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Predicting Utilization of Mental Health Services Among Undergraduate Nursing Students on College Campuses in the Mississippi Delta

Deidra Michelle Byas
Walden University

Walden University

College of Social and Behavioral Health

This is to certify that the doctoral dissertation by

Deidra M. Byas

has been found to be complete and satisfactory in all respects,
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the review committee have been made.

Review Committee
Dr. Danyelle Brooks, Committee Chairperson, Counselor Education and Supervision Faculty
Dr. Geneva Gray, Committee Member, Counselor Education and Supervision Faculty

Chief Academic Officer and Provost
Sue Subocz, Ph.D.

Walden University
2025

Abstract

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Deidra M. Byas

M.Ed., Delta State University, 2006

BS, Delta State University, 1997

Dissertation Submitted in Partial Fulfillment

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Abstract

Over recent years, concerns about the mental health of nursing students in the Mississippi Delta have increased. However, research indicated that many nursing students do not utilize mental health services. This population has received little research attention, creating a gap in the literature and leaving counselor educators and supervisors ill-equipped to prepare counselors to meet the needs of nursing students. This quantitative study examined whether attitudes toward mental health services, social and cultural stigmas, and demographic characteristics explained the variance in nursing students' willingness to seek help. Guided by the Theory of Planned Behavior, the study focused on three areas: (1) the extent to which attitudes predicted willingness to seek services, (2) the extent to which perceived stigma reduced willingness to seek services, and (3) the extent to which demographic variables predicted willingness to seek services. The study included 84 undergraduate nursing students in the Mississippi Delta. Direct multiple logistic regression and chi-square analyses were used to determine odds ratios and differences in odds. Descriptive analysis summarized demographic characteristics. Results indicated that stigma-related factors accounted for approximately 12% of the variance in some students' help-seeking behavior and significantly impacted help-seeking behaviors. Social and cultural stigmas and demographic variables (gender, age, ethnicity) did not significantly predict willingness to seek services. Recommendations included normalizing mental health. The findings may guide counselor educators and supervisors in developing targeted strategies to address the needs of undergraduate nursing students in the Mississippi Delta, who themselves serve underserved populations.

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Dedication

This dissertation is dedicated to several special people, but first and foremost, to my Lord and Savior. Without Him, I would not have had the courage to begin this journey again, nor the strength to see it through. Though this process has taken several years, off and on, I have no regrets. I'm thankful for God's grace and mercy. He has covered, protected, and revealed things to me that I would not have known or discovered had I given up after my first attempt.

I also dedicate this work to my beloved mother, Ms Ilester Byas. I lost my mom 2 weeks before I graduated with my master's degree. She was my biggest cheerleader and supporter. She was an educator and the epitome of strength, resilience, and devotion. I am who I am because of her, and I am eternally grateful to have had her as my mother. I know she is watching over me, smiling, and celebrating this milestone. I thank God for choosing her for me.

To my children, Ja'Terica Byas and Malia Byas, and my granddaughter, Alanna Byas—this accomplishment is for you. Every sacrifice and every long night were with you in mind. I hope I've shown you what God's grace looks like and that, in time, what He has for you is yours. Trust Him, and He will provide. It may not be easy, and it may feel unbearable, but surrender to His will and trust Him. Looking back over my life, 13 years ago, this was not how I envisioned my life. God had another plan in mind, and His plans superseded the plan I had for myself.

If it were not for the support of my big sister and only sister, Amanda Byas, I would not have made it this point. Thank you for your steadfast prayers, encouragement, and support during the most challenging moments in my life. Thank you for stepping in

with love, grace, and strength where our mom left off. And to my niece, Qiana Byas, thank you for your love and support throughout this journey as well.

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Chapter 1: Introduction to the Study

Nursing degree-seeking students experience higher psychological problems than students enrolled in other healthcare fields (Barlett et al., 2016). The nursing profession has been widely recognized as a population that experiences the highest stress level compared to any other professional or traditional college major (De la Fuente, 2015). Counseling centers on college campuses can assist nursing students with mental health services, but these services are underutilized (Lipson et al., 2015; Mitchell, 2018). Further, nursing students do not recognize mental health's role in their academic success, leading to higher levels of psychological distress (Mitchell, 2018).

Other variables may impact nursing students' utilization of counseling resources. Examining what nursing students think about mental health services is important to develop appropriate strategies to address the problem. To that end, this study was designed to investigate the relationship between attitudes toward help-seeking and the potential of nursing students to access professional counseling services. The commonalities between attitudes toward help-seeking and the propensity for actual help-seeking are complex. To better understand these commonalities, this non-experimental, predictive research study examined the utilization of mental health services among undergraduate nursing students on college campuses in the core region of the Mississippi Delta in the United States. The research questions provided a framework for the researcher to predict the relationships between three independent variables (attitudes, social and cultural stigmas, and demographics) and the dependent variable (potential for help-seeking among nursing students). Three general questions were explored through a

quantitative, predictive research design:

- Are the independent variables significantly associated with the dependent variable?
- What relationships exist between the independent variables and the dependent variable?
- Which independent variable explained the largest degree of variance in the dependent variable?

Understanding the relationship between help-seeking attitudes and the potential for help-seeking had various implications for social change. The results provide information on the importance of mental health care for nursing students. By understanding the potential for help-seeking, this study provides a mechanism to help meet the mental health needs of students enrolled in nursing programs. Lastly, the results of this study not only indicate the need for mental health counselors in nursing programs but also focus on help-seeking among a small population of college students. Predicting help-seeking attitudes among nursing students lays a foundation for future studies to explore mental health services and the specific mental health needs of nursing students and nursing professionals. This study also addresses the gap within the literature on perceived barriers and stigma of mental health usage among nursing students in the Mississippi Delta and the barriers that affect their attitudes toward seeking mental health.

The remainder of this chapter include the background of the study, the problem statement, the purpose of the study, the research questions and hypotheses, the theoretical framework, and the nature of the study. This chapter includes key terms, assumptions,

scope and delimitations, limitations, and significance of the study. The chapter ends with a summary and the transition to the next chapter.

Background of the Study

College students experience high levels of stress and struggle emotionally (Brunner et al., 2014). Mental health issues such as depression and anxiety are more prevalent among college students. The problems interfere with the academic pressure to succeed in fast-paced educational environments like nursing programs (Lipson et al., 2019). With the impact of COVID-19, which began around March 2020, mental health services from campus counseling centers increased drastically (Aslan & Pekince, 2020; Curcio et al., 2022; Kecojeviv et al., 2020). However, there is a stigma of having a mental illness (Eylem et al., 2020). Stigma is an erroneous perception (Clement et al., 2015), which impacts several college students and their willingness to seek mental health services. The attitudes and perceptions of college students regarding mental health care are critical when exploring mental health services (Barry et al., 2019). Additionally, college students' ethnicity, along with their cultural beliefs, play a role in seeking mental health services (Lipson et al., 2018; Villatoro, 2018).

Nursing students have higher stress levels than other college students (Enns et al., 2018). Due to their academic challenges as well as interpersonal problems, nursing students are at risk of developing psychological issues (Enns et al., 2018). But mental health care is vital to the academic success of nursing students (He et al., 2018). Because nursing students fail to access educational and emotional support, they begin to feel doubtful and unsure of their ability to be successful students (Madian et al., 2019). Long-

term, untreated stress among nursing students leads to burnout (Cleary et al., 2018). Burnout manifests itself in nursing students, causing low energy, feelings of helplessness, and a negative outlook on life, the nursing profession, and themselves (McDermott et al., 2021).

Multiple factors may contribute to students being unsuccessful in a nursing program. These factors exist nationally as well as in the Mississippi Delta. The Mississippi Delta is considered one of the poorest regions in Mississippi (Slack et al., 2015). This region is a medically underserved area that has a high risk of untreated health-related problems due to healthcare shortages, low incomes, and high poverty levels (Connell et al., 2019; Gennuso et al., 2016; Hossfeld & Mendez, 2018). In addition, there is a lack of educational resources, which is a result of the historical legacies within the Mississippi Delta that stem from the consequences of slavery, racism, and oppression of African Americans (Slack et al.). Many African Americans reside in the Mississippi Delta, and at least 40% of them lack health care insurance (Connell et al., 2019). According to Delgado (2015), even with the establishment of the Affordable Care Act (ACA), many African Americans in Mississippi are still unable to afford healthcare coverage. The author further stated that the current Governor of Mississippi wants to not only do away with the ACA but also with Medicaid as well.

Several challenges present themselves in the Mississippi Delta region. First, because this is a rural area, there is a lack of financial resources and community services available to provide adequate medical and mental health care. Second, because the region is a rural community, many people know each other and are less likely to seek or ask for

the help they need for fear of being stereotyped (Hampton & Sharp, 2014). Lastly, there is a negative connotation attached to mental health care, and this stigma is prevalent among many in rural communities (Saykeo, 2018). The lack of appropriate education on the importance of mental health can impact academic success (Janota et al., 2022).

Nursing student retention is a concern for all nursing programs in the Mississippi Delta. According to Feeney (2024), Mississippi is one of 30 states currently experiencing a nursing shortage, with 9.99 nurses for every 1,000 people in the state. Since the COVID-19 pandemic in 2020, students in undergraduate nursing programs in Mississippi decreased by 7.7% for associate degree nursing programs and 9.6% for baccalaureate nursing programs (Temple, 2022). While there may be multiple factors that contribute to nursing students being unsuccessful, nursing programs in the Mississippi Delta have limited resources to address the mental health needs of their students. Students enrolled in these rural nursing programs are already disadvantaged. They are trained to provide care for members of their communities who are burdened with the same issues they face outside of the classroom. These common stressors impact student success and can directly impact a nursing program's success rates. There is also a gap in knowledge and research about the help-seeking attitudes of nursing students in the Mississippi Delta.

Some nursing schools in Mississippi are addressing the mental health needs of nursing students by hiring counselors as student navigators. Student navigators are professional staff members in nursing schools who provide academic and mental health services to nursing students. Some services include, but are not limited to, teaching test-taking strategies, time management, study skills, and any other issue that may prevent the

student from succeeding. The primary purpose of employing student navigators was to increase the level of success for students in each nursing program. The student navigator would see the student if the student encountered an academic problem or a personal issue. However, if the student was experiencing a mental health issue, the student would be referred to the counseling center on campus or in the community. Students retained their independence in this process and were individually responsible for the follow-through on those referrals. In 2006, the Robert E. Smith School of Nursing at Delta State University in Cleveland, Mississippi, was the first nursing program in the Mississippi Delta to hire a counselor to provide in-house mental health services for its nursing students. In 2012, Coahoma Community College Allied Health Center in Clarksdale, Mississippi, was the second nursing program within the core region of the Mississippi Delta to hire a counselor to provide mental health services to all its students enrolled in Allied Health. This included Associate Degree in Nursing (ADN) students.

Problem Statement

Researchers have shown that mental health issues can be a major concern among nursing students (Bartlet et al., 2016; Cheng et al., 2018; McDermott et al., 2021; Mitchell, 2018). McCoy (2024) found that 55% of college nursing students in the United States report experiencing symptoms of depression and other mental health issues. While the quality of mental health is important to the academic success of nursing students, many nursing students do not seek mental health services when needed (Cheng et al., 2018). Further, the nursing profession is identified as a profession that has the highest level of stress compared to other professions and disciplines, yet many nursing students

do not seek mental health services (Cheng et al., 2018; Eisenberg et al., 2011; Lipson et al., 2015, 2018; Mitchell, 2018; Pumpuang et al., 2018).

As a result of not seeking mental health services, nursing students could then find themselves at a greater disadvantage in the management of their stress and adaptation to the rigorous academic environment. There is a plethora of barriers that may prevent nursing students from seeking mental health services. This study examined the extent to which attitudes toward mental health services, perceived stigma of mental health services, and demographic variables predict the variance in undergraduate nursing students' willingness to seek mental health services on college campuses in the Mississippi Delta. As is the case with any population, untreated mental health issues can lead to more serious problems and eventually result in negative consequences that range from being unsuccessful in a nursing program or field (Brunner et al., 2014; Labrague et al., 2017; Lipson et al., 2015) to more serious problems such as alcohol or substance abuse (Boulton & O'Connell, 2017; Walters et al., 2018). The results of this study provided insight into the relationship between attitudes toward help-seeking and the potential for actual help-seeking. Thus, the results suggested some avenues for prevention and early intervention.

Purpose of the Study

This quantitative study predicted whether the existing variables could explain the variance in nursing students' willingness to seek help from mental health services on college campuses in the Mississippi Delta region of the United States. The findings offer valuable insight to mental health professionals to develop targeted strategies that address

the specific needs of undergraduate nursing students in the region. Additionally, this study highlighted the impact of barriers on nursing students' willingness to seek help. Lastly, the results could provide nursing programs with evidence-based best practices to better support nursing students' well-being and academic success in the Mississippi Delta.

