

HELP-SEEKING DECISIONS AMONG COLLEGE STUDENTS:  
THE IMPACT OF MENTAL HEALTH SERVICE AFFORDABILITY

by

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A DISSERTATION

Submitted in partial fulfillment of the requirements  
for the degree of Doctor of Philosophy in the  
Department of Educational Studies in  
Psychology, Research Methodology, and  
Counseling in the Graduate School  
of The University of Alabama

TUSCALOOSA, ALABAMA

2011

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## ABSTRACT

Recent statistics indicate that approximately 40% of students enrolled on U.S. college and university campuses report experiencing at least 1 mental health problem in the previous 12 months. Despite the documented benefits of counseling and mental health services on academic performance and degree attainment, only about 10% of mentally and emotionally distressed students ever seek professional help. The purpose of this study, therefore, was to gain a better understanding of why, among college students experiencing similar types of mental and emotional distress, some seek help, whereas most do not.

For this study, 2 samples of students were recruited from 1 large, research university campus. The first was a clinical sample and consisted of distressed students who were attending a first screening appointment at the university's counseling center. The second was a random sample of students from the general student population who demonstrated levels of distress similar to the first sample, but who had chosen not to seek professional help. Participants in both samples completed 4 study instruments used for collecting demographic data, as well as data pertaining to help-seeking attitudes, help-seeking behaviors, treatment barriers, types of distress, and levels of distress. Data from both groups were combined to examine what variables contribute to the prediction of who, among similarly distressed college students, chooses to seek professional help and who does not. Of particular interest was the role that treatment barriers related to the affordability, availability, accessibility, and acceptability of mental health services might play in distinguishing help-seekers from non-help-seekers.

A binary logistic regression model revealed that treatment-related barriers associated with cost of services, not knowing what services are available, and stigma were found to be significant predictors of help-seeking behavior. Among person-related barriers, measures of depression, generalized anxiety, eating concerns, and substance use were found to be significant predictors of help-seeking behavior. Another person-related barrier, help-seeking attitude, was found to be a significant predictor, but showed a lower rate of accuracy in predicting help-seeking behavior than the other significant predictors. A discussion of these findings is presented, along with associated implications for college campus stakeholders and directions for further research.

Dedicated to the memory of my parents,  
Wilbur and Emily Nash

## ACKNOWLEDGMENTS

I am grateful for this opportunity to recognize and thank individuals whose help and support have made it possible for me to undertake doctoral study and complete the dissertation process. I start by thanking and offering much appreciation to my committee members. In particular, I remain grateful to the guidance and extended support of my committee chair, Dr. S. Allen Wilcoxon, III. My first contact with Dr. Wilcoxon was in 1997 when I was contemplating a “later-in-life” return to school to pursue graduate work. Starting with the positive encouragement I encountered in my initial conversation with him, I have been a fortunate recipient throughout my graduate studies of his excellent teaching, supervision, professional role modeling, and, most recently, his unfailing guidance and support through a time-challenged dissertation process.

I have also been a fortunate recipient of the expertise and professional guidance of my other committee members. Dr. Lisa Hooper beckoned me to excellence through her thorough reviews of my manuscripts, offering suggestions for a high-quality presentation of my research. Dr. Rick Houser’s support challenged me to think scientifically about my research and enabled me to engage in state-of-the-art data collection. Dr. Lee Keyes brought an essential balance of clinical experience and expertise into the conceptualization and facilitation of my research. And Dr. Steve Thoma challenged me to think outside the box (as he had often done in his developmental psychology courses) and strive for sophistication in my research.

I have also had the good fortune of receiving support from others on the university campus. I am very appreciative of the extended support from Dr. John Schmitt of The Graduate

School in being able to bring this process to completion. As well, Ed Shirley from the Research Compliance office helped me on numerous occasions with answers to my questions and facilitation with research protocol modifications.

I have had the added good fortune of working with colleagues and support staff at the UA Counseling Center who have continuously supported me and offered words of encouragement along this journey. I am especially appreciative of the office associates at the center who aided in my research by handing out and collecting survey packets. I consider myself very lucky to have walked through this process in the company of good folks!

Although I cannot thank them personally, the students on campus have been the backbone of my research. Without their willingness to complete randomly emailed electronic surveys or volunteer to fill out survey packets at the Counseling Center, there would be no research to report. For their participation, I am very grateful.

I have saved for best and last the acknowledgment of the people I belong to and with whose love I have been supported. My daughter, Allison, continues to be a central reason for wanting to role model excellence, and her love and support have continuously helped me to fulfill that desire as a parent. And lest I was to forget to mention my best friends—my three sisters—they would not be happy with me! They have been my cheerleaders and have seen me (actually they haven't seen much of me, lately!) through years of graduate study and I am very thankful for them, their love, and their patience. And finally, the love and support of good friends and extended family have continuously been a part of this journey for which I am very grateful.

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## CHAPTER 1

### INTRODUCTION

Between 1998 and 2008 the traditional college-age population in the United States rose by 14%, and approximately 40% of 18- to 24-year-olds were enrolled at this nation's postsecondary institutions. Reflecting this trend, enrollment increased by 37% for full-time students and 24% for part-time students. By the fall of 2009, college enrollment was at an all-time high of 19.6 million students (Snyder & Dillow, 2010). During this same time, "mental, emotional, or psychiatric condition/depression" became the most prevalent category of postsecondary student disability, with an unprecedented increase of 42% from 2000 to 2008 (Sharpe, Bruininks, Blacklock, Benson, & Johnson, 2004; U.S. Government Accountability Office [GAO], 2009). Although this is a revealing statistic, it mirrors a more widespread national phenomenon. Recent epidemiology studies indicate that the percentage of the U.S. population with a mental disorder is growing, especially among young adults (Kessler et al., 1994; Kessler, Berglund, et al., 2005; National Institute of Mental Health [NIMH], 2001, 2010; World Health Organization [WHO], 2008). In particular, mental disorders are reported to account for a larger burden of disease among younger adults than any other health condition (Eisenberg, Golberstein, & Hunt, 2009; Hunt & Eisenberg, 2010; Michaud et al., 2006; NIMH, 2010; WHO, 2008).

Over recent decades, investigators have conducted studies aimed at demonstrating that mental health problems at U.S. university and college campuses have been growing in severity

(Benton, Robertson, Tseng, Newton, & Benton, 2003; Cornish, Riva, Henderson, Kominars, & McIntosh, 2000; Erdur-Baker, Aberson, Barrow, & Draper, 2006; Kettman, Schoen, Moel, Cochran, Greenberg, & Corkery, 2007; Pledge, Lapan, Heppner, Kivilighan, & Roehlke, 1998; Robbins, May, & Corazzini, 1985). Many of these studies were spurred by a growing consensus among directors of university and college counseling centers that psychological problems on their campuses were increasing in severity (Gallagher, 1995, 2005, 2008). Empirically based evidence, however, eluded researchers, and no consistent trends pertaining to severity were established (Much & Swanson, 2010; Schwartz, 2006; Sharkin, 2004a; Sharkin & Coulter, 2005). At best, these studies introduced the possibility of an increase in prevalence of certain categories of psychopathology on college campuses, rather than an expanding problem with severity (Benton et al., 2003; Cornish et al., 2000; Sharkin & Coulter, 2005; Schwartz, 2006). Consistent with epidemiologic studies in the general U.S. population (NIMH, 2001, 2010), this supposition has recently received a degree of support from ongoing longitudinal research with general student populations across the nation. In particular, findings from the biannual National College Health Assessment (ACHA-NCHA; American College Health Association [ACHA], 2000, 2008a) indicate that the number of college students reporting any lifetime diagnosis of depression increased 77% from 2000 to 2008.

Recent reports in the mental health literature indicate that anywhere from 30% to 45% of college students in nonclinical campus samples report some form of mental health problem in the previous 12 months. The most frequently cited problems include depression, anxiety, substance abuse, eating disorders, self-injury, attention-deficit hyperactivity disorder (ADHD), and relationship issues (ACHA, 2008a; Benton et al., 2003; Blanco et al., 2008; Collins & Mowbray, 2005; Joyce, Ross, Vander Wal, & Austin, 2009; Kadison & DiGeronimo, 2004; Nafziger,

Couillard, & Smith, 1999; Soet & Sevig, 2006b; Yorgason, Linville, & Zitzman, 2008; Zivin, Eisenberg, Gollust, & Golberstein, 2009). Although debate continues concerning the ability of investigators to clarify trends in prevalence or severity, the perception of an increasing problem with mental health issues on college campuses appears to persist (Gallagher, 1995, 2005, 2008; Hanson, 2008; Hunt & Eisenberg, 2010; Kettman et al., 2007; Mowbray et al., 2006; Much & Swanson, 2010; Schwartz, 2006; Sharkin & Coulter, 2005).

Many observers have speculated as to the etiology of rising mental health issues on campuses (Hanson, 2008; Hunt & Eisenberg, 2010; Kadison & DiGeronimo, 2004; Levine & Cureton, 1998; Mowbray et al., 2006). One frequently cited explanation is the impact of federal legislation on college admission practices. For example, the Americans with Disabilities Act of 1990 (ADA), as well as Section 504 of the Rehabilitation Act of 1973, prohibit postsecondary schools from discriminating against students on the basis of disability with regard to recruitment, enrollment, and participation in academic life (GAO, 2009; Mowbray et al., 2006). A disability is defined as a physical or mental impairment that substantially limits one or more major life activities. Through the provision of academic adjustments, or “reasonable accommodations,” a growing number of students with diagnosed mental health disorders have been able to successfully undertake the rigors of a college education (GAO, 2009; Mowbray et al., 2006). This trend takes on added significance in light of the fact that half of all lifetime cases of diagnosable mental disorders start by 14 years of age and three fourths of cases start by age 24 (Kessler, Berglund, et al., 2005).

The emergence of psychotropic medications with lower incidence of side effects, especially the selective serotonin reuptake inhibitors, has also contributed to another common explanation of etiology regarding contemporary mental health issues on campuses (Hunt &

Eisenberg, 2010; Young, 2003). In previous years, debilitating symptoms led many students with serious mental illness to either never enroll in college or to terminate before completing a degree. However, the ongoing development of medications that improve symptom management while reducing side-effect incidence has allowed many students to pursue postsecondary study or remain in school with less interruption (Hanson, 2008; Hunt & Eisenberg, 2010; Mowbray et al., 2006). Recent studies indicate that the use of prescribed psychotropic medications among college students has indeed increased over the past three decades (Benton et al., 2003; Gallagher, 2008; Schwartz, 2006).

A third frequently cited explanation for increased mental health problems among college students is attributed to increased levels of stress throughout contemporary society. Beyond the levels of stress caused by the normative developmental issues of early adulthood and college attendance, many contend that students coming to college over the past couple of decades have been born into an era of mounting cultural stress unmatched in previous generations (Hanson, 2008; Hersh, 2009; Kadison & DiGeronimo, 2004; Levine & Cureton, 1998; Mowbray et al., 2006; Von Steen, 2000). For example, Hersh (2009) expressed the following:

The larger cultural forces children and adolescents must cope with—broken and/or less present families, coarsening television and internet content, family economic distress, the paradox of electronic umbilical computer and cell-phone “connections” with the potential for producing psychological and emotional disengagement, and the “dumbing” down of K-12 education, with its lowered expectations and focus on reductionist standardized tests—are having cumulative adverse and perverse effects well before students arrive at our colleges and universities. (p. 53)

Observers further voice their belief that these cultural changes have contributed to an ever-increasing erosion in psychosocial resiliency among traditional college-age students that has been most visibly manifested through deficits in coping ability (Hersh, 2009; Levine & Cureton, 1998; Mowbray et al., 2006; Rodolfa, 2008; Steinhardt & Dolbier, 2008). Steinhardt and

Dolbier (2008) observed that college students with ineffective coping strategies are often characterized by detriments in psychological functioning or an exacerbation of symptomatology when mental health issues already existed. When these investigators introduced interventions for improving coping ability and resiliency in a sample of college students, they found that symptoms of psychological distress decreased even during periods of increased academic stress.

In general, perceptions of increased difficulties in mental health functioning among college students have led to corresponding increases in interest among investigators regarding the potential impact on academic functioning (Breslau, Lane, Sampson, & Kessler, 2008). Whereas early notions of academic success were typically viewed as a function of a student's intellectual ability or aptitude, a growing body of literature has since suggested that psychosocial adjustment is as important, if not more so, in predicting academic outcomes (Gerdes & Mallinckrodt, 1994). The following section expands on these observations, especially in relation to college dropout rates and the role of mental health services.

### **Statement of the Problem**

Researchers have clearly linked mental health functioning with academic performance and educational attainment (Megivern, Pellerito, & Mowbray, 2003; Smith-Osborne, 2005). In national data, Kessler and his colleagues found that nearly 4.3 million individuals did not complete college because of early onset psychiatric disorders (Kessler, Foster, Saunders, & Stang, 1995). Other investigators have observed that social and emotional adjustment difficulties predict college student attrition as well as or better than academic adjustment factors (Gerdes & Mallinckrodt, 1994; Rummel, Acton, Costello, & Pielow, 1999). Across a 6-year period, Turner and Berry (2000) found that an average of 70% of clients at a university counseling center reported that their personal problems were affecting their academic progress, especially their

grades, and 20% of the clients reported that they were considering withdrawing from school because of their personal problems. In other studies, depression, anxiety, and eating disorders were reported to be significantly associated with academic outcomes among college students (Eisenberg et al., 2009), and depression was a predominant factor in approximately half of all medical withdrawals at one college over a 3-year period (Meilman, Manley, Gaylor, & Turco, 1992).

A primary function of university and college counseling centers has been to provide direct counseling interventions to students whose personal problems interfere with their ability to function successfully in the academic environment (Sharkin, 2004b). In fact, compelling evidence supports the role campus counseling centers play in increasing student retention and graduation rates (Choi, Buskey, & Johnson, 2010; Hanson, 2008; Illovsky, 1997; Minami et al., 2009; Nafziger et al., 1999; Osberg, 2004; Turner & Berry, 2000; Wilson, Mason, & Ewing, 1997). For example, Wilson, Mason, and Ewing (1997) found that retention rates of counseled students were higher than those of a comparison group of students waiting to receive counseling, and Turner and Berry (2000) found that the retention rates of counseling center student-clients were repeatedly superior to those of an entire student body. In other studies, students have reported significant improvements in areas of psychological, social, and academic functioning after participating in individual counseling (Kitzrow, 2003; Nafziger et al., 1999).

Despite the documented benefits of counseling and mental health services, recent research indicates that less than half of troubled students on university and college campuses ever utilize mental health services (Hunt & Eisenberg, 2010; Zivin et al., 2009). This finding holds true even when the services are available within the campus community (Eisenberg, Golberstein, Gollust, 2007). Some investigators have reported unexpectedly low rates of service

use (ACHA, 2008a; Gallagher, 2008; Rosenthal & Wilson, 2008). For example, in a sample of college students who reported clinically significant levels of psychological distress, Rosenthal and Wilson (2008) found that over three fourths reported not receiving mental health services.

To date, studies directed toward understanding the phenomenon of service underutilization among college students have focused on factors that increase or decrease the likelihood of help-seeking behaviors (Kushner & Sher, 1989; Vogel & Wester, 2003). Results of these efforts have been mixed and, at times, contradictory and have accounted for only weak explanations of mental health help-seeking choices among college students (Vogel & Wester, 2003; Vogel, Wester, Wei, & Boysen, 2005). One finding, however, has been consistent throughout the literature: help-seeking attitudes are the strongest predictor of help-seeking intentions among college students (Deane & Todd, 1996; Vogel & Wester, 2003; Vogel et al., 2005). Nevertheless, this finding fails to explain the persistent underutilization of mental health services by students on college campuses, especially when recent literature suggests that a high percentage of college students place a high value on psychological health and services (Bishop, 2006; Joyce et al., 2009).

In general population studies, service affordability has been found to be a dominant barrier to obtaining mental health services (Stefl & Prospero, 1985; Sturm & Sherbourne, 2001). However, similar investigations among college students are sparse and have been mainly focused on subsets of students. In particular, recent studies with graduate psychology students (Dearing, Maddux, & Tangney, 2005) and medical students (Givens & Tjia, 2002) indicated that the cost of mental health services was a significant barrier to seeking or receiving mental health services. To build on these findings, the current study was an effort to extend this line of research to a general population of college students.

## **Purpose of the Study**

The purpose of this study was to build on existing research concerning why, among college students experiencing similar levels of mental and emotional distress, some students seek help for their distress, whereas others do not. Although previous research among college students has been focused primarily on person-related correlates of help-seeking, results of these studies have been mixed and inconclusive. In contrast, general population studies have focused more on treatment-related factors and have demonstrated stronger and more consistent correlations with help-seeking decisions. Therefore, the main objective of this study was to clarify the potential role of treatment-related factors, especially the cost of mental health services or perceived affordability, in help-seeking behavior among college students. A secondary objective was to identify any other variables or factors that may help distinguish between help-seeking and non-help-seeking students.

## **Definition of Terms**

The following terms were used in the study as defined below:

*Distress*: This term refers to moderate to high levels of psychological distress, unless otherwise denoted as *low distress*. Moderate to high levels of distress infer a level of distress that significantly interferes with a student's academic or psychosocial functioning. For purposes of this study, distress was defined operationally as a score on any of the eight subscales of the Counseling Center Assessment of Psychological Symptoms-62 (CCAPS-62; depression, generalized anxiety, social anxiety, academic distress, eating concerns, family distress, hostility, and substance abuse) that fell above the distribution mean score for the normative data reported for the CCAPS-62 (Center for Collegiate Mental Health [CCMH], 2010; Center for the Study of Collegiate Mental Health [CSCMH], 2009a).

*Type of distress:* This term refers to categories of distress represented by each of the eight subscales of the CCAPS-62 (depression, generalized anxiety, social anxiety, academic distress, eating concerns, family distress, hostility, and substance abuse; CCMH, 2010; CSCMH, 2009a).

*Severity of distress:* This term refers generally to CCAPS-62 subscale scores that fall above the distribution mean scores for each of the eight subscales as reported from the national normative data (CCMH, 2010; CSCMH, 2009a). For purposes of this study, subscale scores were categorized as either falling above the distribution mean for the normative CCAPS-62 data for each of the eight subscales or as falling below the distribution mean; scores equal to the distribution mean were categorized with those falling below the mean. Accordingly, each subscale was transformed into a dichotomous variable (*severe* and *not severe*) whereby scores in the higher category (above the distribution mean) would indicate more severe cases and scores in the lower category (equal to and below the mean) would indicate less severe cases (see Table 3, Chapter 4).

*Clinical sample:* This term refers to study participants who were recruited from a university counseling center and were engaged in receiving mental health services.

*Nonclinical sample:* This term refers to study participants who were recruited from the general student body and met criteria for moderate to high distress (as previously defined), but who were neither currently receiving mental health services nor had engaged in receiving mental health services within the previous 12 months.

*Nondistressed participants:* This term refers to study participants who were recruited from the general student body, but who ultimately did not meet criteria for moderate to high levels of distress (i.e., participants whose scores on any of the eight subscales were equal to or

below the distribution mean scores for the normative data reported for the CCAPS-62 subscales; CCMH, 2010; CSCMH, 2009a).

*Help-seeking and help-seeker:* Help-seeking is the action of receiving mental health care services from a professional provider, including licensed psychologist, licensed counselor, licensed social worker, psychiatrist, or medical doctor. For purposes of this study, a help-seeker was operationally defined as a student who was either currently experiencing mental or emotional distress or had experienced such distress in the past and had received mental health services from a professional provider within the previous 12 months. As noted previously, distress was defined operationally as a score on any of the eight subscales of the Counseling Center Assessment of Psychological Symptoms-62 (CCAPS-62) that falls above the distribution mean score for the normative data reported for the CCAPS-62 (CCMH, 2010; CSCMH, 2009a).

*Non-help-seeking and non-help-seeker:* Non-help-seeking is an absence of action toward obtaining mental health care from a professional provider of mental health services. For this study, a non-help-seeker was operationally defined as an individual who was either currently experiencing mental or emotional distress or had experienced such distress in the past, but who had not received mental health services from a professional provider within the previous 12 months. As noted previously, distress was defined operationally as a score on any of the eight subscales of the Counseling Center Assessment of Psychological Symptoms-62 (CCAPS-62) that falls above the distribution mean score for the normative data reported for the CCAPS-62 (CCMH, 2010; CSCMH, 2009a).

*Help-seeking behavior:* Help-seeking behavior is a distressed person's action that leads to actual utilization of mental health services from a professional provider. For purposes of this study, the presence or absence of help-seeking behavior was determined through use of a

screening question on the Mental Health Help-Seeking Questionnaire, a study instrument developed by this investigator.

*Help-seeking attitude:* Help-seeking attitude refers to a person's cognitive and emotional orientations, which influence the tendency to seek or to resist professional help for personal crisis or distress (Fischer & Turner, 1970). For this study, help-seeking attitude was defined operationally by a scale score between 0 and 30 on the Attitudes Toward Seeking Professional Psychological Help Scale–Short Form (ATSPPHS-SF; Fischer & Farina, 1995), with higher scores indicating positive help-seeking attitudes.

*Approach factors in help-seeking:* Approach factors are those variables that have a motivational influence on an individual's behavior and increase the likelihood that he or she will obtain professional services for mental or emotional distress (Kushner & Sher, 1989).

*Avoidance factors in help-seeking:* Avoidance factors are those variables that have an inhibitory influence on an individual's behavior and decrease the likelihood that he or she will obtain professional services for mental or emotional distress. Avoidance factors are a type of person-related, help-seeking barrier (Kushner & Sher, 1989).

*Help-seeking barriers:* Help-seeking barriers are impediments to receiving mental health services and can be person-related or treatment-related (Saunders, Zygowicz, & D'Angelo, 2006).

*Person-related barriers:* Person-related barriers are cognitive and emotional factors that impede a person's decisions about seeking mental-health services. These factors can include attitudes, fears, and other personal beliefs or traits that influence the acceptability of mental-health services as a mode of treatment (Penchansky & Thomas, 1981; Saunders et al., 2006).

*Treatment-related barriers:* Treatment-related barriers are aspects of the treatment system that hinder the process of help-seeking. These elements can include cost and location of treatment services, as well as other elements that influence the affordability, availability, and accessibility of mental-health services (Penchansky & Thomas, 1981; Saunders et al., 2006).

*Affordability:* Affordability is a help-seeking barrier tied to financial limitations. For purposes of this study, affordability referred to perceived cost of mental health services, health insurance coverage, and/or personal financial constraints (Penchansky & Thomas, 1981).

*Availability:* Availability is a help-seeking barrier tied to proximal location of mental health services. For this study, availability referred to knowing what services were available and knowing where they were located (Penchansky & Thomas, 1981).

*Accessibility:* Accessibility is a help-seeking barrier tied to ability to get to mental health services. For this study, accessibility referred to having time and transportation to attend services (Penchansky & Thomas, 1981).

*Acceptability:* Acceptability is a help-seeking barrier tied to attitudes and beliefs about mental health services. For this study, acceptability referred to concerns with stigma and privacy. This barrier is closely associated with avoidance behaviors (Penchansky & Thomas, 1981).

### **Research Questions**

The following research questions were tested in the study:

Research Question 1: Does service affordability contribute to the prediction of help-seeking behavior more significantly than barriers of availability, accessibility, and acceptability?

Research Question 2: Does help-seeking attitude predict help-seeking behavior more significantly than treatment barriers of affordability, availability, accessibility, and acceptability?

Research Question 3: Does type of distress predict help-seeking behavior more significantly than treatment barriers of affordability, availability, accessibility, and acceptability?

Research Question 4: Does severity of distress predict help-seeking behavior more significantly than treatment barriers of affordability, availability, accessibility, and acceptability?

### **Null Hypotheses**

The following null hypotheses were tested in the study:

H<sub>01</sub>: Service affordability will not contribute to the prediction of help-seeking behavior more significantly than barriers of availability, accessibility, and acceptability.

H<sub>02</sub>: Help-seeking attitude will not predict help-seeking behavior more significantly than treatment barriers of affordability, availability, accessibility, and acceptability.

H<sub>03</sub>: Type of distress will not predict help-seeking behavior more significantly than treatment barriers of affordability, availability, accessibility, and acceptability.

H<sub>04</sub>: Severity of distress will not predict help-seeking behavior more significantly than treatment barriers of affordability, availability, accessibility, and acceptability.

### **Limitations of the Study**

Limitations of the study were as follows:

1. The study was conducted at only one university campus, and its results may not be generalizable to all college campuses.

2. The clinical sample was comprised solely of students receiving services at the University Counseling Center and did not represent students receiving mental health services from other campus or community providers.

3. The nonclinical sample was operationally defined as students with a score on any of the eight subscales of the Counseling Center Assessment of Psychological Symptoms-62

(CCAPS-62) that fell above the distribution mean score for the normative data reported for the CCAPS-62 (CCMH, 2010 CSCMH, 2009a) and who were non-help-seekers. These restrictions yielded a small number of participants representing this participant pool in the study.

