dropout rates for students who entered who entered college with panic disorder, bipolar disorder, AD/HD, and certain substance use disorders. The researchers estimated that in the absence of any mental disorders high school graduation would rise 10.2%, primary school graduation would rise 3.9%, college enrollment would rise 4.4% and completion of four years of college would rise 2.6%. Breslau et al. (2008) also stated that students with no mental disorders had about a 25% rate of college graduation compared to students with comorbid disorders with a 1% chance.

Davidson (2015) conducted a study about the effects of leading indicators to predict the successful graduation from a community college or transfer to a 4-year

university in first-time, full-time enrollment Kentucky community colleges students during fall 2008. Predictor variables for the study were minorities, underprepared students, low socio-economic status, students passing all classes attempted during their first term, declaring a major after their first term, continuous enrollment, passing summer classes, passing college-level math and English courses within two years, and obtaining a minimum of 30 credit hours in the first year of enrollment. The study utilized a sample of 2,850 students from the fall 2008 cohort. The researcher planned to use the variables mentioned above to predict successful graduation from a community college or transfer to a 4-year university within three years. Only 30.1% of students graduated or transfer to a 4-year university in the allotted timeframe. The study proposed two models for predicting success. The first model included only pre-college factors in a block-wise binary logistic regression. Also, tolerance, variance inflation factors (VIF) and a correlation matrix were used as part of the statistical analyses. The second model examined precollege factors and leading indicators. The first model indicated that low socioeconomic status and being underprepared for college-level courses had a significantly negative correlation. Minorities had a nonsignificant negative correlation and being male had a nonsignificant positive correlation. It was pointed out the model one had only a 65% predictive factor for graduation or transfer. However, the second model found that students who completed at least 30 hours in one year, passing summer classes, completing a college-level math course, completing a college level English course, and completing all courses attempted significantly correlated with graduation or transfer. Also, being male became significant in the second model (Davidson, 2015).

Hyun, Quinn, Madon, and Lustig (2006) conducted a cross-sectional, online survey of 3,121 graduate students during the spring of 2004 on the mental health needs of graduate students at a large western U.S. university. Of the respondents, 68% were doctoral students, 22.2% were master's level, and 8.7% were in professional programs. The study examined knowledge of counseling services, need for services, use and satisfaction with on-campus services, influences on graduate students' mental health, and demographic characteristics. The study broke the data into three models. The first model examined the self-reported need for services, influences on mental health and differences between male and female participants. The statistical analysis included a logistic regression model with two dependent variables including whether emotional or stressrelated concerns were present. The second model examined knowledge of mental health services on campus and the differences in this knowledge between male and female respondents. The third model examined the use of on-campus and off-campus services and if the utilization rate changes between gender. Results for the first model found that 44.7% self-reported having an emotional or stress-related concern in the last year, while 57.7% reported a colleague with an emotional or stress-related concern. Concerning reported emotional or stress-related concerns, 38.6% of men and 51.7% of women report concerns, and 51.7% of men and 64.6% of women report a colleague with a mental health concern. There were significant differences between men and women on depression scores with women's scores being higher than men's scores. The second section reported 50% of respondents reported considering counseling, with men being significantly less likely to consider counseling. Several factors were found to have a significant, positively correlated relationship with mental health needs such as completeness within a program,

amount of time in school, and identifying as female. The third model examined respondents' knowledge of on-campus counseling services. Close to a third of respondents were aware of counseling services, with 82.1% of women and 67.2% of men being aware. Significantly more students discovered counseling services through the health services website, which was about 25% of respondents; 19% learned about counseling through orientations and flyers, 14% learned from a friend, and about 9% learned from a physician. Nearly 31% of respondents reported using counseling while in graduate school, while 26% of respondents reported using on-campus services and 10.5% used off-campus services. Almost 6% reported using both on and off-campus services (Hyun et al., 2006). Women were significantly more likely to utilize services whether on-campus, off-campus or both. Significant and positive correlations existed between the use of counseling and four elements in graduate school including depression, stressful relationship with their advisor, time in school and identifying as female; this was also true for utilizing on-campus services. Conversely, negative and significant correlations were found between use of counseling and three factors including having a positive relationship with their advisor, being in the sciences or engineering programs, and being married; this was also true for utilizing on-campus services. Also, the competitiveness of one's program had a significantly negative correlation with attending counseling. Caucasian students were more likely to seek services than any other race/ethnicity. The significant predictors of seeking counseling off-campus include higher depression scores, stressful relationship with an advisor, and time in graduate school (Hyun et al., 2006).

In chapter II, research presented how emotional and social adjustment predicts attrition and the retention rates of students who received personal counseling for

emotional, social and mental health issues. Also, information was provided concerning mental health impacts on transfer students from 2-year institutions to 4-year institutions and other barriers transfer students face. As the research shows, there are differences in retention for students receiving mental health counseling and the general student population. However, there is a lack of information concerning the perceived impact of personal counseling on students' decisions to continue their education and transfer to a 4-year institution. This study investigated students' perceptions about personal counseling's impact on their retention and decision to transfer to a 4-year institution.

#### CHAPTER III

## **METHODOLOGY**

#### Overview

Chapter III discusses the methods and procedure of this study which includes a description of the research design, research questions, research sites, participants, instruments, and data collection and analysis procedures.

## **Research Design**

This study employed a quantitative, cross-sectional, and quasi-experimental design including independent variables consisting of demographic characteristics and presenting concerns. The design of the study was chosen due to the ability of a survey to access students who would not otherwise be identifiable. The study included three dependent variables (perceptions of the role of mental health concerns as barriers to retention, graduation, academics, and transfer; perceptions of the role of mental health counseling on retention, graduation, and transfer; and perceptions of the roles of mental health barriers and mental health counseling based on demographic characteristics and presenting concerns). The purpose of this study was to examine how the independent variables were related to the dependent variables. The primary aim of this study was to examine transfer students who received mental health counseling in community college and their perceptions of the impact on retention, graduation, and transfer to a 4-year

institution. The study included nine demographic factors as well as the presenting concerns for counseling among the transfer students.

### **Research Questions**

Question 1: What were the perceptions of community college transfer students regarding the role of personal/mental health concerns as barriers to community college retention, community college graduation, academics and transfer to a 4-year institution according to a client perceptions survey?

Question 2: What were the perceptions of community college transfer students regarding the role of personal/mental health counseling on community college retention, community college graduation and transfer to a 4-year according to a client perceptions survey?

Question 3: To what extent were there differences in perceptions of personal/mental health barriers and counseling based on demographic factors including age, gender, ethnicity, GPA, graduation from community college, classification of year in college, the classification of year in school when transferred, number of sessions attended, work status during college, and presenting concerns on community college retention, community college graduation and transfer to a 4-year institution according to a client perceptions survey?

#### **Research Sites**

Participants were community college transfer students who attended a mid-size

Mississippi university. This study examined the perceived effects of mental health

counseling and the removal of perceived barriers as related to demographics and

presenting concerns of community college transfer students. The site selected was due to

access to community college transfer students. The surveys were self-administered online. Initially, two sites were chosen, but only one site's survey information was used due to incomplete data in the other research site.

## **Participants**

All participants in this study were full-time and part-time community college transfer students who attended a Mississippi university during the fall semester of 2017. Approval was gained from the Institutional Review Board (IRB) of each university to distribute an online survey by email per the respective university's Institutional Effectiveness and Institutional Research offices. All community college transfer students were emailed and asked to complete the survey. An incentive was provided by the researcher in the form of a raffle of a pre-paid gift card for students who participated in the survey. The Offices of Institutional Effectiveness and Research for each participating university identified and emailed all transfer students who met criteria a prepared questionnaire. The Office of Institutional Research and Effectiveness of University A provided access to more than 5,000 transfer students attending in fall 2017. The Office of Institutional Research at University B provided access to more than 4,000 transfer students attending during fall of 2017.

#### Instrumentation

This study utilized a 19-question survey including rule-out questions; demographic characteristic questions; four questions concerning the perceived impact of mental health concerns on retention, graduation, transfer, and ability to do academic work; and three questions about the student's perception of mental health counseling's role in overcoming barriers to retention, graduation and transfer. The questionnaire also

included questions about presenting concerns for counseling. This study utilized a 4-point Likert scale for assessing the students' perceptions with 1 equals Strongly Agree, 2 equals Agree, 3 equals Disagree, and 4 equals Strongly Disagree. The *Client Perceptions Survey* (Appendix B) was created by the author of this study. The survey was reviewed for face validity and approval for use in this study. The Peer reviewer is the Associate Vice-President of Student Affairs and Director of Strategic Planning at his university, and one of his primary responsibilities is creating and measuring learning objectives for the Student Affairs Division of his institution. The peer reviewer created and critiqued numerous surveys for various departments within Student Affairs during his career. He has served in Student Affairs for five years, and during much of this time, his work involved assessment, data collection, and reporting responsibilities. He also holds a doctoral degree in communication. Three studies (Bishop & Walker, 1990; Bundy & Benshoff, 2000; Turner & Berry, 2000) in the literature review utilized client satisfaction/perception surveys to ask questions about the perceived effectiveness of the student's counseling experience in empirical research.

#### **Data Collection**

The researcher and University A's Office of Institutional Effectiveness and
University B's Office of Institutional Research identified transfer student's enrollment at
the two universities during the fall of 2017. The researcher sought approval from the IRB
of both universities. The Office of Institutional Effectiveness and the Office of
Institutional Research dispersed surveys to all community college transfer students due to
there were no means to identify who received counseling during community college as 1)
this knowledge was not part of the admission process and 2) this is confidential

information that the colleges cannot provide. Therefore, this study employed a survey of all community college transfer students. The survey was an electronic questionnaire emailed to transfer students which included the consent for participation in research and a cover letter which explained the purpose of the research and the survey. The email also provided a link to the survey. The electronic surveys were gathered by each university's preferred method of electronically surveying students. Three reminder emails were sent to transfer students with links to the survey during the data collection window.

Participants were offered an incentive in the form of a raffle for their participation.

Participation was entirely voluntary, and each participant could also choose to enter the raffle, in which case he or she supplied his or her student ID, phone number, email and mailing address to be contacted if he or she won the raffle.

## **Data Analysis**

Research questions one and two employed descriptive statistics to analyze the data. Descriptive statistics provide sample summaries to describe and explain study data often gathered with a questionnaire (Trochim, 2006). Data from the *Client Perceptions Survey* were presented using mean scores, standard deviations, and sample size for each factor. This study also employed descriptive statistics and ANOVAs to analyze research question 3. A one-way ANOVA offered the researcher the ability to examine an independent variable (IV) with multiple factors to find differences in means (Gravetter & Wallnau, 2000). The study analyzed three dependent variables (perceptions of the role of mental health counseling on retention, graduation and transfer; and perceptions of the role of mental health counseling based on demographic factors) for each of the independent variables (student

demographic characteristics and presenting concerns). The study confidence level was set at 95%.

## Conclusion

Chapter III presented the research design of this study including identified participants, research sites, instruments for the online survey, data collection procedures, and data analysis. Research questions were restated, and the independent and dependent variables were identified. The study used descriptive statistics to answer research questions 1 and 2. This study also used descriptive statistics as well as one-way ANOVAs for research question 3.

#### CHAPTER IV

#### RESULTS

#### Introduction

This chapter presents the analysis and results of cross-sectional, quasi-experimental survey data. The first research question included independent variables consisting of participants' perceptions of mental health concerns interfering with the dependent variables, which included retention in community college, graduation from a community college, academics in community college, and the ability to transfer from a community college to a 4-year university. The second question examined participants' perception of mental health counseling's effect on retention, graduation, and transfer from community college, which are the dependent variables. The third research question examined demographic factors and presenting mental health concerns' effects on perception related to retention, graduation, academics, and transfer. Descriptive statistics and ANOVAs, and where possible post hoc tests and effect size tests (Eta squared for ANOVAs), were employed to analyze the statistically significant findings. The chapter is organized in order of research questions presented in chapter one. Tables are employed when they provide clarity to the results.