Research Questions and Hypotheses

Research questions explored existing variables that may explain the variance in nursing students' willingness to seek help from mental health/counseling services on college campuses in the Mississippi Delta's core region of the United States. The research questions and the null hypotheses provided a framework to predict the relationships between three independent variables (attitudes, social and cultural stigmas, and demographics) and the dependent variable (potential for help-seeking among nursing students). Three general questions were explored through a quantitative, predictive research design:

- Are the independent variables significantly associated with the dependent variable?
- What relationships existed between the independent variables and the dependent variable?
- Which independent variable explained the largest degree of variance in the dependent variable?

Research Question 1 and Hypothesis

To what extent do attitudes toward mental health services explain the variance in

nursing students' willingness to seek mental health services?

$H_0$1: The odds of perceived barriers to accessing mental health services predicting willingness to access mental health services equals zero.

H_a1: The odds of perceived barriers to accessing mental health services predicting willingness to access mental health services is greater than zero.

Research Question 2 and hypothesis

To what extent does the perceived stigma of mental health services decrease the likelihood of nursing students' willingness to seek mental health services?

$H_0$2: The odds of the perceived stigma of mental health services decreasing the likelihood of nursing students' willingness to seek mental health services equals zero.

H_a2: The odds of the perceived stigma of mental health services decreasing the likelihood of nursing students' willingness to seek mental health services is greater than zero.

Research Question 3 and Hypothesis

To what extent do demographic variables predict the variance in nursing students' willingness to seek mental health services?

$H_0$3: The odds of demographic variables increasing the likelihood for nursing students to access mental health services equals zero.

H_a3: The odds of demographic variables increasing nursing students' likelihood of accessing mental health services is greater than zero.

Theoretical Framework

The theoretical framework for this study came from the theory of planned

behavior (TPB). Ajzen (2020) stated that attitudes and beliefs influence a person's behavior, and exploring one's intention is the best way to predict behavior. Ajzen further postulated that intention represents a person's readiness or ability to engage in a particular behavior. Therefore, one's intention to engage in the behavior will determine their action. More specifically, this model suggests that people consider the outcomes of their actions before deciding to engage in a particular behavior. Therefore, by applying the TPB model to this study, the impact of nursing students' intentions was identified, which led to predicting the utilization of mental health services. This will be further explained in detail in Chapter 2.

Nature of the Study

This study examined the degree of variance explained in predicting the utilization of mental health services among undergraduate nursing students on college campuses in the core region of the Mississippi Delta in the United States. This study explored the relationships among variables. The independent variables (IV) are attitudes, social and cultural stigmas, and demographics. This study's dependent variable (DV) was nursing students' potential to demonstrate help-seeking behavior.

Since there is a current gap in the literature as it relates to mental health services being accessed by nursing students in the Mississippi Delta, surveying nursing students regarding their outlook on mental health services could provide more information for further research. The General Help Seeking Questionnaire (GHSQ), the Perceived Stigma and Barriers to Seeking Mental Health Services Survey, and the demographic survey were used to assess the relationships between help-seeking behaviors. I chose the

instruments after a systematic, in-depth nursing, counseling, and clinical mental health literature review.

The study sampled undergraduate nursing students from various ethnic backgrounds within the core region of the Mississippi Delta. An average of 240 current nursing students are enrolled in programs across the Mississippi Delta. Using 85 participants, the study meets the acceptable power level of .80 for a multiple regression study. According to Balkin and Sheperis (2011), to determine the minimum sample size, an a priori power analysis should be conducted using G*Power with an effect size of .15, error probability of .05, and power set at .80. Based on these criteria, the resulting required sample size was 85 for a population size of 240 nursing students. Multiple logistic regression identified the relationship between two or more independent variables and the dependent variable, explaining the outcome of the dependent variable (Hickman & Wright, 2011).

Definitions

Barriers/Barriers to care: Obstacles that prevent students from receiving needed services (Horwitz et al., 2020).

Coping: Refers to controlling specific behaviors related to stressful experiences (Enns et al., 2018).

Mental health: A state of psychological well-being (Jones, 2023).

Stigma: A negative label is associated with something unacceptable (Clement et al., 2014).

Stress: An individual experience that causes an internal and external response

(Labrague et al., 2017).

Assumptions

It was an assumption that the participants would fully understand all the questions on the questionnaires and that all participants would answer each question truthfully. Another assumption was that the GHSQ, Perceived Barriers and Stigma Questionnaire, and demographic survey would measure the barriers to seeking mental health services. According to Pampel (2020), multiple logistic regression is a technique that considers the categories of the dependent variable by predicting the independent variables. Using this statistical technique determined which independent variables increased or decreased the probability of the outcome of the dependent variable (Pampel, 2020). Several independent variables predicted the outcome of the dependent variable (Osborne, 2014). However, the dependent variable was categorical. Lastly, multiple logistical regression also determined if there were interactions among the predictors (Osborne, 2014).

Scope and Delimitations

Because this study focused on undergraduate nursing students in the Mississippi Delta, there were limits to generalizability due to geographical differences that may have existed in the larger population of nursing students throughout the United States. This study consisted of participants in the Mississippi Delta region—Sunflower, Coahoma, and Bolivar counties. The scope of this study was nursing students who were at least 18 years of age and currently enrolled in an undergraduate nursing degree program. This comprised an Associate of Nursing Degree (ADN) and a Baccalaureate of Science in Nursing (BSN). The excluded populations were those enrolled in a certificate program

and those outside the core region of the Mississippi Delta. The long-term goal was to generalize the information gathered from this specific population of nursing students in the Mississippi Delta to compare it to other nursing schools within the state of Mississippi as well as other states.

Limitations

The quantitative, predictive design selected for this study is a key limitation of this research. Researchers criticized the quantitative design for lacking the depth and breadth of its qualitative counterpart. This criticism relates to the response rates and the ability to provide in-depth discussion of responses. A limitation to utilizing multiple regressions is that one can discover the relationships but cannot be certain of the underlying cause. In addition, the GHSQ scale used for this study did not solely measure the behavior of seeking mental health services. The construct validity of the GHSQ was only supported when combined with a measure to assess help-seeking behavior (Hammer & Spiker, 2018; White et al., 2018). Another limitation was that only students enrolled in a full-time nursing degree program were included in the sample. Lastly, there was a lack of prior research on mental health services in nursing schools in the Mississippi Delta.

Significance of the Study

This study identified various elements related to help-seeking behavior among nursing students in the Mississippi Delta. The assumption was that some of these variables prevented nursing students from seeking mental health care on college campuses. For many nursing programs, stress significantly impacted a student's well-being. According to Dalky and Gharaibeh (2018), this population faces academic and

personal stressors. Many studies have been conducted on this population (Mitchell, 2018). However, there is still a need for a more cognizant study to address the impact of psychological distress among nursing students (Dalky & Gharaibeh, 2018). Furthermore, there is a growing imperative for additional research to shift the focus away from identifying shortcomings in nursing students and toward recognizing and fostering the positive attributes they possess (McDermott et al., 2020).

Significance to Theory

The TPB played a vital role in this study. The use of this theory identified a person's behavioral intentions as well as predictive behavior. Fischer and Turner (1970) created a conceptual framework examining attitudes toward seeking mental health. The authors state that attitudes influence behaviors. According to Fishbein and Ajzen (1977), the theory of planned behavior explained the important aspects of planned behavior and the impact on one's ability to make conscious choices. The TPB has also been used in other studies on help-seeking behaviors and health care.

Significance to Practice

The use of mental health counseling services has been stigmatized since its beginning. This study could bridge the gap between the two healthcare professions while expanding on research. It could also help decrease the service gap between those needing mental health services and those seeking and utilizing them.

Significance to Social Change

There was a gap in the literature concerning the use of mental health services by undergraduate nursing students in the Mississippi Delta. This study aimed to address that

gap by examining the barriers affecting this student population's willingness to seek mental health support. The findings could offer valuable insights for mental health professionals to develop strategies tailored to the specific needs of undergraduate nursing students in this region, who also serve an underserved population. This study could potentially influence the culture within nursing schools in Mississippi and beyond. Nursing programs can foster social change by incorporating evidence-based practices and improving nursing students' well-being and academic success across other programs.

Summary and Transition

Chapter 1 will include a synopsis of the research surrounding barriers to seeking mental health services. More specifically, nursing students who experienced unprecedented stress were not seeking help (Dalky & Gharaibeh, 2019; Horwitz et al., 2020). There was a large amount of research that supported the need for mental health services and emotional support for this unique population (Aslan & Pekince, 2020; Curcio et al., 2022; Dalky & Gharaibeh, 2019; Enns et al., 2018; Horwitz et al., 2020; Madian et al., 2019; Mitchell, 2018; He et al., 2018). However, there was a gap in the literature as it relates to perceived barriers and stigma of mental health usage among nursing students in the Mississippi Delta and the effect their attitudes had toward seeking mental health. The chapter further discussed the theoretical lens used to view helping-seeking behaviors. Chapter 1 also included more background of the problem, the problem statement, the purpose of the study, the variables of the study, the research question and hypotheses, the conceptual framework, the nature of the study, definitions, assumptions, limitations, delimitations, and the significance of the study.

Chapter 2 will provide a more in-depth review of the literature supporting this study. The terms *mental health services* and *professional counseling* are interchangeable in the next chapter. I will discuss the history of mental health counseling, psychological issues associated with stress, and nursing programs. Lastly, Chapter 2 highlights the impact of social and cultural stigmas, barriers to seeking mental health services, the impact of counseling in nursing, and the theoretical framework.

Chapter 2: Literature Review

In this dissertation, I explored relationships between nursing students' attitudes about mental health and the potential for help-seeking behaviors. This study focused on undergraduate nursing students in the Mississippi Delta's core region of the United States. The emphasis on beliefs toward help-seeking involved an examination of barriers that may have impacted nursing students' attitudes toward professional counseling. This chapter reviews the literature on the history of mental health on college campuses. This chapter also includes an overview of nursing students' challenges while pursuing their career paths. Key variables such as stress, stigma, and health beliefs are reviewed regarding their role in this aggregate attitude toward seeking professional counseling among nursing students.

College nursing students have been recognized unofficially as the elite population on college campuses (Labrague et al., 2017; Mitchell, 2018). Often, nursing students are seen as healthcare providers placed on the college campus and clinical areas to provide services to the community. However, nursing students are expected to be high academic achievers who can handle academic demands, clinical and personal responsibilities, and the ability to provide care to patients (Enns et al., 2018). These expectations obscure the fact that nursing students have problems like everyone else, yet they are not receiving the potential benefits of mental health services. Recent findings have shown an escalating problem that impacted not only the self-perception of nursing students but also their ability to develop healthy coping mechanisms (Cleary et al., 2018; Enns et al., 2018; He et al., 2018; Labrague et al., 2017). Studies conducted by other researchers reveal that

nursing students' hesitancy in utilizing mental health services was driven by stigma, perceptions surrounding treatment, and a lack of awareness regarding mental health resources. (Barry & Ward, 2017; Busby et al., 2021; Haugen et al., 2017; Mitchell, 2018).

The literature reflected substantial research on nursing students' stressors, internal and external barriers, and mental health beliefs. Empirical research also existed about the impact anxiety and stress had on the academic performance and clinical performance of nursing students (Aslan & Pekince, 2020; Barry et al., 2019; Barry & Ward, 2017; Bartlett, et al., 2016; Cleary et al., 2018; He et al., 2018; McDermott et al., 2021; Madian, et al., 2019; Mitchell, 2018; Mulyadi, et al., 2021; Labrague et al., 2017; Patias, et al., 2021; Zhao, et al., 2020). However, there was limited research on undergraduate nursing students' utilization of mental health services on college campuses. Therefore, this research study explored existing variables that may have explained the variance in nursing students' utilization of mental health services on college campuses in the Mississippi Delta region of the United States.

Literature Search Strategy

A literature review utilizing peer-reviewed articles was conducted using EBSCOhost Databases (PSYCArticles, PSYCINFO, and Academic Search Premier), Educational Resources Information Center (ERIC), and Google Scholar, Cumulative Index of Nursing and Allied Health Literature (CINAHL), Google Scholar, Medline, Science Direct, Cochrane Database, Agency of Healthcare and Quality (AHRQ). Moreover, I also used resources and data from the United States Bureau of Labor Statistics. Key terms utilized to conduct the search were *nursing student stress, barriers,*

coping, college counseling, mental health services, stress, stressors, barriers to seeking mental health services, perceived mental health experiences, accessibility of mental health services in Mississippi, access to health care in the Mississippi Delta, attitudes toward seeking mental health services counseling for nursing students, academic stressors, clinical stressors, social stigma, cultural stigma, health beliefs, counseling stigmas, attitudes and health beliefs, counseling in nursing education, health disparities in the Mississippi Delta, nursing schools in the Mississippi Delta, substance use and misuse among nursing students, nursing students self-concept, undergraduate nursing students in Mississippi, race and culture in nursing, mental health on college campuses, utilization of campus counseling centers, COVID-19 and nursing students, impact of COVID-19 on stress, psychological distress of nursing students, and *theory of planned behavior on seeking counseling.*

I used peer-reviewed literature that was dated from 2014 to 2024. The pertinent historical literature review also included information from the early 1900s to the 2000s. Literature about the history of counseling on college campuses dates back to 1861. The literature included in the study are peer-reviewed articles, literature reviews, and systematic reviews.