4. The web-based survey utilized in a portion of this study resulted in a response rate of less than half of the initially contacted random pool of potential participants and, therefore, may not truly represent the characteristics of the sampled population.

5. All four study instruments were self-report questionnaires and may have been biased by responses influenced by social desirability.

### **Assumptions**

Assumptions for the study were as follows:

1. Students in the general student population regularly used their university-based email accounts.
2. Study participants were honest in answering questions on the study instruments.

### **Organization of the Remaining Chapters**

Chapter 2 features an examination of related professional literature that has served as the conceptual foundation of the study. In particular, a brief history of mental health research on college campuses is followed by a review of literature pertaining to the impact of mental health issues on college student functioning, the underutilization of campus mental health services, and correlates of help-seeking behaviors among students. Comparisons with general population studies introduce concepts of service access and lead to a synthesis of the literature in support of the significance of the study.

Chapter 3 features an examination of the methodology employed in the study. Specifically, this chapter includes a discussion of the study participants, instrumentation,

research design, and the outcome of a trial administration. Chapter 4 describes the data analysis and outcome of the study, whereas Chapter 5 discusses the results of the study and examines study implications and suggestions for further research.

## CHAPTER 2

### REVIEW OF THE LITERATURE

The purpose of this literature review is to identify and integrate relevant research that provides a framework for exploring the mental health needs of college students, as well as their underutilization of mental health services. The review is presented according to five interrelated topics: (a) a brief history of organized research efforts pertaining to college student mental health, (b) the impact of mental health problems on educational attainment, (c) the impact of mental health services on educational attainment, (d) research pertaining to the underutilization of mental health services, and (e) comparisons with general population studies. The review begins with a brief examination of how interest in college student mental health emerged and concludes with a literature synthesis and implications for the current study.

#### **Organized Research on College Student Mental Health**

Chickering noted that when his first edition of *Education and Identity* was published in 1969, not all those concerned with higher education agreed with his notion that colleges and universities should be concerned with the personal development of students, including their ways of thinking, modes of learning, or interpersonal and intercultural skills (Chickering, 1969; Chickering & Reisser, 1993). He commented:

Since educational institutions were not supposed to be churches, parents, or social service agencies, it did not much matter whether the students worked all night, slept all day, fought depression, or abused alcohol. Fostering self-esteem, healthy relationships, and

socially responsible behavior was not a priority. Instead, the goal was to give students a limited number of skills, insights, and points of view that would somehow help them find a good job and a satisfying life. (Chickering & Reisser, 1993, p. xi)

In the 1980s, this philosophy started evaporating in response to the writings and observations of Chickering and others like him (Pascarella & Terenzini, 1991), as well as in response to growing concerns on college campuses with the mental and emotional well-being of students (Stone & Archer, 1990). Some of the initial research to emerge out of this period was conducted at a national level with directors of campus counseling centers (Gallagher, 2008). These early studies subsequently led to research with clinical student samples and, more recently, to research with general student populations. These lines of research are explored in the following discussion.

### **Counseling Center Directors**

Some of the earliest and most consistent research pertaining to college student mental health commenced almost three decades ago in 1981 when Gallagher and his colleagues at the University of Pittsburgh conducted the first National Survey of Counseling Center Directors. Since its inception, the survey has been conducted annually and has included data provided by the administrative heads of over 300 college and university counseling centers in the United States and Canada (Gallagher, 2005, 2008). Over the past 25 years, the survey has revealed increases in the percentage of counseling center directors who believe students on their campuses are experiencing more severe psychological problems. In particular, the percentage of directors reporting such an observation rose from 53% in 1984 (Bishop, 2006) to 82% in 1995 (Gallagher, 1995) to 90% in 2005 (Gallagher, 2005) and finally to 95% by 2008 (Gallagher, 2008). In the 2008 survey, center directors estimated that 49% of their student-clients had severe psychological problems, and 7.5% of those had impairment serious enough that they could not

remain in school without extensive psychological or psychiatric help. As well, 81% of directors reported a significant increase in calls from faculty and others on campus seeking consultations regarding students of concern (Gallagher, 2008).

When initiated in the 1980s, the counseling center directors' surveys offered the most organized effort, to date, for studying college mental health issues; however, because the data were based on the subjective perceptions of counseling center directors, the empirical utility was limited. In fact, in their seminal "state of the field" article published in *The Counseling Psychologist* in 1990, Stone and Archer observed that "because 'few counseling centers publish systematic and ongoing research' (Heppner & Neal, 1983, p. 81), it is difficult to establish an empirical basis for this article" (p. 541). In response, researchers in the 1990s began to base their studies on clinically driven data. A major focus was directed toward finding empirical support for the subjective observations of the counseling center directors, in particular, that mental health issues of students were increasing in severity.

### **Clinical Studies**

In one retrospective study, data were collected from self-reported intake information gathered from 1989 through 1995 at one Midwestern public university's counseling center (Pledge et al., 1998). Despite student presentations of clinically significant problems, Pledge and her colleagues found that the concerns identified by the student-clients over the 6-year span were remarkably constant. In a similar retrospective study, data were gathered from self-report intake records of students seen at the counseling center of a small, private university in the western United States from 1986 to 1992 (Cornish et al., 2000). Like the Pledge et al. study, Cornish and her colleagues found no consistent increase in general client distress over the 6-year period.

In a subsequent study, archival data from clinical staff assessments at case closure were examined from a counseling center at a large Midwestern university covering a time span from 1988 to 2001 (Benton et al., 2003). Benton and her colleagues reported that in 14 of 19 assessed problem areas, clinicians reported increases in the percentages of student-clients having difficulties over a 13-year period. However, Sharkin (2004a; Sharkin & Coulter, 2005) observed that the Benton et al. study only demonstrated that the proportion of students presenting with particular problems had increased over the 13-year period, but had failed to demonstrate any increases or trends in problem severity.

More recently, Erdur-Baker and colleagues (2006) compared two clinical samples with a nonclinical sample drawn from across 32 participating college campuses. Using a self-report measure, they found a significant, but relatively small increase in severity and chronicity of presenting problems over a 6-year period from 1991 to 1997. The following year, Kettman and colleagues (2007) reported results of a study using a student-client self-report measure, as well as clinician-derived assessment information, from a counseling center at a large Midwestern university. Trends in severity of psychopathology were examined over a 7-year period between 1999 and 2005; however, the investigators concluded that no meaningful increases or trends in severity of psychopathology could be demonstrated from study data.

Despite enduring perceptions of growing severity in mental health problems across university and college campuses, clinically driven studies failed to produce any viable support for these perceptions (Much & Swanson, 2010; Schwartz, 2006; Sharkin, 2004a; Sharkin & Coulter, 2005). At best, these studies were thought to have produced some tentative support for an increase in prevalence of certain categories of psychopathology, rather than an increase in severity (Benton et al., 2003; Cornish et al., 2000; Hunt & Eisenberg, 2010; Schwartz, 2006;

Sharkin & Coulter, 2005). Moreover, some observers noted that these studies were all conducted with counseling center student-clients, or clinical samples, and were being erroneously relied on for commentary about college student populations in general (Sharkin & Coulter, 2005; Soet & Sevig, 2006b). One research initiative, however, emerged approximately a decade ago and focused strictly on the health issues of general college student populations.

### **Nonclinical Research**

In 2000, the American College Health Association (ACHA) initiated a health survey of nonclinical, general student populations conducted at college and university campuses across the United States. Since its inception, the National College Health Assessment (ACHA-NCHA) has been conducted biannually at participating institutions. The initial survey conducted in the spring of 2000 was completed by 16,024 randomly-selected students from 28 postsecondary institutions across the United States (ACHA, 2000). By the spring of 2008 (the most recent results suitable for trend comparisons with the 2000 results [ACHA, 2008b]), surveys were completed by 80,121 randomly selected students across 106 U.S. campuses (ACHA, 2008a).

Although the ACHA-NCHA survey was not developed specifically to address campus mental health concerns, it nevertheless contains a section of questions pertaining to mental health issues and treatment. In particular, survey questions inquire about hopelessness, anxiety, depression, feeling overwhelmed, and suicidal thoughts or behavior (ACHA, 2000, 2008a, 2010). Results from the biannual administrations of the survey have provided a significant source of trend data gathered from college student populations outside of the clinical settings of student health and counseling centers. For instance, the rate of students reporting ever being diagnosed with depression increased from 10.3% in 2000 to 14.9% in 2008; the rate of students reporting an anxiety disorder within the last school year increased from 6.7% in 2000 to 13.2%

in 2008; the rate of students reporting problems with academic performance due to depression or an anxiety disorder increased from 11.3% in 2000 to 16.1% in 2008; and the rate of students reporting problems with academic performance due to stress increased from 28.7% in 2000 to 33.9% in 2008 (ACHA 2000, 2008a). Although areas of inquiry pertaining to hopelessness, feeling overwhelmed, and suicidal ideation/behavior remained fairly constant throughout the survey's first decade of administration, the ACHA's most recently available data from the spring 2010 administration of the survey reveals a current snapshot of college student functioning among 95,712 students across 139 campuses (ACHA, 2010). When asked to report experiences from the past 12 months, 85.2% of students reported feeling overwhelmed by all they had to do; 45.6% reported feeling things were hopeless; 48.4% reported overwhelming anxiety; 56.4% reported feeling very lonely; 30.7% reported feeling so depressed that it was difficult to function; 6.2% reported seriously considering suicide; and 1.3% reported attempting suicide. When asked what factors had negatively affected their academic performance within the previous 12 months, 18.3% of students reported anxiety; 11.7% reported depression; 11.0% reported relationship difficulties; 20.0% reported sleep difficulties; and 27.4% reported stress—the most prevalent factor reported as being detrimental to academic functioning (ACHA, 2010). Negative impacts on academic functioning were defined in terms of receiving a lower grade on an exam or an important project; receiving a lower grade in a course; receiving an “incomplete” or dropping a course; or experiencing a significant disruption in thesis, dissertation, research, or practicum work (ACHA, 2010).

### **Impact of Mental Health Issues on Educational Attainment**

Academic success and retention of students in higher education are ongoing priorities of college administrators, as well as campus mental health professionals. Early researchers focused

on academic ability as the primary predictor of academic performance and retention, but typically found only weak explanations for variances in attrition rates (Gerdes & Mallinckrodt, 1994; Pantages & Creedon, 1978). Later studies, however, directed attention toward the significance of social and emotional adjustment in influencing educational outcomes (Chickering & Reisser, 1993; Gerdes & Mallinckrodt, 1994), as well as the impact of psychopathology on academic functioning (Brackney & Karabenick, 1995). Brackney and Karabenick (1995) found that measures of psychopathology were significantly related to levels of motivation and use of learning strategies in a sample of college undergraduates. In particular, they found that more poorly adjusted students perceived themselves as less able to succeed; reported greater levels of test anxiety; and were less able to regulate their study habits, persist in the face of challenges, or seek academic assistance when needed (Brackney & Karabenick, 1995). Others have also noted the impact of social, emotional, and psychological adjustment issues on students' abilities to concentrate; remember important information; screen out distractions; meet deadlines under pressure; plan, organize and make decisions; interact within a group or with peers; make public presentations; and regularly attend classes (Collins & Mowbray, 2005; Megivern et al., 2003; Mowbray et al., 2006). In fact, several investigators have noted the significance of social and emotional adjustment factors in predicting college student attrition relative to academic adjustment factors (Gerdes & Mallinckrodt, 1994; Rummel et al., 1999; Turner & Berry, 2000).

In a study conducted with a sample of entering freshman, Gerdes and Mallinckrodt (1994) assessed college adjustment both before and during the first semester of college and then followed the academic standing of the participants over a 6-year period. They found that difficulties with social and emotional adjustment predicted student attrition better than or as well as academic adjustment difficulties. In a similar study, Rummel and her colleagues (1999) found

that for students exiting their institution without graduating during a 6-year period (1992-1997), the majority of them were in good academic standing. Moreover, among students whose grade point averages (GPA) were above a 2.0, “personal reasons” was cited more frequently than other reasons (financial, medical, transfer, academic) as the main explanation for choosing to leave school. In another 6-year study, Turner and Berry (2000) found that an average of 70% of student-clients at a university counseling center reported that their personal problems were affecting their academic progress. The majority of these students indicated that their personal issues were having a negative effect on their grades; moreover, nearly 20% indicated they were considering withdrawing from the university because of their personal problems. In this same study, the researchers also examined the effect of counseling on academic outcomes and found that 60.7% of the respondents reported that their counseling experience improved their academics. In fact, results of the study showed that counseling clients had an annual retention rate of 70.9% compared to a retention rate of 58.6% for the general student population.

### **Impact of Mental Health Services on Educational Attainment**

#### **Retention**

Compelling research supports the role college counseling centers play in improving student retention and graduation rates (Choi et al., 2010; Hanson, 2008; Illovsky, 1997; Minami et al., 2009; Nafziger et al., 1999; Osberg, 2004; Turner & Berry, 2000; Wilson et al., 1997). In fact, a central function of campus counseling centers has been to facilitate the mission of colleges or universities by providing support and intervention to students whose personal problems interfere with their ability to fully engage in their academic endeavors (Choi et al., 2010; Kahn, Wood, & Weisen, 1999; Wilson et al., 1997). In a study similar to Turner and Berry’s (2000), Illovsky (1997) found a retention rate of 75% among counseled students compared to a rate of

68% among the general student population across one academic year. When Wilson and his colleagues (Wilson et al., 1997) investigated the academic outcomes of students requesting services at a large university counseling center, they found a strong positive linear relationship between number of counseling sessions attended and likelihood of retention 2 years later. The retention rate for students who requested counseling, but ultimately did not participate in counseling services was 65%, whereas 79% of students who had received one to seven counseling sessions were either still enrolled 2 years later or had graduated (Wilson et al., 1997). More recently, Lee, Olson, Locke, Michelson, and Odes (2009) conducted a study with freshman and transfer students at a large public university located in the northeastern part of the United States. When comparing a “counseling group” of students with a “noncounseling group,” they found that the odds of re-enrollment for a third semester of study were 3.05 times higher among the counseled group of students. As well, they found that counseling experience was more significant in predicting re-enrollment than academic factors and, similar to Gerdes and Mallinckrodt (1994), suggested that academic retention “may be a matter of social and psychological adjustment rather than academic performance” (Lee et al., 2009, p. 316).

### **Academic Performance**

Beyond studies connecting college counseling services with student retention rates, other studies have likewise attested to the beneficial role of counseling among college students. Consistent with general population studies (Lambert & Cattani-Thompson, 1996; Lambert & Ogles, 2004), outcome studies conducted with students have demonstrated the psychosocial benefits and effectiveness of counseling. For example, Nafziger and his colleagues (1999) collected outcome data over a 2½ year period at a public university in the western United States from students attending at least six counseling sessions at the university’s counseling center.

Using a precounseling and post-sixth-session assessment design, they found statistically significant decreases in reported symptomatology across all nine scales of the College Adjustment Scale (CAS; Anton & Reed, 1991; Nafziger et al., 1999): anxiety, depression, suicidal ideation, substance abuse, self-esteem, interpersonal problems, family problems, academic problems, and career problems. Moreover, they reported moderate to large effect sizes in decreased symptomatology among students who were markedly distressed at intake (Nafziger et al., 1999). In another study conducted with student-clients at a university counseling center at a midsized, Midwest university, Frisch and his associates (Frisch et al., 2005) compared pretreatment and posttreatment scores on the Quality of Life Inventory (QOLI; Frisch, 1994) over a 4-year period. They found that QOLI scores increased significantly with treatment and, in particular, moved from more than 1 standard deviation of the functional, nonclinical normative mean pretreatment to within 1 standard deviation of that mean posttreatment. In an 8-year study, Minami and his associates (Minami et al., 2009) gathered data at a student counseling center at a large university in the western United States by utilizing the Outcome Questionnaire (OQ-45; Lambert, Hansen, et al., 1996), an outcome measure that was completed by student-clients prior to each of their counseling sessions. Results of their analysis suggested that approximately 80% of the student-clients treated for two or more sessions were better off after receiving counseling than the average client randomized into a wait-list control condition. Moreover, they noted that positive outcomes were especially demonstrated in cases related to loss of productivity, stress, psychological distress, and anhedonia.

## **Underutilization of Mental Health Services**

### **College Campus Studies**

Despite compelling research that demonstrates the benefits of counseling and mental health services, less than half of troubled students on university and college campuses ever utilize mental health services (Harrar, Affsprung, & Long, 2010; Hunt & Eisenberg, 2010; Zivin et al., 2009). Turner & Quinn (1999) found that when compared with a general population sample, college students were less likely to seek professional help for depression and anxiety, alcohol or drug problems, eating disorders, making lifestyle changes, or coping with stress. In the University of Michigan's Healthy Minds Study, Eisenberg and his colleagues (Eisenberg, Golberstein, et al., 2007; Hunt & Eisenberg, 2010) found that fewer than half of students who screened positive for major depression or anxiety disorders received any mental health services in the preceding 12 months. Likewise, results from the spring 2008 administration of the American College Health Association's NCHA survey (ACHA, 2008b) demonstrated that only 25% of students diagnosed with depression were currently in therapy, and 36% were being treated only with medication (ACHA, 2008b). In the spring 2010 administration of the NCHA survey, 96,000 college students reported that 85% of them felt overwhelmed, 46% felt hopeless, 48% experienced overwhelming anxiety, 56% felt very lonely, and 31% felt so depressed that it was difficult to function. Results from that same survey also indicated that, at most, only 8% of those students had sought professional treatment across several categories of mental health-related conditions (ACHA, 2010). In another study reported in 2010, Harrar and his colleagues (Harrar et al., 2010) sought to determine the need for counseling services among students who were not counseling center clients. Although they found that 29% of nonclinical students endorsed significant levels of distress and dysfunction, only 7% of those students reported

receiving treatment. Moreover, data from their university's counseling center indicated that only 6% of the student body had been seen at the center during the year that the study was conducted.

In the National Epidemiologic Study on Alcohol and Related Conditions (NESARC; Chen et al., 2006), Blanco and his associates (Blanco et al., 2008) reported low treatment rates across an array of psychiatric disorders among college students (ages 19 to 25), with fewer than half of those with a mood disorder and less than 20% of those with an anxiety disorder receiving treatment. They also discovered that college students with drug or alcohol use disorders were significantly less likely to receive treatment than their non-college-attending peers. In fact, in a study conducted at a large public university, Caldeira and her colleagues (Caldeira et al., 2009) found that only 3.6% of students who met the criteria for substance use disorders perceived a need for help with substance use problems and only 8.8% actually sought help after receiving encouragement from another individual (see also Cranford, Eisenberg, & Serras, 2009).

In a national awareness program related to eating disorders on college campuses, the National Eating Disorder Screening Program (NEDSP) was first initiated in 1996 across 400 college campuses (Becker, Franko, Nussbaum, & Herzog, 2004). In a subsequent follow-up study conducted with a subset of the original survey participants, Becker and her colleagues (2004) found that only 33% of the student participants meeting criteria for an eating disorder had sought help before the awareness program and, two years later, only 39% reported having engaged in treatment after the initial survey and recommendation for treatment. In a more recent administration of the NEDSP, only 3% of one campus's student participants endorsing significant eating disorder patterns reported seeking help (Heidelberg & Correia, 2009). In a similar study at another campus, Schwitzer and his colleagues found that none of the NEDSP

participants who screened positive for clinically significant eating concerns had accessed health or mental health resources (Schwitzer et al., 2008).

### **General Population Studies**

Underutilization of mental health services on college campuses mirrors a more widespread phenomenon across the United States. In particular, extant literature consistently indicates that many people in the general population never seek treatment for mental health issues. Over the past 30 years, three large-scale national epidemiologic studies have confirmed that less than half of individuals meeting diagnostic criteria for a mental disorder engage in treatment (Kessler et al., 1994; Kessler, Chiu, Demler, & Walters, 2005; Regier et al., 1993; Wang et al., 2005). In the early 1980s, the Epidemiologic Catchment Area (ECA) program was the first to collect general population data using diagnostic criteria from the *Diagnostic and Statistical Manual of Mental Disorders (DSM)-III* (American Psychiatric Association [APA], 1980). Data from the study demonstrated an annual prevalence rate of 28% for mental and addictive disorders, with less than 30% of those with a disorder ever seeking treatment (Regier et al., 1993). A decade later, data from the National Comorbidity Survey (NCS), using diagnostic criteria from the *DSM-III-R* (APA, 1987), indicated that close to 30% of respondents met criteria for a mental disorder in the previous 12 months; however, less than 20% of that group had received any treatment during that same time span (Kessler et al., 1994). A subsequent replication study, the National Comorbidity Survey Replication (NCS-R), was conducted from 2001 to 2003 (Kessler, Chiu, et al., 2005; Wang et al., 2005). Using diagnostic criteria from the *DSM-IV* (APA, 1994), data from the study indicated that 26% of respondents met the criteria for a mental disorder in the preceding 12 months and, of that number, less than half (40%) had sought treatment services.

## **Research Aimed at Understanding Service Underutilization**

Consistent indications of a gap between service need and service utilization rates in general population studies, as well as student population studies, have led to a line of research in both populations aimed at understanding the widespread underutilization of mental health services, even in the face of compelling need. Relevant literature reveals a preponderance of underutilization studies on college campuses led by a framework of help-seeking correlates. On the other hand, underutilization investigations in the general population have predominantly been guided by concepts of access and barriers to access.

### **College Students and Help-seeking**

Led primarily by a psychosocial approach to understanding behavior, researchers of the past decade have attempted to shed light on possible determinants of help-seeking behavior among college and university students. One psychosocial model of behavior, in particular, has been utilized as a means of conceptualizing mental health help-seeking practices on campuses. Ajzen's (1991; Fishbein & Ajzen, 1975) theory of planned behavior (TPB) has been widely used to understand and predict help-seeking behavior in a variety of healthcare settings (Sheeran, Aubrey, & Kellett, 2007). According to the theory, the most salient predictor of behavior is an individual's decision or intention to actually perform the behavior. In the current context, intentions are assumed to capture the motivational factors that influence help-seeking behaviors and provide an indication of how much effort will be devoted to performing the behavior (Sheeran et al., 2007). Across various contexts, the TPB has shown consistent effectiveness in predicting behavior and behavioral intention (Ajzen, 1991; Sheeran et al., 2007; Mackenzie, Knox, Gekoski, & Macaulay, 2004).

Many researchers have used the TPB model as a framework for determining how various factors may impact help-seeking through potential correlation with Ajzen's (1991) construct of intention. Early studies conducted with college students focused primarily on what Kushner and Sher (1989) conceptualized as approach tendencies or factors perceived as increasing the likelihood of help-seeking behavior. In particular, gender and other demographics (Cramer, 1999; Oliver, Reed, Katz, & Haugh, 1999; Vogel & Wester, 2003), prior help-seeking (Deane & Todd, 1996; Vogel & Wester, 2003), perceived social support (Rickwood & Braithwaite, 1994; Sherbourne, 1988; Vogel & Wester, 2003), and level of psychological distress (Deane & Chamberlain, 1994; Hinson & Swanson, 1993; Vogel & Wester, 2003) have all been examined as possible antecedents to help-seeking actions. However, results of the various studies have been mixed and, at times, contradictory (Vogel et al., 2005). As noted by Vogel and Wester (2003), "such studies have generally only accounted for less than 25% of the variance associated with help-seeking attitudes" (p. 351). In light of these observations, more recent efforts have examined the counterpoint to approach explanations.

Avoidance factors are those that decrease the chances that a person in distress will seek out services (Kushner & Sher, 1989; Vogel & Wester, 2003). Treatment fear, fear of self-disclosure, self-concealment, stigma, emotional constriction, and anticipated risks are among some of the variables that have been shown to inhibit the likelihood of help-seeking by college students. Moreover, these factors have been shown to be as predictive of help-seeking attitudes as some of the more recognized approach variables (Kushner & Sher, 1989). In fact, Vogel & Wester (2003) found avoidance variables to be even more predictive of help-seeking attitudes *and* intentions. In particular, treatment fear (Deane & Chamberlain, 1994; Kushner & Sher, 1989; Vogel et al., 2005), self-disclosure (Hinson & Swanson, 1993; Vogel & Wester, 2003;

Vogel et al., 2005), and self-stigma (Corrigan, 2004; Sheeran, et al., 2007; Vogel, Wade, & Hackler, 2007) have consistently been shown to have a direct effect on help-seeking attitudes and intentions among college students. In addition, public stigma (Corrigan, 2004; Deane & Todd, 1996; Komiya, Good, & Sherrod, 2000; Vogel, Wade, & Ascherman, 2009; Vogel, Wade, & Hackler, 2007; Vogel et al., 2005) and self-concealment (Cepeda-Benito & Short, 1998; Cramer, 1999; Kelly & Achter, 1995; Vogel & Wester, 2003) have consistently been shown to predict help-seeking attitudes. However, among all studies, the most consistent finding has been that help-seeking attitudes related to mental health services are the strongest predictor of help-seeking intentions among college students (Deane & Todd, 1996; Kelly & Achter, 1995; Vogel, Wade, & Hackler, 2007; Vogel & Wester, 2003; Vogel et al., 2005). Paradoxically, this result fails to explain the persistent underutilization of mental health services by students on college campuses, especially in light of recent literature suggesting that a high percentage of college students place a high value on psychological health and services (Archer & Cooper, 1998; Bishop, 2006; Joyce et al., 2009).