An examination of the respondents revealed that it was comprised primarily of females (85%), ages 18–24 (74%), white/Caucasian (83%), seniors (52%) and graduated from community college (72%). Of the participants, 40% attended three or fewer

counseling sessions. Of participants, 83% stated anxiety as a presenting concern, along with mood disorders (72%), family concerns (51%), and stress (66%), to name the presenting concerns that endorsed by more than 50% of the participants.

Before examining the available data, the author must discuss the population size. The study was initially a combination of participants from two mid-size universities in the southeast United States. One research site failed to collect any useful data, and therefore the study relied on only one university's population. Survey software statistics indicated that one university received over 100 surveys; however, the students appeared to have skipped the survey to fill out the raffle leaving the questions blank. The survey service, Qualtrics, did gather 65 completed surveys from the other research site.

# Research Question One: Students' Perceptions of Presenting Concerns Effect on Retention, Graduation, Academics, and Transfer

What are the perceptions of community college transfer students regarding the role of personal/mental health concerns as barriers to community college retention, community college graduation and transfer to a 4-year institution according to a client perceptions survey? The first research question asks how mental health concerns interfere with retention, graduation, academics, and transfer. Participants rated each question on a 4-point Likert scale with one equaling Strongly Agree, two equaling Agree, three equaling Disagree and four equaling Strongly Disagree.

The means in Table 2 indicate that students perceived mental health concerns as barriers only modestly since Agree equals two and Disagree equals three, and these

means round up to three except for academics. The means, standard deviation, and the number of participants for each question are presented below in Table 2.

Table 2

Role of Mental Health Concerns as Barriers

Dependent Variables	M	SD	N
Ability to remain in school	2.61	1.018	64
Ability to graduate	2.75	.985	65
Ability to transfer	2.62	.995	65
Ability to do academic work	2.09	.897	65

# Research Question Two: Participants' Perception of the Impact of Mental Health Counseling on Retention, Graduation, and Transfer

What were the perceptions of community college transfer students regarding the role of personal/mental health counseling on community college retention, community college graduation and transfer to a 4-year according to a client perceptions survey? Research question two asked if mental health counseling helped the student to remain in school, graduate, and transfer to a 4-year institution. Table 3 describes means, standard deviation, and population size. The participants perceived that mental health counseling does help in the areas of the ability to stay in school, graduate from community college and transfer to a 4-year institution.

Table 3

Role of Mental Health Counseling

Counseling effects	M	SD	N
Stay in school	1.80	.780	64
Graduate from community college	2.05	.785	64
Helped overcome barriers to continue their education at a 4-year institution	1.72	.826	64

# Research Question Three: The Effects of Demographic Characteristics and Presenting Concerns on the Dependent Variables

To what extent are differences in perceptions of students receiving mental health counseling based on demographic factors including age, gender, ethnicity, GPA, graduation from community college, classification of year in college, the classification of year in school when transferred, number of sessions attended, work status during college, and presenting concerns (e.g. mood, anxiety, stress) on community college retention, graduation and transfer to a 4-year university according to a client perceptions survey?

#### Gender

A one-way between subjects ANOVA was utilized to compare gender regarding perceptions of mental health concerns as barriers to staying, graduating, transferring and doing academic work. Results from the ANOVA indicated there was not a significant difference in the respondents' perceptions of mental health concerns interfering with the ability to stay in community college, graduate from community college, transfer to a 4-year university, or do academic work based on gender.

A one-way between subjects ANOVA was also utilized to compare gender regarding perceptions of the benefits of mental health counseling on staying in

community college, graduating, and overcoming obstacles. Results from the ANOVA indicated that there was not a significant difference in the respondents' perceptions of mental health counseling session attended helping participants stay in school, graduate from community college, or overcome obstacles for continuing education at a 4-year university based on gender.

Table 4 illustrates participants' responses to related survey questions based on gender and includes the number of responses, means, standard deviations, and percentages. All descriptive statistics tables will include a dependent variable questions column that will be abbreviated as "DV Questions".

Table 4

Gender Descriptive Statistics

DV Questions	Gender	N	M	SD	%
Mental health concerns	Male	9	2.78	1.093	14
were interfering with ability	Female	55	2.58	1.013	86
to stay in school	Total	64	2.61	1.018	100
Mental health concerns	Male	10	3.20	.789	15
were interfering with	Female	55	2.67	1.001	85
graduation	Total	65	2.75	.985	100
Mental health concerns	Male	10	3.10	.994	15
were interfering with ability	Female	55	2.53	.979	85
to transfer to a 4-year institution	Total	65	2.62	.995	100
Mental health concerns	Male	10	2.40	1.075	15
were interfering with	Female	55	2.04	.860	85
academics	Total	65	2.09	.897	100
Mental health counseling	Male	9	1.78	.833	14
helped me stay in school	Female	55	1.80	.779	86
	Total	64	1.80	.780	100

Table 4 (Continued)

DV Questions	Gender	N	M	SD	%
Mental health counseling	Male	9	2.11	.782	14
helped me graduate	Female	55	2.04	.793	86
	Total	64	2.05	.785	100
Mental health counseling	Male	9	1.78	.833	14
helped me overcome	Female	55	1.71	.832	86
obstacles to continue my	Total	64	1.72	.826	100
education at a 4-year					
institution					

## Age

A one-way between subjects ANOVA was utilized to compare age groups regarding their perceptions of mental health concerns as barriers to staying, graduating, transferring and doing academic work. Results from the ANOVA indicated that there was not a significant difference in the respondents' perceptions of mental health concerns were interfering with their ability to stay in community college, graduate from community college, transfer to a 4-year university, or do academic work based on age groups.

A one-way between subjects ANOVA also was utilized to compare age groups regarding their perceptions of the benefits of mental health counseling on staying, graduating, and overcoming obstacles. Results from an ANOVA analysis indicate that there was not a significant difference in the respondents' perceptions of mental health counseling sessions attended helping the respondents stay in school, graduate from community college, or overcome obstacles for continuing their education at a 4-year university based on age groups.

Table 5 illustrates participants' responses to related survey questions based on age groups and includes the number of responses, means, standard deviations, and percentages.

Table 5

Age Group Descriptive Statistics

DV Questions	Age	N	M	SD	%
Mental health	18-24	47	2.74	1.010	73.4
concerns were	25-34	13	2.46	.967	20.3
interfering with ability	35-49	4	1.50	.577	6.3
to stay in school	Total	64	2.61	1.018	100
Mental health	18-24	48	2.83	.953	74
concerns interfering	25-34	13	2.54	1.050	20
graduation	35-49	4	2.50	1.291	6
	Total	65	2.75	.985	100
Mental health	18-24	48	2.67	.975	74
concerns interfering	25-34	13	2.46	1.050	20
with transfer	35-49	4	2.50	1.291	6
	Total	65	2.62	.995	100
Mental health	18-24	48	2.10	.881	74
concerns interfering	25-34	13	2.08	.954	20
academics	35-49	4	2.00	1.155	6
	Total	65	2.09	.897	100
Mental health	18-24	47	1.81	.770	73.4
counseling helped me	25-34	13	1.92	.862	20.3
stay in school	35-49	4	1.25	.500	6.3
	Total	64	1.80	.780	100
Mental health	18-24	47	2.15	.751	73.4
counseling helped me	25-34	13	1.92	.862	20.3
graduate	35-49	4	1.25	.500	6.3
	Total	64	2.05	.785	100
Mental health	18-24	47	1.72	.826	73.4
counseling helped me	25-34	13	1.85	.899	20.3
overcome barriers to	35-49	4	1.25	.500	6.3
continue education	Total	64	1.72	.826	100

## **Classification at University**

A one-way between subjects ANOVA was utilized to compare classification at the university regarding their perceptions of mental health concerns as barriers to staying, graduating, transferring and doing academic work. Results from the ANOVA indicated that there was not a significant difference in the respondents' perceptions of mental health concerns interfering with the ability to stay in community college, graduate from community college, or do academic work based on classification at the university. Results from the ANOVA indicated that there was a significant difference in the respondents' perceptions of mental health concerns interfering with ability transfer to a 4-year university based on classification at the university (p = .048).

A one-way between subjects ANOVA also was utilized to compare classification at the university regarding perceptions of the benefits of mental health counseling on staying, graduating, and overcoming obstacles to transfer. Results from the ANOVA indicated that there was not a significant difference in the respondents' perceptions of mental health counseling session attended helping participants stay in school, graduate from community college, or overcome obstacles for continuing education at a 4-year university based on classification at the university.

A Tukey HSD post hoc test was performed to make pairwise comparisons between groups. This test indicated that no specific classification at the university had a significant effect that mental health concerns were interfering with the ability to transfer to a 4-year university when compared to other classifications. Although, the Tukey HSD post hoc test did find a near significant difference between juniors and first-year students (p = .058) concerning mental health barriers interfering with transfer to a 4-year

institution; however, this does not explain the significant difference found by the ANOVA. Upon further examination, the Tukey HSD post hoc test indicated that group sizes were unequal and that type I error levels could not be guaranteed. A Games-Howell post hoc test for unequal variances was performed. The Games-Howell found significant differences between sophomores and each of the other three categories. Also, a Least Significant Difference (LSD) post hoc found significant differences between sophomores and each of the other three categories (juniors, seniors, and graduate students).

Table 6 illustrates participants' responses to related survey questions based on classification at university and includes the number of responses, means, standard, deviations, and percentages. Table 7 illustrates the results of the ANOVA.

Table 6

Classification at Time of Survey Descriptive Statistics

DV Questions	Classification	N	M	SD	%
Mental health	Sophomore	2	1.00	.000	3.1
concerns were	Junior	7	3.00	1.000	11
interfering with	Senior	34	2.71	1.001	53.1
ability to stay in	Graduate student	21	2.48	.981	32.8
school	Total	64	2.61	1.018	100
Mental health	Sophomore	2	1.50	.707	3.1
concerns were	Junior	7	3.14	.900	10.8
interfering with	Senior	34	2.85	1.048	52.3
graduation	Graduate student	22	2.59	.854	33.8
	Total	65	2.75	.985	100
Mental health	Sophomore	2	1.00	.000	3.1
concerns were	Junior	7	2.86	.900	10.8
interfering with	Senior	34	2.79	1.008	52.3
transferring	Graduate student	22	2.41	.908	33.8
	Total	65	2.62	.995	100

Table 6 (Continued)

DV Questions	Classification	N	M	SD	%
Mental health	Sophomore	2	1.00	.000	3.1
concerns were	Junior	7	2.43	1.272	10.8
interfering with	Senior	34	2.06	.851	52.3
academics	Graduate student	22	2.14	.834	33.8
	Total	65	2.09	.897	100
Mental health	Sophomore	2	1.50	.707	3.1
counseling helped	Junior	7	1.86	.690	11
me stay in school	Senior	34	1.85	.821	53.1
	Graduate student	21	1.71	.784	32.8
	Total	64	1.80	.780	100
Mental health	Sophomore	2	1.50	.707	3.1
counseling helped	Junior	7	2.14	.690	11
me graduate	Senior	34	2.09	.793	53.1
	Graduate student	21	2.00	.837	32.8
	Total	64	2.05	.785	100
Mental health	Classification				
counseling helped me	Sophomore	2	1.00	.000	3.1
overcome barriers to	Junior	7	1.14	.378	11
continue education at	Senior	34	1.88	.880	53.1
a 4-year institution	Graduate student	21	1.71	.784	32.8
	Total	64	1.72	.826	100

Table 7

Classification at University Significant ANOVA Results

DV Questions		df	SS	MS	F	р	$\eta^{2}$
Mental health	Between Groups	3	7.650	2.550	2.791	.048*	.121^
concerns were	Within Groups	61	55.734	.914			
interfering with	Total	64	63.385				
transferring							

*Note.* The symbol (\*) indicates a statistically significant p score, and the symbol ( $^{\land}$ ) indicates a large effect size.