Local municipal libraries in Bolivar County, Mississippi, and the online University Library were searched for archived journals and the expulsion of resources. A massive amount of data was found on barriers to mental health. However, limited research was found on the barriers identified among undergraduate nursing students seeking mental health services in the Mississippi Delta.

Theoretical Foundation

To address the needs of college nursing students, the counseling profession must be proactive. Working knowledge of the barriers that factor into a nursing student's decision to seek mental health services can help mental health professionals better serve this population. Mental health counselors can assess the unique challenges and concerns of this aggregate. The Theory of Planned Behavior (TPB) is used to better understand the potential to demonstrate help-seeking behaviors and the forces that drive the behavior.

TPB was first coined in 1967 to provide consistency in studies about the relationship between behavior and attitudes (Fishbein & Ajzen, 1977). In 1975, Martin Fishbein and Icek Ajzen attempted to give statistical interpretations in predicting an individual's behavior. According to Fishbein and Ajzen (1977), the TPB explains the important aspects of planned behavior that influence an individual to make conscious choices. The first aspect is based on how one can sense the personal benefits of a behavior that could lead to positive outcomes. The second aspect reveals how individuals tie the incentives, threats, and social norms related to their choices. The TPB explains that choice begins with individual intentions and the components that sway the intentions.

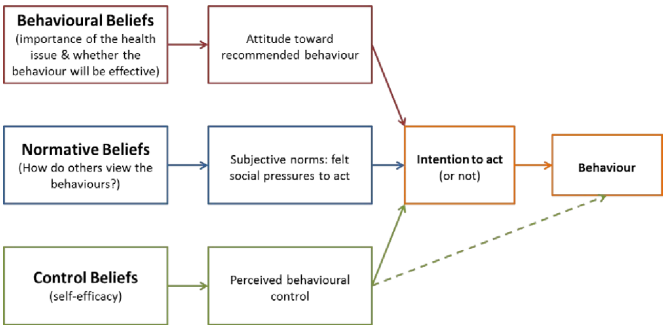
The principles of compatibility explain that to predict a certain behavior to a specific target, the specific attitudes that relate to the specific target must be assessed. Behavioral intentions suggest that an individual's motivation to engage in behavior is delineated by the attitudes that affect the behavior. Two characteristics classify behavioral intentions. The first characteristic suggests that one's attitude toward a behavior will influence one's behavior. The second characteristic centers on a person's

belief related to the amount of social pressure to select or reject the behavior.

Behavioral intention is controlled by attitudes and subjective norms (Ajzen, 1988). An attitude is defined as a person's discernment (either auspicious or inauspicious) toward a particular behavior (Ajzen, 2020, & Damghanian & Alijanzadeh, 2018). A subjective norm is defined as a person's skewed judgment concerning others' choices and support of the behavior (Ajzen, 2020). The TPB has been criticized for not incorporating real-life social factors that could influence a person's behavior. These social factors capture all elements of the environment that directly impact individual behavior. In 1991, Ajzen proposed an additional element in controlling an individual's behavior called perceived behavior control. As a result, perceived behavior control can indirectly influence behavior (Ajzen, 1991). See Figure 1 for an illustration of the TPB.

Figure 1

Theory of Planned Behavior



Fischer and Turner (1970) proposed that the difference in attitude accounted for help-seeking behaviors and attitudes and investigated the relationship between attitudes and other significant variables. They surveyed 960 male and female students to examine personality traits such as interpersonal trust, social desirability, authoritarianism,

masculinity, and locus of control. The authors found that social desirability and interpersonal trust positively correlated with help-seeking attitudes for only the male population. For the female population, the variables showed a higher percentage of positive attitudes toward help-seeking behaviors than males. The researchers found that authoritarianism and external locus negatively correlated with help-seeking attitudes. In addition to conceptualizing the framework, the researchers also developed a well-known, highly-used instrument that measures a person's attitude toward seeking professional counseling services. Fischer and Turner categorized four attitudinal themes that contribute to an individual seeking mental health services: stigma tolerance, interpersonal openness, confidence in mental health practitioners, and recognition of the need for mental health services.

Behavior/reasoned action variables include personality traits, demographics, attitudes, and beliefs. These variables play a vital role in influencing behavior. For this study, similar variables, such as social and cultural stigma, the accessibility of mental health services, previous mental health experience and demographic influence, and the attitude toward seeking help, were also measured. There are documented sources of stress in nursing students that stem from the difficulty in balancing home and college demands and financial concerns (Barry et al., 2019; Bartlett et al., 2016; Cleary et al., 2018; He et al., 2018; Labrague et al., 2017; Madian et al., 2019; McDermott et al., 2021; Mitchell, 2018; Zhao et al., 2021). These same studies have highlighted the benefits of social support for the sustainability of positive mental health and healthy lifestyle choices. Unlike academic programs that use competency-based evaluations to measure content,

assessing student learning outcomes for student life programs is difficult to measure (Barry et al., 2019; Curcio et al., 2022; Labrague et al., 2017). Predicting a student's help-seeking behaviors is imperative to evaluate student campus life related to mental stability fully.

Help-Seeking Behaviors and the Theory of Planned Behavior

To create effective mental health services for nursing schools, it is important to examine the methods of help-seeking behaviors within the undergraduate nursing student population. There were limited studies on the effectiveness of these programs and whether they could modify s student's attitude and intention to seek help. The current research did not indicate or explain the variables that predicted nursing students' use of mental health services. Consequently, there is a need to investigate the barriers that influence nursing students' attitudes about help-seeking behaviors.

The TPB has been diversely used in help-seeking behavior studies. It has also been used to understand wildlife (Miller, 2017). Moreover, a person's attitude toward mental health has been highlighted as a strong indicator in facilitating psychological factors that are significant to the purpose of seeking mental health services. In the TPB, the behavior is eventually governed by one's ideas. Therefore, altering a person's behavior is mostly a matter of transforming one's fundamental cognitive composition. Dissimilar beliefs should trigger separate behaviors even if the behaviors connect. Therefore, two individuals forming similar choices can have various core beliefs.

Components of TPB Related to Behavior

Target Behavior

Fishbein and Middlestadt (1987) explained that behavior identification includes four major concepts: target, time, context, and action. These concepts are essential to identifying beliefs associated with behaviors that may impede seeking mental health services. According to Fishbein and Middlestadt, behaviors are significantly influenced by the environment where the behavior takes place. Furthermore, the authors emphasized that behaviors are also influenced by time. For instance, nursing students may have the intention of seeking mental health services during periods of extreme stress. Still, their intentions may decrease if the stress diminishes or their adaptability to the stressful environment improves. Because an individual may feel some relief from a stressful environment, counseling professionals and students must consider the difference between positive behavioral change and behavioral adaptation. Fishbein (1979) also stated that student's actions can influence the continued use of mental health services. For instance, a student's goal may not be achievable because the appropriate actions were not taken to ensure the student's success.

Control Beliefs and Perceived Behavioral Control

The TPB suggests that intention is a major predictor of behavior (Fishbein & Ajzen, 1977). Nevertheless, critics of the theory argue that behavioral intention does not lead to actual behavior. In 1985, Ajzen added an extension to the TPB. Ajzen explained that actual behavior is predicated mostly on behavioral intentions, but sometimes non-volitional behaviors predicate behavior intentions and actual behavior. When it comes to

seeking mental health services, nursing students may encounter barriers that discourage or prevent them from seeking help. For example, a student experiencing emotional problems may indicate a need to seek counseling but never go. Consequently, students use other methods rather than seeking professional help with their problems, which interferes with the emotions they are experiencing.

Attitudes

Fishbein and Ajzen (1975) postulated that attitudes are a result of beliefs about a particular outcome. To change a person's behavior, their attitudes about the behavior must be changed. Belief target communication describes the consequences of performing the behavior (Bright et al., 1993). Furthermore, Ajzen and Fishbein (1980) emphasized the significance of distinguishing personal and general attitudes toward behavior related to carrying out the behavior. For example, some people may have a positive attitude toward a specific behavior but feel negative about engaging. Fishbein (1979) also explained that when belief target communication is effective, it affects personal target behavior.

Literature Review

History of Mental Health on College Campus

In 1861, Amherst College became the first institution to promote students' psychological and physical health care (Kraft, 2009). Clergy and instructors first provided counseling services on college campuses in 1861. Promoting physical health programs can help students avoid emotional problems (Kraft, 2011). This phenomenon was the beginning of the Mental Health Hygiene Movement. The hygiene movement

integrated mental health with physical well-being, including disease processes and conduct and behavioral disorders (Kraft, 2011). In 1909, a more formal movement spread in the United States and Canada in 1918 (Kraft, 2011).

In 1910, Dr. Stewart Paton, a psychiatrist, organized the nation's first college mental hygiene program for students with personality problems at Princeton University (Pumpuang et al., 2018). Mental health services in the 1920s were an extension of health services on college campuses and as a result of the First World War (Prescott, 2008). After the war, several colleges and universities started offering mental hygiene programs to students (Pumpuang et al., 2018). The stress and strain of the war, along with academic pressures, were prevalent among civilians, and there was a great need for mental health care. Other programs such as the University of Wisconsin in 1914, Washburn College in 1920, United States Military College at West Point in 1920, Dartmouth College in 1921, Vassar College in 1923, and Yale University in 1925 followed as a result of Princeton's program (Kraft, 2011). The first National Conference on Health in Colleges was held in 1931 in Syracuse, New York, followed by the second one held in Washington, D.C., in 1937 (Kraft, 2011).

Throughout the 20th century, mental health professionals and funding for mental health services increased (Kraft, 2009). These mental health services increased due to the funding provided to community mental health centers that President Kennedy approved in 1963 (Kraft, 2009). Multidisciplinary treatment teams of psychiatrists, social workers, and psychologists offered mental health services to college students (Kraft, 2011). The need for mental health services on college campuses grew quickly as the baby boomers

became college-aged (Kraft, 2011). As the number of degree-granting schools increased, so did the number of students who needed mental health services (Kraft, 2011). These students can encounter a broad spectrum of issues when enrolling in college. Counselors could address students' academic and psychological needs by establishing counseling centers on college and university campuses (Lipson et al., 2015).

According to Lipson et al. (2015, 2022), understanding cultural diversity and its impact on the academic success of diverse students is essential. Counselors must be aware of the mental health needs of diverse student populations. According to Lipson et al. also stated that, many African Americans approach mental health services differently than Caucasians. Connell et al. (2019), Haynes et al. (2017), Nelson et al. (2022), and Villatoro et al. (2018) state that African Americans are cautious and suspicious of mental health services and believe in receiving help from prayer or a spiritual leader.

According to Busby et al. (2021), Eylem et al. (2020), Connell et al. (2019), Haynes et al. (2017), Madian et al. (2019), and Miranda et al. (2015), African Americans still hold on to their historical beliefs that African Americans are misdiagnosed and do not receive proper or fair treatment. This belief passes through generations and prevents many African Americans from seeking mental health services. Within the African American culture, there is also a lack of knowledge about what mental illness is and how it can be treated (Haynes et al., 2017; Madian et al., 2019; Saykeo, 2018; & Villatoro et al., 2017.To that end, many African Americans are less likely to seek mental health services.

According to Miranda et al. (2015), 582 college students were invited to

participate in a study to examine racial and ethnic differences in the utilization of mental health services on college campuses. Of the 582 students invited to participate, only 124 completed the survey, and 122 provided data. The outcome of the study indicates that racial and ethnic minority students are less likely to seek mental health services than white students.

According to Hampton and Sharp (2014), Horwitz et al. (2020), and Nelson et al. (2022), men are also less likely to seek mental health care than women. In addition to ethnicity and gender, individual personality traits contribute to mental health-seeking behaviors. This causes the role of counseling centers to shift based on the students' needs (Pumpuang et al., 2018). Xiao et al. (2017), Aslan and Pekince (2020), and Shaler et al. (2020) agree that college and university campuses are feeling the pressure of addressing the mental health needs of a diverse student population. The author further postulates that issues such as depression, suicide, sexually transmitted diseases, and binge drinking are a few of the many issues college students face (Horwitz et al., 2020; Kecojevic et al., 2020; Ramon-Arbues et al., 2020; & Xiao et al., 2017;). According to Shaler et al. (2020), college students have a significant increase in psychological issues than any other population, and many enter college already on psychiatric medications. They further state that this is due to a willingness to seek help.

Critics argue that one's mental health impacts a person's quality of life (Madian et al., 2019; Dalky & Gharaibeh, 2018, & Capone et al., 2020). The ability to adapt to a rigorous environment like a nursing program can cause many students significant physical and emotional problems that lead to mental health issues (Barry et al., 2019;

Enns et al., 2018; He et al., 2018; & Mitchell, 2018). Mental health issues have a profound impact on college students, consequently resulting in academic and psychological problems (Aslan & Pekince, 2020; Barry & Ward, 2017; Barry et al., 2018; Bartlett et al., 2016; Cleary et al., 2018; Curcio et al., 2022; Damghanian & Alijanzadeh, 2018; & McDermott et al., 2019).