Literature suggests that recent and current generations of college students are paying more attention to issues of mental health and well-being (Bishop, 2006) and are demonstrating increases in perceived acceptability of psychological problems (Archer & Cooper, 1998). Building on the American Psychological Association's 1995 public education campaign, "Talk to Someone Who Can Help," Turner and Quinn (1999) explored college students' perceptions toward the value of counseling and psychological services. They found that 95% of the college students they surveyed indicated a strong belief that "good psychological health plays an important role in maintaining good health" (p. 369) and 91% indicated believing that "people should spend time doing things to improve their mental and emotional health" (p. 369).

Likewise, nearly all of the students surveyed (96%) attached a level of importance to having access to mental health care; in fact, 59% of the students rated access to mental health care as *very important*, whereas 37% rated it as *somewhat important*. Over half (55%) of the surveyed students indicated believing that “people should seek professional help when they have a problem they don’t know how to resolve” (p. 369) and, as well, strongly supported seeking help for serious mental illness and suicidal feelings (Turner & Quinn, 1999). In a similar study, 70% of student participants in a survey conducted across seven community colleges indicated that having a personal counseling center on campus would be *very helpful* or *helpful* (Bundy & Benschhoff, 2000).

In a Penn State University (PSU; 2007) campus-wide study, close to 70% of students sampled indicated being aware of campus counseling services; of that number, 97% expressed moderately to highly positive views of the available services. Moreover, 51% of all participants reported believing that “counseling services are primarily for students who need to talk with someone about normal life events,” whereas 62% reported believing that “counseling services are primarily for students with serious and chronic mental health problems” (p. 2). Only 12% of students thought their “friends would view them negatively if they were to receive counseling services,” and only 7% believed that their “family would view them negatively” (p. 2). When students were asked how they would respond “if they were struggling with a mental health issue that upset them to the point that it interfered with their daily functioning” (p. 3), 59% indicated that they were likely to seek assistance from their health care provider, whereas 58% stated that they would seek services from the campus counseling center. However, consistent with other cited research, of the 50% of students who “reported having at least one mental health concern

that interfered with their ability to function within the last 12 months,” (p. 4) only 12% reported seeking professional treatment (PSU, 2007).

### **General Population Studies and Access/Barriers to Treatment**

Examinations of mental health service gaps in the general population have produced studies led primarily by frameworks of service access (Penchansky & Thomas, 1981) and service barriers (Saunders, 1993; Saunders et al., 2006) for conceptualizing the problem of underutilization. According to Penchansky and Thomas’s model of access, access is defined as “a measure of the ‘fit’ between characteristics of providers and health services and characteristics and expectations of clients” (p. 139) and includes distinct dimensions of availability, accessibility, affordability, and acceptability. Problems with access or any of its component dimensions can influence service utilization, especially by lowering rates of service entry (Penchansky & Thomas, 1981). More recently, Saunders proposed a model of treatment-seeking whereby problems with access are viewed in terms of barriers to the process of seeking treatment (Saunders, 1993; Saunders et al., 2006). Barriers are categorized as either person related or treatment-related. In particular, person-related barriers include a treatment-seeker’s cognitive and emotional factors that impede decisions leading to actual service use, whereas treatment-related barriers include aspects of the treatment system that hinder the process of help-seeking.

In a frequently cited study, Stefl and Prospero (1985) investigated underutilization of mental health services across a five county area in the early 1980s. They found that affordability, especially as measured by “cost of services,” repeatedly emerged as the dominant service barrier (43% of respondents needing, but not obtaining services), followed by barriers of availability (20%), accessibility (18%), and acceptability (stigma, 14%). Using national data

from the ECA program (Regier et al., 1993), Landerman and his associates investigated the impact of insurance coverage for mental health services on actual service utilization (Landerman, Burns, Swartz, Wagner, & George, 1994). Results of their study indicated that among individuals with a psychiatric diagnosis, insurance coverage was significantly associated with an increased probability (odds ratio = 3.15) of obtaining mental health services over those without insurance coverage. Drawing on data collected in the NCS (Kessler et al., 1994), Kessler and his colleagues examined rates of untreated serious mental illness and corresponding reasons for lack of treatment (Kessler et al., 2001; see also Sareen et al., 2007). They found that the most cited barrier to treatment was “too expensive” (44%), followed by “unsure about where to go for help” (41%) and “health insurance would not cover treatment” (36%).

In a study conducted in the late 1990s, the Healthcare for Communities national survey (Sturm & Sherbourne, 2001) collected data from the Community Tracking Study (Kemper et al., 1996) to provide updated national estimates of unmet need for mental health services, as well as barriers to care. Sturm and Sherbourne found that 3 out of 5 respondents cited concern about costs as the main reason for unmet need. Additional reasons, cited less frequently (about 1 out of 3 respondents), pertained to having to wait too long or not being able to get into treatment and having a health plan that would not pay for treatment. In the 2002 National Survey on Drug Use and Health (Substance Abuse and Mental Health Services Administration [SAMHSA], 2003), Ojeda and Bergstresser (2008) examined correlates of barriers to mental health care in a population of adults reporting unmet need for mental health services. Results of the study indicated that 45% of the participants attributed unmet need to financial barriers, whereas 30% cited barriers related to stigma and negative treatment attitudes.

In 2005, Mojtabai reported the results of national trend data collected over a 6-year span related to cost barriers to mental health services for adults with significant psychological distress. Drawing from annual administrations of the National Health Interview Study (NHIS; Centers for Disease Control and Prevention, 2000, 2003) from 1997 through 2002, he found that the proportion of NHIS respondents with significant psychological distress who reported that they could not afford mental health care grew from 15.6% to 20.0%. Likewise, the proportion of respondents who reported that they could not afford psychotropic medications grew from 27.7% to 34.1% over that same time interval (Mojtabai, 2005).

### **Access and Barriers to Treatment Among College Students**

Whereas general population studies have consistently demonstrated the significance of access factors, especially affordability, in examining mental health service underutilization, such studies among college student populations are sparse. In fact, literature searches yield only three studies that include cost of services as a potential barrier to seeking services; although two of the studies relate to graduate student populations, only one relates to undergraduates. Examining elements of service access among a random sample of undergraduate students, Yorgason and his colleagues (2008) found that “not enough time” was the most frequently cited potential obstacle to seeking campus mental health services (33% of sample), followed by beliefs that services would not be helpful (19%) and concerns about financial cost (18%). When students in this same study were asked if their knowledge of mental health services was sufficient, 37% of respondents reported not having enough information about how to make contact for services; 30% indicated they had never heard of the services; and 38% had heard of the services, but knew nothing more about them (Yorgason et al., 2008). Using a national sample, Dearing and her associates (Dearing et al., 2005) examined barriers to seeking psychological help among clinical

and counseling psychology graduate students. Although finding that the students' attitudes toward seeking personal therapy were "generally very favorable," these investigators found that "concerns with cost" was rated as the highest ranking potential service obstacle, followed by "concerns about time" and "concerns about confidentiality" (p. 325). In a study conducted with one group of medical students, Givens and Tjia (2002) found that 24% of first- and second-year students endorsed clinical levels of depression, and only 22% of that number reported using mental health services. Among treatment-related barriers to service use, they found that close to one third of the depressed students cited "cost" as the reason for not seeking services, surpassed only by concerns about "lack of confidentiality" (37%; p. 919).

A frequently cited reason for not further examining cost or affordability barriers to mental health services among general populations of college students is typically characterized in terms of students having access to free or subsidized mental health services on college campuses (Eisenberg, Gollust, Golberstein, & Hefner, 2007; Furr, Westefeld, McConnell, & Jenkins, 2001). Drawing on results from the Healthy Minds Study (Eisenberg, Golberstein, & Gollust, 2007), Hunt and Eisenberg (2010) noted that the data indicated "ability to pay is probably not a major barrier for most students" because more than 90% of the student respondents in that study had health insurance, and "the majority of campuses offer free or highly subsidized health services" (p. 6). Likewise, Furr and her associates (2001) expressed puzzlement when stating, "even though college students on these campuses have access to free services, why do they not seek assistance?" (p. 99). Although neither group of investigators actually tested their assumptions about the relationship between cost of mental health services and help-seeking practices among students, Eisenberg and his colleagues (Eisenberg, Golberstein, et al., 2007) found that 51% of all Healthy Minds Study respondents ( $n = 2,785$ ) reported being unaware of

where to go for mental health care, and 41% reported being unaware of the availability of free counseling services on the university's campus. As well, they found that of the respondents in the study who indicated perceiving a need for professional help, only half actually engaged in either counseling or medication interventions. Among service nonusers, only 32% indicated they would know where to go for mental health services, and only 53% were aware of free counseling services on campus. Among students with health insurance, but unmet needs for services, over half (54%) did not know if they had coverage for mental health visits or believed they actually did not have coverage (13%). Results such as these open the possibility that service affordability may be a relative concept and, therefore, perceptions of cost may be as tenable a treatment barrier as any actual costs of services (Waehler, Hardin, & Rogers, 1994).

### **Financial Trends for Students**

Other studies highlight the significance of financial considerations among recent and current college student populations. In the fall 2008 administration of the ACHA-NCHA survey (ACHA, 2008b), students were asked about occurrences in their lives over the previous 12 months that had been traumatic or very difficult to handle. "Finances" was the second highest response after "academics," with 35% of the respondents indicating the former and 45% the latter. In subsequent biannual administrations of the survey (ACHA, 2009a, 2009b, 2010), these rates remained essentially the same, except for a slight decline in the number of students identifying "academics" as a significant stressor. In similar data, Furr and her associates (Furr et al., 2001) found that the most frequently cited causes of depression among a sample of students across four different campuses were grade problems (53%), loneliness (51%), *money problems* (50%), and relationship problems (48%). In the Healthy Minds Study, Eisenberg and his associates (Eisenberg, Golberstein, et al., 2007; Eisenberg, Gollust, et al., 2007) found that

college students reporting financial struggles were at higher risk for mental health problems. Specifically, students reporting current financial problems, as well as students reporting that they grew up in a poor family, were more likely to screen positive for depression and anxiety disorders, compared with students reporting no past or present financial concerns. Likewise, they were more likely to experience suicidal thoughts than the group that grew up in a comfortable financial situation (see also Roberts, Golding, Towell, & Weinreb, 1999).

### **Financial Trends for College Counseling Centers**

Figures from the 2009 administration of the National Survey of Counseling Center Directors (Gallagher, 2009) indicated that counseling centers at 16.7% of large-size colleges and universities (enrollment over 15,000 students) and 8.7% of moderately sized schools (enrollment between 7,500–15,000) charge a fee for personal counseling (excluding fees charged for psychiatry visits or the cost of psychotropic medications). In relation to other funding sources, counseling center directors reported that 3.4% of centers at large schools (1.4% at moderately sized schools) collect third-party payments; 6.7% (2.9%) are supported by a mandatory fee earmarked for the counseling center; 26.7% (30.4%) receive support from a mandatory student health fee; and 18.3% (4.3%) receive support from a mandatory student life fee. Directors also reported that 48.3% of centers at large schools and 62.3% of centers at moderately sized schools receive no support from mandatory fee funding; as well, 73% (70%) reported a growing demand for counseling services without an appropriate increase in resources (Gallagher, 2009).

As college enrollments have grown over the past decade (Snyder & Dillow, 2010), counseling centers have struggled to keep up with growing demands for services (Much & Swanson, 2010). Prevalent funding cuts have continually led centers to adopt brief therapy approaches by limiting the number of counseling sessions students are eligible for or have led

more centers into consideration of fee-for-service charges (Kraft, 2009; Mowbray et al., 2006; Much, Wagener, & Hellenbrand, 2010). Current literature suggests that this trend will only heighten in coming years (Kadison, 2006). Although many college counseling centers have started increasing referrals to practitioners in the surrounding community, financial issues have been found to be an inhibitory factor for this alternative, as well (Owen, Devdas, & Rodolfa, 2007).

### **Synthesis of Related Literature**

Since the mid 1980s, empirical interest in the mental health functioning of college students has gained momentum and led to focused areas of inquiry. Prompted initially by the subjective assessments of campus counseling center directors, subsequent studies explored growing concerns of increased severity in the mental health issues experienced among college student populations (Gallagher, 2008). Beginning in the 1990s, reports of investigations aimed at testing these concerns started emerging in professional literature. Although no discernable trends pertaining to severity could be established, results from many of these studies suggested that the prevalence of mental health issues across U.S. college campuses was increasing (Benton et al., 2003; Cornish et al., 2000; Hunt & Eisenberg, 2010; Sharkin & Coulter, 2005; Schwartz, 2006). Moreover, another trend was revealed as a result of these studies: Only a small percentage of students reporting clinical levels of mental and emotional distress were actually seeking professional help. Whereas anywhere from 30% to 45% of college students in general campus samples were reporting some form of mental health problem in the prior 12 months, only about 10% were actually seeking treatment (ACHA, 2008a, 2010; Harrar et al., 2010; PSU, 2007). Although this trend reflects a parallel trend of service underutilization in the general U.S. population (Kessler et al., 1994; Kessler, Demler, et al., 2005), investigators searching for

explanations have taken different approaches for studying this phenomenon in the two populations.

Investigations of service underutilization in student populations have predominantly been guided by a framework of help-seeking correlates. In particular, examinations of person-related factors such as attitude (Deane & Todd, 1996), level of distress (Deane & Chamberlain, 1994; Vogel & Wester, 2003), fear of self-disclosure (Hinson & Swanson, 1993; Vogel et al., 2005), stigma (Corrigan, 2004; Vogel et al., 2009), emotional openness (Komiya et al., 2000), and fear of treatment (Deane & Chamberlain, 1994; Vogel et al., 2005) have produced mixed results with mainly weak explanations of help-seeking variances. In contrast, studies in the general U.S. population have primarily been guided by a framework of service access/barriers (Penchansky & Thomas, 1981; Saunders, 1993; Saunders et al., 2006), including person-related variables (acceptability of services), as well as treatment-related variables (accessibility, availability, and affordability of services). Findings from these studies have consistently indicated that cost of services (affordability) is a significant and leading barrier to help-seeking activity for mental health services (Kessler et al., 2001; Landerman et al., 1994; Mojtabai, 2005; Ojeda & Bergstresser, 2008; Stefl & Proserpi, 1985; Sturm & Sherbourne, 2001).

Despite investigations across college campuses indicating that money problems and financial issues are high-ranked stressors among students (ACHA 2008b, 2009a, 2010; Furr et al., 2001), very little research has been conducted to test the saliency of mental health service affordability among college students. The availability of free counseling services on many campuses has been used as a primary reason not to explore the possibility of a relationship between cost of services and service utilization (Eisenberg, Gollust, et al., 2007; Furr et al., 2001). However, in the few studies that have actually examined treatment-related barriers to

mental health service utilization on college campuses, results have indicated that only about half of students know that the counseling services exist on campus or that the services are free (Eisenberg, Golberstein, et al., 2007). As well, in three published reports of studies including cost as a factor, affordability was shown to be a significant barrier to service use among subsets of students and, in two of those studies, was the predominant barrier (Dearing et al., 2005; Givens & Tjia, 2002; Yorgason et al., 2008). Findings such as these open the possibility that perception of cost or affordability may be as salient a barrier to seeking mental health services as any actual treatment costs (Waehler et al., 1994).

Although many campuses across the United States currently offer free counseling services to their enrolled students, recent literature attests to increases in student enrollment, as well as increases in the demand for counseling services, but without commensurate increases in resources and funding (Much & Swanson, 2010; Snyder & Dillow, 2010). Limits on number of counseling sessions, fees-for-services, and referrals to billed services in the local community have become the trend for how campus counseling centers are responding to limited operating resources (Kraft, 2009; Much et al., 2010). Moreover, adjunct services to counseling, such as psychiatry and prescription medications, are not always included as free services available on campuses. Although cost factors, as well as other treatment-related factors, have continuously been shown to have an impact on decisions to seek or not seek mental health services among U.S. residents with perceived service need, there remains a dearth in the literature of studies pertaining to the possibility of a relationship between these factors among college students. The purpose of the current study was to start filling this gap.

The following chapter describes the methods utilized for the study. Specifically, Chapter 3 outlines recruitment of study participants, study instruments used in data collection, research

design and data collection procedure, and the outcome of a trial administration. A description of the statistical methods chosen for data analysis concludes the chapter.

## CHAPTER 3

### METHODOLOGY

The purpose of the study was to address a gap in current literature concerning why, among college students experiencing similar levels of mental and emotional distress, some students seek help for their distress, whereas others do not. The aim of the investigation was to compare a clinical sample of students who had sought counseling services for distress with a random sample of students who demonstrated similar levels of distress, but had not sought any mental health services. The main objective was to clarify the role of perceived affordability or cost of mental health services in help-seeking decisions among college students and to identify any other variables (e.g., treatment-related barriers, help-seeking attitude, type or severity of distress) that might help distinguish between help-seekers and non-help-seekers.

This chapter features a discussion of the methods employed for the study. The chapter includes a description of study participants, study instrumentation, research design, and data collection procedures, as well as the outcome of a trial administration. A description of the statistical methods utilized for data analysis concludes the chapter.

#### **Participants**

Data for the study were collected at the main campus of The University of Alabama in Tuscaloosa, Alabama. Enrollment at this campus approximates 30,000 students enrolled in bachelors, masters, doctoral, and professional (law) programs. University demographic data

indicate that general student enrollment consists of 53% females and 47% males; 82% undergraduates and 17% graduates/ professional; 81% white, 12% Black/African American, 2% Hispanic, 1% Asian, 0.1% Hawaiian/Pacific Islander, and 0.9% American Indian/Alaskan Native; 68% from Alabama; 92% under 25 years of age; and 3% international students (University of Alabama, 2010).

The study included a clinical sample and a nonclinical sample from the university's student population. Participants for the clinical sample ( $n = 105$ ) were recruited from the University of Alabama Counseling Center ("Counseling Center"). Data for this sample were gathered from students, at least 19 years of age, who were in attendance at an initial screening appointment for counseling/psychotherapy at the Counseling Center and completed the center's intake instruments. Participants for the nonclinical sample ( $n = 295$ ) were recruited from the university's general student body. This sample was comprised of a random selection of undergraduate and graduate/professional students, at least 19 years of age, who were enrolled part-time or full-time at the Tuscaloosa campus and had been assigned a university-based email account. Data for this sample were gathered electronically from students who volunteered to participate after receiving an electronic invitation in their campus email accounts. Data collection for both samples occurred during the university's two 2011 summer terms and the fall 2011 semester. Initial Institutional Review Board (IRB) approval for this study was granted on December 14, 2010, and approvals for two subsequent modifications were granted on June 15, 2011 and August 17, 2011 (see Appendix A, Appendix B, and Appendix C).

### **Clinical Recruitment Site and Services**

The Counseling Center is located adjacent to the university's main campus and offers counseling and psychotherapy services to any enrolled graduate/professional or undergraduate

student. The center is typically open Monday through Friday and maintains regular business hours from 8:00 a.m. to 5:00 p.m. Students routinely access the center by automobile where student parking is provided or by campus transit involving a 30- to 45-minute bus route. The center employs an executive director (licensed psychologist), along with a clinical staff consisting of five licensed professional counselors, three licensed social workers, two licensed psychologists, and three part-time advanced doctoral/graduate psychology trainees. In addition to providing services for mental health concerns, the Counseling Center serves as a clinical training site for supervised master's-level trainees from the disciplines of counseling and social work.

An initial screening appointment at the Counseling Center is free of charge; for any subsequent sessions, a student incurs a fee of \$15 which is charged directly to the student's financial account with the university. Enrolled students are eligible for 15 sessions of individual therapy per academic year. Although the Counseling Center does not maintain licensed psychiatrists on its staff, two licensed psychiatrists are employed full-time by the university's Student Health Center (SHC). These psychiatrists are a frequent referral resource for the Counseling Center. Students referred to a psychiatrist at the SHC are billed at the fair market value for a visit to a psychiatrist. However, the SHC accepts coverage from most third-party payers while also requiring a co-payment from students it serves. Students that do not maintain health insurance coverage can sign a non-insured waiver with the SHC to qualify for a reduced fee. The SHC also maintains an on-site pharmacy which charges fair market value prices for filling students' prescriptions. On occasion, students seen at the Counseling Center are referred to mental health service providers who practice outside the university community and are subject to the fair market value fees of those providers.

## Instrumentation

The following section describes the measures used for data collection in the study:

*Demographic Questionnaire.* A brief questionnaire for securing demographic information was administered to both samples participating in the study. For the nonclinical sample (electronic survey), the questionnaire contained five questions pertaining to gender, age, ethnicity, academic level, and international status. For the clinical sample (Counseling Center survey), the questionnaire contained the five questions previously mentioned, but an additional question was included to inquire as to whether or not a student had been mandated to attend counseling. Copies of these demographic questionnaires are provided in Appendix D.

*Mental Health Help-Seeking Questionnaire.* A questionnaire with two versions was developed by this researcher for eliciting data pertaining to current or recent help-seeking behavior for mental or emotional distress and any perceived treatment-related barriers (affordability, availability, accessibility, and acceptability) associated with help-seeking decisions. Each treatment-related barrier was measured by two items representing common aspects of the barrier that were rated using Likert-type responses to indicate level of importance in making help-seeking decisions. For example, affordability was measured with these two items: *Cost of services* and *Lack of health insurance coverage*. Availability was measured with these two items: *Not knowing what services are available* and *Not knowing where services are located*. Accessibility was measured with these two items: *Lack of transportation* and *Not enough time in my schedule*. Acceptability was measured with these two items: *Worried about what others might think* and *Worried about privacy and confidentiality*. The Likert-type response possibilities ranged from 0 (*Not at all important*) to 4 (*Extremely important*).

The first version of the questionnaire, Mental Health Help-Seeking Questionnaire-I (Appendix E), included six questions and was designed for use with nonclinical samples. The first three questions inquired about recent or current use of mental health services (Yes/No: “I am currently receiving mental health services or have received mental health services in the past 12 months from a professional [e.g. a psychologist, a counselor, a social worker, a psychiatrist, or a physician]”), current or recent experiences with distress (Yes/No: “I am currently experiencing emotional or mental health concerns or have experienced such concerns in the past 12 months”), and perceived need for help (Yes/No: “I currently think or have thought in the past 12 months that I need professional help with emotional or mental health concerns”). The fourth question included the eight items for measuring the treatment-related barriers of affordability, availability, accessibility, and acceptability (as outlined previously). The last two questions inquired further about issues of affordability with Likert-type items pertaining to current and past financial stress, as well as items pertaining to how a respondent prioritizes spending decisions in relation to entertainment, travel, dental care, mental health care, school books/supplies, and clothes.

The second version of the questionnaire, Mental Health Help-Seeking Questionnaire-II (Appendix F), included three questions and was designed for use with clinical samples. Because a clinical sample is already comprised of help-seekers, this version did not include the first three questions from Mental Health Help-Seeking Questionnaire-I (for nonclinical samples) pertaining to recent or current use of mental health services, recent or current experiences with distress, or perceived need for help. However, it did contain the last three questions from Mental Health Help-Seeking Questionnaire-I pertaining to the treatment-related barriers of affordability,

availability, accessibility, and acceptability, as well as those pertaining to financial stress and spending priorities.

*Counseling Center Assessment for Psychological Symptoms-62* (CCAPS-62; CCMH, 2010; CSCMH, 2009a). The CCAPS-62 is a recently updated version of the CCAPS-70 (Soet & Sevig, 2006a, 2006b), a psychometric instrument developed at the University of Michigan's Counseling and Psychological Services (CAPS) starting in 2000 to objectively measure specific facets of mental health in college student populations (CSCMH, 2009a). Support for the structure, reliability, and validity of the original 70-item instrument was previously demonstrated through a two-phase, multiyear study of college student mental health. Phase I consisted of two studies ( $n = 2,155$  and  $n = 218$ , respectively) involving college students seeking or receiving clinical services at CAPS and a third study ( $n = 939$ ) involving a nonclinical, random sample of the general student body at the University of Michigan (Soet & Sevig, n.d.-a, 2006a, 2006b). Phase II consisted of a second nonclinical study ( $n = 2,358$ ) conducted 2 years later with another random student sample from the same campus (Soet & Sevig, n.d.-b).