# **Ethnicity**

A one-way between subjects ANOVA was utilized to compare ethnicity regarding perceptions of mental health concerns as barriers to staying, graduating, transferring and doing academic work. Results from the ANOVA indicated that there was not a significant difference in the respondents' perceptions of mental health concerns interfering with the participants' ability to stay in community college graduate from community college transfer to a 4-year university do academic work based on ethnicity.

A one-way between subjects ANOVA was also utilized to compare ethnicity regarding their perceptions of the benefits of mental health counseling on staying, graduating, and overcoming obstacles. Results from the ANOVA indicated that there was not a significant difference in the respondents' perceptions of mental health counseling sessions attended helping the respondents stay in school, graduate from community college, or overcome obstacles for continuing education at a 4-year university based on ethnicity.

Table 8 illustrates participants' responses to related survey questions based on ethnicity and includes number of responses, means, standard, deviations, and percentages.

Table 8

Ethnicity Descriptive Statistics

DV Questions	Ethnicity	N	M	SD	%
Mental health	Black/African	10	2.30	.823	16
concerns were	American				
interfering with	Asian/Pacific	1	2.00	<b>-</b> a	1
ability to stay in	Islander				
school	White/Caucasian	52	2.67	1.061	83
	Total	63	2.60	1.025	100
Mental health	Black/African	10	2.70	.949	16
concerns were	American				
interfering with	Asian/Pacific	1	2.00		1
graduation	Islander				
	White/Caucasian	53	2.77	1.012	83
	Total	64	2.75	.992	100
Mental health	Black/African	10	2.60	.966	16
concerns were	American	10	2.00	.900	10
interfering with my	Asian/Pacific		2.00		1
ability to transfer	Islander	1	2.00	-	1
donity to transfer	White/Caucasian	53	2.64	1.021	83
	Total	64	2.63	1.000	100
Mental health	Black/African	10	2.00	.816	16
concerns were	American		4.00		
interfering with my	Asian/Pacific	1	1.00	-	1
academics.	Islander	50	0.10	001	0.2
	White/Caucasian	53	2.13	.921	83
	Total	64	2.09	.904	100
Counseling	Black/African	10	1.70	.949	16
sessions helped me	American				
stay in school	Asian/Pacific	1	1.00	-	1
	Islander				
	White/Caucasian	52	1.83	.760	83
	Total	63	1.79	.786	100

Table 8 (Continued)

DV Questions	Ethnicity	N	M	SD	%
Counseling sessions I	Black/African	10	1.80	1.033	16
attended helped me to	American				
graduate	Asian/Pacific	1	1.00		1
	Islander				
	White/Caucasian	52	2.12	.732	83
	Total	63	2.05	.792	100
Counseling helped	Black/African	10	1.70	.949	16
me to overcome	American				
barriers to continue	Asian/Pacific	1	1.00	-	1
education at a 4-	Islander				
year institution	White/Caucasian	52	1.73	.819	83
	Total	63	1.71	.831	100

# **Graduation from Community College**

A one-way between subjects ANOVA was utilized to compare graduation from community college regarding perceptions of mental health concerns as barriers to staying, graduating, transferring and doing academic work. Results from the ANOVA indicated that there was not a significant difference in the respondents' perceptions of mental health concerns interfering with the ability to stay in community college, graduate from community college, transfer to a 4-year university, or do academic work based on graduation from community college.

A one-way between subjects ANOVA also was utilized to compare graduation from community college regarding perceptions of the benefits of mental health counseling on staying, graduating, and overcoming obstacles. Results from the ANOVA indicated that there was not a significant difference in the respondents' perceptions of mental health counseling session attended helping the respondents stay in school or graduate from community college based on the factor of graduation from community

college. The results of the ANOVA indicated that there was a significant difference in the respondents' perceptions of mental health counseling sessions attended helping overcome obstacles for continuing education at a 4-year university based on graduation from community college.

A Tukey HSD indicated that not graduating from a community college has a stronger effect on mental health counseling helping the participants transfer to a 4-year institution as indicated by the mean scores of M = 1.33 for not graduating and M = 1.87 for graduating. Note that lower scores are closer to Strongly Agree.

Table 9 illustrates participants' responses to related survey questions based on graduation from community college and includes the number of responses, means, standard, deviations, and percentages. Table 10 illustrates the results of the ANOVA.

Table 9

Graduation from Community College Descriptive Statistics

DV Questions	Graduation	N	M	SD	%
Mental health concerns	Yes	46	2.65	1.016	71.9
were interfering with	No	18	2.50	1.043	28.1
ability to stay in school	Total	64	2.61	1.018	100
Mental health concerns	Yes	47	2.79	.977	72.3
interfering with graduation	No	18	2.67	1.029	27.7
graduation	Total	65	2.75	.985	100
Mental health concerns	Yes	47	2.64	.987	72.3
interfering with transfer	No	18	2.56	1.042	27.7
	Total	65	2.62	.995	100
Mental health concerns interfered with	Yes	47	2.11	.890	72.3
	No	18	2.06	.938	27.7
academics	Total	65	2.09	.897	100
	10001	0.0	=.07	.007	100

Table 9 (Continued)

DV Questions	Graduation	N	M	SD	%
Counseling sessions	Yes	46	1.91	.812	71.9
helped me stay in school	No	18	1.50	.618	28.1
	Total	64	1.80	.780	100
Counseling sessions	Yes	46	1.98	.802	71.9
helped me graduate	No	18	2.22	.732	28.1
	Total	64	2.05	.785	100
Counseling sessions	Yes	46	1.87	.859	71.9
helped me overcome barriers to continuing education at a 4-year institution	No	18	1.33	.594	28.1
	Total	64	1.72	.826	100

Table 10

Graduation from Community College ANOVA Results

DV Questions		df	SS	MS	F	p	$\eta^2$
Mental health	Between	1	3.720	3.720	5.881	.018	.087
counseling helped	Groups						
me overcome	Within Groups	62	39.217	.633			
barriers to	Total	63	42.938				
continuing education	1						

# **GPA**

A one-way between subjects ANOVA was utilized to compare GPA regarding perceptions of mental health concerns as barriers to staying, graduating, transferring and doing academic work. Results from the ANOVA indicated that there was not a significant difference in the respondents' perceptions of mental health concerns interfering with the ability to stay in community college, graduate from community college, transfer to a 4-year university, or do academic work based on GPA.

A one-way between subjects ANOVA also was utilized to compare GPA regarding their perceptions of the benefits of mental health counseling on staying, graduating, and overcoming obstacles. Results from the ANOVA indicated that there was not a significant difference in the respondents' perceptions of mental health counseling session attended helped respondents stay in school, graduate from community college, or overcome obstacles for continuing education at a 4-year university based on GPA.

Table 11 illustrates participants' responses to related survey questions based on classification at university and includes number of responses, means, standard, deviations, and percentages.

Table 11

GPA Descriptive Statistics

DV Questions	GPA	N	M	SD	%
Mental health concerns	4.0-3.5	30	2.87	.973	46.8
were interfering with	3.49-3.0	15	2.47	1.187	23.4
ability to stay in school	2.9-2.5	13	2.23	1.013	20.3
	2.4-1.0	6	2.50	.548	9.3
	Total	64	2.61	1.018	100
Mental health concerns	4.0-3.5	31	2.94	.929	47.7
were interfering with my	3.49-3.0	15	2.67	1.113	23.1
ability to graduate	2.9-2.5	13	2.31	.947	20
	2.49-1.0	6	3.00	.894	9.2
	Total	65	2.75	.985	100
Mental health concerns	4.0-3.5	31	2.71	.938	47.7
were interfering with my	3.49-3.0	15	2.53	1.187	23.1
ability to transfer	2.9-2.5	13	2.31	.947	20
	2.49-1.0	6	3.00	.894	9.2
	Total	65	2.62	.995	100

Table 11 (Continued)

DV Questions	GPA	N	M	SD	%
Mental health concerns	4.0-3.5	31	2.35	.877	47.7
were interfering with	3.49-3.0	15	2.00	1.000	23.1
academics	2.9-2.5	13	1.77	.725	20
	2.49-1.0	6	1.67	.816	9.2
	Total	65	2.09	.897	100
Mental health	4.0-3.5	30	1.83	.791	46.8
counseling sessions	3.49-3.0	15	1.80	.941	23.4
helped me stay in school	2.9-2.5	13	1.69	.630	20.3
	2.49-1.0	6	1.83	.753	9.3
	Total	64	1.80	.780	100
Mental health	4.0-3.5	30	2.00	.743	46.8
counseling helped me	3.49-3.0	15	2.27	.961	23.4
graduate	2.9-2.5	13	1.92	.641	20.3
	2.49-1.0	6	2.00	.894	9.3
	Total	64	2.05	.785	100
Mental health counseling	4.0-3.5	30	1.70	.794	46.8
helped me overcome	3.49-3.0	15	1.73	1.033	23.4
obstacles to continuing	2.9-2.5	13	1.77	.725	20.3
education at a 4-year	2.49-1.0	6	1.67	.816	9.3
institution	Total	64	1.72	.826	100

# Average Number of Hours Worked in Community College

A one-way between subjects ANOVA was utilized to compare the mean number of hours worked a week regarding their perceptions of mental health concerns as barriers to staying, graduating, transferring and doing academic work. Results from the ANOVA indicated that there was not a significant difference in the respondents' perceptions of mental health concerns interfering with their ability to stay in community college, graduate from community college, transfer to a 4-year university, or do academic work based on the average number of hours worked a week.

A one-way between subjects ANOVA was also utilized to compare the average number of hours worked a week regarding their perceptions of the benefits of mental health counseling on staying, graduating, and overcoming obstacles. Results from the ANOVA indicated that there was not a significant difference in the respondents' perceptions of mental health counseling session attended helping the respondents stay in school, graduate from community college, or overcome obstacles for continuing education at a 4-year university based on the average number of hours worked a week.

Table 12 illustrates participants' responses to related survey questions based on the average number of hours worked a week and included the number of responses, means, standard deviations, and percentages.

Table 12

Average Hours Worked a Week Descriptive Statistics

DV Questions	Average Hours Worked	N	M	SD	%
Mental health concerns	0	15	2.67	.900	23.4
were interfering with	1-10	7	2.43	1.134	10.9
ability to stay in school	11-20	13	2.92	.862	20.3
	21-34	16	2.81	1.167	25
	35 or more	13	2.08	.954	20.3
	Total	64	2.61	1.018	100
Mental health concerns	0	15	2.93	1.033	23
were interfering with	1-10	7	2.29	1.113	10.8
graduation	11-20	13	2.92	.954	20
	21-34	17	2.82	1.015	26.2
	35 or more	13	2.54	.877	20
	Total	65	2.75	.985	100

Table 12 (Continued)

,	Work				
DV Questions	Hours	N	M	SD	%
Mental health concerns	0	15	2.93	.884	23
were interfering with	1-10	7	1.86	.690	10.8
transfer	11-20	13	2.85	.899	20
	21-34	17	2.71	1.105	26.2
	35 or more	13	2.31	1.032	20
	Total	65	2.62	.995	100
Mental health concerns	0	15	2.27	.961	23
were interfering with	1-10	7	1.71	.756	10.8
academics	11-20	13	2.15	1.068	20
	21-34	17	2.18	.951	26.2
	35 or more	13	1.92	.641	20
	Total	65	2.09	.897	100
Mental health counseling	0	14	2.00	.877	21.9
helped me stay in school	1-10	7	1.86	1.069	10.9
	11-20	13	1.77	.599	20.3
	21-34	17	1.76	.831	26.6
	35 or more	13	1.62	.650	20.3
	Total	64	1.80	.780	100
Mental health	0	14	2.14	.949	21.9
counseling	1-10	7	1.86	.900	10.9
helped me graduate	11-20	13	2.08	.641	20.3
	21-34	17	2.24	.831	26.6
	35 or more	13	1.77	.599	20.3
	Total	64	2.05	.785	100
Mental health	0	14	1.86	.949	21.9
counseling helped me	1-10	7	1.57	.976	10.9
overcome obstacles to	11-20	13	1.69	.751	20.3
continue education at a	21-34	17	1.76	.831	26.6
4-year institution	35 or more	13	1.62	.768	20.3
	Total	64	1.72	.826	100

### Class Standing at Community College at Time of Transfer

A one-way between subjects ANOVA was utilized to compare class standing at a community college at the time of transfer regarding their perceptions of mental health concerns as barriers to staying, graduating, transferring and doing academic work.