College students face life transitions such as leaving home, losing support, and increased personal responsibility for the first time (Horwitz et al., 2020; Shaler et al., 2020). This is transition causes college students to experience higher levels of stress and anxiety, which leads to more serious psychological problems such as anxiety, depression, suicide, or substance abuse (Dalky & Gharaibeh, 2018; Horwitz et al., 2020; Pumpuang et al., 2018, & Xiao et al., 2017). For many students, the inability to cope with stress is problematic, as well as the inability to cope with academic, social, and cultural issues. Almeida et al. (2018) conducted a quantitative cross-study of nursing students. They found that students who felt support from family, friends, and teachers could tolerate higher levels of stress than those who did not have a support system. During periods of high stress, nursing students should seek help and support to reduce the chance of experiencing psychological issues.

The Role of Stress

Stress

Stress is often used to describe a physical or emotional state that can impact a person's health, leading to long-term physical and psychological problems (Enns et al., 2018; Hirsch et al., 2018; Labrague et al., 2017; & Madian et al., 2019). Stress is also a

natural and common phenomenon many people experience (Hirsch et al., 2018). Moreover, stress can be the reaction to the way a person perceives something. Stress reactions can include symptoms such as not sleeping, feeling anxious, racing heart, sweaty palms, over or under-eating, thoughts of self-doubt, feeling depressed, easily irritated, unmotivated, and indecisiveness.

According to Horwitz et al. (2019), college students experience stress due to transitioning into a new environment. Many students cannot cope with such a demanding workload (Nebhinani et al., 2019). This newfound sense of adulthood is stressful and life-changing for many students. Some of their responsibilities now include buying groceries, washing clothes, completing assignments, meeting parents' expectations, and developing new relationships (Ramon-Arbues et al., 2020). According to Horwitz et al. (2020), the transition to college is harder and more stressful than students realize. The difficulties that many college students face as they transition to college trigger mental health disorders (Dalky & Gharaibeh, 2018 & Horwitz et al., 2020). For many college students, the lists of responsibilities never seem to end. Coupled with the stress of being away from home for the first time, the pressure of performing up to the academic standards of a college and adapting to a new environment may cause students to struggle with an elevated and unforeseen level of stress (Dalky & Gharaibeh, 2018; Hirsch et al., 2018; Horwitz et al., 2019; Shaler et al., 2020).

As previously mentioned, mental health issues on college campuses are a current trend and are seen as a major concern for administrators and parents (Cheng et al., 2018 & Lipson et al., 2015). For a college student who is not accustomed to such an intense

level of stress, it could lead them to develop severe mental health problems (Cheng et al., 2018, & He et al., 2018). Often, students experience emotional and physical stress that can affect them academically and socially (Labrague et al., 2017). This consistent stress and strain are unhealthy and can harm many college students. Although stress can be used as a motivator to accomplish tasks, it is important to realize that prolonged stress can lead to mental and physical problems (Mitchell, 2023).

Stress Related to Challenges of Nursing Education

Many researchers have documented the trials and tribulations related to nursing education and the high stress seen in nursing students (Barry & Ward, 2017; Barry et al., 2019; Cleary et al., 2018; He et al., 2018; Hirsch et al., 2018; Labrague et al., 2017; McDermott et al., 2021; & Madian et al., 2019). The nursing profession is complex, fast-paced, and stressful. Because of the environment and the constant need for nurses to be accurate and effective, it is easy to see why this profession has a higher stress level than others (Bartlett et al., 2016; He et al., 2018; & McDermott et al., 2021). Nursing schools are fast-paced learning environments, and although stress may affect people differently, it is still important to explore the relationship between stress and nursing students.

Nebhinani et al. (2020) conducted a study and found that 82.4% of 221 participants suffered from moderate stress. 12.6% experienced mild stress, and five percent experienced severe stress levels. They further state that stress among nursing students occurs throughout their nursing program.

According to Rios-Risquez et al. (2016), stress and burnout are major concerns in nursing. Many researchers believe that student levels of anxiety will only increase over

time. As a result, Labrague et al. (2017) and Enns et al. (2018) state that abundant research indicates stress is closely associated with nursing students and their well-being. Barry and Ward (2017) further indicated that nursing education programs' curriculum design and organizational structure also contribute to high stress levels in nursing students.

Academic Stressors

Nursing students struggle academically with the demands of the content needed to be successful in nursing programs. Because of the need for critical thinking and judgment to analyze best practices to care for patients, nursing students must push beyond the theories they learn in class and execute those basic concepts into practice. Nursing students also experience high-stress levels (Dalky & Gharaibeh, 2018; Enns et al., 2018; Labrague et al., 2017; McDermott et al., 2021; & Madian et al., 2017) and stressful relationships with their nursing faculty (He, et al., 2018 & Labrague et al., 2017).

Clinical Stressors

Nursing students struggle with clinical practice as well. Nursing is a fast-paced, driven profession. Students can find themselves experiencing high-stress levels in clinical environments. These stressors relate to managing large clinical units, handling the deaths of patients, trying to learn as they practice and observe other nurses, and developing working relationships with nursing staff (Barry et al., 2019 & He et al., 2018). Because of technological advances and a more technology-driven society, nursing students must be able to practice safe, quality, and competent care when using nursing technology and equipment. Some recent technological advances in nursing include electronic medical

records, updated and improved patient monitoring systems, and computer programs to aid in communication between nurses, doctors, and other healthcare affiliates. Some clinical sites may be more advanced than others as technology continues to be incorporated into clinical sites. Clinical sites in rural areas are less technologically savvy than others. To that end, students must be flexible and able to adjust to any clinical environment.

Impact of COVID-19

In March 2020, COVID-19, a novel infectious disease (Kim, 2024), emerged in the United States, causing a devastating global disaster (Gao et al., 2021). Many countries immediately began mandatory lockdowns, social distancing, and extended time frames to quarantine (Patias et al.,2021) as a preventive measure to help contain this rapidly infectious disease (Aslan & Pekince, 2020). Cases were rapidly increasing, and so was the world's mortality rate.

According to Patias (2021), as cited in Saude (2020a), social distancing became the primary preventative method to prevent COVID-19. The authors further stated that Extended Social Distancing, also known as ESD, quickly became one of the most effective measures to help slow down the virus transmission. Many were required to undergo quarantine to better safeguard individuals unaffected by the initial cases. While the primary intent of the quarantine measures was to promote health and safety by separating individuals, it inadvertently led to secondary challenges, effectively constituting an epidemic in its own right.

Quarantine led to many people being isolated at home, public gatherings and events being canceled, travel restrictions, and schools and colleges canceling in-person

classes (Aslan & Pekince, 2020 & Gracious et al., 2024). The world's stress and uncertainty left many hopeless and empty (Capone et al., 2020). Capone et al., also indicated these posed challenges for schools, universities, and students. According to Kecojevic et al. (2020), the lives of college students took a drastic change. The authors postulated that the abrupt shift in their academic environment prompted concerns regarding their academic progress, while the inability to socialize with family and friends heightened their anxiety levels (Zhang et al., 2023). Additionally, fears of contracting COVID-19, worries about the well-being of family members, and financial strains emerged as notable stressors among college students during this period.

Prior to the pandemic, college students were already experiencing academic difficulties, stress, anxiety, depression, and other psychological reactions (Kecojevic et al., 2020). According to Gandhi et al. (2021), the impact of COVID-19 led to adverse psychological effects on many people and an inability to focus on anything else (Kecojevic et al., 2020 & Gao et al., 2021). The authors further postulated that nurses and nursing students were on the frontline during this crisis with already elevated psychological issues before COVID-19. According to Mulyadi et al. (2021), as also cited in Czeisler et al., 2020 and Kim et al., 2021, nursing students were reporting higher levels of stress, anxiety, and depression as a result of COVID-19. This led to many nursing students suffering from loss of sleep and other additional mental health issues (Mulyadi et al., 2021).

COVID-19 profoundly impacted the mental health of nursing students (Kim, 2024). Goa et al. (2021) conducted a cross-sectional online survey on the impact COVID-

19 had on the mental health of 1532 nursing students who attended a vocational college. The study found that among nursing students, 44.5% experienced PTSD, 2.9% experienced depression, 1.1% experienced stress, and 22.8% experienced insomnia. In addition to this, they also found that rural students, compared to urban students, experienced higher rates of PTSD, depression, anxiety, stress, and insomnia.

Stigma of Mental Health

As it relates to mental health, stigma has been identified as a major concern, and its ability to hinder people from using mental health services (Cheng et al., 2018 & Eylem et al., 2020). Several studies found that stigma negatively predicts help-seeking behaviors (Cheng et al., 2018; Clement et al., 2015; Eylem et al., 2020; & Haugen et al., 2017).

Social Stigma

Social stigma is a leading factor in individuals seeking health care services. The general public tends to see mental illness as negative. The fear of social stigma includes backlash and harsh comments. According to Clement et al. (2015), even those who currently receive mental health services often delay or terminate early due to the stigma associated with receiving mental health services.

Cultural Stigma

According to Eylem et al. (2020), 1 in 5 five people suffer from mental illness. Unfortunately, African Americans, Asians, and Hispanics use mental health services less frequently than Caucasians (Cheng et al., 201 & Lee et al., 2014). The need for mental health services is greater among racial minorities, such as African Americans, Asians,

and Hispanics, than it is among racial majorities, such as Caucasians (Cheng et al., 2018; Eylem et al., 2020). Due to the underutilization of mental health services by some minorities, more severe mental illnesses may develop (Chandrasekara, 2016 & Eylem. et al., 2020).

As common as mental health is among students and as prevalent as it is on college campuses, mental health services can only help those students who seek it (Chandrasekara, 2016; Horwitz et al., 2019; & Pumpuang et al., 2018). Busby et al. (2021) postulate that seeking mental health services among African American students is different than among Caucasian students due to African Americans' lack of understanding of therapy and fear of treatment from providers. The authors also state that African American students have more unfavorable views of mental health. This can also become another barrier to utilizing mental health services. Therefore, seeking help is not an option, nor is accepting it. Cultural mistrust within this population can deter students from being successful and mentally stable. According to Connell et al. (2019), sociopolitical history, such as racism and segregation in the Mississippi Delta, contributes to mistrust and underutilization of mental health services (Hossfeld & Mendez, 2018). Attitudes toward mental health care are the driving force that fosters mistrust among African Americans seeking any health care services in the United States (Hampton & Sharp, 2014).

Stigmas regarding mental health manifest from generation to generation. According to Busby et al. (2021), Connell et al. (2019), and Saykeo (2018), African Americans typically seek help from neighbors, churches, and other sources rather than a

mental health professional. This is partially due to the mistrust of providers. According to Lipson et al. (2018), African Americans, Asians, and Hispanics harbored negative attitudes toward mental health services more than Caucasians. Social and economic disadvantages also play a significant role in seeking mental health services. According to Connell et al. (2019), Gennuso et al. (2016), and Haynes et al. (2017), African Americans in rural Mississippi have a greater disadvantage than Caucasians because many minorities cannot afford mental health services.

Counseling Stigma

Aside from cultural influences, the stigma of counseling deters students from seeking mental health services (Chandrasekara, 2016 & Mitchell, 2023). Many college students have misconceptions about counseling and their ability to help themselves (Chandrasekara, 2016). Often, students do not want to assume responsibility for their problems. This faulty concept creates mistrust of the mental health professional and interferes with the therapeutic process (Chandrasekara, 2016). This misunderstanding can lead to a negative reputation and view of counseling and discourage students from seeking help (Nelson et al., 2022).

Kumar et al. (2021) state that nursing is a noble profession. Nursing students are trained to serve others and be experts in their field (Kumar et al., 2021 & Mwini-Nyaledzigbor et al., 2014). Due to this elevated expectation, many nursing students find it difficult to relinquish their personal problems and do not seek counseling. A feeling of vulnerability and fear of being negatively perceived by others outweighs the urge to seek help (Emmanuel et al., 2015). As a result, nursing students may be reluctant to talk with

counselors.

Students seeking mental health services are largely an anonymous act. Few studies have been conducted about why nursing students do not seek mental health services. Kumar et al. (2021), Mitchell (2018), and Pumpuang et al. (2018) postulate that nursing students enjoy a sense of prestige and honor on college campuses. They may not want to be seen at a counseling center for fear that it may damage their image by showing a need for help. Therefore, due to their perceptions, attitudes, and beliefs, nursing students may downplay the need for help and the potential benefits of seeking help.

According to Brunner et al. (2014), Lipson et al. (2015), and Miranda et al. (2015), today's college students deal with issues such as substance abuse, depression, anxiety, and suicide because of not being able to cope with stress. Students know the counseling centers on the college or university campus, but rarely seek assistance when needed. For many students, the notion of seeking mental health counseling creates barriers that prevent them from seeking mental health services.

Traditionally, nursing students are trained in an environment that stresses the importance of self-reliance and resilience (Li & Hasson, 2020 & Smith & Yang, 2016). Healthcare environments foster the importance of taking care of patients. Often, the care of patients takes precedence over personal problems and the nurse caring for the patient. This behavior could discourage the student from seeking mental health services.