Item selection and factor structure for the CCAPS-70 were determined over a four-phase process of data analysis. The first phase involved establishment of the criteria for determining inclusion of a factor, resulting in a nine-subscale model, including the following: Depression, Eating Issues, Substance Use, General Anxiety, Hostility, Social Role Anxiety, Family-of-Origin Issues, Academic Stress, and Spirituality. The second phase involved item analysis for decreasing overlap and reducing the total number of items, while increasing clinical utility of the subscales; results revealed a factor loading of .32 for each item on the criterion with an item-total correlation of .3 or above. The third phase involved a confirmatory factor analysis conducted on the data set established in the previous two phases; results revealed a chi-square ( $\chi^2$ ) of

14930.918,  $p < .001$ , a root mean square error of approximation (RMSEA) of .053, a PCLOSE-value  $< .001$ , and a comparative fit index (CFI) of .829. The fourth phase involved an examination of the standardized regression weights for each item, leading to the elimination of two items with weights less than .50. This phase also involved an analysis of the correlations among the nine subscales, revealing low to moderate correlations with significant ( $p < .05$ ) coefficients ranging from .067 to .584 (Soet & Sevig, 2006a).

Reliability of the original nine subscales was examined using Cronbach's alpha for each subscale, as well as for three categories of identity groups: race/ethnicity, gender, and international student status. Reliability coefficients ranging from .80 to .93 were demonstrated for the nine subscales across the total sample. By identity grouping, coefficients were found to be satisfactory for all groups ( $r > .75$ ); for coefficients less than .80 (found among the identity groups for the academic subscale), the item-total correlations were shown to be at least moderately strong, suggesting reliability for each identity group (Soet & Sevig, 2006a, 2006b). Data comparisons across study phases revealed percentage consistencies from Phase I to Phase II pertaining to reports of current distress and coping (Soet & Sevig, n.d.-b).

Validity studies for the original nine subscales occurred in three phases. In the first phase, the nine subscale scores were compared with scores from a diagnostic index created by the Counseling and Psychological Services psychiatric staff based on the nine areas of distress measured by the CCAPS-70. This analysis demonstrated convergent validity for four of the subscales: Academic Stress, Eating Issues, General Anxiety, and Depression. However, no associations were found for Hostility, Substance Use, Family-of-Origin Issues, and Spirituality. Low correlations between less-related subscales and index scores gave evidence of discriminant validity (Soet & Sevig, 2006a). In the second phase, significant correlations were demonstrated

between counseling center clients' self-reported goals for therapy and corresponding subscale scores in the areas of anxiety, depression, academics, eating concerns, and substance use. In the third phase, comparisons of subscale scores between clinical and nonclinical samples revealed the ability of the CCAPS-70 to distinguish between individuals currently receiving mental health services and those not currently in treatment (Soet & Sevig, 2006a, 2006b). Finally, a comparison of CCAPS data to national data from the 2004 National College Health Assessment (ACHA-NCHA; ACHA, 2004) revealed similarities in percentages of students reporting diagnoses of depression, anxiety, eating disorders, and substance use (Soet & Sevig, n.d.-a, 2006b).

Upon being donated to the Center for the Study of Collegiate Mental Health at Penn State University in 2006 (now the Center for Collegiate Mental Health [CCMH] since October 2010), the CCAPS-70 was used to collect data for a large pilot study involving 66 participating college and university counseling centers during fall 2008 (CSCMH, 2009b). Institutional characteristics among the 66 participating centers accounted for less than 5.3% of the variance across the original nine subscales of the CCAPS-70 and were, therefore, not considered to impede the reliability and generalizability of the data and study conclusions (CSCMH, 2009b). As well, the pilot study offered opportunity for reanalysis of the factor structure leading to the elimination of weak or unstable items and ultimately resulting in a 62-item instrument with eight subscales demonstrating internal consistencies ranging between .82 and .92 (CSCMH, 2009a). The eight subscales include Depression, Generalized Anxiety, Social Anxiety, Academic Distress, Eating Concerns, Family Distress, Hostility, and Substance Use. Each of the 62 items is scored on a 5-point scale from 0 (*Not at all like me*) to 4 (*Extremely like me*). Examples of a question from each of the eight subscales include the following: (a) Depression—I have

thoughts of ending my life; (b) Generalized Anxiety—I have spells of terror and panic; (c) Social Anxiety—I am concerned that other people do not like me; (d) Academic Distress—I am unable to keep up with my schoolwork; (e) Eating Concerns—I feel out of control when I eat; (f) Family Distress—I wish my family got along better; (g) Hostility—I am afraid I may lose control and act violently; and (h) Substance Use—When I drink alcohol I can't remember what happened (CCMH, 2010).

The strength of the CCAPS-62 lies in its comparison of an individual's subscale scores to those of a large normative sample derived from a diverse college student population. The latest normative sample from the 2009 pilot study included 19,247 college students from 52 of the participating counseling centers. Ages in the sample ranged from 18 to 63 years, with a mean age of 22.6 years. As well, the sample consisted of 64.2% females and 35.4% males; 72.6% White/Caucasian, 7.0% Black/African American, 6.0% Asian/Asian American, 4.9% Hispanic/Latino/a, 3.1% Multiracial, 0.5% Native American, and 0.3% Native Hawaiian/Pacific Islander; 18.1% first-year students, 19.7% sophomores, 22.1% juniors, 22.8% seniors, and 14.9% graduate-level students (CCMH, 2010; CSCMH, 2009a).

Scoring of the CCAPS-62 provides a percentile score for each of the eight subscales based on subscale scores from the 2009 clinical normative sample. Higher scores reflect greater levels of distress. Whereas normalized scores (*t* scores) were initially used in the first years of development of the CCAPS-62, data from the 2009 pilot study allowed for interpretation of each of the eight subscales in comparison to a referent population for each subscale; therefore, subscale scores (percentiles) are currently designed to be interpreted separately because not all of the CCAPS subscales are normally distributed (CCMH, 2010; CSCMH, 2009a). Histograms of each subscale distribution are provided in Appendix G. The distribution mean scores from the

2009 normative data for each of the eight subscales are as follows: Depression ( $M = 1.57$ ,  $SD = 0.93$ ); Generalized Anxiety ( $M = 1.56$ ,  $SD = 0.91$ ); Social Anxiety ( $M = 1.79$ ,  $SD = 0.93$ ); Academic Distress ( $M = 1.87$ ,  $SD = 1.03$ ); Eating Concerns ( $M = 0.99$ ,  $SD = 0.89$ ); Family Distress ( $M = 1.22$ ,  $SD = 0.94$ ); Hostility ( $M = 1.01$ ,  $SD = 0.86$ ); and Substance Use ( $M = 0.73$ ,  $SD = 0.85$ ; CCMH, 2010).

Concurrent validity of the CCAPS-62 was tested in the fall of 2009 using a nonclinical sample of 500 students from a single university campus. The CCAPS-62 was administered along with eight established referent measures selected a priori to represent each of the CCAPS subscales (CCMH, 2010; Locke et al., 2011; McAleavey, Locke, Hayes, & Castonguay, 2010). Correlations were as follows: Depression was paired with the Beck Depression Inventory (.721); Generalized Anxiety with the Beck Anxiety Inventory (.643); Social Anxiety with the Social Phobia Diagnostic Questionnaire (.733); Academic Distress with the Academic Adjustment subscale of the Student Adaptation to College Questionnaire (-.680); Eating Concerns with the Eating Attitudes Test 26 (.648); Family Distress with the Self-report Family Inventory (.648); Hostility with the Trait Anger Scale of the State-Trait Anger Expression Inventory II (.566); and Substance Use with the Alcohol Use Disorders Identification Test (.811; CCMH, 2010; Locke et al., 2011; McAleavey et al., 2010). Post-hoc tests were conducted to test the significance of differences between preselected correlations (CCMH, 2010; McAleavey et al., 2010). Results indicated that all subscales, except Hostility, had statistically higher correlations with their hypothesized referent measure than the next highest correlation. Hostility correlated highly with the Trait Anger Scale, as well as with the Beck Depression Inventory; however, both of these correlations were significantly higher than the next highest measure (CCMH, 2010; McAleavey et al., 2010). Moreover, the subscales did not correlate highly with the Marlow-Crowne Social

Desirability scale, indicating that although social desirability may influence responses on the CCAPS-62, this effect is not dominant (CCMH, 2010; McAleavey et al., 2010).

Test-retest reliability of the CCAPS-62 was examined in the spring of 2010 using data from a nonclinical sample of undergraduates from a single campus. Standard test-retest coefficients were calculated over both 1-week ( $n = 175$ ) and 2-week intervals ( $n = 52$ ). Overall, the coefficients were substantially high, ranging from .831 to .913 (for the eight subscale scores) for the 1-week condition and ranging from .759 to .914 for the 2-week condition (CCMH, 2010; Locke et al., 2011).

Because the CCAPS-62 is designed to assess psychological symptoms in all college students, analyses have also included an examination of its cultural validity. Initial analyses have indicated that internal consistency reliability across gender, ethnicity, and international student status is quite similar across all eight subscales. In particular, results have shown these coefficient ranges: Depression (coefficients ranging from .91 to .92 across the demographic categories); Generalized Anxiety (.83 to .85); Social Anxiety (.80 to .85); Academic Distress (.81 to .83); Eating Concerns (.86 to .90); Family Distress (.78 to .83); Hostility (.85 to .88); and Substance Use (.82 to .85; CCMH, 2010; Locke et al., 2011).

*Attitudes Toward Seeking Professional Psychological Help Scale–Short Form* (ATSPPHS-SF; Fischer & Farina, 1995). The ATSPPHS-SF (Appendix H) is the most widely used contemporary assessment of mental health treatment attitudes (Elhai, Schweinle, & Anderson, 2008) and is a shortened version (10 items) of the original 29-item scale developed by Fischer and Turner in 1970 for measuring attitudes toward seeking professional help for psychological problems. The original measure was “standardized primarily on samples of college students and was shown to possess good psychometric properties” (Fischer & Farina,

1995, p. 368). In particular, internal consistency for the original instrument was shown to be .83 and .86 (Cronbach's alpha) across two nonclinical student samples, while test-retest reliability was demonstrated at intervals of five days ( $r = .86$ ), two weeks ( $r = .89$ ), four weeks ( $r = .82$ ), six weeks ( $r = .73$ ), and two months ( $r = .84$ ) using five different groups of students administered the scale twice. Fischer and Turner (1970), along with subsequent researchers, demonstrated that the original scale could consistently discriminate between college students who have sought psychological services and those who have not (Cash, Kehr, & Salzbach, 1978; Cepeda-Benito & Short, 1998; Hamid, Simmonds, & Bowles, 2009; Hatchett, 2006; Joyce et al., 2009; Masuda, Suzumura, Beauchamp, Howells, & Clay, 2005; Vogel & Wester, 2003). Moreover, the original scale repeatedly demonstrated positive correlations with measures of intentions to seek counseling among college students, while also consistently demonstrating no significant association with measures of emotional and mental distress (Cepeda-Benito & Short, 1998; Deane & Todd, 1996; Kelly & Achter, 1995; Vogel & Wester, 2003). Among demographic variables, the original measure demonstrated a strong gender difference across student groups, consistently yielding more favorable attitudes toward seeking help among females than males (Fischer & Turner, 1970; see also Deane & Todd, 1996; Hamid et al., 2009; Joyce et al., 2009; Kelly & Achter, 1995; Masuda et al., 2005; Vogel & Wester, 2003).

Although the original measure had a four-factor structure, Fischer and Turner (1970) recommended interpretation using only the overall scale score, citing modest internal reliability coefficients for the subscales (Factor I: Recognition of personal need for professional psychological help; Factor II: Tolerance of the stigma associated with psychiatric help; Factor III: Interpersonal openness regarding one's problems; and Factor IV: Confidence in the mental health professional). Moreover, they noted that Factor IV correlated fairly high with Factor I

( $r = .58$ ) and observed that “the combination of these two factors reflects the essence of the attitude toward seeking professional help, and would be most directly related to actual help seeking” (Fischer & Turner, 1970, p. 88). Twenty-five years later in 1995, Fischer teamed with another colleague (Fischer & Farina, 1995) to develop a shortened scale retaining 10 items from the original, reflecting constructs of Factor I and Factor IV. Accordingly, Fischer and Farina (1995) observed that the “attitude-belief construct” of the shortened measure defines a “willingness to seek help from mental health professionals when one’s personal-emotional state warrants it” (p. 371). In support of the new measure, their investigations demonstrated an internal consistency of .84 (Cronbach’s alpha), a 1-month interval, test-retest correlation of .80, and a correlation of .87 between scores of the new and old versions of the measure (Fischer & Farina, 1995) in samples of college students.

Since its introduction, the shortened measure has been widely used and has consistently demonstrated similar findings as the original. Specifically, the short form continues to distinguish between mental health service users and nonusers (Fischer & Farina, 1995; see also Elhai et al., 2008; Vogel, Wade, Wester, Larson, & Hackler, 2007). While continuing to demonstrate no significant correlation with measures of mental and emotional distress (Elhai et al., 2008; Vogel et al., 2005), it has retained a strong association with measures of intention to seek mental health services (Elhai et al., 2008; Vogel, Wade, & Hackler, 2007; Vogel et al., 2005; Vogel, Wade, Wester, et al., 2007). Among demographic variables, it continues to demonstrate significance with gender differences in attitudes (Fischer & Farina, 1995; see also Elhai et al., 2008; Komiya et al., 2000; Vogel, Wade, Wester, et al., 2007). The short form consists of 10 statements rated from 0 (*Disagree*) to 3 (*Agree*) with five of the items reverse scored; it yields an overall score ranging from 0 to 30, with higher scores indicating positive

help-seeking attitudes (Fischer & Farina, 1995). Data using this instrument were collected from both the clinical and nonclinical samples.

### **Research Design**

The investigation was a correlational study with a one-time survey approach for collecting data. Survey data for the clinical sample were collected at the University of Alabama Counseling Center in an ongoing manner during the first and second summer academic terms and the fall academic semester of 2011. As students scheduled and attended first appointments, they were invited to participate in the study. A sample size of at least 100 respondents was targeted for the clinical sample.

Data collection for the nonclinical sample occurred across the same time period as that of the clinical sample; however Web-based study surveys were made available online to randomly selected students through three block emailings of survey invitations corresponding to each of the three academic periods. To avoid duplication, randomly selected students with last names beginning with the letters A, C, F, J, R, and Y were sent email invitations in the first summer term ( $n = 1,866$ ); students with last names beginning with the letters E, G, H, L, O, and U were sent email invitations in the second summer term ( $n = 1,617$ ); and students with last names beginning with the letters B, D, I, K, M, N, P, Q, S, T, V, W, X, and Z were sent email invitations in the fall semester ( $n = 11,448$ ). A sample size of at least 100 respondents was targeted for the nonclinical sample.

### **Procedure**

For the clinical sample, potential student participants were invited to participate after completing electronic intake instruments for an initial appointment at the University of Alabama Counseling Center. After completing the intake instruments, students were supplied with a

packet of study instruments by the reception staff ( $n = 140$ , total number of survey packets distributed), including a letter inviting voluntary participation in the study (Appendix I) and an informed consent document (Appendix J). Those students who volunteered to participate in the study ( $n = 137$ ) were asked to complete three anonymous, paper-and-pencil survey instruments included in the packet and return them to a receptionist when finished. The paper-and-pencil surveys were stapled together in this order: the Demographic Questionnaire; the Attitude Toward Seeking Professional Psychological Help–Short Form (ATSPPH-SF); and the Mental Health Help-Seeking Questionnaire-II. In addition to the anonymous data collected from the paper-and-pencil questionnaires, study data for the clinical sample also included de-identified data from the Counseling Center Assessment for Psychological Symptoms-62 (CCAPS-62), one of the initial intake instruments completed electronically. Data collection with this sample commenced with the first summer term of 2011 and concluded during the fall 2011 semester.

Potential participants for the random sample were recruited via email invitation. A sample of random email addresses of currently enrolled students over the age of 18 was obtained from the University of Alabama registrar's office (total of  $n = 14,931$ , across three academic terms). An initial letter inviting students to participate in the study was sent by email (Appendix K). Students who chose to participate ( $n = 1,238$ ) accessed a Web-based survey site through a link provided in the invitation. The Web-based survey was administered anonymously through Qualtrics Research Suite software (Copyright by Qualtrics, Inc.) and included an electronic informed consent (Appendix L) along with the four study instruments, presented in this order: the Demographic Questionnaire; the Attitude Toward Seeking Professional Psychological Help – Short Form (ATSPPH-SF); the Mental Health Help-Seeking Questionnaire-I; and the Counseling Center Assessment for Psychological Symptoms-62 (CCAPS-62). Web-based data collection

ran concurrently with data collection for the clinical sample during the summer and fall terms of 2011.

Data collection contingencies yielded two final comparison groups. The final clinical sample ( $n = 105$ ) included de-identified Counseling Center student-clients, 19 years or older, who attended an initial screening appointment; completed the electronic CCAPS-62 as part of routine intake procedure; scored above the distribution mean scores for the normative data on any of the eight subscales of the CCAPS-62; consented to participate in the study; and volunteered to fully complete paper-and-pencil versions of the Demographic Questionnaire, the Mental Health Help-Seeking Questionnaire-II, and the ATSPPHS-SF. The final nonclinical sample ( $n = 295$ ) included anonymous student-participants in the Web-based survey who consented to participate in the study, volunteered to fully complete all study instruments electronically, had scores that fell above the distribution mean scores for the normative data reported for the CCAPS-62 subscales, and indicated on the Mental Health Help-Seeking Questionnaire-I that they had not sought mental health services in the prior 12 months.

In support of a Web-based approach, recent studies have indicated that Web surveys offer a viable mode of data collection among college students (Eisenberg, Gollust, et al., 2007; Soet & Sevig, 2006b). For example, Carini and his colleagues (Carini, Hayek, Kuh, Kennedy, & Ouimet, 2003) examined the responses of 58,288 college students across 276 four-year college and university campuses using a 53-item, 8-scale instrument designed to assess the nature of the college experience, to determine whether students would respond differently to a Web-based versus a paper-based version of the survey. After controlling for student and institutional characteristics, they found only small effect sizes between students' responses to Web versus paper administrations, noting consistency with other post-secondary studies (Carini et al., 2003;

see also McCabe, 2004; Sax, Gilmartin, Lee, & Hagedorn, 2008). More recently, Sax and her colleagues (Sax et al., 2008) demonstrated similar findings in a survey study of over 2,000 community college students. In addition, they found a higher response rate for Web-based survey respondents when compared to paper-based respondents (32.1% versus 15.2%) and also found similarities in non-response predictors between the two groups (Sax et al., 2008). In another study, McCabe (2004) compared a Web-based versus a paper-based administration of a survey assessing student life behaviors, including alcohol and drug use, among 3,606 students on a single campus. Consistent with Carini et al. and Sax et al., he found no significant mode effects between the two administrations on 16 distinct measures, except on a measure of lifetime use of cocaine for which higher lifetime prevalence rates were reported on the Web-based survey. Likewise, his study demonstrated a higher response rate to the Web-based versus paper-based administration (63% versus 40%) and, for both response samples, revealed findings closely resembling national survey data (McCabe, 2004).

### **Trial Administration**

A trial administration of the online survey suite was conducted by the study's investigator on the same university campus during the spring 2011 semester. The purpose of the trial was to verify that the electronic versions of the informed consent and the four study instruments (survey suite) were fully accessible and operational for data collection with the nonclinical sample. As well, the trial administration provided information as to approximate time needed for completing the electronic survey suite. Undergraduate students from a 300-level counselor education class were recruited for the trial. They were informed about the purpose of their participation and that data from their surveys would not be included in the actual study. They were further informed that the investigator would be the only person with online access to their completed surveys and

that their survey responses would be permanently deleted after the trial administration. Nineteen student volunteers provided the investigator with their current email addresses and were subsequently emailed a research invitation. They were allowed approximately a 3-week period where the survey suite could be accessed through a link in the invitation. Of the 19 students, 7 indicated willingness to participate through electronic completion of the informed consent, which then allowed access to the four study instruments. In addition to the emailed research invitation, the investigator sent a separate email that allowed participants to respond and make the investigator aware of any problems with either accessing or completing the survey suite. The investigator received no indication of any problems with administration of the online survey suite. As well, there was no problem for the investigator in accessing student responses and data through the password protected Qualtrics account. As designed and assured through the informed consent, participant data was completely anonymous (i.e., no email addresses were linked with completed surveys). Results of the trial indicated an approximate average completion time of 10 to 15 minutes for the informed consent and all four study instruments.

### **Research Questions**

The following research questions were tested in the study:

Research Question 1: Does service affordability contribute to the prediction of help-seeking behavior more significantly than barriers of availability, accessibility, and acceptability?

Research Question 2: Does help-seeking attitude predict help-seeking behavior more significantly than treatment barriers of affordability, availability, accessibility, and acceptability?

Research Question 3: Does type of distress predict help-seeking behavior more significantly than treatment barriers of affordability, availability, accessibility, and acceptability?

Research Question 4: Does severity of distress predict help-seeking behavior more significantly than treatment barriers of affordability, availability, accessibility, and acceptability?

### **Null Hypotheses**

The following null hypotheses were tested in the study:

H<sub>01</sub>: Service affordability will not contribute to the prediction of help-seeking behavior more significantly than barriers of availability, accessibility, and acceptability.

H<sub>02</sub>: Help-seeking attitude will not predict help-seeking behavior more significantly than treatment barriers of affordability, availability, accessibility, and acceptability.

H<sub>03</sub>: Type of distress will not predict help-seeking behavior more significantly than treatment barriers of affordability, availability, accessibility, and acceptability.

H<sub>04</sub>: Severity of distress will not predict help-seeking behavior more significantly than treatment barriers of affordability, availability, accessibility, and acceptability.

### **Data Analysis**

Regression analysis was used to analyze the study data. In its simplest form, regression analysis is utilized to explain or predict variability in a dependent variable through the effect(s) of an independent variable or variables (Pedhazur, 1997). In the present study, the potential variability of the dependent variable was dichotomous (categorical)—help-seeker versus non-help-seeker—and the data analysis was therefore conducted using a binary, logistic regression model. Whereas classical regression models of simple linear regression (one independent variable) or multiple linear regression (two or more independent variables) are bound by assumptions of linearity, homoscedasticity, and distribution normality, these assumptions are generally assumed to be violated in cases of categorical dependent variables and, particularly, in the case of a dichotomous dependent variable (Menard, 2002; Pedhazur, 1997). However,

logistic regression provides an approach to data analysis whereby the prediction of a dichotomous dependent variable is expressed in terms of *odds* or the likelihood of a case falling into one of the outcome categories relative to the likelihood of falling into the other category in response to unit changes in the dependent variable(s) (Pampel, 2000). Moreover, the model accommodates investigations where the independent variables are continuous, categorical, or both.

A common concern related to the use of multivariate methods of data analysis is the production of problematic results when too few outcome events are available relative to the number of independent variables analyzed in the statistical model (Peduzzi, Concato, Kemper, Holford, & Feinstein, 1996). Whereas computation of sample size to achieve a desired level of statistical power has been essentially codified for comparative studies, no similar standard of procedure has been developed for determining desired sample sizes in multivariate and correlational studies (Hsieh, Bloch, & Larsen, 1998; Courvoisier, Combescure, Agoritsas, Gayet-Ageron, & Perneger, 2011). However, through the use of Monte Carlo and simulation studies, general guidelines have been suggested. In one Monte Carlo study conducted with data from 673 subjects, Peduzzi and his colleagues (1996) utilized a logistic regression model for predicting a dichotomous outcome based on seven predictor variables. They reported that for EPV (events per variable) values of 10 or greater, no significant problems occurred with the predictive ability of the model. However, when EPV values were less than 10, the regression coefficients were biased, the sample variance estimates were distorted, and the validity of the logistic model was compromised. In a similar study utilizing logistic regression, Courvoisier and associates (2011) used a simulation studies design to derive 500 replications or random samples. For EPV values greater than or equal to 10, they found that less than 5% of the simulations did

not converge for a univariate analysis. For a large multivariate analysis (including 25 predictors), they found that for an odds ratio of 2, confidence interval coverage was acceptable for EPV values equal to 10; whereas even 7 EPV yielded correct coverage for odds ratios between 1 and 1.5. Although their findings were similar to those of Peduzzi et al., they cautioned about failing to consider other elements that can have an impact on statistical power in conjunction with sample size and EPVs; in particular, they suggested that the size of the regression coefficients based on previous literature, as well as correlations among the predictor variables, should also be taken into account. In an earlier simulation study, Freedman and Pee (1989) also noted the importance of watching for random correlations between independent variables. Using a simulation of 500 repetitions with a multiple linear regression model, they found that Type I error was inflated when the ratio of the number of independent variables to the number of observations was greater than 0.25. In a recently published guide for application with IBM SPSS Statistics analysis, Leech, Barrett, and Morgan (2011) suggested that a minimum of 20 cases per predictor and a minimum of 60 total cases are requirements that must be met before utilizing the SPSS software for logistic regression analysis.