Results from the ANOVA indicated that there was not a significant difference in the respondents' perceptions of mental health concerns interfering with their ability to stay in community college, graduate from community college, transfer to a 4-year university, or do academic work based on class standing at a community college at the time of transfer.

A one-way between subjects ANOVA also was utilized to compare class standing at a community college at the time of transfer regarding their perceptions of the benefits of mental health counseling on staying, graduating, and overcoming obstacles. Results from the ANOVA indicated that there was not a significant difference in the respondents' perceptions of mental health counseling session attended helping respondents stay in school, graduate from community college, or overcome obstacles for continuing education at a 4-year university based on class standing at a community college at the time of transfer.

Table 13 illustrates participants' responses to related survey questions based on class standing at a community college at the time of transfer and includes the number of responses, means, standard deviations, and percentages.

Table 13

Class Standing at Time of Transfer to a University Descriptive Statistics

DV Questions	Classification at Time of Transfer	N	M	SD	%
Mental health concerns	Freshman	2	1.50	.707	3
were interfering with	Sophomore	62	2.65	1.010	97
ability to stay in school	Total	64	2.61	1.018	100
Mental health concerns	Freshman	2	2.00	.000	3
were interfering with	Sophomore	63	2.78	.991	97
graduation	Total	65	2.75	.985	100
Mental health concerns					
were interfering with	Freshman	2	1.50	.707	3
transfer	Sophomore	63	2.65	.986	97
transfer	Total	65	2.62	.995	100
Mental health concerns	Freshman	2	2.00	1.414	3
were interfering with	Sophomore	63	2.10	.893	97
academics	Total	65	2.09	.897	100
Mental health	Freshman	2	2.00	.000	3
counseling helped me	Sophomore	62	1.79	.792	93
stay in school	Total	64	1.80	.780	100
Mental health	Freshman	2	2.00	.000	3
counseling helped me	Sophomore	62	2.05	.798	97
to graduate	Total	64	2.05	.785	100
Mental health	Freshman	2	1.50	.707	3
counseling helped me	Sophomore	62	1.73	.833	97
overcome obstacles to continuing education at a 4-year institution	Total	64	1.72	.826	100

# **Number of Sessions Attended**

A one-way between subjects ANOVA was utilized to compare the number of counseling sessions attended regarding their perceptions of mental health concerns as barriers to staying, graduating, transferring and doing academic work. Results from the ANOVA indicated that there was not a significant difference in the respondents'

perceptions of mental health concerns interfering with their ability to stay in community college, graduate from community college, transfer to a 4-year university, or do academic work based on the number of counseling sessions attended.

A one-way between subjects ANOVA was also utilized to compare the number of counseling sessions attended regarding their perceptions of the benefits of mental health counseling on staying, graduating, and overcoming obstacles. Results from the ANOVA indicated that there was not a significant difference in the respondents' perceptions of mental health counseling sessions attended helping respondents stay in school, graduate from community college, or overcome obstacles for continuing education at a 4-year university based on the number of counseling sessions attended at the time of transfer.

Table 14 illustrates participants' responses to related survey questions based on the number of counseling sessions attended and includes the number of responses, means, standard deviations, and percentages.

Table 14

Number of Sessions Attended Descriptive Statistics

DV Questions	Counseling Sessions	N	M	SD	%
Mental health	1-3 sessions	26	2.73	.919	40.6
concerns interfering	4-7 sessions	17	2.88	1.111	26.6
with retention	8-11 sessions	4	3.00	1.155	6.2
	12 or more	17	2.06	.899	26.6
	sessions				
	Total	64	2.61	1.018	100

Table 14 Continued

DV Questions	Sessions	N	M	SD	%
Mental health	1-3 sessions	26	2.58	1.027	40
concerns interfering	4-7 sessions	18	3.11	.900	27.7
with graduation	8-11 sessions	4	3.25	.957	6.2
	12 or more	17	2.53	.943	26.1
	sessions				
	Total	65	2.75	.985	100
Mental health	1-3 sessions	26	2.62	.941	40
concerns interfering	4-7 sessions	18	2.83	1.098	27.7
with transfer	8-11 sessions	4	3.00	1.155	6.2
	12 or more	17	2.29	.920	26.1
	sessions				
	Total	65	2.62	.995	100
Mental health	1-3 sessions	26	2.23	.908	40
concerns interfering	4-7 sessions	18	2.22	1.003	27.7
with academics	8-11 sessions	4	1.75	.957	6.2
	12 or more	17	1.82	.728	26.1
	sessions				
	Total	65	2.09	.897	100
Mental health	1-3 sessions	25	1.88	.781	40
counseling helped	4-7 sessions	18	1.94	.873	27.7
me stay in school	8-11 sessions	4	2.00	.816	6.2
	12 or more	17	1.47	.624	26.1
	sessions				
	Total	64	1.80	.780	100
Mental health	1-3 sessions	25	2.00	.816	40
counseling helped	4-7 sessions	18	2.33	.840	27.7
me graduate	8-11 sessions	4	2.50	.577	6.2
	12 or more	17	1.71	.588	26.1
	sessions				
	Total	64	2.05	.785	100

Table 14 (Continued)

DV Questions	Sessions	N	M	SD	%
Mental health	4-7 sessions	18	1.94	.873	27.7
counseling helped	8-11 sessions	4	1.75	.957	6.2
me overcome	12 or more	17	1.29	.588	26.1
obstacles to	sessions				
continuing	Total	64	1.72	.826	100
education at a 4-					
year institution					

## **Academic Concerns as Reason for Counseling**

A one-way between subjects ANOVA was used to compare students with academic concerns as a presenting concern for counseling and students who did not indicate that they had an academic concern as a presenting concern for counseling regarding their perceptions of mental health concerns as barriers to staying, graduating, transferring and doing academic work. Results from the ANOVA indicated that there was a significant difference in the respondents' perceptions of mental health concerns interfering with their ability to stay in community college based on academic concerns as a reason for counseling, and in the respondents' perceptions of mental health concerns interfering with respondents' ability to graduate from community college based on academic concerns as a reason for counseling. However, results from the ANOVA indicated that there was not a significant difference in the respondents' perceptions of mental health concerns interfering with the respondents' ability to transfer to a 4-year university and for mental health concerns interfering with the ability to do academic work based on academic concerns as reason for counseling

A one-way between subjects ANOVA was also utilized to compare academic concerns as a reason for counseling regarding their perceptions of the benefits of mental

health counseling on staying, graduating, and overcoming obstacles. Results from the ANOVA indicated that there was not a significant difference in the respondents' perceptions of mental health counseling session attended helping respondents stay in school or graduate from community college based on academic concerns as a reason for counseling. However, the results of the ANOVA indicated that there was a significant difference in the respondents' perceptions of mental health counseling sessions attended helping overcome obstacles for continuing education at a 4-year university based on academic concerns as a reason for counseling.

Table 15 illustrates participants' responses to related survey questions based on academic concerns as a reason for counseling and includes the number of responses, means, standard, deviations, and percentages. Table 16 illustrates the results of the ANOVA.

Table 15

Academic Concerns Descriptive Statistics

	Academics					
DV Questions	N	M	SD	%		
Mental health concerns interfered with retention	17	2.06	1.029	26		
Mental health concerns were interfering graduate	17	2.29	.985	26		
Mental health concerns were interfering with transfer	17	2.29	1.047	26		
Mental health concerns were interfering with academics	17	1.71	.686	26		
Mental health counseling helped me stay in school	17	1.65	.606	26		

Table 15 (Continued)

DV Questions	N	M	SD	%
Mental health counseling helped me	17	1.65	.606	26
graduate				
Mark III III II	1.7	1.52	717	26
Mental health counseling	17	1.53	.717	20
helped me overcome obstacles to continue				
education at a 4-year institution				

Table 16

Academic Concerns Significant ANOVA Results

DV Questions		df	SS	MS	F	р	$\eta^2$
Mental health	Between	1	7.017	7.017	7.472	.008*	.108^
concerns	Groups						
were	Within	62	58.218	.939			
interfering	Groups						
with ability to	Total	63	65.234				
stay in school							
Mental health	Between	1	4.865	4.865	5.359	.024*	.078
concerns	Groups						
were	Within	63	57.196	.908			
interfering	Groups						
with	Total	64	62.062				
graduation							
Mental health	Between	1	3.438	3.438	4.511	.038*	.067
concerns	Groups						
were	Within	63	48.009	.762			
interfering	Groups						
with	Total	64	51.446				
academics							

*Note.* The symbol (\*) represents significance, and the symbol (^) indicates large effect size.

A post hoc analysis was not available due to lack of factors in the statistical analysis. Mean scores indicated that participants indicated academic problems as interfering more with their ability to stay in school (M = 2.06) versus participants not

indicating academics as a presenting concern (M = 2.81). Participants also indicated that academic concerns interfered more with graduation (M = 2.29) versus participants who did not indicate academics as a presenting concern (M = 2.92). Participants indicated that academics concerns interfered more with their academics (M = 1.71) versus participants who did not indicate academic concerns as a presenting concern (M = 2.23).

# Anxiety

A one-way between subjects ANOVA was utilized to compare anxiety as a reason for counseling versus not indicating anxiety as a presenting concern regarding their perceptions of mental health concerns as barriers to staying, graduating, transferring and doing academic work. Results from the ANOVA indicated that there was not a significant difference in the respondents' perceptions of mental health concerns interfering with their ability to stay in community college, graduate from community college, transfer to a 4-year university, or ability to do academic work based on anxiety as a reason for counseling.

A one-way between subjects ANOVA was also utilized to compare anxiety as a reason for counseling versus not indicating anxiety as a presenting concern regarding their perceptions of the benefits of mental health counseling on staying, graduating, and overcoming obstacles. Results from the ANOVA indicated that there was not a significant difference in the respondents' perceptions of mental health counseling sessions attended helping the respondents stay in school or graduate from community college based on anxiety as a reason for counseling. However, the results of the ANOVA indicated that there was a significant difference in the respondents' perceptions of mental

health counseling sessions attended helping overcome obstacles for continuing their education at a 4-year university based on anxiety as a reason for counseling.

Mean scores suggested that participants indicated anxiety as interfering more with their ability to stay in school (M = 1.63) versus participants not indicating academics as a presenting concern (M = 2.20).

Table 17 illustrates participants' responses to related survey questions based on anxiety as a reason for counseling and includes the number of responses, means, standard, deviations, and percentages. Table 18 illustrates the results of the ANOVA.