Demographic Response to Mental Health Services

Miranda et al. (2015) studied 122 college students from diverse backgrounds. This study sampled 36% White, 28% Asian, 16% Latino, 3% Black, 13% Multiracial,

and 4% other. According to the study conducted by Miranda et al. (2015), racial/ethnic minority students were less likely to seek counseling than white students. In addition to this, the study also revealed that out of the racial/ethnic minority students, 62% of the participants stated that lack of time was a barrier to them seeking mental health services (Miranda et al.). 28% of the racial/ethnic students also indicated that the perception of their family was a barrier to them seeking mental health services compared to only 9% of white students who felt the same (Maranda et al.).

According to Chenh et al. (2018), Miranda et al. (2015), and Nelson et al. (2022, African American women are less likely to seek mental health services than Caucasian women. Busby et al. (2019) postulate that African American men often terminate their mental health services prematurely due to dissatisfaction with the services they are receiving. The author further states that young adults and males have more negative attitudes toward mental health services (Barry & Ward, 2017; Cheng et al., 2018; & Lipson et al., 2019). The authors further state that African American and Latino families do not trust mental health professionals and fear they will be labeled. Also, due to this mistrust, they are more likely to receive help from family members (Shaler et al., 2020). Nelson et al. (2022) conducted a study of women from ages 18 to 70 years old. The authors examined the relationship between anxiety, depression, and post-traumatic stress disorder and the influence of these psychological disorders on seeking mental health care. Nelson et al. (2022) discovered that past experiences with mental health providers influenced their attitudes toward seeking mental health services. In the Mississippi Delta, African Americans experience more hospitalizations due to untreated mental illness than

any other race (Haynes et al., 2017). This is due to the healthcare disparities in the region, distrust of providers, and discrimination toward low-income families.

The Role of Mental Health in Nursing

Counseling is a discipline that relies on the commitment and determination of the people needing and seeking mental health services. Even though counseling and nursing are both health-related professions, the two areas often do not interact collaboratively. Current literature suggests that effective coping mechanisms such as social support are effective in managing stress and promoting the emotional well-being of nursing students (Almeida et al., 2017 & McDermott et al., 2020).

From a behavioral standpoint, negative thoughts and perceived image of nursing influence their intentions and behaviors, thus preventing them from seeking any mental health care (Emmanuel et al., 2015; Kumar et al., 2021; & Mwini-Nyaledzigbor et al., 2014). From a prevention standpoint, the negative thoughts and convictions that student nurses have about prior professional health-seeking episodes will reduce the likelihood that students will seek mental health services in the future. However, current literature supports the notion that interventions created by counselors can modify these attitudes.

Mental health professionals can assist students in exploring and identifying previous help-seeking behaviors (Enns et al., 2018 & Pumpuang et al., 2018). Mental health professionals can also create specialized services to cater to the needs of nursing students, which may generate positive help-seeking behaviors (Labrague et al., 2017 & Pumpuang et al., 2018). Effective mental health services allow student nurses to reassess their attitudes and beliefs about mental health and seeking mental health services

(Haugen et al., 2017 & Pumpuang et al., 2018).

According to Slack et al. (2015), the Mississippi Delta is one of the poorest regions in the state. It is also known for being racially segregated. Unemployment rates are high, and Delta residents have been marginalized from the American mainstream (Slack et al., 2015). The Mississippi Delta is also known for its history of civil rights and civil rights leaders such as Fannie Lou Hamer, Medgar Evers, Amzie Moore, and many others. It is internationally known for being the birthplace of the blues and blues legends such as W.C. Handy, B.B. King, Sonny Boy Williamson, Robert Johnson, and many others. However, it is also economically challenged and lacks financial and medical resources to aid the community. According to Connell et al. (2019) and Gennuso et al. (2016), 1 in 5 Mississippi Delta residents do not have affordable health care, and access to services is limited.

Summary and Conclusions

Although mental health services are available on college campuses and to nursing students, many do not seek help. Mental health professionals must be aware of the many barriers that influence nursing students' decisions not to seek mental health services, to address and remove those barriers. There is growing evidence regarding identifying barriers to seeking mental health care to help nursing students gain the knowledge and help needed to succeed in nursing programs. Although independent problem-solving is ideally the ultimate goal and objective of counseling, it is equally important for nursing students to understand that professional counseling is an effective way to manage distressing situations in their lives as nursing students. Based on the literature review, it is

clear that a gap exists in understanding the relationship between help-seeking attitudes and help-seeking behaviors among nursing students in the Mississippi Delta. Because this region of the country is medically underserved, it is critical to produce nurses who can manage the stress in their professional roles. As such, identifying the variables that predict help-seeking among this population could lead to greater retention of students and greater growth in the nursing workforce for the Mississippi Delta.

Chapter 3: Research Method

In this study, I explored variables that may explain the variance in nursing students' utilization of mental health services on college campuses in the Mississippi Delta region of the United States. More specifically, this study involved the relationships among three independent variables (attitudes toward mental health, social and cultural stigmas, and demographic influence) and one dichotomous dependent variable, which was help-seeking behavior. The results provided insight into perceived barriers nursing students face when seeking mental health services. This chapter outlines the procedures and data collection that were used to gather the evidence throughout the study. A detailed description of the study design, the population, instruments, research questions, hypotheses, and the data analysis used to investigate each research question will be discussed.

Research Design and Rationale

Quantitative research designs use numerical data to test research hypotheses. The study was a non-experimental, predictive research design that predicted the relationships among three independent variables (attitudes toward mental health, social and cultural stigmas, and demographical influence) and one dependent variable, help-seeking behavior. This study used direct multiple logistic regression analysis to identify predictive models. This predictive model best explained the odds of the various independent variables predicting the dependent variable (i.e., seeking help from a mental health professional). Direct multiple logistic regression analyses were used to examine the degree of variance explained in predicting the potential of help-seeking behaviors

among nursing students in the Mississippi Delta region of the United States.

Direct multiple logistic regression is a common form of regression analysis when the independent variable is binary (e.g., 0 or 1). It is a multivariate statistical technique where the relationships between two or more independent variables are examined for their ability to predict the variance in the dependent variable (Williams et al., 2019). According to Muller and MacLehose (2014), logistical regression is a technique within the family of regression analyses, but the process involves predicting the outcome of a binary dependent variable. The variance accounted for in this regression model will explain the potential for help-seeking behavior among nursing students in the Mississippi Delta region of the United States. In other words, logistic regression will allow for a prediction of whether nursing students will seek mental health services based on various independent variables.

The quantitative data used in this study were collected via a survey design. The survey methodology allows for the statistical analysis of the data represented (Nardi, 2018). The survey design was selected to collect quantitative data for the study to capture participants' perceptions of mental health services and the likelihood of utilizing those services. The survey methods helped gather a snapshot of perceptions among the participants. The most efficient data collection method for a study of this nature was a survey. A rating survey instrument provided familiarity for the population (Nardi, 2018). It also allowed for comparisons within the sample. This study combined two previous surveys: The General Help-seeking Questionnaire and the Perceived Stigma and Barriers to Seeking Mental Health Services Survey (Chapman et al., 2014). Additionally, a

demographic questionnaire is included. Specifics related to instrumentation follow this section.

Methodology

Population

The population for this study was nursing students in the Mississippi Delta who were currently enrolled in nursing degree programs. Even though students differ in age, educational programs, and socioeconomic levels, they were all nursing students currently enrolled at a college or university. This population did not include nursing students seeking credentials via alternative methods.

Sampling and Sampling Procedures

The sample population came from current nursing students enrolled in degree programs in the Mississippi Delta core region of the United States. Because this study focused on a very specific population, the sampling procedure is purposive (Andrade, 2021). In this case, because the purpose was to understand the help-seeking behaviors of nursing students in this small region, the sample was well-defined ahead of time. The goal was to generalize the information gathered from the sample to the specific population of nursing students in the Mississippi Delta's core region.

The average population size of students currently enrolled in a nursing program in the Mississippi Delta is 240. Using at least 85 participants, the study met the acceptable power level of .80 for a multiple regression study. According to Kang (2021), to determine the minimum sample size, an a priori power analysis should be conducted using G*Power with an effect size of .15, error probability of .05, and power set at .80.

Based on these criteria, the resulting required sample size was 85.

Criteria for inclusion in this study:

1. Participants must be at least 18 years of age.
2. Participants must be enrolled in an associate degree in nursing or a baccalaureate of science in a nursing degree program.
3. The nursing program must be located in the core geographical region of the Mississippi Delta (Delta State University, Mississippi Delta Community College, and Coahoma Community College).

Criteria for exclusion:

1. Participants in either college's Licensed Practical Nursing (LPN) program. The LPN program is a certificate program. The exclusion of students enrolled in an LPN program is due to the study focusing solely on nursing degree programs.
2. Participants enrolled in nursing programs outside of the Mississippi Delta core region.

The population comprises female and male nursing students from various ethnic backgrounds and nursing programs within the Mississippi Delta. The Mississippi Delta region's nursing student population is rather small (estimated population is 243 students). As a result, the sample required is nearly the size of the population. According to an a priori, G*Power logistic multiple regression analysis, a sample size of at least 150 is needed to reach statistical significance with a power set at .80 and an odds ratio of 2.33. This includes an alpha level of 0.05, an a priori 1 tail, and a critical z score of 1.65.

Procedures for Recruitment, Participation, and Data Collection (Primary Data)

I contacted the program directors and deans of each nursing school to obtain approval to use the students in the study. I sent a letter to the program directors and deans of each college and university explaining the purpose and goals of the study and seeking permission to collect data for the study (see Appendix C). After approval, I collected the data at each school to assist with administering the survey. I distributed the questionnaires at the beginning or end of a core nursing class to capture as many willing participants as possible (see Appendices F, G, and H).

Data collection began after approval of the Walden University Institutional Review Board (approval no. 12-04-24-0229171) and was completed when the sample reached 85 participants. I adhered to the Institutional Review Board (IRB) requirements for each college and university. Questionnaires did not use any information to identify the participants. I collected and placed the questionnaires in a sealed envelope. I will retain all the information regarding the study for 5 years, and then the data will be destroyed.

Participation was voluntary, which was made clear to all participants. The researcher adhered to the guidelines and procedures of the IRB of Walden University. Flyers containing information about the study and a Quick Response (QR) code, and a link to the survey were displayed in common areas in the participating nursing departments. This included the informed consent. The program directors also emailed the flyers to nursing students who were completing their studies online. Participants had to complete and click submit on their informed consent to begin the survey. They were free to withdraw from the study at any time or refuse to answer any questions on the

questionnaire. No incentives or gifts were given for participation in the study.

Instrumentation and Operationalization of Constructs

The instruments used for the study were chosen after a systematic, in-depth review of nursing, counseling, and clinical mental health literature. After analyzing the literature, I identified several variables pertinent to the goals of this study. The instruments were chosen because they directly measure the variables consistently described in the literature. I attempted to obtain instruments that had been normed on nursing students and diverse selections of populations. I also proposed that some factors contributed to the influence of a student's attitude toward seeking mental health services. After analyzing the literature, I discovered several variables that established relevant goals of the study. This study focused more specifically on the stigma of mental health counseling, previous mental health counseling experience, and cultural influence. Three instruments were selected for this study.

General Help-Seeking Questionnaire

Dr. Coralie Wilson developed the General Help Seeking Questionnaire (GHSQ) in 2005 (see Appendix E). The instrument was originally designed as a questionnaire (in contrast to a standardized assessment instrument) to assess intentions to seek help from different sources for various problems. It is a 7-point Likert rating scale developed in matrix format and normed on college students. Olivari and Gonzalez (2017) conducted a study using the vignette version, and they found the GHSQ to be valid and reliable for their cross-sectional and correlational study, which measured help-seeking among adolescents with mental health problems. In a similar study by Levin et al. (2018), the

GHSQ was used to assess help-seeking for mental health problems. According to Ward et al. (2019), also see Ciarrochi and Deane (2001) and Wilson et al. (2005), several studies were conducted using the scale and found evidence of reliability and validity.

Perceived Stigma and Barriers to Seeking Mental Health Scale

Hoge et al. (2004) designed this scale to study combat duty in Iraq and Afghanistan, mental health problems, and barriers to care. (see Appendix F). Previously, this instrument has only been used to study military personnel's barriers to seeking mental health services and their perception of mental health services. The Cronbach Alpha for this use is 0.84 and 0.79. The instrument developed for this study included eleven items related to perceived barriers and stigmas to accessing mental health care (Hoge et al., 2004).

The instrument was originally developed to assess the stigma and barriers impacting military combat veterans' access to care. However, the survey was constructed theoretically, and scores on individual items were aligned with two perceived themes (stigma and barriers). According to the instructions for the instrument, the target of assessment can be altered to gain insight from different perspectives. For example, the Unit Leader may be altered to a Faculty Member, Supervisor, or other related authority figure. As an example of this adjustment, Britt et al. (2008) adapted the scale items and examined them between a sample of college students and military personnel. They found the adaptations to be equivalent. According to Britt et al (2008), Cronbach's Alpha for the adapted perceived stigma scale was .82. The Alpha for the adapted barriers to care scale was .70. As it relates to the outcome's assessment, the Perceived Stigma and

Barriers to Seeking Mental Health Questionnaire proved to provide the additional information needed concerning soldiers' decision to seek mental health. The outcomes were reported to be the same regardless of the screening criteria of the soldiers (Britt et al., 2008). There were no differences between those that had 3 and 12 months post-deployment for seeking mental health assistance from either a mental health professional (j 2(l, N = 543) = 0.049,p = 0.48) or others, (j 2(l, N = 538) = 0.29,/? = 0.59) (Britt et al., 2008). The questions used by Britt et al. (2008) are used in the current study. However, the military terms were altered to fit the language of college-age students, and yes or no responses after the statements were provided in the revised version. This survey is described in Appendix G.