### **Pending Chapters**

In the remaining chapters, Chapter 4 features a description of the results of the data analysis in response to the research questions. Chapter 5 presents a summary of the study, discussion and synthesis of the findings, and recommendations for practice and subsequent research.

## CHAPTER 4

### RESULTS

This study explored barriers to seeking mental health services among a population of students at one university campus. In particular, the purpose of this study was to examine why, among college students experiencing similar levels of mental and emotional distress, some students seek help for their distress, whereas others do not. A quantitative approach was utilized to investigate how person-related factors and treatment-related factors impact help-seeking decisions.

This chapter features a description of the results of the data analysis. The first section provides a description of the study's sample of participants. The second section reviews the research questions and hypotheses that guided the investigation. The final section of the chapter addresses the hypothesis testing for each of the research questions.

#### **Participants**

Participants for the study were recruited from the campus of a large research university and included both undergraduate and graduate students enrolled for part-time and full-time study. Two samples were developed through recruitment at the university's Counseling Center and through random recruitment by campus email. The clinical sample from the Counseling Center consisted of students who scheduled and attended a first appointment and volunteered to complete an informed consent and the four study instruments. This sample originally consisted of 137 respondents; however, the data from 32 respondents were eliminated from the original recruitment number based on three reasons: (a) missing data; (b) the student indicated that he or

she was mandated to counseling; (c) the student erroneously volunteered to participate, but was not of majority age; or (d) the student did not have scores on any of the eight subscales of the CCAPS-62 (Depression, General Anxiety, Social Anxiety, Academic Distress, Eating Concerns, Family Distress, Hostility, and Substance Use) that were greater than the distribution means from the normative data for the subscales (CCMH, 2010). The resulting final clinical sample consisted of 105 volunteers representing 69 females (66%) and 36 males (34%) with a mean age of 21.25 years ( $M = 21.25$ , range 19-28 years). Eighty-three percent ( $n = 87$ ) of respondents identified their race/ethnicity as Caucasian/White; 11% ( $n = 11$ ) identified as African American/Black; 3% ( $n = 3$ ) identified as Hispanic/Latino/a; 1% ( $n = 1$ ) identified as Asian American/Asian; and 2% identified as Multiracial (Asian/White,  $n = 1$ ; American Indian/White,  $n = 1$ ) or Other ( $n = 1$ ). One percent ( $n = 1$ ) identified their current academic status as Freshman/First-year; 23% ( $n = 24$ ) identified as Sophomore; 37% ( $n = 39$ ) identified as Junior; 21% ( $n = 22$ ) identified as Senior; and 18% ( $n = 19$ ) identified as Graduate/Professional degree student. Three percent ( $n = 3$ ) of the sample indicated that they were international students.

The nonclinical sample consisted of students who volunteered to participate after receiving an emailed invitation linked to an anonymous electronic informed consent, as well as electronic versions of the four study instruments. After approval from the university's Institutional Review Board, three random samples of student email addresses, corresponding with each of three academic terms, were requested from the registrar's office for students 19 years of age and older. A total of 14,931 research invitations were emailed to students' campus email boxes; 1,866 were sent during the first summer 2011 term, 1,617 were sent during the second summer 2011 term, and 11,448 were sent during the fall 2011 term. Of the emails sent, a total of 1,238 ( $n = 318$  for the summer terms;  $n = 920$  for the fall term) students linked to the

electronic informed consent for an initial overall response rate of 8.3%. Cases were eliminated from the initial pool of respondents for the following reasons: (a) the student indicated on the electronic informed consent that he or she did not wish to participate in the study; (b) the student did not complete all survey instruments; (c) the student's surveys had missing data; (d) the student indicated that he or she was currently receiving mental health services or had received such services in the previous 12 months; or (e) the student did not score above the distribution mean for the normative data on any of the eight subscales of the CCAPS-62 (CCMH, 2010). A final nonclinical sample of 295 respondents resulted and included 215 females (73%) and 80 males (27%) with a mean age of 26.09 years ( $M = 26.09$ , range 19-62 years). Eighty-three percent ( $n = 246$ ) of respondents identified their race/ethnicity as Caucasian/White; 6% ( $n = 19$ ) identified as African American/Black; 2% ( $n = 5$ ) identified as Hispanic/Latino/a; 2% ( $n = 5$ ) identified as Asian American/Asian; 1% ( $n = 4$ ) identified as American Indian or Alaskan Native; 4% ( $n = 12$ ) identified as Multiracial; and 1% ( $n = 3$ ) identified as Other. Three percent ( $n = 9$ ) identified their current academic status as Freshman/First-year; 14% ( $n = 41$ ) identified as Sophomore; 20% ( $n = 60$ ) identified as Junior; 26% ( $n = 77$ ) identified as Senior; and 37% ( $n = 108$ ) identified as Graduate/Professional degree student. Two percent ( $n = 7$ ) of the sample indicated they were international students.

The combination of these two samples produced a final study sample size of 400 ( $N = 400$ ), respondents whose scores on any of the eight subscales of the CCAPS-62 (Depression, Generalized Anxiety, Social Anxiety, Academic Distress, Eating Concerns, Family Distress, Hostility, and Substance Use) were above the distribution means of the normative sample. Of these 400 participants, 105 were help-seekers (clinical sample), whereas 295 were non-help-seekers (nonclinical sample).

## **Research Questions**

The following research questions were tested in the study:

Research Question 1: Does service affordability contribute to the prediction of help-seeking behavior more significantly than barriers of availability, accessibility, and acceptability?

Research Question 2: Does help-seeking attitude predict help-seeking behavior more significantly than treatment barriers of affordability, availability, accessibility, and acceptability?

Research Question 3: Does type of distress predict help-seeking behavior more significantly than treatment barriers of affordability, availability, accessibility, and acceptability?

Research Question 4: Does severity of distress predict help-seeking behavior more significantly than treatment barriers of affordability, availability, accessibility, and acceptability?

## **Null Hypotheses**

The following null hypotheses were tested in the study:

H<sub>01</sub>: Service affordability will not contribute to the prediction of help-seeking behavior more significantly than barriers of availability, accessibility, and acceptability.

H<sub>02</sub>: Help-seeking attitude will not predict help-seeking behavior more significantly than treatment barriers of affordability, availability, accessibility, and acceptability.

H<sub>03</sub>: Type of distress will not predict help-seeking behavior more significantly than treatment barriers of affordability, availability, accessibility, and acceptability.

H<sub>04</sub>: Severity of distress will not predict help-seeking behavior more significantly than treatment barriers of affordability, availability, accessibility, and acceptability.

## **Analysis of the Data**

Data collection and analysis for the clinical sample were facilitated by the Counseling Center's Titanium software (Copyright 2002, 2011, by Titanium Software, Inc.) designed to

electronically administer and score the CCAPS-62. Data from the paper-and-pencil administrations of the Demographic Questionnaire, Mental Health Help-Seeking Questionnaire–II, and the ATSPPHS-SF for the clinical sample were manually entered into an IBM SPSS Statistics, Version 19 (Copyright 1989, 2010 by SPSS, Inc.), spreadsheet. SPSS syntax for scoring the ATSPPHS-SF was written and applied to that instrument’s data.

Data collection for the nonclinical sample was facilitated by university-based Qualtrics Research Suite software support for Web-based research. All study instruments were administered to the nonclinical sample using this software. Upon completion of data collection for the nonclinical sample, the Qualtrics software provided a downloadable file of the nonclinical study data in IBM SPSS Statistics format. Scores on the CCAPS-62 (hereafter referred to as the CCAPS for the remainder of the chapter) and ATSPPHS-SF for the nonclinical sample were subsequently tabulated using scoring syntax in the SPSS program.

These data collection and scoring procedures produced two SPSS files, one with data from the clinical sample and one with data from the nonclinical sample. Each of these files was filtered for cases missing critical study data or cases not meeting study criteria for subscale scores on the CCAPS (scores greater than the normative distribution means for any of the eight subscales: Depression, Generalized Anxiety, Social Anxiety, Academic Distress, Eating Concerns, Family Distress, Hostility, and Substance Use). These adjustments produced a final clinical sample consisting of 105 participants who completed the Demographic Questionnaire, the ATSPPHS-SF, the Mental Health Help-Seeking Questionnaire–II, and the CCAPS, and whose scores on any of the eight subscales of the CCAPS were above the distribution mean scores as reported from the national normative data (CCMH, 2010; CSCMH, 2009a). Likewise, a final nonclinical sample was produced consisting of 295 participants who completed the

Demographic Questionnaire, the ATSPPHS-SF, the Mental Health Help-Seeking Questionnaire–I, and the CCAPS, and whose scores on any of the eight subscales of the CCAPS were above the distribution mean scores as reported from the national normative data.

After combining data from the final clinical and nonclinical samples, a resulting sample of 400 cases ( $N = 400$ ) was used for correlational analysis of the study data. In particular, a logistic regression model was utilized to explore the ability of treatment-related and person-related variables (independent variables) to predict the help-seeking behavior of college students (dependent variable) who are in mental or emotional distress. The treatment-related variables (treatment barriers) included mental health service affordability (concerns about cost of services and health insurance coverage), availability (knowing what services are available and where they are located), accessibility (having transportation and time to get to services), and acceptability (degree of worry about stigma or privacy/confidentiality), as measured by related questions on the Mental-Health Help-Seeking Questionnaires administered to both the clinical and nonclinical samples. The person-related variables included demographic factors, mental health help-seeking attitudes, as well as types and levels of distress, as measured respectively by the Demographic Questionnaire, the ATSPPHS-SF, the Mental-Health Help-Seeking Questionnaire (I and II), and the CCAPS subscales (Depression, Generalized Anxiety, Social Anxiety, Academic Distress, Eating Concerns, Family Distress, Hostility, and Substance Use). The dependent variable of help-seeking behavior included two categories: help-seeking (getting mental health services) or non-help-seeking (not getting mental health services). IBM SPSS Statistics software was used for all analyses.

Prior to analysis of the research questions, Pearson correlations were computed for the dependent variable (help-seeking behavior) and the five demographic variables (gender, age,

race/ethnicity, academic level, and international student status). Of the five demographic variables, age and academic level showed significant correlation with each other,  $r(398) = .43$ ,  $p = .000$ , and with the dependent variable, help-seeking behavior:  $r(398) = .26$ ,  $p = .000$ , for age; and  $r(398) = .18$ ,  $p = .000$ , for academic level. In subsequent hypothesis testing, the age variable was controlled for by using a hierarchical logistic regression model.

### **Research Question 1**

To address Research Question 1, a preliminary analysis using Pearson correlations was conducted to check for multicollinearity among the eight measures for the treatment barriers (affordability, availability, accessibility, and acceptability) from the Mental Health Help-Seeking Questionnaires (I and II; Appendices E and F): (a) affordability—cost of services [cost] and lack of health insurance coverage [no insurance]; (b) availability—not knowing what services are available [resources unknown] and not knowing where services are located [location unknown]; (c) accessibility—lack of transportation [no transportation] and not enough time in my schedule [no time]; and (d) acceptability—worried about what others might think [stigma] and worried about privacy and confidentiality [privacy concerns]. Results of this analysis indicated that three pairs of the eight measures were highly correlated ( $r > .50$ ). The strongest correlation was between resources unknown and location unknown,  $r(398) = .76$ ,  $p = .000$ ; followed by cost and no insurance,  $r(398) = .57$ ,  $p = .000$ ; and stigma and privacy concerns,  $r(398) = .53$ ,  $p = .000$ . Before proceeding with further analysis, these outcomes were addressed by eliminating the following three measures: location unknown, no insurance, and privacy concerns. The remaining measures were utilized in measuring the treatment barriers in this way: affordability was measured by a cost item; availability was measured by a resources unknown item; accessibility was measured by a no transportation item and a no time item; and acceptability was

measured by a stigma item. Each of these items was measured (rated) as to its importance in influencing a participant's decision about seeking help by utilization of a Likert-type scale ranging from 0 (*not at all important*) to 4 (*extremely important*) on the Mental Health Help-Seeking Questionnaire–I (administered to the nonclinical sample) and the Mental Health Help-Seeking Questionnaire–II (administered to the clinical sample) .

Investigation of Research Question 1 continued by conducting a hierarchical, binary logistic regression analysis to assess whether the remaining treatment barriers (resources unknown, no transportation, cost, stigma, and no time) could significantly predict the participants' help-seeking behavior when controlling for age. Age was controlled for by introducing it into the regression model in the first step of analysis and introducing the treatment barriers in the second step. Findings from this analysis indicate that when all five of the treatment barriers were considered together (barriers model), they significantly predicted whether or not students sought help for their distress.

Table 1 presents the odds ratios, which indicate that cost ( $p = .000$ ) and resources unknown ( $p = .017$ ) have statistical significance in predicting help-seeking behavior. In this regression model, these findings suggest that the odds of *not getting help*<sup>1</sup> increase as concerns about cost increase; in contrast, the odds of *not getting help* increase as concerns about the

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<sup>1</sup> When analyzing data using SPSS, the odds are for the outcome that is coded as “1”; in the present study, “1” represents distressed students who are not help-seekers, or students in the nonclinical sample.

Table 1

*Regression of Help-Seeking Behavior on Treatment Barriers*

Treatment Barrier	$\beta$	<i>SE</i>	<i>OR</i>	<i>p</i>
Age (control)	.19	.04	1.20	.000
Resources unknown	-.24	.10	0.79	.017
No transportation	-.20	.13	0.82	.128
Cost	.51	.10	1.66	.000
Stigma	-.19	.10	0.83	.053
No time	-.03	.10	0.98	.804
Constant	-3.31	.95	0.04	.000

*Note.* *OR* = odds ratio; *Constant* represents the Y-intercept.

availability of resources (resources unknown) decrease. In particular, the odds of a distressed student not seeking help increased by 1.66 (95% CI = 1.37-2.02) for each unit increase (odds ratio greater than 1 or positive  $\beta$  coefficient) in concerns about cost of services; however, the odds of a distressed student not seeking help increased by 0.79 (95% CI = 0.65-0.96) for each unit decrease (odds ratio less than 1 or negative  $\beta$  coefficient) in concerns about what services were available (resources unknown).

Other statistics produced by the analysis confirmed the utility of this model for the research question being investigated. An omnibus test of model coefficients indicated that when all five predictors were considered together, the regression model was significant,  $\chi^2 = 81.80$ ,  $df = 6$ ,  $N = 400$ ,  $p = .000$ . Moreover, the findings indicate that the model was able to correctly

predict 95% of the non-help-seekers and had an overall prediction rate (help-seekers and non-help-seekers) of 79%. Taking into consideration the significance of the regression model, as well as the finding that of the two significant predictors, cost demonstrated a stronger per unit effect on help-seeking behavior than resources unknown, the null hypothesis for Research Question 1 was rejected.

## **Research Question 2**

To address Research Question 2, a hierarchical, binary logistic regression model was utilized to examine if the person-related variable of help-seeking attitude, as measured by the ATSPPHS-SF, could predict help-seeking behavior more significantly than the five treatment barriers (resources unknown, no transportation, cost, stigma, no time). An initial examination was made of the ability of help-seeking attitude scores from the ATSPPHS-SF to predict help-seeking behavior as a sole predictor by applying it to the hierarchical logistic regression model while controlling for Age. Consistent with other testing, age was introduced in the first step of the analysis, and ATSPPHS-SF scores were introduced in the second step. Results of this analysis indicate that ATSPPHS-SF scores (help-seeking attitude) were a significant predictor of help-seeking behavior. As demonstrated in Table 2, the odds of a distressed student *not seeking help* increased by 0.81 (95% CI = 0.76-0.85) for each unit decrease in his or her ATSPPHS-SF score (lower scores on the ATSPPHS-SF imply more negative attitudes toward help-seeking, whereas higher scores reflect more positive attitudes). Although statistics from the omnibus test of model coefficients indicated that this regression model (for help-seeking attitude) was significant,  $\chi^2 = 120.80$ ,  $df = 2$ ,  $N = 400$ ,  $p = .000$ , the model's ability to correctly predict non-help-seekers (89% accuracy) was lower than that of the treatment barriers model (95% accuracy) used to analyze Research Question 1; moreover, the help-seeking attitude model's overall ability

to predict help-seeking behavior (78% accuracy) was slightly lower than that of the treatment barriers model (79% accuracy).

Introduction of the ATSPPH-SF variable (help-seeking attitude) into the Research Question 1 regression model as a covariate with the five treatment barriers (resources unknown, no transportation, cost, stigma, and no time) produced further observations. Whereas its introduction slightly lowered the ability of the treatment barriers model to accurately predict non-help-seekers (from 95% down to 92% accuracy), it did increase the overall ability of the model to predict help-seeking behavior (from 79% to 83% accuracy). As well, the impact on the odds ratios of the treatment barriers of introducing help-seeking attitude into the treatment barriers model is shown in Table 2. Among the covariates, two barriers were found to be significant as predictors: Cost maintained predictive influence on help-seeking behavior with an odds ratio of 1.56 ( $OR = 1.56, p = .000$ ), whereas stigma was found to have a significant odds ratio of 0.74 ( $OR = 0.74, p = .007$ ). As a covariate with the help-seeking barriers, help-seeking attitude maintained an odds ratio very similar to its odds ratio as a single predictor ( $OR = 0.80, p = .000$ ). As a single predictor, help-seeking attitude showed a slightly lower ability than the treatment barriers model for overall prediction of help-seeking behavior (78% versus 79% accuracy). Among the three significant covariates' odds ratios, the barrier of cost demonstrated the strongest per unit impact on help-seeking behavior. Based on these findings, the null hypothesis for Research Question 2 was not rejected.

Table 2

*Regression of Help-Seeking Behavior on Treatment Barriers and Help-Seeking Attitude as Covariates*

Predictor	$\beta$	<i>SE</i>	<i>OR</i>	<i>p</i>
Age (control)	.26	.05	1.30	.000
Help-seeking attitude (as single predictor)	-.22	.03	0.81	.000
Help-seeking attitude (as covariate)	-.22	.03	0.80	.000
Resources unknown	-.10	.11	0.90	.343
No transportation	-.25	.15	0.78	.096
Cost	.45	.11	1.56	.000
Stigma	-.30	.11	0.74	.007
No time	-.06	.11	0.95	.621
Constant	-.65	1.13	0.52	.568

*Note.* *OR* = odds ratio; *Constant* represents the Y-intercept.

### Research Question 3

To address Research Question 3, a hierarchical, binary logistic regression model was used to examine if types of distress (person-related variables), as measured by the eight subscales of the CCAPS (Depression, General Anxiety, Social Anxiety, Academic Distress, Eating Concerns, Family Distress, Hostility, Substance Use) could predict help-seeking behavior more significantly than the five treatment barriers (resources unknown, no transportation, cost, stigma, and no time). Prior to conducting the regression analysis, the CCAPS subscale scores

were categorized as either falling above the distribution mean for the normative CCAPS data for each of the eight subscales or as falling below the distribution mean (see Appendix H; CCMH, 2010); scores equal to the distribution mean were categorized with those below the distribution mean. Accordingly, each subscale was transformed into a dichotomous variable (severe and not severe; to stay consistent with power requirements for events per category), whereby scores in the higher category (above the distribution mean) indicated more severe cases of distress for the given CCAPS subscale, and scores in the lower category (equal to and below the mean) indicated less severe cases (see Table 3).

An investigation was made of the ability of each of the CCAPS subscales (type of distress) to predict help-seeking behavior as single predictors by applying the categorized scores of each subscale to the hierarchical logistic regression model while controlling for age. Age was introduced in the first step of the analysis, and the CCAPS subscale under investigation was introduced in the second step. Whereas the regression models for Depression, General Anxiety, Academic Distress, Eating Concerns, and Substance Use all showed significance at the  $p < .01$  level, the overall ability of each of these models to individually predict help-seeking behavior (75%, 74%, 73%, 74%, and 74% accuracy, respectively) was lower than that for the treatment barriers model (unknown resources, no transportation, cost, stigma, and no time; 79% accuracy) in Research Question 1. Likewise, the regression model for Social Anxiety showed significance at the  $p < .05$  level, but the overall ability of the model to predict help-seeking behavior (74% accuracy) was lower than the 79% prediction accuracy of the treatment barriers model. The individual regression models for the remaining two subscales, Family Distress and Hostility, were not significant ( $p = .372$  and  $p = .075$ , respectively). Because none of the types of distress

Table 3

*Normative Means and Standard Deviations (SD) for the CCAPS-62 Subscale Scores*

Subscales	<i>M</i>	<i>SD</i>
Depression	1.57	0.93
Generalized Anxiety	1.56	0.91
Social Anxiety	1.79	0.93
Academic Distress	1.87	1.03
Eating Concerns	0.99	0.89
Family Distress	1.22	0.94
Hostility	1.01	0.86
Substance Use	0.73	0.85

*Note.* Minimum score = 0, maximum score = 4. From *CCAPS 2010 User Manual* (pp. 28-29), by Center for Collegiate Mental Health, 2010, University Park, PA. Copyright © 2010 by The Pennsylvania State University. Reprinted with permission.

were able to independently predict help-seeking behavior at a higher rate of accuracy than that of the treatment barriers model, the null hypothesis for Research Question 3 was not rejected.

#### **Research Question 4**

To address Research Question 4, a hierarchical, binary logistic regression model was utilized to examine if severity of distress (person-related variables), as measured by the eight subscales of the CCAPS (Depression, General Anxiety, Social Anxiety, Academic Distress, Eating Concerns, Family Distress, Hostility, and Substance Use) could predict help-seeking behavior more significantly than the five treatment barriers (resources unknown, no transportation, cost, stigma, and no time). As previously discussed in addressing Research

Question 3, the scores for the eight CCAPS subscales were dichotomized whereby scores equal to or below the normative distribution mean for each of the subscales were assigned a value of “1” and were considered to be in a less severe range, and subscale scores greater than each of the normative distribution means were assigned a value of “2” and were considered to be in a more severe range (see Table 3 and Appendix H).

The regression analysis was conducted by entering age (control variable) in the first step of the analysis, entering the CCAPS subscales into the analysis at the second step, and entering the treatment barriers at the third step, such that the final model contained all five of the treatment barriers (resources unknown, no transportation, cost, stigma, and no time), as well as all eight of the CCAPS subscales (Depression, General Anxiety, Social Anxiety, Academic Distress, Eating Concerns, Family Distress, Hostility, and Substance Use) as covariates. Findings from the regression of help-seeking behavior on the CCAPS subscales indicated that the CCAPS subscales, as covariates, were significant in predicting help-seeking behavior,  $\chi^2 = 117.18$ ,  $df = 9$ ,  $N = 400$ ,  $p = .000$ . Although the CCAPS subscales were shown to accurately predict 93% of non-help-seekers (compared to 95% for the treatment barriers), they demonstrated a slightly higher ability overall to predict help-seeking behavior (80% accuracy) than that of the treatment barriers (79% accuracy).

Introduction of the treatment barriers into the regression produced a model that continued to demonstrate predictive significance,  $\chi^2 = 152.36$ ,  $df = 14$ ,  $N = 400$ ,  $p = .000$ . This model (including all five treatment barriers, all eight CCAPS subscales, and controlling for age) showed the ability to predict non-help-seekers with 91% accuracy, with an overall prediction rate of 81% accuracy. The odds ratios and other findings from this model are displayed in Table 4.

Examination of the findings in Table 4 reveals several outcomes important to the testing of Research Question 4. In particular, several of the CCAPS scales have nonsignificant odds ratios—Social Anxiety ( $p = .861$ ), Academic Distress ( $p = .120$ ), Family Distress ( $p = .723$ ), and Hostility ( $p = .617$ ). Significant odds ratios are displayed by the remaining CCAPS subscales—Depression, General Anxiety, Eating Concerns, and Substance Use. Eating Concerns and Substance Use show an inverse relationship (have negative  $\beta$  coefficients) with help-seeking behavior. In particular, the odds of *not getting help* increase as the severity of Eating Concerns decreases ( $OR = 0.33, p = .000$ ); likewise, the odds of *not getting help* increase as the severity of Substance Use decreases ( $OR = 0.30, p = .000$ ). In contrast, Depression and General Anxiety demonstrate a direct positive relationship (have positive  $\beta$  coefficients) with help-seeking behavior. In particular, the odds of *not getting help* increase as the severity of Depression increases ( $OR = 3.36, p = .002$ ), and similarly, the odds of *not getting help* increase as the severity of General Anxiety increases ( $OR = 2.74, p = .005$ ).