Table 17
Anxiety Descriptive Statistics

_	Anxiety				
DV Questions	N	M	SD	%	
Mental health concerns were	53	2.55	1.011	83	
interfering with retention  Mental health concerns were interfering with graduation	54	2.72	.960	83	
Mental health concerns were interfering with transferring	54	2.56	.965	83	
Mental health concerns were interfering with academics	54	2.04	.823	83	
Mental health counseling helped me stay in school	54	1.74	.757	83	
Mental health counseling helped me graduate	54	2.02	.765	83	
Mental health counseling helped me overcome obstacles to continue education at a 4-year institution	54	1.63	.784	83	

Table 18

Anxiety Presenting Concerns Significant ANOVA Results

DV Questions		df	SS	MS	F	р	$\eta^{2}$
Mental health	Between	1	2.745	2.745	4.234	.044*	.064
counseling	Groups						
helped me overcome	Within	62	40.193	.648			
obstacles to continue	Groups						
education at a 4-year	Total	63	42.938				
institution.							

Note. (\*) represents significance

### Concentration

A one-way between subjects ANOVA was utilized to compare concentration difficulties as a reason for counseling versus not indicating concentration difficulties as a presenting concern regarding their perceptions of mental health concerns as barriers to staying, graduating, transferring and doing academic work. Results from the ANOVA indicated that there was a significant difference in the respondents' perceptions of mental health concerns interfering with their ability to stay in community college and do academic work based on concentration difficulties as a reason for counseling. Results from the ANOVA indicated that there was not a significant difference in the respondents' perceptions of mental health concerns interfering with the respondents' ability to graduate from community college or transfer to a 4-year university based on concentration difficulties as a reason for counseling.

A one-way between subjects ANOVA was also utilized to compare concentration difficulties as a reason for counseling versus not indicating concentration difficulties regarding their perceptions of the benefits of mental health counseling on staying, graduating, and overcoming obstacles. Results from the ANOVA indicated that there

was not a significant difference in the respondents' perceptions of mental health counseling session attended helping respondents stay in school or graduate from community college based on concentration as a reason for counseling. The results of the ANOVA indicated that there was a significant difference in the respondents' perceptions of mental health counseling sessions attended helping respondents overcome obstacles for continuing education at a 4-year university based on concentration difficulties as a reason for counseling.

A post hoc analysis was not available due to lack of factors. Mean scores suggested that participants indicated concentration difficulties as interfering more with their ability to stay in school (M = 2.19) versus participants not indicating concentration as a presenting concern (M = 2.92). Participants indicated concentration difficulties as interfering more with the ability to do academics (M = 1.81) versus participants not indicating concentration as a presenting concern (M = 2.29). Participants indicated mental health counseling was helping them continue their education at a 4-year institution (M = 1.48) versus participants not indicating concentration as a presenting concern (M = 1.89).

Table 19 illustrates participants' responses to related survey questions based on academic concerns as a reason for counseling and includes the number of responses, means, standard, deviations, and percentages. Table 20 illustrates the results of the ANOVA.

Table 19

Concentration Difficulties Descriptive Statistics

	Concentration						
DV Questions	N	M	SD	%			
Mental health concerns were interfering with retention	27	2.19	1.001	41			
Mental health concerns were interfering with graduation	27	2.50	1.014	41			
Mental health concerns were interfering with transferring	27	2.33	.961	41			
Mental health concerns were interfering with academics	27	1.81	.786	41			
Mental health counseling helped me stay in school	27	1.67	.679	41			
Mental health counseling helped me graduate	27	1.89	.751	41			
Mental health counseling helped me overcome obstacles to continue education at a 4-year institution	27	1.48	.643	41			

The effect of concentration difficulties on mental health counseling sessions improving ability to remain in school violated the homogeneity of variance assumption. The Levene's test indicated unequal variances F = 4.104, p = .047. The Welch test corrected degrees of freedom and Welch's F(1, 61.967) = 4.492, p = .038,  $\eta^2 = .061$ . Please see Table 20 for more details about significant ANOVA results.

Table 20

Concentration Difficulties Significant ANOVA Results

DV Questions		df	SS	MS	F	р	$\eta^2$
Mental health concerns were interfering with	Between Groups	1	8.404	8.404	9.168	.004*	.129^
stay in school	Within Groups	62	56.831	.917			
	Total	63	65.234				
Mental health concerns were interfering with	Between Groups	1	3.556	3.556	4.678	.034*	.069
academics	Within Groups	63	47.890	.760			
	Total	64	51.446				
Mental health counseling helped me overcome obstacles to	Between Groups	1	2.629	2.629	4.492**	.038**	.061
continue education	Within Groups	61.967**	40.308	.650			
-	Total	63	42.938				

*Note.* The symbol (\*) represents p< .05, (\*\*) represents p= .05 when corrected by Welch statistic due to violation of homogeneity of variance. The symbol (^) represents a large effect size.

# **Depression and Other Mood Disorders**

A one-way between subjects ANOVA was utilized to compare depression and other mood disorders as a reason for counseling versus not indicating depression and other mood disorders as a presenting concern regarding their perceptions of mental health concerns as barriers to staying, graduating, transferring and doing academic work.

Results from the ANOVA indicated that there was a significant difference in the respondents' perceptions of mental health concerns interfering with the respondents' ability to stay in community college, graduate from community college, ability to transfer

to a 4-year university and the ability to do academics based on depression and other mood disorders as a reason for counseling.

A one-way between subjects ANOVA was also utilized to compare depression and other mood disorders as a reason for counseling versus not indicating depression and other mood disorders regarding their perceptions of mental health counseling on staying, graduating, and overcoming obstacles. Results from the ANOVA indicated that there was not a significant difference in the respondents' perceptions of mental health counseling sessions attended helping the respondents stay in school, graduate, and transfer to a 4-year university based on depression and other mood disorders as a reason for counseling.

A comparison of mean scores indicated depression and other mood disorders as interfering more with their ability to stay in school (M = 2.35) than participants not indicating depression and other mood disorders as a presenting concern (M = 3.28). Participants indicated depression and other mood disorders as interfering more with their ability to graduate (M = 2.55) than participants not indicating depression and other mood disorders as a presenting concern (M = 3.28). Participants indicated depression and other mood disorders as interfering more with their ability to transfer to a 4-year institution (M = 2.38) than participants not indicating depression and other mood disorders as a presenting concern (M = 3.22). Participants indicated depression and other mood disorders as interfering more with their ability to do academic work (M = 1.89) than participants not indicating depression and other mood disorders as a presenting concern (M = 2.61).

Table 21 illustrates participants' responses to related survey questions based on academic concerns as a reason for counseling and includes the number of responses, means, standard, deviations, and percentages. Table 22 illustrates the results of the ANOVA.

Table 21

Depression and Other Mood Disorders Descriptive Statistics

	Depression and Other Mood Disorders						
DV Questions	N	M	SD	%			
Mental health concerns were interfering with retention	46	2.35	1.016	72			
Mental health concerns were interfering with graduation	47	2.55	.951	72			
Mental health concerns were interfering with transferring	47	2.38	.922	72			
Mental health concerns were interfering with academics	47	1.89	.729	72			
Mental health counseling helped me stay in school	47	1.72	.826	72			
Mental health counseling helped me graduate	47	1.98	.794	72			
Mental health counseling helped me overcome obstacles to continue education	47	1.64	.845	72			

Mood effects on mental health concerns influencing retention violated the homogeneity of variance assumption. The Levene's test indicated unequal variances F(1, 62) = 4.868, p = .031. The Welch test corrected the homogeneity of variance violation. Mood effects on mental health concerns concerning retention was statistically significant

Welch's F(1, 47.038) = 18.282, p < .001,  $\eta^2 = .172$ ). Also, mood effects on mental health concerns concerning academics violated the homogeneity of variance assumption. The Levene's test indicated unequal variances F(1, 63) = 7.597, p = .008. After correcting the homogeneity of variance with the Welch test. The effect of mood on mental health concerns about academics was statistically significant at the .05 alpha level, Welch's F(1, 23.054) = 6.635, p = .017,  $\eta^2 = .130$ .

Table 22

Depression and Other Mood Disorders Significant ANOVA Results

						2
	df	SS	MS	F	p	$\eta^2$
ween	1	11.188	11.188	12.835	.001*	.145^
ups						
hin Groups	62	54.046	.872			
al	63	65.234				
ween	1	6.833	6.833	7.795	.007*	.110^
ups						
hin Groups	63	55.228	.877			
al	64	62.062				
ween	1	9.167	9.167	10.652	.002*	.145^
ups						
hin Groups	63	54.217	.861			
al	64	63.385				
ween	1	6.700	6.700	6.635**	.017**	.130^
ups						
hin Groups	23.05**	44.746	.710			
al	64	51.446				
	ween ups hin Groups al	ween 1 ups hin Groups 62 al 63 ween 1 ups hin Groups 63 al 64 ween 1 ups hin Groups 63 al 64 ween 1 ups hin Groups 63 al 64 ween 1 ups hin Groups 23.05**	ween 1 11.188 ups hin Groups 62 54.046 al 63 65.234 ween 1 6.833 ups hin Groups 63 55.228 al 64 62.062 ween 1 9.167 ups hin Groups 63 54.217 al 64 63.385 ween 1 6.700 ups hin Groups 23.05** 44.746	ween 1 11.188 11.188 ups hin Groups 62 54.046 .872 al 63 65.234 ween 1 6.833 6.833 ups hin Groups 63 55.228 .877 al 64 62.062 ween 1 9.167 9.167 ups hin Groups 63 54.217 .861 al 64 63.385 ween 1 6.700 6.700 ups hin Groups 23.05** 44.746 .710	ween 1 11.188 11.188 12.835  ups hin Groups 62 54.046 .872 al 63 65.234 ween 1 6.833 6.833 7.795  ups hin Groups 63 55.228 .877 al 64 62.062 ween 1 9.167 9.167 10.652  ups hin Groups 63 54.217 .861 al 64 63.385 ween 1 6.700 6.700 6.635**  ups hin Groups 23.05** 44.746 .710 al 64 51.446	ween 1 11.188 11.188 12.835 .001* ups hin Groups 62 54.046 .872 al 63 65.234 ween 1 6.833 6.833 7.795 .007* ups hin Groups 63 55.228 .877 al 64 62.062 ween 1 9.167 9.167 10.652 .002* ups hin Groups 63 54.217 .861 al 64 63.385 ween 1 6.700 6.700 6.635** .017** ups hin Groups 23.05** 44.746 .710 al 64 51.446

Note. The symbol (\*) indicates statistical significance, and the symbols (\*\*) represents Welch test correction is significant. The symbol (^) indicates large effect size.

## **Family Issues**

A one-way between subjects ANOVA was utilized to compare family issues as a reason for counseling versus not indicating family issues regarding their perceptions of

mental health concerns as barriers to staying, graduating, transferring and doing academic work. Results from the ANOVA indicated that there was not a significant difference in the respondents' perceptions of mental health concerns interfering with their ability to stay in community college, graduate or transfer to a 4-year university based on family issues as a reason for counseling. Results from the ANOVA indicate that there was a significant difference in the respondents' perceptions of mental health concerns as interfering with ability to do academic work based on family issues as reason for counseling

A one-way between subjects ANOVA was also utilized to compare family issues as a reason for counseling versus not indicating family issues as a presenting concern regarding their perceptions of the benefits of mental health counseling on staying, graduating, and overcoming obstacles. Results from the ANOVA indicated that there was not a significant difference in the respondents' perceptions of mental health counseling sessions attended helping the respondents stay in school, graduate or transfer to a 4-year university based on family issues as a reason for counseling.

Mean scores indicated family issues as interfering more with their academics (M = 1.82) than participants not indicating family issues as a presenting concern (M = 2.38).