Demographic Questionnaire

I designed the demographic questionnaire and gathered the demographic variables of each participant in the aggregate (see Appendix H). Each variable on the questionnaire targeted the barriers nursing students have in seeking professional counseling and mental health services. The variables identified and included in the questionnaire were gender, age, and ethnicity.

Data Analysis Plan

This quantitative research study used direct multiple logistic regression and chi-square analyses to determine the odds ratio and the differences in odds. A predictive design was applicable because the research questions were specifically aimed at understanding the potential of nursing students to access mental health services. To implement a predictive design, data related to several variables were gathered and

analyzed for their relationship to the independent variable. In this case, the independent variable was binary. A direct multiple logistic regression analysis was warranted because the research questions were related to whether nursing students in the Mississippi Delta would access mental health services if available. A direct multiple logistic regression was the appropriate choice because there were multiple independent variables, and there was no rationale for the order of entry into the analysis procedures. Chi-square identified how one group was statistically different from the other. The variance accounted for in this regression model predicted the help-seeking behavior among nursing students in the Mississippi Delta.

Data analysis was completed by using direct multiple logistic regression. Descriptive analysis was used for the demographic variables. The correlations discovered between the dependent and independent variables are presented and discussed in Chapter 4. The independent variables (IV) were attitudes toward mental health, social and cultural stigmas, and demographic influence. The dependent variable (DV) in this study was the nursing students' potential to engage in help-seeking behavior. According to Martos et al. (2011), TPB stated that attitudes toward one's behavior and beliefs could result in intentional behavior. That intentional behavior is the central predictor (Martos et al., 2011). Martos et al. (2011) stated that there are several key variables within this theory, which were attitudes, subjective norms (consisting of beliefs about how other people of importance approve or disapprove of the behavior being displayed), perceived behavior control (refer to the control that one has over their behavior), and behavior intention (the likelihood that the behavior will occur).

Assumptions

Logistic regression is robust in terms of violations of most typical assumptions of multiple logistic regression. However, there are some assumptions to consider when conducting a logistic regression. First, the dependent variable must be ordinal. The General Help Seeking Scale data were used as the dependent variable in this case. This instrument measured an individual's intention to seek help from various sources. The order of the scores on the instrument reflected the difference between a nursing student's willingness and unwillingness to seek help (Pampel, 2020).

Second, the coding of the data for a logistic regression must allow for a calculation of probability (Pampel, 2020). In this case, the data must predict the likelihood of seeking help from each participant. Third, an appropriate attempt must be made to include relevant variables, resulting in an appropriate model fit. Finally, all of the observations for a logistic regression must be independent and examined for the potential of multicollinearity. The data in this study were reviewed for interaction effects, testing multicollinearity.

Research Questions and Hypotheses

Three questions were used to direct this study. The questions sought to identify the odds of nursing students seeking mental health services. To examine the research questions, the null hypothesis was investigated. Each research question and the null hypothesis allowed me to examine various independent variables and their relationship to the odds of nursing students seeking mental health services (i.e., help-seeking behavior) on college campuses in the Mississippi Delta region of the United States.

Research Question 1 and Hypothesis

To what extent do attitudes toward mental health services explain the variance in nursing students' willingness to seek mental health services?

Null Hypothesis (H_1)ßK=0:The odds of perceived barriers to accessing mental health services predicting willingness to access mental health services equals zero.

Alternative Hypothesis (H_1)ßK> 0:The odds of perceived barriers to accessing mental health services predicting willingness to access mental health services is greater than zero.

Research Question 2 and Hypothesis

To what extent does the perceived stigma of mental health services decrease the likelihood of nursing students' willingness to seek mental health services?

Null Hypothesis (H_2)ßK = 0:The odds of the perceived stigma of mental health services decreasing the likelihood of nursing students' willingness to seek mental health services equals zero.

Alternative Hypothesis (H_2)ßK >0:The odds of the perceived stigma of mental health services decreasing the likelihood of nursing students' willingness to seek mental health services is greater than zero.

Research Question 3 and Hypothesis

To what extent do demographic variables predict the variance in nursing students' willingness to seek mental health services?

Null Hypothesis (H_3)ßK = 0:The odds of demographic variables increasing the likelihood for nursing students to access mental health services equals zero.

Alternative Hypothesis (H_3)ßk>0:The odds of demographic variables increasing nursing students' likelihood of accessing mental health services is greater than zero.

Threats to Validity

External Validity

Threats to external validity included the interaction of selection and interaction of setting as a result of research that could not be generalized to others who did not have characteristics similar to the participants and setting. This will be addressed in the implications for further research by recommending future research on groups with the same characteristics in other geographical locations and settings.

Internal Validity

Threats to internal validity included using self-report surveys and the potential for participants to misinterpret the questions. This could lead to participant bias and difficulty accurately reflecting on themselves, resulting in less truthful responses. Participants were required to interpret the questions independently, which may have led to the participants misunderstanding the questions on the survey.

Ethical Procedures

As required by Walden University, before soliciting participants and collecting data, the researcher will submit the *Research Ethics Review Plan* to the Institutional Review Board (IRB) for approval. The study was conducted after approval from the University of Walden Internal Review Board. Before beginning the study, participants were provided informed consent outlining their rights, ability to withdraw from the study at any time, confidentiality, procedures, risks, and benefits.

Permission from participating Deans and Program Directors of Schools of Nursing programs within the core region of the Mississippi Delta was obtained. I received IRB approval from all participating nursing programs before conducting the study. There were no risks to the subjects anticipated during this study. The information obtained excluded participant identifiers. All information collected was handled with strict confidentiality. I ensured that participants' identifying information did not appear in any documents or presentations about the study. Employing agencies will not be identified by name for further anonymity. Only I and the committee members will have access to the raw data. The survey data was downloaded on an external drive and locked in a safe. After five years, all information from the study will be destroyed.

Summary

In this study, I examined the probability of nursing students seeking mental health services. An examination of this nature required consideration of multiple variables. Specifically, the study examined the contribution of three independent variables (attitudes toward mental health, social and cultural stigmas, and demographical influence) to the odds of seeking mental health services among nursing students in the Mississippi Delta region of the United States. All appropriate tables have been generated using Python and have been included, along with a discussion of the alternative and null hypotheses related to each research question. Interpretation of the data collected and presented will be discussed in chapters 4 and 5.

Chapter 4: Results

The purpose of this study was to identify the likelihood that nursing students would seek mental health services on college campuses in the Mississippi Delta region of the United States. The research questions used in this study provided a framework to predict the relationships between three independent variables (attitudes, social and cultural stigmas, and demographics) and the dependent variable (potential for help-seeking among nursing students). The research questions and hypotheses for this study are:

- RQ 1: To what extent do attitudes toward mental health services explain the variance in nursing students' willingness to seek mental health services?
  - Null Hypothesis: The odds of perceived barriers to accessing mental health services predicting willingness to access mental health services equals zero.
  - Alternative Hypothesis: The odds of perceived barriers to accessing mental health services predicting willingness to access mental health services is greater than zero.
- RQ 2: To what extent does the perceived stigma of mental health services decrease the likelihood of nursing students' willingness to seek mental health services?
  - Null Hypothesis: The odds of the perceived stigma of mental health services decreasing the likelihood of nursing students' willingness to seek mental health services equals zero.

- Alternative Hypothesis: The odds of the perceived stigma of mental health services decreasing the likelihood of nursing students' willingness to seek mental health services is greater than zero.

- RQ 3: To what extent do demographic variables predict the variance in nursing students' willingness to seek mental health services?
  - Null Hypothesis: The odds of demographic variables increasing the likelihood for nursing students to access mental health services equals zero.
  - Alternative Hypothesis: The odds of demographic variables increasing nursing students' likelihood of accessing mental health services is greater than zero.

This chapter contains the results of the data analysis I conducted to address the three research questions and the hypotheses. I also describe the data collection process, population sample, and analyses of the variables and results.

Data Collection

This non-experimental, predictive research design was intended to predict the relationships between three independent variables: attitudes toward mental health (perceived barriers), social and cultural stigmas (perceived stigmas), and demographics. The dependent variable for this study was the willingness to seek help. I collected data from December 10, 2024, to April 4, 2025 through Qualtrics.

In Chapter 3, I discussed having a sample size of 85 since the estimated population was 243. However, the population size decreased to 193 nursing students in

that region. To meet the acceptable power level of .80 for a logistic regression study, an a priori power analysis was conducted using GPower 3.1 software. An effect size (f^2 = 0.15), an alpha level (α) of 0.05, and a desired statistical power of 0.80, with three predictors, determined that the minimum required sample for logistic regression was 77. The total sample size of nursing students in the Mississippi Delta core region of the United States for this study concluded with 84 participants. This resulted in a response rate of 43.5%. This response rate is considered fair and acceptable in survey-based research on sensitive topics such as help-seeking behavior in mental health (Fincham, 2008). In addition to the sensitive nature of the survey, the collection time also took place during the spring semester, which is considered a busy semester for many nursing schools. Most nursing students, during the spring semesters, are participating in clinical rotations and preparing for graduation. These factors are likely to have contributed to the limited availability of nursing students. Despite aforementioned challenges, I offered flexible online access through a link or QR Code for students to complete the survey if they chose to participate.

Demographic Characteristics of the Sample

The participants for this sample included a total of 85 nursing students enrolled in an undergraduate nursing program in the core region of the Mississippi Delta. The gender was mostly women (*n* = 63, 75%), as indicated in Table 1. Most participants fell within the age range of 18-24 (45.3%). Most the participants identified as African American (n = 46, 54.8%).

Table 1

Demographic Characteristics of Participants (N = 84)

Category	Variable	N	%
Gender	Male	21	25.0%
	Female	63	75.5%
Age	18-24	39	46.4%
	25-30	22	26.2%
	31-40	13	15.5%
	41-50	2	2.4%
	Prefer not to state	8	9.5%
Ethnicity	American Indian or Alaskan Native	2	2.4%
	Asian/Pacific Islander	2	2.4%
	Black/African American	46	54.8%
	Hispanic	1	1.2%
	White/Caucasian	16	19.0%
	Multiple Ethnicity	3	3.6%
	Prefer not to state	14	16.7%

Data Analysis

Variable Analysis

The three independent variables were examined. The first independent variable was attitudes toward mental health, which was examined by perceived barriers. There were five survey items that were binary indicators of barriers to accessing mental health services. Each item was coded as 1= Yes, meaning there was a barrier present, or 2 = No, meaning there was not a barrier present. I also calculated a barrier composite score as the mean of the five binary items that reflected the proportion of the barriers that a nursing student perceived. The barrier items showed that there was moderate internal consistency (Cronbach's $\alpha = 0.64$), which means that some students who may have endorsed one barrier tended to endorse others.

The second independent variable was stigma, which was measured with six

survey items. The binary indicators of social stigma concerns were regarding seeking mental health. For example, “It would be too embarrassing to seek help,” “I would be seen as weak if I seek help,” “It would harm my career.” These were coded as 1 = Yes or 2 = No. A stigma composite score was computed for the mean of these six survey items. The stigma scale showed a high internal consistency (Cronbach’s $\alpha = 0.88$), which means that these concerns were strongly related and the nursing students who endorsed one stigma mainly endorsed others.

The third independent variable was demographic characteristics. This questionnaire consisted of Gender (Male = 1, Female = 2), Age (categorized: 18–24, 25–30, 31–40, 41–50, or Prefer not to state), and Ethnicity (African American/Black, White, Asian/Pacific Islander, Hispanic, American Indian, Multiple/Other, or Prefer not to state. Age and ethnicity were treated as categorical factors in regression, using 18–24 (for age) and Black/African American (for ethnicity) as reference, or baseline groups.

The dependent variable for this study was “willingness to seek mental health services.” This was listed as a composite outcome based on the General Help Seeking survey items that were rated on a Likert Scale. Each item ranged from 1 (*Extremely Unlikely*) to 7 (*Extremely Likely*). I computed the willingness score as the average of the 20 items for each of the 84 participants.

For this study, three values out of the 1,680 data points for my dependent variable questions were missing. Those missing values are minimal, which is 0.18% of missing data. According to Haliduola, Bretz, and Mansmann (2022), missing data can weaken the data analysis for a study. Therefore, for each participant who did not answer a question, I

filled in the missing answer using that participant's average response from their related questions. This is called person-mean imputation. Person mean imputation is a simple statistical method that is used whenever little data is missing and is considered the best method and practice for transparency and appropriate handling of data (Zhang, 2016). All 84 participants answered the questions regarding gender and barrier, and stigma survey items. A few participants selected the "Prefer Not to State" for age (n=8) or ethnicity (n=14). These categories were treated a valid rather than missing.