The lower half of Table 4 displays the five treatment-related barriers as covariates of the eight CCAPS subscales. Whereas resources unknown and cost demonstrated significant odds ratios in the original treatment barriers model of Research Question 1, the model of Research Question 4 showed cost and stigma to be the only significant odds ratios for the treatment barriers when considered as covariates with the CCAPS subscales. In particular, cost continued to demonstrate a direct positive relationship with help-seeking behavior whereby the odds of a distressed student *not getting help* increased as concerns about cost increased ( $OR = 1.79, p = .000$ ). In contrast, stigma showed an inverse relationship with help-seeking behavior whereby the odds of a distressed student *not getting help* increased as concerns about stigma decreased ( $OR = 0.80, p = .041$ ). As well, the odds ratio of cost increased from 1.66 ( $p = .000$ )

Table 4

*Regression of Help-Seeking Behavior on the Subscales of the CCAPS-62 and Treatment Barriers as Covariates*

Predictor	$\beta$	<i>SE</i>	<i>OR</i>	<i>p</i>
Age (control)	0.20	.05	1.22	.000
Depression	1.21	.38	3.36	.002
General Anxiety	1.01	.36	2.74	.005
Social Anxiety	0.06	.31	1.06	.861
Academic Distress	0.50	.32	1.65	.120
Eating Concerns	-1.10	.31	0.33	.000
Family Distress	0.11	.31	1.12	.723
Hostility	-0.16	.33	0.85	.617
Substance Use	-1.20	.32	0.30	.000
Resources unknown	-0.12	.12	0.89	.320
No transportation	-0.26	.15	0.77	.079
Cost	0.58	.11	1.79	.000
Stigma	-0.23	.11	0.80	.041
No time	0.05	.12	1.05	.675
Constant	-4.32	1.09	0.13	.000

*Note.* *OR* = odds ratio. *Constant* represents the Y-intercept.

in the original treatment barriers model (from Research Question 1) to 1.79 ( $p = .000$ ) when introduced as a covariate with the CCAPS subscales in the Research Question 4 model. Despite

this increase in the impact on help-seeking behavior, as well as a continued demonstration of significance in both models, the odds ratio of cost in the present model (for Research Question 4) had a lower impact on help-seeking behavior than the odds ratios of Depression and General Anxiety. Moreover, severity of distress (as measured by the CCAPS subscales) showed an overall ability of predicting help-seeking behavior at an 80% rate of accuracy compared to that of 79% with the treatment barriers model; therefore, the null hypothesis for Research Question 4 was rejected.

### **Summary**

The null hypothesis for Research Question 1 stated that mental health service affordability would not contribute to the prediction of help-seeking behavior more significantly than the other treatment barriers of availability, accessibility, and acceptability (as measured by resources unknown, no transportation, cost, stigma, and no time). A hierarchical, binary logistic regression model produced results suggesting that as concerns about the cost of services increased, the odds of *not getting help* increased as well. Moreover, the odds ratio for cost was larger than the odds ratio for resources unknown, the only other significant treatment barrier measure. As a result of these observations, the null hypothesis for Research Question 1 was rejected.

The null hypothesis for Research Question 2 stated that help-seeking attitude would not predict help-seeking behavior more significantly than the treatment barriers. A hierarchical, binary logistic regression model showed significance in the ability of the treatment barriers to predict help-seeking behavior at a higher level of accuracy than help-seeking attitude. Moreover, cost remained the treatment barrier measure with the greatest per unit impact on help-seeking

behavior. In view of these results, the null hypothesis for Research Question 2 failed to be rejected.

The null hypothesis for Research Question 3 stated that the type of distress (as measured by the CCAPS subscales) experienced by a student would not predict help-seeking behavior more significantly than the treatment barriers. A hierarchical, binary regression model showed that the significant odds ratios of the treatment barriers (cost and resources unknown) had higher per unit impacts on help-seeking behavior than any of the significant odds ratios of type of distress (Depression, General Anxiety, Social Anxiety, Academic Distress, Eating Concerns, and Substance Use). As well, the treatment barriers model showed a higher overall predictive ability than any of the distress types. Therefore, the null hypothesis for Research Question 3 failed to be rejected.

The null hypothesis for Research Question 4 stated that the severity of distress (as measured by the CCAPS subscale scores) experienced by a student would not predict help-seeking behavior more significantly than the treatment barriers. A hierarchical, binary logistic regression model suggested that severity of distress predicted help-seeking behavior at a higher level of accuracy than the treatment barriers model. Moreover, the odds ratios of Depression and General Anxiety, two of the significant severity of distress measures, showed a higher per unit impact on help-seeking behavior than cost, the highest significant odds ratio among the treatment barrier measures. As a result of these findings, the null hypothesis for Research Question 4 was rejected.

The saliency of treatment-related and person-related barriers in influencing the help-seeking decisions of college students was explored using a statistical model for prediction. Results of the study suggest that treatment-related factors associated with affordability (cost),

availability (resources unknown), and acceptability (stigma) may have significance in influencing the help-seeking decisions of distressed college students. As well, results of the study suggested that person-related factors associated with the severity of Depression, General Anxiety, Social Anxiety, Academic Distress, Eating Concerns, and Substance Use may also be significant in influencing help-seeking decisions about mental health services among college students. A summary of the study and its outcomes are discussed in Chapter 5, along with recommendations for further inquiry.

## CHAPTER 5

### SUMMARY, DISCUSSION, AND RECOMMENDATIONS

This chapter presents a summary and discussion of the current study. It features a review pertaining to study participants, data collection methods, and results of the data analysis. The chapter concludes with a general discussion of the study findings and recommendations for further research direction.

#### **Summary**

Recent statistics indicate that anywhere from 30% to 45% of students on college and university campuses report some form of mental health problem in the prior 12 months. Despite evidence suggesting that counseling and mental health services improve the well-being of distressed students and enhance academic performance, as well as degree completion rates, only about 10% of college student populations seek help for mental health concerns (ACHA, 2008a, 2010; Harrar et al., 2010). The present study, therefore, was aimed at adding to the growing interest in understanding college student mental health issues.

Participants in the study were from a large, southeastern university campus and were recruited both from a campus clinical setting, as well as from the general student population. The purpose was to recruit a sample of students experiencing similar levels of emotional or mental distress for which some were help-seekers and other were non-help-seekers. This aggregate sample was investigated to determine if certain independent variables have predictive capacity for distinguishing between students in distress who seek help and those who do not seek help. Students were invited to participate in the study either through random receipt of an

emailed research invitation or through direct recruitment upon attending a first screening appointment at the university's Counseling Center. Only enrolled undergraduate and graduate students were recruited.

Students who volunteered to participate completed an informed consent and four study instruments. The instruments elicited demographic information, as well as information pertaining to a student's current distress levels, attitudes toward seeking help for distress, barriers to seeking help, and the student's help-seeking choices. Data collection spanned two consecutive summer academic terms and the subsequent fall academic term.

Analysis of the data led to four central findings in relation to the testing of the four study hypotheses. First, findings from the study suggested that concerns about the cost of mental health services (affordability) are more predictive of help-seeking behavior than concerns related to service availability (knowing what and where services are available), accessibility (having transportation and time to attend services), and acceptability (freedom from concerns about stigma). Second, the study results suggested that the treatment barriers of affordability, availability, accessibility, and acceptability are more predictive of help-seeking behavior than attitudes toward seeking professional help for mental health concerns. Third, study results suggest that the four treatment barriers are more predictive of help-seeking behavior than types of mental and emotional distress (depression, generalized anxiety, social anxiety, academic distress, eating concerns, family distress, hostility, and substance use). Finally, findings from the study suggest that, in general, the level of distress severity is more predictive of help-seeking behavior than the four treatment barriers of affordability, availability, accessibility, and acceptability. Although the severity levels of depression and general anxiety, in particular, appeared to have a stronger impact on help-seeking behavior than concerns about the

affordability of services, the results of the study suggest that cost of services became more significant as a predictor of help-seeking when included as a covariate of the distress variables. Likewise, stigma emerged as a significant predictor when included as a covariate with the distress variables.

### **Discussion and Implications**

The purpose of the study was to explore why, among college students experiencing similar levels of mental and emotional distress, some students seek professional help for their distress, whereas others do not. To date, studies aimed at exploring this phenomenon among students on college campuses have predominantly focused on person-related factors associated with types and levels of distress, fears about receiving treatment, and attitudes about getting help for psychological problems (Komiya et al., 2000; Vogel & Wester, 2003). Although findings from these studies have often been mixed and contradictory, the most consistent finding has been that help-seeking attitude is the strongest predictor of help-seeking intentions among college students (Deane & Todd, 1996; Vogel & Wester, 2003; Vogel et al., 2005). This finding, however, has fallen short in explaining the persistent underutilization of mental health services by distressed students on college campuses, especially when recent literature suggests that a high percentage of college students place a high value on psychological health and services (Bishop, 2006; Joyce et al., 2009).

In contrast to college campus studies, general population studies have predominantly focused on treatment-related barriers in addressing similar issues of service underutilization. In particular, barriers associated with service affordability, availability, accessibility, and acceptability were brought to the forefront of interest in 1985 by the work of Stefl and Proserpi (1985) in a community mental health setting. Subsequent to their study, other investigators in

general population studies started focusing on the role of treatment barriers in influencing whether or not individuals in mental or emotional distress sought help. One consistent finding throughout many of these studies was that cost of mental health services appeared to be a predominant barrier to obtaining professional help (Kessler et al., 2001; Ojeda & Bergstresser, 2008; Sturm & Sherbourne, 2001).

Despite the nature of findings from general population studies, investigative attention on college campuses has primarily remained on person-related barriers to obtaining mental health services, and only sparse attention has been given to the potential impact of affordability or other treatment-related barriers on help-seeking behavior. A prominent reason put forward in the literature for not examining these factors in college student populations has often been characterized in terms of students having access to free or subsidized mental health services on their campuses and, therefore, not being concerned with the ability to pay for services (Eisenberg, Gollust, et al., 2007; Furr et al., 2001). Therefore, assumptions about the relationship between free and subsidized mental health services and help-seeking practices among college students have generally remained untested.

### **Implications Related to Service Cost and Affordability**

Findings from the present study have relevant implications when considered in the context of the preceding discussion. First, consistent with general population studies, the results of this study suggest that concerns with service affordability may be a hindrance among college students to seeking services for mental health issues. Recent literature related to campus studies has focused on the primacy of help-seeking attitudes as a predictor of help-seeking decisions (Deane & Todd, 1996; Kelly & Achter, 1995; Vogel, Wade, & Hackler, 2007; Vogel & Wester, 2003; Vogel et al., 2005). A consistent response to this observation has been the encouragement

from investigators for college campus stakeholders to increase outreach efforts toward changing attitudes through campaigns of education aimed at addressing negative attitudes toward mental health services and normalizing the symptoms of mental and emotional distress (Cramer, 1999; Vogel, Wade, & Hackler, 2007). However, the results of the current study suggest that concerns with cost of mental health services may be a stronger predictor of help-seeking behavior than attitudes toward getting help. Accordingly, living at a time when funding and budget cuts in higher education systems are becoming prevalent, being able to direct outreach funding toward the most salient factors in help-seeking decisions becomes a more critical consideration (Kitzrow, 2003; Waehler et al., 1994).

A second closely related implication of this study is associated with assumptions expressed in recent literature in reference to college campuses where counseling services are offered to enrolled students free of charge or at a reduced fee. In looking for explanations for underutilization of mental health services, some investigators have assumed that service cost is not a relevant factor because counseling and psychological services on their campuses are offered at no charge (Eisenberg, Gollust, et al., 2007; Furr et al., 2001). However, this assumption has remained untested. In the present study, the investigation took place at a large university campus where counseling services are offered at a campus-based counseling center at a reduced-fee charge of \$15 per counseling session, compared to a range of approximately \$80 to \$120 per session in the private sector of the surrounding community. Nonetheless, in the results of the present study, concerns related to the cost of mental health services consistently emerged as a statistically significant barrier to help-seeking behavior. Possibly educative campus outreach efforts, in general, need to include clear communication about the availability of counseling services and at what applicable fees. In a study where college student participants

were asked to predict the actions of a distressed student, Waehler et al. (1994) found that when participants were told that the fee for a counseling session would be \$70 (classified as a high fee in their study) as compared to a no-fee condition, the student participants predicted that the distressed student would be less likely to go for counseling, more likely to attend fewer sessions, and less likely to receive effective help. Such results generate speculation about the potential role of *perception* of cost as related to help-seeking behavior. Other experiences in U.S. society related to the costs encountered in the medical care system may create carry-over attributions among college students for the costs they anticipate in receiving campus counseling services. If such perceptions are the case, then educating student populations about what services are available on their campuses and at what fee structures may produce improvements in mental health care utilization by distressed students.

A third implication of this study is connected with a growing inability of some campus counseling centers to maintain free and reduced-rate services. As college enrollments have increased over the past decade, campus counseling centers have struggled to keep up with overall increases in the demand for services, especially as funding cuts in higher education have become more prevalent (Much & Swanson, 2010; Snyder & Dillow, 2010). More counseling centers have been responding to these circumstances either by reducing the supply of services they offer or by initiating or increasing remuneration through fee for service structures (Mowbray et al., 2006; Much et al., 2010). Either way, the delivery of mental health services to students in need could be jeopardized through too few services or services that students potentially view as unaffordable.

A fourth implication of this study pertains to costs associated with a distressed student *not* getting help. Several studies have brought attention to the positive impact of counseling and

mental health services on a distressed student's academic success, as well as his or her ability to complete an academic degree. Investigators have shown compelling evidence for the role of campus mental health services in supporting academic performance, as well as increasing retention and graduation rates (Choi et al., 2010; Hanson, 2008; Illovsky, 1997; Minami et al., 2009; Nafziger et al., 1999; Osberg, 2004; Turner & Berry, 2000; Wilson et al., 1997). If, as studies have suggested, only 10% to 15% of the 30% to 45% of distressed students on college campuses are receiving intervention (through campus mental health services; ACHA, 2008a, 2010; Harrar et al., 2010), what then are the individual costs associated with lower ability to perform academically and the institutional costs of student attrition? Results of the present study suggest that students may be sensitive to the cost of obtaining mental health services and may be choosing to forego intervention for mental and emotional distress. Therefore, the cost/benefits ratio of increasing fees for service to compensate for tightening fiscal budgets needs to be weighed against that of increasing institutional funding for mental health services in order to maintain adequate service offerings and low- or no-cost services.

Frequency distributions associated with the findings of the present study have produced interesting results with regard to this discussion. In particular, when student participants from the general student population (nonclinical sample; met study criteria for being considered distressed, but were not seeking professional help) were asked about current or recent experiences with mental health concerns, 54% indicated they had experienced such concerns within the past 12 months. When asked about their perceived need for professional mental health services, 62% of these same students indicated that they were currently thinking or had thought within the past 12 months that they needed professional help with emotional or mental health concerns. Among these same students, 53% indicated that cost of services had been a

*very* or *extremely important* service obstacle; 51% indicated that not having enough time in their schedule had been a *very* or *extremely important* service obstacle; 37% indicated that not knowing what services were available had been a *very* or *extremely important* service obstacle; 25% indicated that concerns about what others might think (stigma) had been a *very* or *extremely important* service obstacle; and 6% indicated that lack of transportation had been a *very* or *extremely important* service obstacle.

### **Implications Related to Distress Severity and Other Treatment Barriers**

Turning away from considerations of service cost and affordability, the present study produced other equally notable implications with regard to the impact of distress severity on students' help-seeking behaviors. Whereas study participants' experiences of social anxiety, academic distress, family distress, and hostility were not shown to be statistically significant in influencing behavior toward getting professional help, the other four types of distress (depression, generalized anxiety, eating concerns, and substance use) showed significance in affecting help-seeking behavior. Possibly this is an indication of what type issues students are able to cope with on their own or with the support of family and friends, and what issues are experienced in a more private, overwhelming, or possibly stigmatized way. If this is the case, then these results are informative for how campus counseling centers can effectively direct outreach funding and efforts toward promoting more awareness and discussion of concerns related to these areas of distress. Likewise, an outreach effort devoted to opening up more awareness of these issues could also include information pertaining to what services are available for addressing these issues and how much these services cost.

Whereas results of the study indicate that increased levels of severity related to eating concerns and substance use were associated with increased help-seeking behavior, the results

also indicate that more severe levels of depression and generalized anxiety were actually associated with decreased help-seeking behavior. Perhaps these findings speak to the increase in awareness campaigns on college campuses pertaining to eating disorders, binge drinking, and substance abuse and point to a need for increased campus awareness and education efforts related to depression and anxiety. Moreover, because social withdrawal and isolation are often experienced along with severe depression and anxiety, these manifestations may also be contributing to the inverse relationship between help-seeking and the severity level of these mental health issues. In that case, awareness and education need to extend beyond the sufferer, and should also be geared toward teaching individuals how to recognize these symptoms in others, as well as when and where to help another individual get help. This type of outreach would especially be important among campus personnel working in mentoring and leadership roles in dormitories or housing facilities.

Another notable finding in the study was how concerns related to stigma or *what others might think* emerged as a significant predictor of help-seeking behavior when introduced as a covariate with types and severity of distress, but was not significant as a covariate when regressed only with other treatment barriers. Moreover, like two of its covariates, depression and generalized anxiety, concerns with stigma was shown to be inversely related to help-seeking behavior. One possible implication of this is that the dynamic that drives the isolation and social withdrawal associated with severe depression and anxiety may actually develop out of a sense of stigma and shame, therefore creating reluctance with getting help from family, friends, or a professional provider. If such an observation is true, it again holds important implications for a campus counseling center's outreach efforts, funding resources, and determinations for how to spend outreach dollars where they will have the most impact. Moreover, this observation

reinforces the need for educating peers, family, faculty, and other campus personnel on how to recognize signs of distress and social isolation and how to support a distressed student in getting appropriate intervention.

In summary, prior studies aimed at strengthening an understanding of mental health issues on college campuses, as well as an understanding of help-seeking correlates among college students, have primarily focused on individual traits or person-related barriers to seeking mental health treatment. This study was aimed at examining the saliency of system traits of the treatment service culture or treatment-related barriers as predictors of help-seeking behavior in a college campus culture. Results of the study indicate that both types of barriers must be considered in trying to optimize a treatment and intervention milieu in a campus setting. Whereas findings associated with significant treatment-related barriers need to be elemental in guiding how mental health services are funded and marketed, findings associated with person-related barriers need to guide outreach efforts through an understanding of which types/severity of distress appear to be managed by the student through support from friends and family, which types/severity of distress appear to readily lead to the seeking of professional help, and which types/severity of distress appear to cause the most detriment in a student's functioning without a comparable effort on the part of the student to get help, but actually, to the contrary, to shun help. All of these distinctions can be elemental in deciding how to direct marketing and outreach dollars.

### **Limitations**

Findings of this study should be considered in conjunction with certain limitations. They include, but are not limited to, the following:

1. The total sample ( $N = 400$ ) of the study included 10 freshmen (3% of the sample), and therefore the findings may not be applicable to freshmen students. In the U.S. state where the study took place, the age of majority starts at age 19; therefore, there were no participants younger than the age of 19.

2. Data for the sample were collected over two consecutive summer terms and into the subsequent fall term and did not include any data collection during the spring term. The student population during the summer terms drops to approximately 25% of the regular semester student population and therefore may not be representative of a full campus student population. In the present study, approximately 26% ( $n = 102$ ) of the sample were recruited during the summer terms.

3. Seventy-four percent of the total sample was composed of the nonclinical sample ( $n = 295$ ), and 26% of the sample was composed of the clinical sample ( $n = 105$ ), creating a ratio of approximately 3:1.

4. Data collection at the university's counseling center took place with a captive, in-person audience of students waiting in a comfortable lobby for their first appointment at the counseling center, whereas data collection with the nonclinical, random student sample was by non-face-to-face email contact.

5. Data collection for the study commenced approximately 2 months after a devastating tornado destroyed property (including a predominance of off-campus student housing) and claimed lives (including six university students) in the university community. Levels of distress may have been impacted by this natural disaster. As well, the data collection took place in a depressed economic climate, which appeared to compound recovery circumstances after the devastating storm.

6. Three of the treatment barriers (affordability, availability, and acceptability) as measured with the Mental Health Help-Seeking Questionnaire (I and II) were each measured with only a one-item construct. Accessibility was measured with the same instrument using a two-item construct.

### **Recommendations for Further Study**

The relevance of studying patterns of mental health problems and help-seeking efforts on college campuses has emerged out of the growth in college student populations, tantamount, at some institutions, to the creation of a small community that starts developing the characteristics of a municipality. Along with this growth, trends that have been observed in the general U.S. population have started to become pronounced on university and college campuses, as well. Concerns with mental health issues have been no exception, and because of quick media access to news making events, recent events on college campuses have brought an added interest to the state of mental health on college campuses. Research that is emerging out of this interest has been adding to the promotion of health and well-being among students in college communities. Therefore, additional studies are still needed toward that purpose.

This study sought to add to the literature pertaining to the underutilization of mental health services on college campuses. In particular, a primary focus was on the role of different types of barriers and how they affect the help-seeking efforts, or lack thereof, of distressed college students. However, several of the treatment-related barriers were measured with only one or two item constructs in an instrument developed by this researcher. A further direction for research in this regard, would be to work toward a more well-defined and comprehensive factor structure for measuring these barriers.

The findings in this study could have been enhanced with a larger sample size, both in terms of the size of the clinical sample, as well as the size of the random nonclinical sample. Therefore, another direction for taking research with these same constructs would be on developing larger sample sizes, especially to observe whether or not findings with the sample size in this study still hold with an increase in statistical power. Moreover, this study was conducted at one university campus in the southeastern United States and may not be representative of circumstances at other campuses in other parts of the country. Therefore, replications of this study at other university campuses are needed to start getting a fuller picture of how barriers to seeking help are manifesting in college populations in general.

This study relied on a nonrandom clinical sample drawn from a counseling center setting. Whereas, there were respondents in the general student nonclinical sample who indicated that they were recently or presently engaged in mental health care services, they were not included in the final study samples because of a lack of how to control for certain aspects of the care they were involved with. Another direction, therefore, for research would be to develop ways of controlling for treatment characteristics in a random, clinical sample.

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## APPENDICES

APPENDIX A

INSTITUTIONAL REVIEW BOARD APPLICATION AND APPROVAL

**UNIVERSITY OF ALABAMA  
 INSTITUTIONAL REVIEW BOARD FOR THE PROTECTION OF HUMAN SUBJECTS  
 REQUEST FOR APPROVAL OF RESEARCH INVOLVING HUMAN SUBJECTS**

**I. Identifying information**

	Principal Investigator	Second Investigator	Third Investigator
Names:	Carey N. Marsh, EdS	S. Allen Wilcoxon, EdD	
Department:	Counselor Education	Counselor Education	
College:	College of Education	College of Education	
University:	University of Alabama	University of Alabama	
Address:	Box 870362	Box 870231	
Telephone:	(205) 348-3863 (Work)	(205) 348-7579	
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Title of Research Project: Help-Seeking Decisions Among College Students: The Impact of Mental Health Service Affordability

Date Submitted: 11/12/10  
 Funding Source: self

Type of Proposal	<input checked="" type="checkbox"/> New	<input type="checkbox"/> Revision	<input type="checkbox"/> Renewal Please attach a renewal application	<input type="checkbox"/> Completed	<input type="checkbox"/> Exempt
Please attach a continuing review of studies form					
Please enter the original IRB # at the top of the page					

UA faculty or staff member signature: Signed copy en route

**II. NOTIFICATION OF IRB ACTION** (to be completed by IRB):

Type of Review: \_\_\_\_\_ Full board \_\_\_\_\_ Expedited

**IRB Action:**

\_\_\_ Rejected Date: \_\_\_\_\_  
 \_\_\_ Tabled Pending Revisions Date: \_\_\_\_\_  
 \_\_\_ Approved Pending Revisions Date: \_\_\_\_\_  
 \_\_\_ Approved-this proposal complies with University and federal regulations for the protection of human subjects.  
 Approval is effective until the following date:  
 Items approved: \_\_\_ Research protocol (dated \_\_\_\_\_)  
                   \_\_\_ Informed consent (dated \_\_\_\_\_)  
                   \_\_\_ Recruitment materials (dated \_\_\_\_\_)  
                   \_\_\_ Other (dated \_\_\_\_\_)

Approval signature \_\_\_\_\_ Date \_\_\_\_\_



AAHRPP DOCUMENT # 109  
THE UNIVERSITY OF ALABAMA  
HUMAN RESEARCH PROTECTION PROGRAM

FORM: SIGNATURE ASSURANCE SHEET

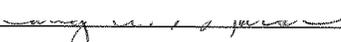
**Directions: The Principal Investigator (PI) and one other person (Dean, Associate Dean, Chair, Supervising Professor, or departmental designee must sign and submit before application can be reviewed by IRB.**

**Principal Investigator's Assurance Statement (Student investigators may sign as PI) :**

I understand the University of Alabama's policies concerning research involving human subjects and I agree:

1. To comply with all IRB policies, decisions, conditions, and requirements;
2. To accept responsibility for the scientific and ethical conduct of this research study;
3. To obtain prior approval from the Institutional Review Board before amending or altering the research protocol or implementing changes in the approved consent/assent form;
4. To report to the IRB in accord with federal, sponsor, university, and IRB policies, any adverse event(s) and/or unanticipated problem(s) involving risks to subjects;
5. To complete continuation, modification, and closure forms on time and to collaborate with IRB monitoring of studies for quality improvement or cause;
6. To notify the Office of Sponsored Programs (OSP) and/or the IRB (when applicable) of the development of any financial interest not already disclosed;
7. To ensure that individuals listed as study personnel have received the mandatory human research protections education;
8. To ensure that individuals listed as study personnel possess the necessary experience for conducting research activities in the role described for this research study.