Table 23 illustrates participants' responses to related survey questions based on academic concerns as a reason for counseling and includes the number of responses, means, standard, deviations, and percentages. Table 24 illustrates the results of the ANOVA

Table 23

Family Issues Descriptive Statistics

_	Family Issues						
DV Questions	N	M	SD	%			
Mental health concerns were interfering with retention	33	2.39	1.029	51			
Mental health concerns were interfering with graduation	33	2.61	.966	51			
Mental health concerns were interfering with transferring	33	2.42	.936	51			
Mental health concerns were interfering with academics	33	1.82	.769	51			
Mental health counseling helped me stay in school	33	1.79	.857	51			
Mental health counseling helped me graduate	33	1.94	.827	51			
Mental health counseling helped me overcome obstacles to continue education	33	1.67	.924	51			

Table 24

Family Issues Significant ANOVA Results

DV Question		df	SS	MS	F	p	$\eta^{2}$
Mental health	Between	1	5.037	5.037	6.838	.011*	.098
concerns were	Groups						
interfering with	Within Groups	63	46.409	.737			
academics	Total	64	51.446				

*Note.* The symbol (\*) indicates statistical significance.

#### Substance Use

A one-way between subjects ANOVA was utilized to compare substance us as a reason for counseling versus not indicating substance use as a presenting concern for counseling regarding their perceptions of mental health concerns as barriers to staying, graduating, transferring and doing academic work. Results from the ANOVA indicated that there was a significant difference in the respondents' perceptions of mental health concerns interfering with their ability to stay in community college based on substance use as a reason for counseling. Results from the ANOVA indicated that there was not a significant difference in the respondents' perceptions of mental health concerns interfering with the ability to graduate from community college, transfer to a 4-year university and the ability to do academic work based on substance use as a reason for counseling.

A one-way between subjects ANOVA was also utilized to compare substance use as a reason for counseling versus not indicating substance use as a presenting concern for counseling regarding their perceptions of the benefits of mental health counseling on staying, graduating, and overcoming obstacles. Results from the ANOVA indicated that

there was not a significant difference in the respondents' perceptions of mental health counseling session attended helping the respondents stay in school graduate from community college and overcome obstacles to transferring to a 4-year university based on substance use as a reason for counseling.

Mean scores indicated substance use as interfering more with their ability to stay in school (M = 1.90) than participants not indicating substance use as a presenting concern (M = 2.74).

Table 25 illustrates participants' responses to related survey questions based on academic concerns as a reason for counseling and includes the number of responses, means, standard, deviations, and percentages. Table 26 illustrates the results of the ANOVA.

Table 25
Substance Use Descriptive Statistics

_	Substance Use						
DV Questions	N	M	SD	%			
Mental health concerns interfering with staying in school	10	1.90	.568				
Mental health concerns were interfering with graduation	10	2.50	1.080	15			
Mental health concerns were interfering with staying in school	10	2.60	.966	15			
Mental health concerns were interfering with academics	10	1.70	.823	15			
Mental health counseling helped me stay in school	10	1.50	.707	15			

Table 25 (Continued)

DV Questions	N	M	SD	
Mental health counseling	10	1.80	.789	15
helped me graduate				
Mental health counseling	10	1.40	.699	15
helped me overcome obstacles				
to continuing education at a 4-				
year institution				

The findings violated the homogeneity of variance assumption with the Levene score being F(1, 62) = 8.141, p = .006. The Welch statistic corrected the degrees of freedom and found a statistically significant score for substance use on mental health concerns interfering with staying in school Welch's F(1, 21.971) = 13.615, p = .001,  $\eta^2 = .001$ .

Table 26
Substance Use Significant ANOVA Results

DV Quartiens		df	CC	MC	E		$\eta^2$
DV Questions		a1	SS	MS	F	<i>p</i>	'/
Mental health	Between	1	5.964	5.964	13.615*	.001**	.091
concerns	Groups				*		
interfering with	Within	21.971*	59.270	.956			
staying in school	Groups	*					
	Total	22.971*	65.234				
		*					

*Note.* The symbol (\*\*) indicates statistical significance after using the Welch statistic to correct for significant homogeneity of variance.

### **Financial Stress**

A one-way between subjects ANOVA was utilized to compare financial stress as a reason for counseling versus not indicating financial stress as a presenting concern regarding their perceptions of mental health concerns as barriers to staying, graduating,

transferring and doing academic work. Results from the ANOVA indicated that there was not a significant difference in the respondents' perceptions of mental health concerns interfering with respondents' ability to stay in community college based on financial stress as a reason for counseling. Results from the ANOVA indicated that there was a significant difference in the respondents' perceptions of mental health concerns interfering with their ability to graduate from community college, transfer to a 4-year university, and to do academic work based on financial stress as a reason for counseling.

A one-way between subjects ANOVA was also utilized to compare financial stress as a reason for counseling versus not indicating financial stress regarding their perceptions of the benefits of mental health counseling on staying, graduating, and overcoming obstacles. Results from the ANOVA indicated that there was not a significant difference in the respondents' perceptions of mental health counseling sessions attended helping respondents stay in school, graduate from community college, and overcome obstacles for transfer to a 4-year university based on financial stress as a reason for counseling.

Mean scores indicated financial stress as interfering more with their ability to stay in school (M = 2.16) than participants not indicating financial stress as a presenting concern (M = 2.89). Mean scores indicated financial stress as interfering more with graduation (M = 2.35) than participants not indicating financial stress as a presenting concern (M = 3.03). Mean scores indicated financial stress as interfering more with their ability to transfer to a 4-year institution (M = 2.15) than participants not indicating financial stress as a presenting concern (M = 2.92). Mean scores indicated financial stress

as interfering more with their academics (M = 1.77) than participants not indicating financial stress as a presenting concern (M = 2.32).

Table 27 illustrates participants' responses to related survey questions based on academic concerns as a reason for counseling and includes the number of responses, means, standard, deviations, and percentages. Table 28 illustrates the results of the ANOVA.

Table 27
Financial Stress Descriptive Statistics

		Financia	al Stress	
DV Questions	N	M	SD	%
Mental health concerns interfering with staying in school	25	2.16	1.028	38.5
Mental health concerns were interfering with graduation	26	3.35	.936	40
Mental health concerns were interfering with transferring	26	2.15	.881	40
Mental health concerns were interfering with academics	26	1.77	.710	40
Mental health counseling helped me stay in school	26	1.65	.745	40
Mental health counseling helped me graduate	26	2.00	.748	40
Mental health counseling helped me overcome obstacles to continuing education at a 4-year institution	26	1.62	.804	40

Table 28

Financial Stress Significant ANOVA Results

DV Questions		df	SS	MS	F	p	$\eta^{2}$
Mental health	Between	1	8.140	8.140	8.721	.004*	.125^
concerns	Groups						
interfering with	Within	61	56.939	.933			
staying in school	Groups						
	Total	62	65.079				
Mental health	Between	1	7.142	7.142	8.071	.006*	.115^
concerns were	Groups						
interfering with	Within	62	54.858	.885			
graduation	Groups						
	Total	63	62.000				
Mental health	Between	1	9.087	9.087	10.404	.002*	.144^
concerns were	Groups						
interfering with	Within	62	54.148	.873			
transferring	Groups						
	Total	63	63.234				
Mental health	Between	1	4.612	4.612	6.106	.016*	.090
concerns were	Groups						
interfering with	Within	62	46.826	.755			
academics	Groups						
	Total	63	51.438				

*Note.* The Symbol (\*) indicates statistically significant *p* score, and the symbol (^) indicates large effect size.

## **Stress**

A one-way between subjects ANOVA was utilized to compare stress as a reason for counseling versus not indicating stress as a presenting concern regarding their perceptions of mental health concerns as barriers to staying, graduating, transferring and doing academic work. Results from the ANOVA indicated that there was not a significant difference in the respondents' perceptions of mental health concerns

interfering with respondents' ability to stay in community college, graduate from community college, ability to transfer to a 4-year university based on stress as a reason for counseling. However, results from the ANOVA indicated that there was a significant difference in the respondents' perceptions of mental health concerns as interfering with their ability to do academic work based on stress as a reason for counseling.

A one-way between subjects ANOVA was also utilized to compare stress as a reason for counseling versus not indicating stress as a presenting concern regarding their perceptions of the benefits of mental health counseling on staying, graduating, and overcoming obstacles. Results from the ANOVA indicated that there was not a significant difference in the respondents' perceptions of mental health counseling sessions attended helping respondents stay in school, graduate or overcome obstacles to transferring to a 4-year university based on stress as a reason for counseling.

Participants indicated academics as interfering more with their academics (M = 1.93) than participants not indicating concentration as a presenting concern (M = 2.41).

Table 29 illustrates participants' responses to related survey questions based on academic concerns as a reason for counseling and includes the number of responses, means, standard, deviations, and percentages. Table 30 illustrates the results of the ANOVA.

Table 29
Stress Descriptive Statistics

		S	tress	
DV Questions	N	M	SD	%
Mental health concerns interfering with staying in school	42	2.52	1.018	65
Mental health concerns were interfering with graduation	43	2.63	1.001	66
Mental health concerns were interfering with transferring	43	2.51	.960	66
Mental health concerns were interfering with academics	43	1.93	.799	66
Mental health counseling helped me stay in school	43	1.77	.727	66
Mental health counseling helped me graduate	43	1.98	.801	66
Mental health counseling helped me overcome obstacles to continuing education at a 4-year institution	43	1.70	.860	66

Table 30

Stress Significant ANOVA Results

DV Question		df	SS	MS	F	p	$\eta^2$
Mental health	Between	1	3.337	3.337	4.37	.041*	.065
concerns were	Groups				0		
interfering with	Within Groups	63	48.109	.764			
academics	Total	64	51.446				

*Note.* The symbol (\*) indicates statistically significant *p*-value.

### **Sexual Orientation**

A one-way between subjects ANOVA was utilized to compare sexual orientation as a reason for counseling versus not indicating sexual orientation as a presenting concern for counseling regarding their perceptions of mental health concerns as barriers to staying, graduating, transferring and doing academic work. Results from the ANOVA indicated that there was not a significant difference in the respondents' perceptions of mental health concerns interfering with the ability to stay in community college, graduate, transfer to a 4-year university and ability to do academic work based on sexual orientation as a reason for counseling.

A one-way between subjects ANOVA was also utilized to compare sexual orientation as a reason for counseling versus not indicating sexual orientation as a presenting concern for counseling regarding their perceptions of the benefits of mental health counseling on staying, graduating, and overcoming obstacles. Results from the ANOVA indicated that there was not a significant difference in the respondents' perceptions of mental health counseling sessions attended helping respondents stay in school, graduate and transfer to a 4-year university based on sexual orientation as a reason for counseling.

Table 31 illustrates participants' responses to related survey questions based on academic concerns as a reason for counseling and includes the number of responses, means, standard, deviations, and percentages.

Table 31
Sexual Orientation Descriptive Statistics

	Sexual Orientation				
DV Questions	N	M	SD	%	
Mental health concerns	8	3.00	.758	12	
interfering with staying in school					
Mental health concerns	8	2.38	1.188	12	
were interfering with graduation					
Mental health concerns	8	2.38	.916	12	
were interfering with					
transferring Mental health concerns	8	1 00	.641	12	
were interfering with	8	1.88	.041	12	
academics					
Mental health counseling	8	1.75	.886	12	
helped me stay in school					
Mental health counseling	8	1.88	.641	12	
helped me graduate					
Mental health counseling	8	1.63	.916	12	
helped me overcome					
obstacles to continuing					
education at a 4-year					
institution					

## **Relational Concerns**

A one-way between subjects ANOVA was utilized to compare relational concerns as a reason for counseling versus not indicating relational concerns as a presenting concern for counseling regarding their perceptions of mental health concerns as barriers to staying, graduating, transferring and doing academic work. Results from the ANOVA indicated that there was not a significant difference in the respondents' perceptions of mental health concerns interfering with respondents' ability to stay in community college,

graduate, transfer to a 4-year institution, and do academic work based on relational concerns as a reason for counseling.