Logistic Regression Analyses

A logistic regression analysis was conducted to examine the perceived barriers, stigmas, and demographic variables, which were entered simultaneously as binary predictors, of nursing students in the Mississippi Delta core region of the United States and their willingness to seek mental health services.

Results

RQ 1

Research question 1(RQ1) stated: To what extent do attitudes toward mental health services explain the variance in nursing students' willingness to seek mental health services?

Null Hypothesis (H_1)H_0: ßK = 0:The odds of perceived barriers to accessing mental health services predicting willingness to access mental health services equals zero.

Alternative Hypothesis (H_1) ßK> 0: The odds of perceived barriers to accessing mental health services predicting willingness to access mental health services is greater than zero.

As shown in Figure 2, RQ1 focused on barriers. There were no individual predictors that reached a statistical significance, although the item "*Faculty discourages help-seeking"* reached a significance (p = .063), with an odds ratio (OR) range of 0.29 to 3.22. This model accounted for a modest amount of variance (Pseudo R^2 = .058) and had an AIC of 121.

Nursing students who indicated that "*Faculty discourages mental health services*" were less willing to seek help (β = –1.25, SE = 0.67, p = 0.063). This effect was the largest of the barriers. This indicated that those students who felt discouraged by their faculty had one-quarter of the odds of willingness to seek help than the others (OR = e^–1.25 ≈ 0.29, 95% CI [0.08, 1.07]). This effect was only marginally significant (p ~0.06).

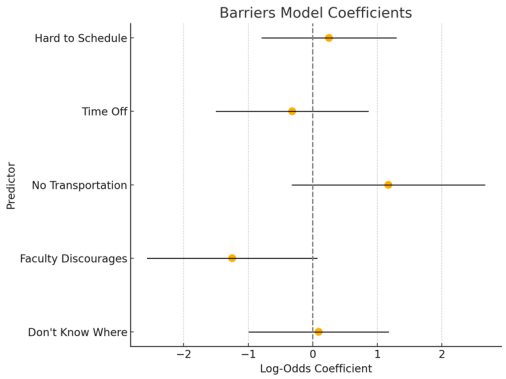
Some of the other barriers indicated nonsignificant associations. For example, "*Difficult to get time off from class or work"* indicated β = –0.32 (SE 0.60, p = 0.59, OR = 0.72), and those that selected *"Hard to schedule an appointment"* had had β = +0.25 (SE 0.53, p = 0.64, OR = 1.28). The confidence intervals included OR=1.0, indicating no clear effect. *"Lacking transportation"* had a positive coefficient (β = +1.17, SE = 0.76, p = 0.13, OR = 3.22), indicating that those nursing students with "No transportation" appeared more willing to seek help, but this was not significant and reflected a small subgroup of 13 who were willing to seek help.

Overall, the perceived barriers alone did not significantly predict a willingness to seek mental health services. I also tested the barriers composite score as a single predictor. The composite was also not significant (β = –0.79, SE = 0.79, p = 0.32, OR = 0.45 for a full-scale increase from 0 to 1 in the proportion of barriers). This means the

null hypothesis for RQ1 cannot be rejected. The perceived barriers were not strong determinants of their willingness to seek help. As indicated in Figure 2, no individual barrier's coefficient reached significance (all p-values >0.1) and did not show a reliable impact on nursing students' willingness to seek help.

Figure 2

Barriers to Seeking Mental Health Care



RQ 2

Research question 2 stated: To what extent does the perceived stigma of mental health services decrease the likelihood of nursing students' willingness to seek mental health services?

Null Hypothesis (H_2)ßK = 0:The odds of the perceived stigma of mental health services decreasing the likelihood of nursing students' willingness to seek mental health services equals zero.

Alternative Hypothesis (H_2)>0: The odds of the perceived stigma of mental health services decreasing the likelihood of nursing students' willingness to seek mental health services is greater than zero.

For research question 2 (RQ2), I examined the 6 stigma-related variables. Being "seen as weak" was 2 predictors that emerged as significant (p = .050). The stigma composite score was (p = .013). The higher perceived stigma was associated with significantly lower willingness to seek help. This resulted in borderline significance ($\chi^2(6)=12.70$, p = 0.048, pseudo $R^2 = 0.110$), with AIC = 117.0. This also indicates that adding stigma predictors improved the model fit by ~10.9% over the null hypothesis. Most of the stigma coefficients were negative, which means that stigmas about mental health reduced the odds of seeking help.

For those students who believed that seeking help would make them be "Seen as weak", they had a significant negative effect on willingness (β = –1.82, SE = 0.93, p = 0.050). That concern of "being seen as weak" corresponded with lower odds of seeking help (OR = e^–1.82 ≈ 0.16, 95% CI [0.02, 1.00]). A student who does not want to be seen or thought of as "weak" for seeking help for their mental health was estimated to have ~16% of the odds of willingness compared to those who did not share that same belief.

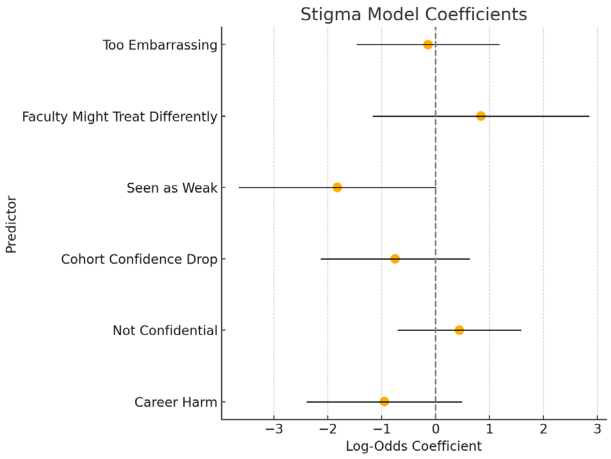
As indicated in Table 2, the other stigma-related concerns showed similar negative directions but did not reach significance individually. Such as thinking help-seeking would "harm my career" had β = –0.95 (SE 0.73, p = 0.19, OR ~0.39), and worrying it "wouldn't be confidential" had β = +0.44 (SE 0.58, p = 0.44, OR ~1.55), a positive but non-significant coefficient. Feeling it's "too embarrassing" (β = –0.14, p = 0.84) or that "faculty might treat me differently" (β = +0.84, p = 0.40) did not show clear effects.

Due to the high intercorrelation of stigma items (α = 0.88), I also tested a model

with just the composite score. This is the total number of items related to stigma that a participant agreed with. This was tested as a single predictor. The composite score was significantly higher (β = –1.52, SE = 0.61, p = 0.013). This means perceived stigma was a strong predictor, increasing to 0.167 of the stigma composite score. yielded an OR ≈0.78, which is around a 22% decrease in odds of seeking help. Therefore, RQ2 is supported, indicating that how nursing students perceived mental health had a significant influence on their willingness to seek help.

Figure 3

Stigma and Mental Health Care



RQ 3

Research question 3 stated: To what extent do demographic variables predict the variance in nursing students' willingness to seek mental health services?

Null Hypothesis (H_3)ßK = 0: The odds of demographic variables increasing the likelihood for nursing students to access mental health services equals zero.

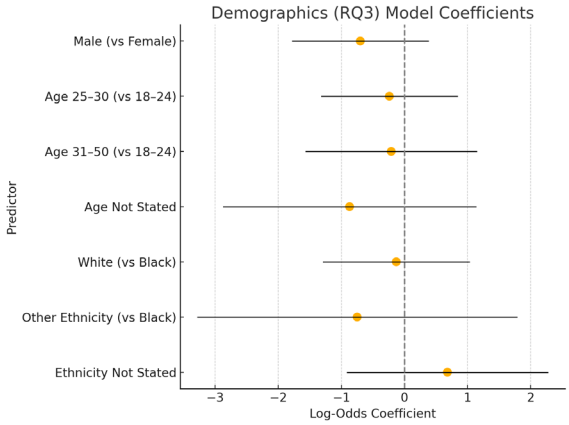
Alternative Hypothesis (H_3)ßk>0: The odds of demographic variables increasing

nursing students' likelihood of accessing mental health services is greater than zero.

This model, which evaluated the demographic variables, was not a significant predictor of a nursing student's willingness to seek help. Males had the lowest p-value ($p = .21$) but did not reach significance, and the model explained the least variance (Pseudo $R^2 = .027$, AIC = 128.6). The explanatory power was low (~2.7% of variance), which implied that a student's demographics did not impact whether or not they would seek mental health services, as indicated in Figure 4.

Figure 4

Demographics and Mental Health Care



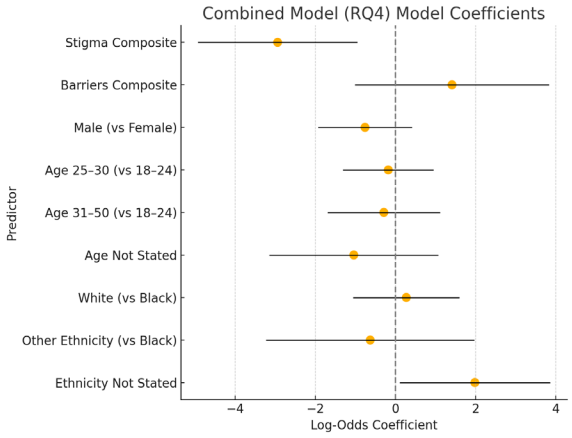
Male nursing students had a lower rate with regard to being willing to seek help. The logistic coefficient for males was negative, indicating that males are less likely to seek help than females. However, this was not statistically significant, meaning that the 21 males in the sample versus the 63 females was not large enough to reach significance. Using a baseline for ages 18 to 24. None of the older age categories had a significant difference. Even the students who elected "Prefer not to state" did not significantly differ.

Under ethnicity, for those who chose Black/African American, there were no other ethnic categories that showed a significant effect. Therefore, I found no statistically significant predictors of willingness to seek help across the demographic characteristics.

Lastly, I ran a combined logistic regression analysis. This involved including all 3 predictors: Attitudes toward mental health (perceived barriers), social and cultural stigmas (perceived stigmas), and demographic characteristics. This was done to determine each predictor's independent contributions. This is indicated in Figure 5.

Figure 5

Combined Model Coefficients



To avoid multicollinearity, the composite scores for the attitudes (barriers) and stigma, along with the demographics, were used. Overall, this model exhibited the highest explanatory power (Pseudo R^2 = .12, AIC = 121.8) as shown below in Table 2. The stigma composite emerged as the most significant predictor of nursing students' willingness to seek help.

Summary

Overall, the findings illustrated the role of stigma, perceptions of weakness, and

general attitudes toward seeking help as the most consistent and significant barriers to help-seeking behaviors among nursing students in the Mississippi Delta. The combined model also verified the earlier findings that indicated that perceived stigma was the strongest predictor of willingness to seek help, while attitudes (perceived barriers) and most demographics remained non-significant. Below are the results of each research question, along with the additional/combined model with coefficients (log-odds), standard errors (SE), p-values, odds ratios (OR), and model fit statistics (AIC and pseudo R^2).

Table 2

Summary of Findings

RQ1: Barriers	None	0.058	121	Faculty Discourage (p=0.063)	0.29 – 3.22
RQ2: Stigma	Seen as Weak (p=0.050), Stigma Composite (p=0.013)	0.11	117	Seen as Weak	0.16 – 1.55
RQ3: Demographics	None	0.027	128.6	Male (p=0.21)	0.47 – 1.97
Combined	Stigma Composite (p=0.003), Ethnicity Not Stated (p=0.038)	0.12	121.8	Stigma Composite (p=0.003)	0.05 – 7.22

Chapter 5: Discussion, Conclusions, and Recommendations

The purpose of this quantitative study was to predict if attitudes, social and cultural stigmas, and demographic characteristics can explain the variance in nursing students' willingness to seek help from mental health services on college campuses in the Mississippi Delta region of the United States. This region was chosen to study for several reasons. First, because this is a rural area, there is a lack of financial resources and community services available to provide adequate medical and mental health care. Second, many people know each other and are less likely to seek or ask for the help they need for fear of being stereotyped (Hampton & Sharp, 2014). Lastly, there is a negative connotation attached to mental health care, and this stigma is prevalent among many in rural communities in the South (Saykeo, 2018).

The state of Mississippi is grappling with retention and elevated attrition rates among undergraduate nursing students. Since the pandemic in 2020, undergraduate nursing programs in Mississippi have decreased by 7.7% for associate degree nursing programs and 9.6% for baccalaureate nursing programs (Temple, 2022). However, there is also little research available about the help-seeking attitudes of nursing students in the Mississippi Delta.

The theoretical framework for this study comes from the Theory of Planned Behavior (TPB). According to Fishbein (2008), Martin Fishbein and Icek Ajzen developed this theory in 1980 but later revised it in 1985. Ajzen (2020) stated attitudes and beliefs influence a person's behavior. The author also indicated that exploring one's intention is the best way to predict a behavior. Ajzen further stated that intention

represents a person's readiness or ability to engage in a particular behavior. Therefore, one's intention to engage in the behavior determines one's action. More specifically, people consider the outcomes of their actions before deciding to engage in a particular behavior. By applying the TPB to this study, the impact of nursing students' intentions was identified, which leads to predicting the behavior of using mental health services.