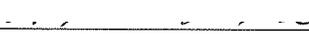
My signature below also means that I have appropriate facilities and resources for conducting the study.

PI SIGNATURE  DATE 11-11-10  
NAME TYPED Carey N. Marsh, Ed. S.

STUDY TITLE Help-seeking Decisions Among College Students: The Impact of Mental Health Service Affordability

**\*\*ALL STUDENT RESEARCH: Supervising Professor's Assurance Statement:**

I certify that I have reviewed this research protocol. I attest to the scientific merit of this study; to the competency of the investigator(s) to conduct the project; that facilities, equipment, and personnel are adequate to conduct the research; that continued guidance will be provided as appropriate, and the study will be closed before student graduation.

SIGNATURE  DATE 11/16/10  
NAME TYPED S. Allen Wilcoxon, III, Ed.D.

**\*Department Chairperson's/Department Designee's Assurance Statement:**

I certify that I have reviewed this research protocol. I attest to the scientific validity and importance of this study; to the competency of the investigator(s) to conduct the project and their time available for the project; that facilities, equipment, and personnel are adequate to conduct the research; and that continued guidance will be provided as appropriate. When the principal investigator assumes a sponsor function, the investigator is knowledgeable of the additional regulatory requirements of the sponsor and can comply with them.

SIGNATURE \_\_\_\_\_ DATE \_\_\_\_\_  
NAME TYPED \_\_\_\_\_ TITLE \_\_\_\_\_

**\*If the PI is also the department chair, dean, associate dean for research, or equivalent, another research-qualified person should sign the Signature Assurance Sheet.**

## RESEARCH DESCRIPTION

### Purpose, Objectives, Design

Recent statistics indicate that approximately 40 percent of students on college and university campuses report experiencing a mental health problem during the previous twelve months. Moreover, mental health problems have been linked to problems with academic performance and educational attainment. Despite the demonstrated benefits of counseling and mental health services, most mentally and emotionally distressed students do not seek professional help – even when counseling services are available on campus or in the surrounding community. Therefore, the purpose of the proposed study is to gain a better understanding of what types of barriers stand in the way of help-seeking among distressed students.

The aim of the study is to compare a clinical sample of students who have sought counseling services for distress with a random sample of students who demonstrate similar levels of distress, but have not sought any mental health services. The objective for the comparison of the two samples is to identify variables or factors that may help distinguish between help-seekers and non-help-seekers. Accordingly, the following research questions will guide this investigation:

1. Do financial barriers contribute to the prediction of help-seeking behaviors more significantly than other barriers?
2. Do attitudes towards help-seeking predict help-seeking behaviors more significantly than other barriers to help?
3. Does severity of distress predict help-seeking behaviors more significantly than other barriers to help?

The investigation will be a correlational study with a one-time survey approach for collecting data. Results of the study are expected to contribute to the understanding of why, among students experiencing similar levels of mental and emotional distress, some students seek help for their distress, while others do not. An understanding of why a majority of students in distress do not seek help can lead to ways of intervening to improve utilization of mental health services. Such an improvement has the potential for enhancing academic functioning, increasing student retention and graduation rates, and promoting a climate of well-being among the student population.

### Study Procedures

Prior to initiation of the proposed study, an informal trial administration of the study instruments will be conducted for the sole purpose of determining length of time for administration. This administration will be conducted with 10-12 willing individuals. Questionnaires used in this trial will be immediately destroyed after completion. [Note: At present, the time estimations shown in the attached Informed Consent documents are based on the principal investigator's completion time for filling out paper-and-pencil versions of all four study instruments. Following the trial administration, the current estimations will be adjusted in the Informed Consents according to any differing results from the trial.]

After electronically completing initial intake instruments at the University Counseling Center, potential student participants, over the age of 18, for the *clinical sample* will be supplied with a packet of study instruments by the reception staff, including a letter inviting voluntary participation in the study and an informed consent document. Those students that volunteer to participate in the study will be asked to complete three paper-and-pencil, anonymous survey instruments included in the packet and return them to a receptionist when finished. Although the principal investigator for this study is on staff as a therapist (Licensed Professional Counselor) at the Counseling Center, she will be blind to which students have chosen to participate. If any participants have questions pertaining to the study instruments they will be directed by the reception staff to the Counseling Center Executive Director, Dr. Lee Keyes, Ph.D., a licensed psychologist who also serves on the principal investigator's dissertation committee and, therefore, has a working knowledge of the study and the study instruments. Since one of the Counseling Center intake instruments initially filled out electronically by participants is also being included as a study instrument in the investigation, upon a participant's return of the study packet to the receptionist, the receptionist will remove all identifying information from a hard copy of the completed electronic instrument and attach it to the paper-and-pencil instruments. As well, the reception staff will remove the number-coded, signed consent form from the original packet and maintain it separately in a locked filing cabinet at the Counseling Center until such time as the data collected from the study instruments is documented in the principal investigator's dissertation and can be subsequently destroyed. The principal investigator will be the recipient of the de-identified data collected from the Counseling Center participants and will not access the filing cabinet used for storage of the informed consents.

Potential participants for the *random sample* will be recruited via email invitation. A sample of random email addresses of currently enrolled students over the age of 18 will be obtained from the University of Alabama registrar's office. An initial letter inviting students to participate in the study will be sent by email. Students who choose to participate will access a Web-based survey site through a link provided in the invitation. The Web-based survey will be administered anonymously through Qualtrics Research Suite software and will include an electronic informed consent along with the study instruments. The principal investigator will be the recipient of the anonymous data collected through the Web survey. Access to the original pool of email addresses will be maintained until data collection is complete and can be documented in the principal investigator's dissertation.

### Study Background

Between 1998 and 2008, the traditional college-age population in the United States rose by 14 percent and approximately 40 percent of 18- to 24-year olds were enrolled at this nation's postsecondary institutions (Snyder & Dillow, 2010). During this same time, "mental, emotional, or psychiatric condition/depression" became the most prevalent category of postsecondary student disability with an unprecedented increase of 42 percent from 2000 to 2008 (U.S. Government Accountability Office [GAO], 2009). Reports in the mental health literature indicate that anywhere from 30 to 45 percent of college students in non-clinical campus samples report some form of mental health problem in the previous twelve months (American College Health Association [ACHA], 2000, 2008). Moreover, studies have clearly linked problems in mental health functioning to problems in academic performance and educational attainment

(Megivern, Pellerito, & Mowbray, 2003). Despite the documented benefits of counseling and mental health services, most mentally and emotionally distressed college students do not utilize mental health counseling services, even when they are available within the campus community (Hunt & Eisenberg, 2010).

Early studies directed towards understanding this phenomenon among college students focused primarily on *approach* tendencies or factors perceived as increasing the likelihood of help-seeking behavior (Kushner & Sher, 1989). In particular, gender and other demographics (Cramer, 1999; Oliver, Reed, Katz, & Haugh, 1999), prior help-seeking (Deane & Todd, 1996), perceived social support (Rickwood & Braithwaite, 1994; Sherbourne, 1988), and level of psychological distress (Deane & Chamberlain, 1994; Hinson & Swanson, 1993) have all been examined as possible antecedents to help-seeking actions. However, results of these various studies have been mixed and, at times, contradictory and have accounted for only weak explanations of help-seeking choices among college students (Vogel & Wester, 2003; Vogel, Wester, Wei, & Boysen, 2005). In light of these observations, more recent efforts have been directed towards an understanding of *avoidance* factors or *barriers* to seeking help.

Treatment fear, fear of self-disclosure, self-concealment, stigma, level of emotional openness, and anticipated risks are among some of the variables that have been shown to reduce the likelihood of help-seeking by college students, especially for mental health services (Sheeran, Aubrey, & Kellett, 2007; Vogel & Wester, 2003; Vogel et al., 2005; Vogel, Wade, & Hackler, 2007). Even though these factors have been shown to be as predictive of help-seeking attitudes as some of the more recognized approach variables, the most consistent finding, among all studies, has been that help-seeking attitudes are the strongest predictor of help-seeking intentions among college students (Deane & Todd, 1996; Vogel & Wester, 2003; Vogel et al., 2005). Unfortunately, this finding fails to explain a persistent underutilization of mental health services by students on college campuses, especially when recent literature suggests that a high percentage of college students place a high value on psychological health and services (Bishop, 2006; Joyce, Ross, Vander Wal, & Austin, 2009).

Access barriers to mental health services have recently started emerging as a possible explanation for underutilization of services; however, these factors have not been regularly explored in previous lines of research with college students. Access barriers of affordability, availability, accessibility, and acceptability were first identified in a study reported by Stefl and Prosperi in 1985. In their community-based study, they found that *affordability* was the dominant barrier to obtaining mental health services, followed by availability, accessibility, and acceptability (stigma), respectively. Other general population studies have demonstrated similar findings with regard to affordability (Sturm & Sherbourne, 2001); however, similar investigations among college students are sparse and have been mainly focused on subsets of students. Recent studies with graduate psychology students (Dearing, Maddux, & Tangney, 2005) and medical students (Givens & Tjia, 2002) have indicated that the cost of mental health services is a significant barrier to seeking or receiving services.

The presently proposed study endeavors to build on these findings among a general population of students. Although previous such studies among general student populations are sparse, recent investigations have indicated that “finances” and “money problems” are frequently

cited among college students as significant sources of stress (ACHA, 2008; Furr, Westefeld, McConnell, & Jenkins, 2001). Moreover, other studies have shown that students reporting current financial problems, as well as students reporting that they grew up in a poor family, were more likely to screen positive for depression and anxiety disorders, compared with students reporting no past or present financial concerns (Eisenberg, Gollust, Golberstein, & Hefner, 2007). In an attempt to start clarifying the role of perceived affordability or cost of mental health services in help-seeking decisions among college students, this study is being undertaken by the principal investigator as the basis for her dissertation. This is the first study to be conducted by this investigator.

### Subject Population

The proposed study will be carried out through two samples of college students. Both samples will be drawn from the University of Alabama population of enrolled students. The study does not target any vulnerable populations; however, minor students, ages 18 and under, will be excluded from the study since they are unable to give legal consent for research purposes. Current figures indicate that general student enrollment at the University consists of 53% females and 47% males; 82% undergraduates and 17% graduates/ professional; 81% white, 12% Black/African American, 2% Hispanic, 1% Asian, 0.1% Hawaiian/Pacific Islander, and 0.9% American Indian/Alaskan Native; 68% from Alabama; 92% under 25 years of age; and 3% international students (University of Alabama, 2010).

A *clinical sample* will be drawn from the University's Counseling Center. The Counseling Center is located at the east edge of campus adjacent to the University's Law School and offers counseling and psychotherapy services to any enrolled undergraduate or graduate/ professional student. Students typically schedule an initial screening appointment by contacting the Center's main phone number and speaking with one of the Center's two receptionists at which time they are scheduled for a 30-minute screening appointment with either a licensed therapist or a graduate therapist-in-training (under the supervision of a licensed therapist). Upon arrival at the Counseling Center for a screening appointment, a student completes two electronic intake instruments. The first instrument is a demographic and presenting concerns questionnaire and the second instrument is a questionnaire designed to measure specific symptoms being experienced by the student. Participants for the proposed study's clinical sample will be students over 18 years of age that have attended a screening appointment during the Spring 2011 semester, completed the two intake instruments, and agreed to participate in the study.

A *random sample* will be drawn from the general student population at the University of Alabama. Since this sample of students will be contacted only by email, eligibility for recruitment will be based on a student being enrolled as an undergraduate or graduate/professional student, maintaining a Crimson email account, and having access to a computer. Email addresses for an initial recruitment pool of 10,000 students will be requested from the University's registrar's office. Typical response rates for Web-based surveys average out to approximately 20 to 30 percent of initial contacts (Sax, Gilmartin, Lee, Hagedorn, 2008). For the proposed study, data from a subset of the original random sample will be utilized for comparison with the clinical sample. Criteria for this subset will be students that indicate that they have experienced moderate to severe emotional or mental distress in the previous twelve

months, but have not sought any mental health services. Based on statistics previously presented in this paper, approximately 30 to 40 percent of respondents are anticipated to populate the subset of students that are experiencing moderate to severe distress (ACHA, 2000, 2008). Therefore, a conservative approach would anticipate a response rate of 20 percent from the original recruitment pool, or 2,000 students, and a subsequent subset of 30 percent of respondents or 600 students with moderate to severe levels of distress. Since current literature indicates an average help-seeking rate of approximately 15 percent among individuals with significant distress (Hunt & Eisenberg, 2010; Pennsylvania State University, 2007), approximately 85 percent of the 600 students anticipated to have moderate to severe distress, or 500 students, could be projected as an estimation of the number of students that will be included in the final subset of students that are experiencing distress, but are not seeking any mental health services. Based on these projections, an initial recruitment of 10,000 students is hoped to produce a random sample of 400 to 500 participants to be compared with a clinical sample of approximately 400 participants from the Counseling Center.

### Risks

Participation in this study will entail filling out four questionnaires: a brief demographic questionnaire; a short questionnaire for measuring attitudes towards seeking professional psychological help (ATSPPHS-SF); a questionnaire for gathering information about help-seeking status and help-seeking barriers (Mental Health Help-Seeking Questionnaire); and a questionnaire for measuring specific symptoms of psychological distress (CCAPS-62). Participants may be uncomfortable answering some of the questions on these questionnaires. In particular, it is anticipated that the CCAPS-62 may have a more elevated potential for discomfort than the other three questionnaires since it inquires about specific areas of mental and emotional distress, including “thoughts of ending my life” and “thoughts of hurting others.” However, the CCAPS-62 is a validated assessment instrument initially developed at the University of Michigan and normed with 22,000 college students at 66 institutions of higher learning across the United States. The instrument is currently under the ownership of the Center for Collegiate Mental Health (CCMH; previously known as the Center for the Study of Collegiate Mental Health [CSCMH]) at Pennsylvania State University and is used at 152 college counseling centers across North America as a standardized intake instrument. Initial reliability and validation studies for the CCAPS were conducted at the University of Michigan through two study phases, both of which were conducted with the general student population through email surveys. In the first phase, email invitations for participation were sent to 5,000 students and in the second phase 10,000 students were contacted by email (Soet & Sevig, 2006, n.d.). More recently, in the spring of 2010, the CCAPS-62 was administered to a non-clinical sample of approximately 21,000 college students from over 40 postsecondary institutions involved with a National Association of Student Personnel Administrators (NASPA) Research Consortium (B. Locke, Center for Collegiate Mental Health, personal communication, September 9, 2010).

### Evaluation of Level of Risk

The level of risk for this proposed study is projected to be minimal.

### Special Precautions/Safeguards Against Risk

In general, participants will be informed that participation is voluntary and if at any time during their participation they become distressed or uncomfortable they may skip any questions they do not wish to answer or they can choose to simply end their participation. They will be reminded that there are no repercussions for choosing to stop participation, even after they have started. As previously noted, it is anticipated that the CCAPS-62 may have a more elevated potential for discomfort than any of the other three questionnaires. Since participants in the clinical sample for the proposed study will be completing the study instruments (including the CCAPS-62) immediately prior to meeting with a therapist at the University Counseling Center, any heightened levels of distress can be assessed and addressed at that time. For the non-clinical sample (i.e. participants from the general student body who are completing the study instruments on-line), potential heightened distress or discomfort will be addressed throughout the survey process in two ways. First, the initial informed consent will encourage contact with a campus health care professional (Student Health Center or University Counseling Center) if the participant is experiencing levels of distress that he or she finds difficult to manage. Likewise, contact information for these resources, as well as emergency resources, will be provided. Second, this same encouragement and resource information will be included at the end of each of the survey instruments. This precautionary approach is similar to the one utilized in the Healthy Minds Study, a Web-based study initiated at the University of Michigan in 2005 (Eisenberg et al., 2007).

### Benefits

In the proposed study, there will be no direct benefits to participants at the time of survey administration other than potential feelings of altruism for having contributed to research. However, future benefits may accrue to current participants. In particular, addressing the mental health needs of college students is perhaps one of the greatest challenges facing higher education in the new millennium. Equally as challenging is knowing what services and outreach efforts can maximize the mental and emotional well-being of students. A basic understanding of what stands in the way of distressed students seeking or getting helpful services is at the core of knowing when and where to make changes. Results of this study may lead to direct benefits to college students in the future through improvements in outreach endeavors and mental health service delivery aimed at mitigating the impact of mental and emotional distress on academic and social functioning. Accordingly, the risk/benefit category would best be described as “minimal risk, no benefit to participant.”

### Privacy and Confidentiality

With regard to the clinical sample, the setting for study recruitment will be the University Counseling Center, a setting that by its nature has high levels of privacy ranging from its location to limits on how the building is accessed. All interactions between students and Counseling Center staff are handled professionally and with a high priority placed on respect and privacy for each student engaging in the Center’s services. For this sample, a paper and pencil version will be used for three of the study instruments; however, the waiting area of the Counseling Center, along with how seating is arranged, allows for a student to have privacy in

completing the instruments. As well, students will be advised through the informed consent that participation is voluntary and they essentially are not required to share any private information they do not wish to. Students that do choose to participate will be provided with an envelope for maintaining the privacy of their completed paper-and-pencil instruments when returning them to the reception desk.

For protection of confidentiality with the clinical sample, instructions on the paper-and-pencil study instruments will include a reminder to not write a name or student identification number on any pages of the questionnaires. As well, data from the participants' electronic completion of the CCAPS-62 will be de-identified. No individual responses from any of the study instruments will ever be identified in any report; all data reporting will be in the aggregate. Upon completion of the study instruments, participants' signed informed consents will be separated from their anonymous study questionnaires and stored in separate, locked filing cabinets at the University Counseling Center. After completion and defense of the principal investigator's dissertation, all informed consents and paper-and-pencil questionnaires will be shredded at the Counseling Center.

As pertains to the privacy of students in the general student random sample, recruitment will take place through email invitation to each student's password protected Crimson mail account. The only information required for making contact with the student is his or her email address that will be among a block of 10,000 other email addresses. Email addresses will not be shared with other parties or entities, will not be used for any other purpose than the proposed study, and will be safeguarded within the safety parameters of the Qualtrics Research Suite. Students will be free to open or not open the email, choose if they will link to the Web-based study instruments, and/or choose if they will delete the email. Upon completion of the data collection phase of the study, the email addresses will no longer be needed and will be removed from any further electronic access or applications.

For protection of confidentiality with the general student random sample, data will be collected anonymously and participants will not be able to add their names or student identification numbers to the electronic study instruments. To maximize response rate, follow-up email invitations will be sent, but will be sent to the entire sample to eliminate the need for a unique, identifiable survey link for each individual in the sample. Scoring for the Demographic Questionnaire, Mental Health Help-Seeking Questionnaire, and the ATSPPHS-SF will be completed with the Qualtrics software and will result in aggregate data. However, software for the scoring of the CCAPS-62 is licensed to the Counseling Center through the CCMH at Penn State University and currently is not available for use with Qualtrics. Accordingly, respondents will complete the CCAPS-62 along with the other study instruments at the linked survey website, but the anonymous raw survey data for each CCAPS-62 completed will be provided to the principal investigator for entry into the CCAPS-62 scoring software at the Counseling Center, at which time any hard copies of raw data will be shredded at the Counseling Center. Furthermore, no individual responses will ever be identified in any report; only aggregate data will be reported. After completion and defense of the principal investigator's dissertation, all individual survey responses, either through Qualtrics survey software or CCAPS-62 scoring software will be electronically deleted and only aggregate data will be maintained. At no time in this process will any individual surveys or responses be identifiable.

### Incentives and Compensation

This study will involve no incentives or compensation to participants.

### Costs to Subjects

This study will involve no costs for participants other than the time taken for completing the study instruments.

### Informed Consent Process and Documentation

The informed consent process will include two different consent forms for each study sample. In general, the consent forms will be identical, but certain portions will be different in order to address some differences in procedure between the two samples. These differences include time spent, privacy protection, confidentiality protection, and procedure for addressing any questions or problems.

For the clinical sample, an informed consent document (with a copy for the participant to retain) will be the first document encountered by a participant upon opening an envelope with a study packet consisting of the informed consent and three paper-and-pencil study questionnaires (a letter of invitation to participate in the study will be affixed to the outside of the envelope). Therefore, consent will be requested at the same time completion of the study instruments is being requested. Upon completion of the study packet, the participant will be instructed to return the envelope containing the completed consent and study questionnaires to the receptionist at the Counseling Center. The receptionist will separate the informed consent from the study packet and store in a locked filing cabinet at the Counseling Center. If a participant has any questions pertaining to the informed consent or the study questionnaires, he or she will be directed to Dr. Lee Keyes, Executive Director of the Counseling Center.

For the general student sample, an electronic informed consent will be obtained from each participant prior to being given access to the Web-based study questionnaires (AAHRPP Document #117 attached). Participants will be provided with contact information for the principal investigator and her faculty advisor if they have any questions.

### Consent Forms

The eight elements of informed consent will be incorporated into the actual consent document(s) in this way:

- (1) *A statement that the study involves research* – The first sentence of the Informed Consents includes this statement:

You are being asked to take part in a research study.

- (2) *An explanation of the purpose of the research* – The following explanation is included on the Informed Consents:

Many college students experience emotional or mental distress while they are at college. Some students seek professional counseling help for their distress, while many others never seek help at all. Therefore, this study is aimed at understanding why many college students who are experiencing emotional or mental distress do not seek help. In particular, this researcher is interested in finding out if certain barriers get in the way of seeking help for some students. Some of the barriers include not being able to pay for professional help, not knowing where or how to get help, being worried about what others might think, being worried about privacy, and not believing that a professional can help. In order to better understand how these barriers may affect students in distress, this researcher is studying students who have chosen to get professional help, as well as students who have chosen *not* to get professional help.

- (3) *A description of the procedures to be followed* – The following description is included on the Informed Consents:

If you agree to be in this study, you will complete four questionnaires: 1) Demographic Questionnaire, 2) Mental Health Help-Seeking Questionnaire, 3) Attitudes Toward Seeking Professional Psychological Help Scale-Short Form, and 4) Counseling Center Assessment for Psychological Symptoms-62.

- (4) *The expected duration of the person's participation* – The following information is included on the Informed Consents for the clinical sample and the non-clinical sample, respectively:

It will require approximately 10 to 15 minutes to complete the three questionnaires included with this document.

The four study questionnaires will take approximately 15 to 20 minutes to complete.

- (5) *A statement describing the extent to which confidentiality will be maintained* – The following text is included on the Informed Consents for the clinical sample and the non-clinical sample, respectively:

Each questionnaire has instructions to not write your name or student number on the questionnaire. As well, before data from your CCAPS-62 questionnaire is supplied to the researcher, your name and other identifying information will be removed. The information from the questionnaires will be reported in the researcher's dissertation only as totals from all students' questionnaires. Your individual responses will never be reported. After the researcher completes her dissertation, all consent forms and paper-and-pencil questionnaires will be destroyed.

You will not be asked for your name, student number, or any other information that might identify you. The information gathered from the study questionnaires will be password protected and only the researcher will have the password. Also, the information from the questionnaires will be reported in the researcher's dissertation only as totals from all students' questionnaires. Your individual responses will never be

reported. After the researcher completes her dissertation, all individual responses to the questionnaires will be electronically deleted.

- (6) *A description of benefits to the individual or society that may reasonably be expected* – The following description is included on the Informed Consents:

You will be contributing to research which could result in finding better ways of reaching out to and helping students in distress. There are no other benefits to you for being in this study.

- (7) *A description of any reasonably foreseeable risks or discomforts* – The following description is included on the Informed Consents:

The main risk for you for being in this study is that you will be asked questions about mental and emotional distress. Some of these questions could potentially be uncomfortable. You can control this potential by not being in the study, by not answering any question that makes you feel uncomfortable, or by stopping your participation in the study at any time. There is no penalty or consequence for choosing to stop your participation.

- (8) *A statement that participation is voluntary, refusal involves no penalty or loss of benefits to which the participant may be entitled, and that the participant may discontinue participation at any time without penalty or loss of benefits to which s/he may otherwise be entitled* – The following text is included on the Informed Consents:

Being in this study is totally voluntary – it is your free choice. You may choose not to be in it at all. If you start the study, you can stop at any time. If you stop, the information from any questionnaires you have completed will not be included in the study. Not participating or stopping participation will have no effect on your relationships with the University of Alabama.