A one-way between subjects ANOVA was also utilized to compare relational concerns as a reason for counseling versus not indicating relational concerns as a presenting concern for counseling regarding their perceptions of the benefits of mental health counseling on staying, graduating, and overcoming obstacles. Results from the ANOVA indicated that there was not a significant difference in the respondents' perceptions of mental health counseling sessions attended helping participants stay in school, graduate or overcome obstacles to transfer to a 4-year university based on relational concerns as a reason for counseling.

Table 32 illustrates participants' responses to related survey questions based on academic concerns as reason for counseling and includes number of responses, means, standard, deviations, and percentages.

Table 32

Relational Concerns Descriptive Statistics

Relational Concerns					
N	M	SD	%		
16	2.63	1.088	25		
16	2.81	1.109	25		
16	2.75	.985	25		
	16 16	N         M           16         2.63           16         2.81	N         M         SD           16         2.63         1.088           16         2.81         1.109		

Table 32 (Continued)

DV Questions	N	M	SD	%
Mental health concerns	16	1.75	.775	25
were interfering with				
academics				
Mental health counseling	16	2.13	.957	25
helped me stay in school				
Mental health counseling	16	2.19	.911	25
helped me graduate				
Mental health counseling	16	2.00	1.033	25
helped me transfer				

## **Major or Career Decisions**

A one-way between subjects ANOVA was utilized to compare major or career decisions as a reason for counseling versus not indicating major or career concerns as a presenting concern for counseling regarding their perceptions of mental health concerns as barriers to staying, graduating, transferring and doing academic work. Results from the ANOVA indicated that there was not a significant difference in the respondents' perceptions of mental health concerns interfering with the respondents' ability to stay in community college, transfer to a 4-year university, and do academic work based on major or career decisions as a reason for counseling. Results from the ANOVA indicated that there was a significant difference in the respondents' perceptions of mental health concerns interfering with the respondents' ability to graduate from community college based on major or career decisions as a reason for counseling.

A one-way between subjects ANOVA was also utilized to compare major or career decisions as a reason for counseling versus not indicating major or career concerns as a presenting concern for counseling regarding their perceptions of the benefits of

mental health counseling on staying, graduating, and overcoming obstacles. Results from the ANOVA indicated that there was not a significant difference in the respondents' perceptions of mental health counseling sessions attended helping respondents stay in school, graduate from community college and overcome obstacles to transferring to a 4-year university based on major or career decisions as a reason for counseling

Mean scores indicated major or career concerns as interfering more with their ability to graduate (M = 2.32) than participants not indicating major or career concerns as a presenting concern (M = 3.08). Mean scores indicated major or career concerns as interfering more with their ability to stay in school (M = 2.25) than participants not indicating concentration as a presenting concern (M = 2.89).

Table 33 illustrates participants' responses to related survey questions based on academic concerns as a reason for counseling and includes the number of responses, means, standard, deviations, and percentages. Table 34 illustrates the results of the ANOVA.

Table 33

Major or Career Concerns Descriptive

	Major or Career Concerns					
DV Questions	N	M	SD	%		
Mental health concerns	28	2.46	.962	43		
were interfering ability to						
remain in school						
Mental health concerns	28	2.32	.945	43		
were interfering with						
graduation						
Mental health concerns	28	2.25	.844	43		
were interfering with						
ability to transfer						

Table 33 (Continued)

DV Questions	N	M	SD	%
Mental health concerns	28	1.93	.766	43
were interfering to do				
academics				
The mental health	28	1.71	.713	43
counseling helped me stay				
in school				
Mental health counseling	28	1.96	.793	43
helped me graduate				
Mental health counseling	28	1.57	.790	43
helped me overcome				
obstacles to continue				
education at a 4-year				
institution				
mstrution				

Table 34

Major or Career Concerns ANOVA Results

DV Questions		df	SS	MS	F	p	$\eta^{2}$
Mental health	Between	1	9.198	9.198	10.961	.002*	.148^
concerns were	Groups						
interfering with	Within Groups	63	52.864	.839			
graduation	Total	64	62.062				
Mental health concerns were	Between Groups	1	6.567	6.567	7.282	.009*	.104^
interfering with	Within Groups	63	56.818	.902			
continuing education	Total	64	63.385				

*Note*. The symbol (\*) indicates statistical significance, and the symbol (^) indicates a large effect size.

## **Medical Concerns**

A one-way between subjects ANOVA was utilized to compare medical concerns as a reason for counseling versus not indicating medical concerns as a presenting concern

for counseling regarding their perceptions of mental health concerns as barriers to staying, graduating, transferring and doing academic work. Results from the ANOVA indicated that there was a significant difference in the respondents' perceptions of mental health concerns interfering with respondents' ability to stay in community college and do academic work based on medical concerns as a reason for counseling. Results from the ANOVA indicated that there was not a significant difference in the respondents' perceptions of mental health concerns interfering with respondents' ability to graduate from community college and transfer to a 4-year university based on medical concerns as a reason for counseling.

A one-way between subjects ANOVA was also utilized to compare medical concerns as a reason for counseling versus not indicating medical concerns as a presenting concern for counseling regarding their perceptions of the benefits of mental health counseling on staying, graduating, and overcoming obstacles. Results from the ANOVA indicated that there was not a significant difference in the respondents' perceptions of mental health counseling sessions attended helping respondents stay in school and graduate from community college based on medical concerns as a reason for counseling. The results of the ANOVA indicated that there was a significant difference in the respondents' perceptions of mental health counseling sessions attended helping respondents overcome obstacles for continuing education at a 4-year university based on medical concerns as a reason for counseling.

Mean scores indicated medical concerns as interfering more with their ability to stay in school (M = 2.07) than participants not indicating medical concerns as a presenting concern (M = 2.76). Mean scores indicated medical concerns as interfering

more with their ability to stay in school (M = 1.43) than participants not indicating concentration as a presenting concern (M = 2.27). Mean scores are indicating medical concerns as their reason for counseling see mental health counseling helping to continue their education at a 4-year institution impacts their ability to transfer to a 4-year institution more (M = 1.29) than participants not indicating concentration as a presenting concern (M = 1.84).

Table 35 illustrates participants' responses to related survey questions based on academic concerns as a reason for counseling and includes the number of responses, means, standard, deviations, and percentages. Table 36 illustrates the results of the ANOVA.

Table 35

Medical Concerns Descriptive Statistics

DV Questions	N	M	SD	%
Mental health concerns	14	2.07	1.207	22
interfering with staying in				
school				
Mental health concerns	14	2.57	1.089	22
were interfering with				
graduation				
Mental health concerns	14	2.29	1.204	22
were interfering with				
transfer				
Mental health concerns	14	1.43	.514	22
were interfering with				
academics				
Mental health counseling	14	1.50	.760	22
helped me stay in school				

Table 35 (Continued)

DV Questions	N	M	SD	%
Mental health counseling	14	1.29	.726	22
helped me overcome				
obstacles to continue my				
education at a 4-year				
institution				

Table 36

Medical Concerns ANOVA Results

DV Questions		Df	SS	MS	F	p	$\eta^2$
Mental health	Between	1	5.186	5.186	5.354	.024*	.089
concerns were	Groups						
interfering with	Within	62	60.049	.969			
staying in school	Groups						
	Total	63	65.234				
Mental health	Between	1	7.861	7.861	11.362	.001*	.153^
concerns were	Groups						
interfering with	Within	63	43.585	.692			
academics	Groups						
	Total	64	51.446				
Mental health	Between	1	3.360	3.360	5.264	.025*	.078
counseling helped	Groups						
me continue my	Within	62	39.577	.638			
education	Groups						
	Total	63	42.938				

Note. The symbol (\*) indicates statistical significance, and the symbol (^) indicates large effect size

In summary, only two demographic categories yielded significant findings. Graduation from community college effects on counseling helping overcome barriers to transfer yielded significant results F(1, 62) = 5.881, p = .018 and a .087 Eta Squared effect size. A comparison of means found that counseling had a significant effect on non-

community college graduates compared graduates in transferring to a 4-year institution.

Classification at university effects on mental health concerns was interfering with the ability to transfer found F(3, 61) = 2.791, p = .048 with a .121 Eta Squared effect size. A Tukey HSD did not yield any significant results among the classifications of sophomore (n=2), junior (n=7), senior (n=34) or graduate student (n=21). However unequal group sizes were indicated. A Games-Howell post hoc test did find significant differences between sophomores and juniors, seniors, and graduate students as did the LSD post hoc test. Sexual orientation and relational concerns were the only two presenting concerns not to yield results.

Students who indicated academic concerns perceived more impact on retention, academics, and graduation than students that did not indicate academic problems. Of the participants in the study 54 out of 65 indicated that anxiety was a presenting concern for counseling which is 83% of the participants. Students indicated that counseling had more impact on continuing their education at a 4-year institution than students that did not indicate anxiety problems. Students indicated that concentration concerns had significantly more impact on retention and academics than students who did not indicate concentration problems. Also, students indicated that counseling significantly helped concentration problems more for students that indicated concentration than the students who did not indicate any concentration difficulties. Students who indicated mood concerns perceived significantly more impact on retention, academics, graduation, and transfer than students that did not report mood problems. Students who indicated family issues perceived significantly more impact on retention and academics than students without indication of family issues. Financial stress was perceived significantly more

impactful on retention, academics, graduation, and transfer than students that did not indicate financial concerns. Students who selected stress as a presenting concern perceived significantly more impact on academics than students that did not indicate academic problems. Students who reported major or career concerns perceived significantly more impact on graduation and transfer than students who did not report major or career concerns. Students who indicated medical concerns perceived significantly more impact on retention and academics than students that did not indicate medical problems. Also, counseling significantly helped more for students who indicated medical concerns transfer to a 4-year university than those who did not indicate concerns.

#### CHAPTER V

## DISCUSSION

This study presents findings of community college transfer students' perceptions of mental health concerns on the ability to remain in school, graduate from community college, do academics, and transfer to a 4-year university. The study also presents findings of transfer students' perceptions of mental health counseling's impact on the ability to stay in school, graduate from community college and overcome obstacles for continuing their education at a 4-year university.

The current study examined the perceptions of community college transfer students rather than analyzing raw data from counseling centers or the registrar's office for attendance, enrollment or graduation like past studies in this research area. Research question 1 concerning the respondents' perceptions of mental health concerns interfering with the ability to remain in school, to graduate from community college, to transfer to a 4-year university, and to do academic work all have mean scores between two and three. Two represents Agree with the statement given in the survey, and three represents Disagree with the statement concerning the variables mentioned above. According to results from research question 1, participants perceive mental health concerns as barriers only modestly. The perception of concerns as only modestly impacting participants agrees with research by Chin-Newman and Shaw (2013) and Hyun et al. (2006).

Research question 2 mean scores concerning the respondents' perception of mental health counseling helping with their ability to stay in school and overcoming barriers to continuing their education at a 4-year institution were between scores one and two with one representing Strongly Agree with the statement in the survey and two representing Agree with the statement. The question concerning graduation from a community college has a mean that is slightly below two as seen in Table 3. The mean scores for research question 2 suggest a favorable perception of mental health counseling helping in areas for the ability to remain in school, graduate, and overcome barriers to transfer to a 4-year university. The mean scores agree with research by Bishop and Walker (1990), Gerdes and Mallinckrodt (1994), McKenzie et al. (2015), Porter (2011), Turner and Berry (2000) and Wilson et al. (1997). Research question 3 yields two significant results when demographic examine the participants' perceptions. The demographic characteristic data with significant results were graduation from community college affects mental health concerns on the ability to stay in school and classification at university affects mental health concerns on the ability to transfer to a 4-year university.