Researchers have shown that mental health issues can be a major concern among nursing students (Bartlet et al., 2016; Mitchell, 2018; Cheng et al., 2018; and McDermott et al., 2021). McCoy (2024) found that 55% of college nursing students in the United States reported experiencing symptoms of depression and other mental health issues. While the quality of mental health is important to the academic success of nursing students, many nursing students do not seek mental health services when needed (Cheng et al.,2018). This study quantitative, non-experimental, predictive research design utilized logistic regression analyses to examine the degree of variance. By utilizing logistic regression, I was able to predict whether nursing students would be willing to seek mental health services based on my independent variables (attitudes, social and cultural stigmas, and demographic characteristics).

Interpretation of Findings

I explored the effects of attitudes, social and cultural stigmas, and demographic influence on the potential effects of nursing students and their willingness to seek mental health services. All of these are documented sources of stress in nursing students (Barry et al., 2019; He et al., 2018; Madian et al., 2019; Zhao et al., 2021). However, based on the findings of this study, the perceived stigma of mental health services had a significant

influence on nursing students' willingness to seek mental health services. The help-seeking behavior of this population is a deterrent to accessing mental health services based on their internalized and perceived stigma of mental health. Practical barriers such as time availability, convenience of accessing services, and knowledge of the services did not indicate a significant effect on nursing students' willingness to seek help.

Based on this model, stigma-related factors contributed to about 12% of some students' help-seeking behavior. The influence of the stigma composite and perception of nursing students being seen as weak was an indicator that cultural and social norms within nursing programs can impact the perception of mental health care. Barriers such as nursing faculty discouraging seeking help, and demographic characteristics such as gender, age, and ethnicity did not significantly predict nursing students' willingness to seek help. However, after combining the models, there was a significant effect of "preferred not to state" for ethnicity, which indicated that there could be a lack of trust or discomfort in disclosing personal demographic information, which I believe warrants further research.

Three primary and core components drove TPB: behavioral beliefs, attitudes, normative beliefs, which were the subjective norms; and control beliefs, which were perceptions. According to Fishbein and Ajzen (1977), a person's belief about an outcome impacts their behavior. Therefore, changing a person's attitude about their beliefs would contribute to a change in their behavior. In the context of my study, the composite score of the stigma-related attitudes showed this as a significant predictor of the help-seeking behavior in nursing students. This was also supported in my combined model.

Additionally, my combined model also indicated the significance of "ethnicity not stated," which reflected the subjective norms. This implies that the reluctance of nursing students who chose not to identify or disclose their ethnicity could have been associated with cultural influences that they have internalized, which leads to them not being willing to seek mental health services. Lastly, although "faculty discouragement" did not have any statistical significance, the *p*-value still suggested that their controlled beliefs and perceptions of how they feel about their faculty could still play a vital role in their willingness to seek help. Overall, TPB reinforced the findings of my study and supported the interplay of how personal perceptions predict a behavior, or in this context, the willingness to seek help.

Social Change Implications

My social change implications hinge on the scope of my study by addressing the gap in literature concerning the utilization of mental health services by undergraduate nursing students on college campuses in the MS Delta. The findings could offer valuable insights for counselor educators and supervisors to develop strategies to address the psychological distress of undergraduate nursing students in the Mississippi Delta as well as increase awareness about the importance of mental health and normalize seeking help. While this study primarily focuses on undergraduate nursing programs in the Mississippi Delta, its implications could extend beyond this scope, potentially influencing the nursing profession by incorporating evidence-based practices to improve undergraduate nursing students' well-being and academic success.

The results of this study also suggest that nursing programs should increase their

efforts to reduce the stigma of mental health and promote the utilization of these services among nursing students. Programs should prioritize stigma-reduction activities, normalize help-seeking behaviors, and integrate mental health wellness into the nursing curriculum. Addressing the stigma of mental health at both individual and academic levels could impact students' mental health outcomes and contribute to a more compassionate and resilient future for all nursing students.

Limitations of the Study

There were several limitations discovered in this study that can be addressed in future research. Based on my experience, it is important to consider the timing of the study compared to the academic schedule and calendar of nursing students. Most nursing programs have preset academic calendars, and their schedules for the semester are made well in advance. For example, their clinical rotations, exams, community service projects, and health fairs are typically scheduled before the start of the semester. Therefore, it is vital for an appropriate response rate. Additionally, the beginning of the semester may be less demanding, especially if they are in class for the first part of the semester and participating in clinical rotations for the latter part of the semester. The fall semester may not be as rigorous as the spring semester, depending on the program and graduation timelines for that program. These factors should be considered when conducting research with nursing students.

Second, the sample size of nursing students ($N = 84$) was considered a modest participant size for logistic regression analyses that involve multiple categorical predictors (Van Smedan et al., 2016). Due to having a smaller sample size, the risk of

Type II errors was increased and may have limited the statistical power needed. Although the combined model was added, which included ten predictors, with only 38 participants who identified as "willing" to seek mental health services, the study fell below the recommended rule of thumb in logistic regression.

Third, some of the demographic subgroups, such as ethnicity, had very few responses, which created an imbalance within the data. This leads to wide confidence intervals. Therefore, some variables may not be reliable due to the lack of responses in certain categories. Fourth, the outcome variable was dichotomized by converting a continuous Likert-scale average to a binary outcome ("willing/not willing"). This made the findings easier to interpret and reduced the precision of the data and possible biases. The cutoff score was 3, being "Unlikely," but that could be interpreted with some level of judgment. Changing the cutoff could have changed the outcome of the results.

Lastly, this study involved multiple models and predictors. This potentially resulted in the interpretation of the data becoming more complicated with the increased number of models and variables, making it challenging to understand the results. Multicollinearity, which is when predictors that are highly correlated among the predictors, can cause the effects to be misunderstood and inflate the standard errors (Winship & Western, 2016). Insufficient sample sizes compared to the number of predictors could result in lower statistical power and cause the model to be unreliable. This also raised the chances of inflated Type I errors, false positives, which could lead to false findings (Bergtold et al., 2011).

Recommendations for Practice and Future Research

Based on the findings of my study, there are several recommendations that can be made for both practice and future research. First, in order to reduce the stigma of mental health, I believe nursing programs should normalize seeking help, in general. According to Horwitz et al. (2020), as cited in Eisenberg et al. (2011), this profession is known for high levels of stress. As a training program, nursing students should be taught, at the early stages of the program, how to take care of themselves, enabling them to take care of others. The profession is focused on others seeking help from them, yet they are not willing to seek help for themselves.

Second, nursing programs should implement peer support groups and seminars on mental health wellness to help normalize the stigma. They can implement activities that challenge these stigmas and address the fears that may prevent students from wanting to seek help. Lastly, I would like to see mental health awareness activities and education embedded within the nursing curriculum. This may help to challenge misbeliefs and faulty perceptions about mental health care. I think it would be significant to have the nursing faculty and staff receive training as well, so they can model this and hopefully influence the norms within the program.

Additional qualitative research that incorporates the actual voices of nursing students would also be impactful. Being able to hear, in their own words, their lived experiences, challenges, and thoughts about help-seeking could offer a deeper understanding of their challenges and fears as nursing students. Moreover, examining and identifying further cultural implications on non-disclosure as it relates to students who

did not want to identify their ethnicity could uncover a deeper issue that may need to be explored.

Understanding the relationship between nursing students and the stigma of help-seeking can have various implications for social change. Providing information on the importance of mental health care in nursing students can help with this. Promoting the benefits of normalizing the importance of seeking help can provide a mechanism for change that will help to meet the mental health needs of all students enrolled in nursing programs, as well as those within the nursing profession.

Conclusion

In conclusion, the results of this study indicated that reducing the stigma (perception) of seeking mental health support could substantially increase nursing students' willingness to seek help. If nursing programs begin to address practical barriers and incorporate this concept into the nursing curriculum, students may be more likely to seek help and view this as a responsible and acceptable action, rather than a sign of weakness. Nursing students need to know that seeking help is acceptable. They also need to trust that seeking help will not lead to social judgment. This concept is crucial for all nursing programs aiming to improve the utilization of mental health services among nursing students, especially those in the Mississippi Delta.

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Appendix A: Permission to Use GHSQ

From: Coralie Wilson
To Deidra Byas
May 14, 2014
Dear Deidra,

Thank you for your email. You have my permission to use the GHSQ in your thesis. There are several versions that you can choose between and download from my staff webpage (address located at the bottom of my signature below).

Your study sounds very interesting. I would love to learn more as you go along.

Let me know if there is anything else I can do to help.

Warm regards,

Coralie

Dr Coralie Wilson | Academic Leader Personal and Professional Development
Graduate School of Medicine | University of Wollongong |

Appendix B: Permission to Use Perceived Barriers and Stigma to Mental Health Survey

May 28, 2015

Hello there,

This is not our survey schedule. If you Google ‘Combat Duty in Iraq and Afghanistan, Mental Health Problems, and Barriers to Care, Hoge et al 2004’, published in the New England Journal of Medicine, this paper describes the schedule in full (in the online version). You do not need permission to use it as there is no copyright.

Good Luck!

Norman

Major Norman Jones ARRC
Senior Research Fellow/Lecturer
Academic Department of Military Mental Health
Academic Dept of Psychological Medicine
Institute of Psychiatry
Weston Education Centre
Cutcombe Road
London

Appendix C: General Help-Seeking Questionnaire (GHSQ)

Section I

Below is a list of people who you might seek help or advice from if you were experiencing a personal or emotional problem.

1). Please circle the number that shows **how likely or unlikely is it** that you would seek help from each of these people for a personal or emotional problem?

	Extremely Unlikely					Extremely Likely
1A) Partner (e.g., Boyfriend or girlfriend)	1	2	3	4	5	6 7
1B) Friend (not related to you)	1	2	3	4	5	6 7
1C) Parent	1	2	3	4	5	6 7
1D) Other relative/ Family member	1	2	3	4	5	6 7
1E) Mental health professional	1	2	3	4	5	6 7
1F) Phone help line (e.g. Lifeline, Kids Help Line)	1	2	3	4	5	6 7
1G) Family Doctor/GP	1	2	3	4	5	6 7
1H) Teacher (advisor classroom teacher)	1	2	3	4	5	6 7
1I) Someone else not listed above (please describe who this was)_____	1	2	3	4	5	6 7
1J) I would not seek help from anyone	1	2	3	4	5	6 7

2). If you were experiencing suicidal thoughts, how likely is it that you would seek help from the following people?

Please circle the number that shows **how likely or unlikely is it** that you would seek help from each of these people for a personal or emotional problem?

	Extremely Unlikely					Extremely Likely
2A) Partner (e.g., Boyfriend or girlfriend)	1	2	3	4	5	6 7
2B) Friend (not related to you)	1	2	3	4	5	6 7
2C) Parent	1	2	3	4	5	6 7
2D) Other relative/ Family member	1	2	3	4	5	6 7
2E) Mental health professional	1	2	3	4	5	6 7
2F) Phone help line (e.g. Lifeline, Kids Help Line)	1	2	3	4	5	6 7
2G) Family Doctor/GP	1	2	3	4	5	6 7
2H) Teacher (advisor classroom teacher)	1	2	3	4	5	6 7
2I) Someone else not listed above (please describe who this was)_____	1	2	3	4	5	6 7
2J) I would not seek help from anyone	1	2	3	4	5	6 7

Appendix D: Perceived Barriers and Stigmas to Utilizing Mental Health Services Questionnaire

Perceived Stigma

1. My faculty might treat me differently.

2.1 would be seen as weak.

3. Members of my student cohort might have less confidence in me.

4. My visit would not remain confidential.

5. It would harm my career.

Perceived Barrier

1. It is difficult to schedule an appointment.

2. It would be difficult to get time off for sessions.

3. I do not have adequate transportation.

4. My faculty discourages the use of mental health services.

5 .I do not know where to get help.

Appendix E: Revised Version of Perceived Barriers and Stigmas to Utilizing Mental Health Services Questionnaire

Perceived Stigma

1. It would be too embarrassing. Yes or No
2. My faculty might treat me differently. Yes or No
3. 1 would be seen as weak. Yes or No
4. Members of my student cohort might have less confidence in me. Yes or No
5. My visit would not remain confidential. Yes or No
6. It would harm my career. Yes or No

Perceived Barrier

1. It is difficult to schedule an appointment. Yes or No
2. It would be difficult to get time off for sessions. Yes or No
3. I do not have adequate transportation. Yes or No
4. My faculty discourages the use of mental health services. Yes or No
5. I do not know where to get help. Yes or No

Appendix F: Demographic Questionnaire

1. Gender:
    a. Man
    b. Woman

2. Age:
    a. 18-24
    b. 25-30
    c. 31-40
    d. 41-50
    e. Prefer not to state

3. Ethnicity:
    a. American Indian or Alaskan Native
    b. Asian/Pacific Islander
    c. Black/African American
    d. Hispanic
    e. White/Caucasian
    f. Multiple Ethnicity/ Other
    g. Prefer not to state