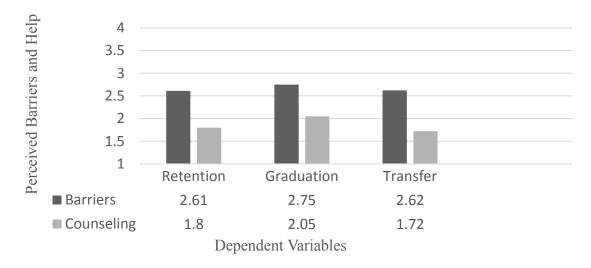


Figure 1. Mean Differences Between Barriers and Counseling

Figure 1. presents the mean differences for perceived barriers' impact on retention, graduation and transfer, and the mean differences for perceived help from counseling on retention, graduation and transfer. Because Strongly Agree is represented by a score of 1 and agree is represented by a score of 2, the lower the score in the figure is closer to strongly agreeing with the questions asked on the survey found in Appendix A.

The demographic characteristic results do not support the research of Wilson et al. (1997) that the number of counseling session attended impacts the ability to remain in school or to graduate. Wilson et al. (1997) also reported effects of counseling in college counseling centers diminishes after the seventh session. The current study also did not find any significant differences in the number of sessions attended on any of the dependent variables. However, this study does confirm research by Bishop (2016) and Lee et al. (2009) that the number of sessions attended does not impact retention. The current study also agrees with research by Illovsky (1997) that counseling does not impact retention or GPA when considering demographic data. Lee et al. (2009) also

support the evidence that counseling does not improve GPA when researchers control for pre-college performance. Bundy and Benshoff (2000) found that women rated counseling more helpful than men, which the current study did not find evidence to support. Turner and Berry (2000) report that 61% of students indicate academic distress and McKenzie (2015) found that 91% of students report academic distress while 26% of respondents in the current study identifies academic concerns as a presenting concern for counseling. The present study indicates that students do perceive academic concerns as significantly interfering with their ability to stay in school, graduate from community college, and perform academic work (see Tables 15 and 16).

The presenting concerns that demonstrate significant results are academic concerns, anxiety, depression, and other mood disorders, family concerns, substance use, financial stress, major or career concerns and medical concerns. Transfer students perceive mental health counseling as improving their ability to overcome barriers to continuing their education for anxiety, academic concerns, and medical concerns which is supported by Illvosky (1997) and Mehr and Daltry (2016). Mehr and Daltry (2016) specifically found significant differences impacting transfer students versus non-transfer students concerning depression, academic concerns, and family distress. The current study also finds depression, academic concerns, and family distress as presenting concerns, among others, which have effects on transfer students.

The results for research questions 1 and 2 are not necessarily supported by the findings of research question 3. As Figure 1 demonstrates, participants do perceive counseling as helpful while in community college. Also, the participants do modestly agree that the barriers negatively impact their retention, graduation, academics and

transfer from community college. However, when the data is examined by demographics and presenting concerns more barriers were recognized and impacting the participants community college academic career. In addition when the data was examined by demographics and presenting concerns, participants appeared not to see the benefit of counseling as strongly. These incongruencies are not explained by the current data, and raises more questions for future research.

The data does affirm that community college students do perceive mental health barriers as interfering with retention, graduation, academics and transfer. Being able to identify specific mental health barriers may demonstrate the need and possible benefits of utilizing mental health counseling while in community college. The fact that students perceive counseling as helping overall demonstrates that offering mental health counselors may be in line with the community college's mission of helping students obtain their academic goals and may promote general wellness while in community college.

Other possible reasons for incongruencies among research questions 1 and 2 versus research questions 3 are that participants may be more aware of chronic problems and barriers especially in the psychiatric realm. This awareness may be due to the amount of distress experienced by psychiatric disorders such as anxiety, depression, or even side effects of medications used to treat psychiatric disorders can be very disruptive.

Participants may also be aware that they were able to meet educational goals and attribute at least in part of the success to counseling. However, participants may not see gradual changes that counseling typically provides which may account for the lack of significant scores for counseling helping with retention, graduation and transfer. Students may be

able to more clearly see the acute or chronic nature of their presenting concern than the incremental improvements made in counseling.

## Limitations

The small sample may affect the generalizability of the results. The survey was conducted with two university transfer student populations; however, only one university's results were valid. The survey was not subject to a pilot study to examine reliability. Although the survey was examined for face validity, this does not address internal consistency. Also, students may not feel comfortable providing personal mental health data especially through the internet. Lack of comfort may exclude some students with serious mental illness (SMI), low socioeconomic status or those who lack comfort with technology. The respondents were transfer students who previously participated in counseling. The participants also had some education past high school and the ability to be admitted into an institute of higher learning. Most participants were white females between the ages of 18 and 24.

## **Recommendations for Future Research**

Possible implications for future research may include further studies of student perceptions of the usefulness of not only counseling services but also other resources. Just because a service is measured as objectively effective, it does not necessarily mean that students will perceive or rate the service as effective. Also, as mentioned above, carrying this research a step further by examining the correlations between demographic characteristics and presenting concerns may help target populations which are most at risk of not completing their education goals. A more in-depth look at what counseling resources are available at each community college and a qualitative study about why

many community colleges in this state do not offer mental health counseling is a logical step forward.

## **Implications for Practitioners and Administrators**

Possible implications of the current study on theory and practice are that demographic characteristics do not play as significant a role in retention, graduation, and transfer of community college students as presenting concerns. Current theory by Tinto (1975, 1993) posits that social adjustment and engagement are the most important factors in retention of college students. The results of the current study appear to support this by finding that community college transfer students perceive presenting concerns as having more significant effects than student demographic characteristics as barriers to their educational goals. In other words, it is possible the presenting concerns are issues that need to be addressed for the student to adjust or fit into the college community. Perhaps demographic characteristics such as age or gender are not as impactful as removing psychological barriers for persisting in college. If Tinto's theory is correct, it appears that the removal of students' psychological concerns has more of an impact on social adjustment, engagement, and fit than do demographic factors. Also, mental health practitioners on community college campuses may be able to use this data to determine which students are at most risk not just by demographic characteristics but by presenting concern.

The participants offered insight into their perceptions of their mental health concerns and their counseling experience. Because the number of sessions attended did not yield any significant results, clinicians may need to review progress in counseling and continually reaffirm or change goals to show progress and improve motivation for

treatment. Community college administrators may also use the data to understand better what students perceive as psychological barriers to continuing their education and allocate resources as needed.

In summary, this study indicates that students' perceptions of mental health concerns and counseling do impact the participants' education. The study does accomplish its goals by measuring each of the three research questions. The study identified perceptions of mental health on barriers and counseling. The study also identified student perceptions concerning which demographic characteristics and presenting concerns had significant effects.

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# APPENDIX A SURVEY INSTRUMENT

## **Client Perceptions Survey**

This section includes information about the participant's demographics. Please indicate the answer that most describes you or fill in another answer when other is indicated.

1)	-	ou a community college transfer student?
		Yes
		If no, please do not complete this survey.
2)	Did yo	ou receive mental health/personal counseling while in community college?
		Yes
		If no, please do not complete this survey.
3)	What	is your age?
		Under 18 (If under 18 years of age please do not complete this survey.)
		18-24
		25-34
		35-49
		50+
4)	Gende	r:
		Male
		Female
		Transgender
		Other:
5)	Classi	fication at your university:
		Sophomore
		Junior
		Senior
		Graduate student
6)	Ethnic	ity:
		African American/Black
		Caucasian/White
		Asian American/Pacific Islander
		Hispanic American/Latino
		More than one ethnicity

		Native American
		Other:
		Prefer to not answer
7)	Did yo	ou graduate from community college?
		Yes
		No
8)	Numb	er of counseling visits during community college?
		1-3 sessions
		4-7 sessions
		8-11 sessions
		12+ sessions
9)	GPA a	at time of transfer
		4.00 - 3.50
		3.49 - 3.00
		2.9 -2.50
		2.4 - 1.00
		Below 1.00
10)	) Numb	er of hours worked on average during a week while attending community
	college	e?
		1-10
		11-20
		21-34
		35+
11)	) Class :	standing at time of transfer?
		Freshman
		Sophomore

## This section asks you to rate your perception of mental health concerns as a barrier during community college.

12) My mental health concerns were interfering with my ability to

	Strongly Agree	Agree	Disagree	Strongly Disagree
stay in community college.				
graduate from community college				
transfer to a 4-year university				
16) Did you perceive your mental health concern as interfering with your ability to do academic work?				

16) Did you perceive your mental health	concern as	s interfering	with your	ability	to do
academic work?					

- ☐ Strongly agree
- □ Agree
- □ Disagree
- ☐ Strongly disagree

## This section asks you to rate your perception of mental health counseling as it pertains to overcoming barriers.

17) The mental health counseling sessions I attended helped me

☐ Family issues

□ Sexual orientation
 □ Relationship concerns
 □ Major/career concerns
 □ Medical concern

college that you sought counseling for.

□ Stress

	Strongly Agree	Agree	Disagree	Strongly Disagree	
stay in school.					
graduate from community college.					
overcome obstacles for continuing education at a 4- year university.					
20) Please indicate any in community college (				d you to seek counseling	g
☐ Academic conce	erns				
□ Anxiety	Anxiety				
☐ Difficulty conce	Difficulty concentrating				
☐ Substance use	Substance use				
☐ Mood disorder					

□ Other: please list and describe any other barrier encountered in community

Thank you for completing the survey. If you have any additional	information
relevant to the questions asked in this survey, please share below.	You may exit the
survey.	

# $\label{eq:appendix} \mbox{APPENDIX B}$ $\mbox{IRB APPROVAL LETTER}$



#### Office of Research Compliance

Institutional Review Board for the Protection of Human Subjects in Research P.O. Box 6223 53 Morgan Avenue Mississippi State, MS 39762 P. 662.325.3294

www.orc.msstate.edu

## NOTICE OF APPROVAL FOR HUMAN RESEARCH

**DATE:** July 13, 2017

TO: Stephanie King, Educational Leadership, Linda Coats; Mark Fincher; Susan Johnson

FROM: Jodilyn Roberts, HRPP Officer, MSU HRPP

**PROTOCOL TITLE:** Student Perceptions of the Impact of Participation in Community College Mental

Health Counseling on Retention, Graduation and Transfer

PROTOCOL NUMBER: IRB-17-402

Approval Date: July 13, 2017 Expiration Date: July 13, 2018

This letter is your record of the Human Research Protection Program (HRPP) approval of this study as exempt.

On July 13, 2017, the Mississippi State University Human Research Protection Program approved this study as exempt from federal regulations pertaining to the protection of human research participants. The application qualified for exempt review under CFR 46.101(b) (2, 3).

Exempt studies are subject to the ethical principles articulated in the Belmont Report, found at www.hhs.gov/ohrp/regulations-and-policy/belmont-report/#

If you propose to modify your study, you must receive approval from the HRPP prior to implementing any changes. The HRPP may review the exempt status at that time and request an amendment to your application as non-exempt research.

In order to protect the confidentiality of research participants, we encourage you to destroy private information which can be linked to the identities of individuals as soon as it is reasonable to do so.

The MSU IRB approval for this project will expire on July 13, 2018. If you expect your project to continue beyond this date, you must submit an application for renewal of this HRPP approval. HRPP approval must be maintained for the entire term of your project. Please notify the HRPP when your study is complete. Upon notification, we will close our files pertaining to your study.

If you have any questions relating to the protection of human research participants, please contact the HRPP by phone at 325.3994 or email irb@research.msstate.edu.

We wish you success in carrying out your research project.

Jodilyn Roberts	
Review Type:	EXEMPT
IRB Number:	IORG0000467