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AAHRPP DOCUMENT # 117  
THE UNIVERSITY OF ALABAMA  
HUMAN RESEARCH PROTECTIONS PROGRAM

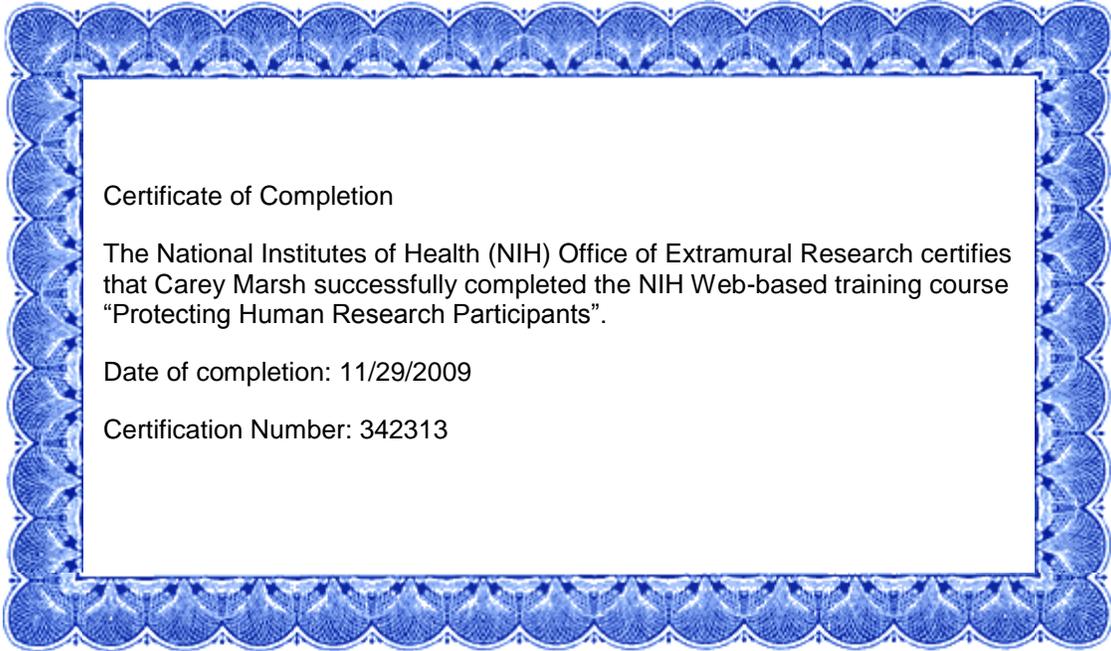
FORM: Request for Waiver of Written Documentation of Informed Consent

*Directions: Address the criteria listed below and attach this form to your application. Also, state in your application that you are requesting a waiver of written documentation of informed consent and describe what you will do to obtain consent in the procedure section of your application. The IRB often requires investigators to provide participants with a written information statement about the research when written documentation is waived; you may wish to include one in your initial application.*  
*NOTE that the UA IRB does not allow passive consent and that waivers may not be granted for FDA-regulated research.*  
*You are welcome to call Research Compliance staff at 205-348-5152 to discuss your need for a waiver in advance of application submission.*

(1) The only record linking the subject and the research would be the consent document and the principal risk would be potential harm resulting from a breach of confidentiality; or

(2) The research presents no more than minimal risk of harm to subjects and involves no procedures for which written consent is normally required outside of the research context.

A waiver of the requirement to obtain signed informed consent is being requested for a portion of this study. In particular, this study involves two samples: a clinical sample (Counseling Center student-clients) and a non-clinical sample (random sample of general student population). The non-clinical sample will be invited by email to participate in the study by connecting to a Web link for completing the study's questionnaires. Although an informed consent will be provided to this sample, participants will signify consent electronically by clicking on an "I Would Like to Participate" option and then subsequently completing the study instruments. No opportunity will be present in this process for actually signing a paper-and-pencil informed consent form. Therefore, a waiver is being requested for this specific population of the study.

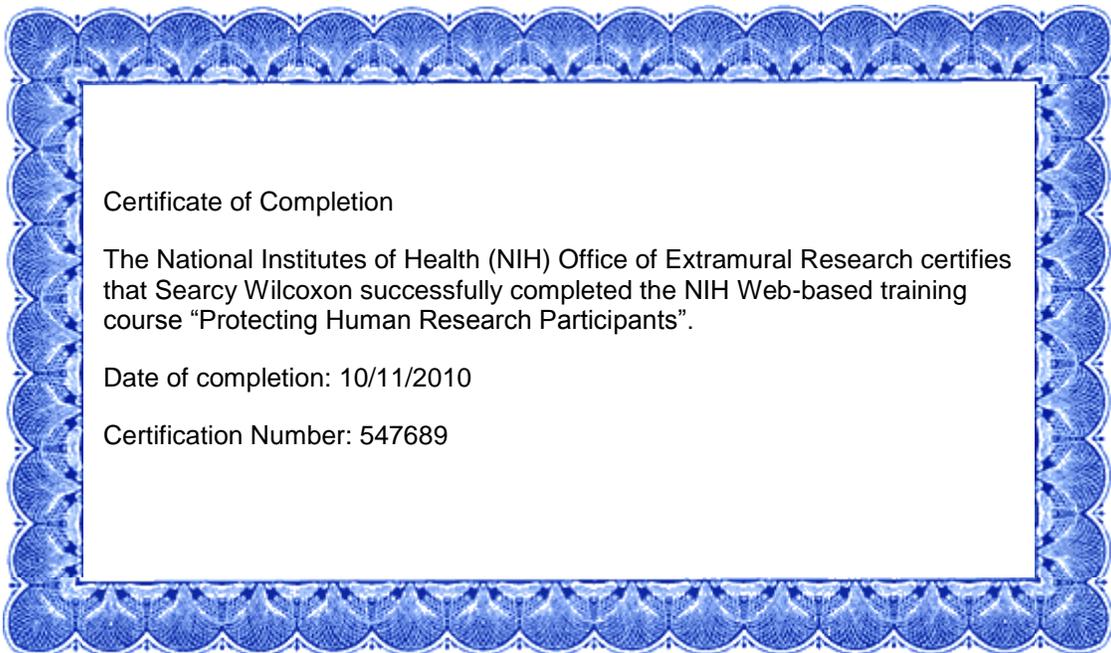


Certificate of Completion

The National Institutes of Health (NIH) Office of Extramural Research certifies that Carey Marsh successfully completed the NIH Web-based training course "Protecting Human Research Participants".

Date of completion: 11/29/2009

Certification Number: 342313



Certificate of Completion

The National Institutes of Health (NIH) Office of Extramural Research certifies that Searcy Wilcoxon successfully completed the NIH Web-based training course "Protecting Human Research Participants".

Date of completion: 10/11/2010

Certification Number: 547689

December 14, 2010

Office for Research  
Institutional Review Board for the  
Protection of Human Subjects

THE UNIVERSITY OF  
**ALABAMA**  
R E S E A R C H

Carey N. Marsh, EdS  
Department of Counselor Education  
College of Education  
The University of Alabama

Re: IRB # 10-OR-397 "Help Seeking Decisions among College Students:  
The Impact of Mental Health Service Affordability"

Dear Ms. Marsh:

The University of Alabama Institutional Review Board has granted approval for your proposed research.

Your protocol has been given expedited approval according to 45 CFR part 46. You have also been granted the requested waiver of written documentation of informed consent for the general student sample. Approval has been given under expedited review category 7 as outlined below:

*(7) Research on individual or group characteristics or behavior (including, but not limited to, research on perception, cognition, motivation, identity, language, communication, cultural beliefs or practices, and social behavior) or research employing survey, interview, oral history, focus group, program evaluation, human factors evaluation, or quality assurance methodologies.*

Your application will expire on December 12, 2011. If your research will continue beyond this date, complete the relevant portions of Continuing Review and Closure Form. If you wish to modify the application, complete the Modification of an Approved Protocol Form. When the study closes, complete the appropriate portions of FORM: Continuing Review and Closure.

Please use reproductions of the IRB approved informed consent form to obtain consent from your participants.

Should you need to submit any further correspondence regarding this proposal, please include the above application number.

Good luck with your research.

Sincerely,



152 Rose Administration Building  
Box 870117  
Tuscaloosa, Alabama 35487-0117  
(205) 348-8461  
FAX (205) 348-8882  
TOLL FREE (877) 820-3066

Stuart Usdan, Ph.D.  
Chair, Non-Medical Institutional Review Board  
The University of Alabama

IRB Project #: 10-02-397

012-33001910R010

UNIVERSITY OF ALABAMA  
INSTITUTIONAL REVIEW BOARD FOR THE PROTECTION OF HUMAN SUBJECTS  
REQUEST FOR APPROVAL OF RESEARCH INVOLVING HUMAN SUBJECTS

I. Identifying information

	Principal Investigator	Second Investigator	Third Investigator
Names:	Carey N. Marsh, EdS	S. Allen Wilcoxon, EdD	
Department:	Counselor Education	Counselor Education	
College:	College of Education	College of Education	
University:	University of Alabama	University of Alabama	
Address:	Box 870362	Box 870231	
Telephone:	(205) 348-3863 (Work)	(205) 348-7579	
FAX:	(205) 348-9256 (Work)	(205) 348-7584	
E-mail:	marsh023@sa.ua.edu	awilcoxo@bamaed.ua.edu	

Title of Research Project: Help-Seeking Decisions Among College Students: The Impact of Mental Health Service Affordability

Date Submitted: 11/12/10  
Funding Source: self

Type of Proposal  New  Revision  Renewal  Completed  Exempt

Please attach a renewal application
Please attach a continuing review of studies form
Please enter the original IRB # at the top of the page

UA faculty or staff member signature: \_\_\_\_\_

II. NOTIFICATION OF IRB ACTION (to be completed by IRB):

Type of Review: \_\_\_\_\_ Full board  Expedited

IRB Action:

Rejected Date: \_\_\_\_\_  
 Tabled Pending Revisions Date: \_\_\_\_\_  
 Approved Pending Revisions Date: \_\_\_\_\_

Approved-this proposal complies with University and federal regulations for the protection of human subjects.

Approval is effective until the following date: 12-12-11

Items approved: \_\_\_\_\_ Research protocol (dated \_\_\_\_\_)  
 \_\_\_\_\_ Informed consent (dated \_\_\_\_\_)  
 \_\_\_\_\_ Recruitment materials (dated \_\_\_\_\_)  
 \_\_\_\_\_ Other (dated \_\_\_\_\_)

Approval signature \_\_\_\_\_ Date 12-15-10

## UNIVERSITY OF ALABAMA

## Individual's Consent to be in a Research Study

You are being asked to take part in a research study. This study is called "Help-seeking Decisions Among College Students: The Impact of Mental Health Service Affordability." This study is being done by Carey N. Marsh, MA, EdS, LPC. Ms. Marsh is a doctoral student in counseling in the Program in Counselor Education at the University of Alabama.

**What is this study about?**

Many college students experience emotional or mental distress while they are at college. Some students seek professional counseling help for their distress, while many others never seek help at all. Therefore, this study is aimed at understanding why many college students who are experiencing emotional or mental distress do not seek help. In particular, this researcher is interested in finding out if certain barriers get in the way of seeking help for some students. Some of the barriers include not being able to pay for professional help, not knowing where or how to get help, being worried about what others might think, being worried about privacy, and not believing that a professional can help. In order to better understand how these barriers may affect students in distress, this researcher is studying students who have chosen to get professional help, as well as students who have chosen *not* to get professional help.

**Why is this study important – What good will the results do?**

The results of this study will help university officials and campus mental health professionals understand why many students who are experiencing emotional or mental distress do not seek help for their distress. This information is important for guiding decisions about how to inform students about campus mental health services, how to improve access to mental health services, and how to reach out to students in distress.

**Why have I been asked to take part in this study?**

This study is being conducted only with students enrolled at the University of Alabama. Therefore, you have been asked to take part because you are a currently enrolled student at the University.

**How many other people will be in this study?**

This study is being conducted with two different samples of University of Alabama students. For the first group, approximately 10,000 students have been randomly selected to receive emails through their campus email addresses inviting them to participate in the study. For the second group, approximately 400 students who have scheduled an appointment at the University of Alabama Counseling Center are being invited to participate in the study.

**What will I be asked to do in this study?**

If you agree to be in this study, you will complete four questionnaires: 1) Demographic Questionnaire, 2) Mental Health Help-Seeking Questionnaire, 3) Attitudes Toward Seeking Professional Psychological Help Scale-Short Form, and 4) Counseling Center Assessment for Psychological Symptoms-62 (CCAPS-62). The first questionnaire asks for basic information pertaining to your age, gender, race/ethnicity, country of origin, and academic level. The other

UNIVERSITY OF ALABAMA IRB  
 CONSENT FORM APPROVED: 12-13-10  
 EXPIRATION DATE: 12-12-11

three questionnaires ask questions about mental or emotional distress and making decisions to seek mental health services.

**How much time will I spend being in this study?**

It will require approximately 10 to 15 minutes to complete the three questionnaires included with this document. You have already completed the CCAPS-62 questionnaire – one of the questionnaires you completed on the computer.

**Will being in this study cost me anything?**

The only cost to you from this study is your time.

**Will I be paid for being in this study?**

You will not be paid for being in this study.

**What are the risks (problems or dangers) from being in this study?**

The main risk for you for being in this study is that you will be asked questions about mental and emotional distress. Some of these questions could potentially be uncomfortable. You can control this potential by not being in the study, by not answering any question that makes you feel uncomfortable, or by stopping your participation in the study at any time. There is no penalty or consequence for choosing to stop your participation. If you experience distress from completing these questionnaires, you are encouraged to discuss it with the Counseling Center therapist you are meeting with today.

**What are the benefits (good things) of being in this study?**

You will be contributing to research which could result in finding better ways of reaching out to and helping students in distress. There are no other benefits to you for being in this study.

**How will my privacy be protected?**

If you choose to participate in this study, please re-use the envelope you have been provided to place your completed consent form and questionnaires in and return to the Counseling Center receptionist. Your consent form will be removed from your questionnaires and both will be stored separately in locked filing cabinets. The researcher will not know the names or identity of students who have chosen to participate in the study.

**How will my confidentiality be protected?**

Each questionnaire has instructions to not write your name or student number on the questionnaire. As well, before data from your CCAPS-62 questionnaire is supplied to the researcher, your name and other identifying information will be removed. The information from the questionnaires will be reported in the researcher's dissertation only as totals from all students' questionnaires. Your individual responses will never be reported. After the researcher completes her dissertation, all consent forms and paper-and-pencil questionnaires will be destroyed.

**What are the alternatives to being in this study?**

The alternative to participating in this study is to not participate.

UNIVERSITY OF ALABAMA IRB  
 CONSENT FORM APPROVED: 12-13-10  
 EXPIRATION DATE: 12-12-11

**What are my rights as a participant?**

Being in this study is totally voluntary – it is your free choice. You may choose not to be in it at all. If you start the study, you can stop at any time. If you stop, the information from any questionnaires you have completed will not be included in the study. Not participating or stopping participation will have no effect on your relationships with the University of Alabama.

The University of Alabama Institutional Review Board (IRB) is a committee that looks out for the ethical (fair) treatment of people in research studies. The committee may review the study records if they wish. This is to be sure that people in research studies are being treated fairly and that the study is being carried out as planned. However, since you will not be asked for your name or other identity information, study records will be anonymous to the committee.

**Who do I call if I have a question or problems?**

If you have questions about this study right now, you can request to speak with Dr. Lee Keyes at the Counseling Center. If you have questions about the study later, you may contact the investigator Carey Marsh at (205) 348-7566, or you may contact the investigator's advisor, Dr. Allen Wilcoxon at (205) 348-7579. If you have any questions about your rights as a research participant you may contact Ms. Tanta Myles, The University of Alabama Research Compliance Officer, at (205) 348-8461 or toll-free at 1-877-820-3066.

You may also ask questions, make a suggestion, or file complaints/concerns through the University's IRB Outreach Website at [http://osp.ua.edu/site/PRCO\\_Welcome.html](http://osp.ua.edu/site/PRCO_Welcome.html). After you participate, you are encouraged to complete the survey for research participants available at that same website. You may also e-mail the IRB at [participantoutreach@bama.ua.edu](mailto:participantoutreach@bama.ua.edu).

By my signature below, I confirm that I am at least 19 years of age and have read this consent document. I understand its contents and freely consent to participate in this study under the conditions described. I also understand that an extra copy of this consent form has been provided for me to keep.

Research Participant \_\_\_\_\_ Date \_\_\_\_\_  
(Signature)

Witness \_\_\_\_\_ Date \_\_\_\_\_  
(Signature)

UNIVERSITY OF ALABAMA IRB  
 CONSENT FORM APPROVED: 12-13-10  
 EXPIRATION DATE: 12-12-11

APPENDIX B

INSTITUTIONAL REVIEW BOARD MODIFICATION (#1) AND APPROVAL

AAHRPP DOCUMENT # 94  
UNIVERSITY OF ALABAMA  
HUMAN RESEARCH PROTECTION PROGRAM

FORM: MODIFICATION OF AN APPROVED PROTOCOL

Investigator: Carey N. Marsh

Study Title: Help-Seeking Decisions Among College Student: The Impact of Mental Health Service Affordability

IRB # 10-OR-397 Approval Date 12/14/10 OSP # \_\_\_\_\_

1. What change(s) do you wish to make? Check all that apply.

- Add or delete instruments
- Change (substitute) instruments
- Modify a selected instrument(s)— (add, delete or change items)
- Add or delete variable(s)
- Add or delete a category of participant (e.g., eliminate diabetics, add Hispanics, add students from other courses or student research pools). Please identify courses or subject pools.
- \_\_\_\_\_
- Change inclusion or exclusion criteria
- Change study title (with or without other changes)
- Add a vulnerable population
- Change sample size
- Add or change recruitment sites
- Change recruitment strategies, e.g., recruitment media
- Change content of recruitment materials
- Change compensation plan
- Change incentive plan
- Change wording of consent document
- Change method of obtaining or documenting consent
- Change in investigator
- Change in project staff ONLY (GRA, student or other assistants)
- Obtain protected health information
- Change strategies for protecting confidentiality or privacy
- Change plan for data storage or dissemination )
- Address new Conflict of Interest issue
- Research has gained funding
- Research has lost funding
- OTHER: Change data collection time frame

2. What is the stimulus for this/these change/s?

- Unanticipated or adverse events have arisen (*RE: TIME FRAMES*)
- Prospects' questions suggest ways to improve study explanation and consent form
- Participants' responses suggest that data collection instruments or procedures should be changed.
- Recruitment is going very slowly (*Please provide numerical details about your recruitment, enrollment, retention, or completion in #3 below.*)
- New information has arisen that suggests an additional population or category of participant should be included or deleted.
- New information has arisen that prospective or current participants should know.
- Reduce participant burden

- Changes in funding require adjustments in study
- Requirement of sponsor
- COI issue requires change in procedure or disclosure to participants
- OTHER: (RE: INSTRUMENT MODIFICATION)

3. Please explain rationale or circumstances in detail.

1. TIME FRAME CHANGE: Due to unforeseen circumstances during the Spring, 2011 semester, data collection did not occur during that semester as had been anticipated when my initial IRB application was submitted. Presently, I am requesting to be able to proceed with data collection during both Summer, 2011 terms, as well, as during the Fall, 2011 semester.
2. INSTRUMENT MODIFICATION: Based on the recommendations of my dissertation committee, I am requesting to make two modifications to my Demographic Questionnaire study instrument. The first modification is to directly ask for a participant's age, instead of using age categories. The second modification is to include an additional question on the questionnaire for clinical (Counseling Center) participants to discern if they have voluntarily chosen to attend counseling or if they are being required to attend counseling.

4. Describe what exactly will be added to or deleted from your currently approved protocol and what change(s) will be made to your protocol.

Please see above and attached protocol and Demographic Questionnaires with highlighted revisions.

5. What is the effect of the requested change(s) on participant burden?

- None
- Increases ---Please explain
- Decreases--- Please explain

6. Will the proposed change(s) affect the risk-benefit ratio for participants?

- No  Yes

If YES, What is your specific appraisal of the new risk-benefit ratio?

- Minimal risk (Potential harm/discomfort not greater than those encountered in everyday life or during routine physical or psychological examinations)
- Greater than minimal risk but has potential direct benefit
- Greater than minimal risk and no direct benefit but with potential to yield generalizable knowledge about the subjects' disorder or condition.

If risk is greater than minimal, are the risks reasonable in relation to the potential benefits?  
Please explain.

\*For modifications involving only change in student personnel (other than as PI), submit only the application face page indicating a revision, this form with the option for "change of project staff only" checked, the revised IRB Application Study Personnel List (Application Page 2), and IRB training certificates for new staff as needed. You need not submit a revised protocol or a copy of the previously approved protocol.

Except for changes in student personnel, please supply (1) a new clean copy of the protocol with all changes incorporated and identified by boldface, underlining, or italics and (2) a copy of the currently approved protocol.

*If you are adding or changing a vulnerable population, please complete and attach the supplementary form appropriate to that population.*

*If your research involves specific on- or off-campus sites such as the Recreation Center, the Child Development Center, rural clinics, or public or private schools, these sites must approve the changes before they can be implemented. Please supply approval letters from officials at those sites with your application for modification or after its approval by IRB but prior to implementation of changes.*

Office for Research  
Institutional Review Board for the  
Protection of Human Subjects

June 15, 2011

THE UNIVERSITY OF  
**ALABAMA**  
R E S E A R C H

Carey N. Marsh, EdS  
Department of Counselor Education  
College of Education  
The University of Alabama

Re: IRB # 10-OR-397 "Help Seeking Decisions among College Students:  
The Impact of Mental Health Service Affordability"

Dear Ms. Marsh:

The University of Alabama Institutional Review Board has reviewed the revision to your previously approved expedited protocol. The board has approved the change in your protocol.

Please remember that your approval period expires one year from the date of your original approval, December 13, 2010, not the date of this revision approval.

Should you need to submit any further correspondence regarding this proposal, please include the assigned IRB application number.

Good luck with your research.

Sincerely,

Carriantato T. Myles, MSM, CIM  
Director & Research Compliance Officer  
Office for Research Compliance  
The University of Alabama



152 Rose Administration Building  
Box 870117  
Tuscaloosa, Alabama 35487-0117  
(205) 348-5152  
FAX (205) 348-8882

IRB Project #: 10-02-397

UNIVERSITY OF ALABAMA  
INSTITUTIONAL REVIEW BOARD FOR THE PROTECTION OF HUMAN SUBJECTS  
REQUEST FOR APPROVAL OF RESEARCH INVOLVING HUMAN SUBJECTS

I. Identifying information

	Principal Investigator	Second Investigator	Third Investigator
Names:	Carey N. Marsh, EdS	S. Allen Wilcoxon, EdD	
Department:	Counselor Education	Counselor Education	
College:	College of Education	College of Education	
University:	University of Alabama	University of Alabama	
Address:	Box 870362	Box 870231	
Telephone:	(205) 348-3863 (Work)	(205) 348-7579	
FAX:	(205) 348-9256 (Work)	(205) 348-7584	
E-mail:	marsh023@sa.ua.edu	awilcox@bamaed.ua.edu	

Title of Research Project: Help-Seeking Decisions Among College Students: The Impact of Mental Health Service Affordability

Date Submitted: 6-3-11  
Funding Source: self

Type of Proposal: New  Revision  Renewal  Completed  Exempt

Please attach a renewal application

Please attach a continuing review of studies form

Please enter the original IRB # at the top of the page

UA faculty or staff member signature: \_\_\_\_\_

II. NOTIFICATION OF IRB ACTION (to be completed by IRB):

Type of Review: \_\_\_\_\_ Full board  Expedited

IRB Action:

Rejected Date: \_\_\_\_\_

Tabled Pending Revisions Date: \_\_\_\_\_

Approved Pending Revisions Date: \_\_\_\_\_

Approved-this proposal complies with University and federal regulations for the protection of human subjects.

Approval is effective until the following date: 12-12-11

Items approved: \_\_\_\_\_ Research protocol (dated \_\_\_\_\_)

\_\_\_\_\_ Informed consent (dated \_\_\_\_\_)

\_\_\_\_\_ Recruitment materials (dated \_\_\_\_\_)

\_\_\_\_\_ Other (dated \_\_\_\_\_)

Approval signature ]

Date 6/15/2011

APPENDIX C

INSTITUTIONAL REVIEW BOARD MODIFICATION (#2) AND APPROVAL

AAHRPP DOCUMENT # 94  
UNIVERSITY OF ALABAMA  
HUMAN RESEARCH PROTECTION PROGRAM

FORM: MODIFICATION OF AN APPROVED PROTOCOL

Investigator: Carey N. Marsh

Study Title: Help-Seeking Decisions Among College Student: The Impact of Mental Health Service Affordability

IRB # 10-OR-397 Approval Date 12/14/10 OSP # \_\_\_\_\_

1. What change(s) do you wish to make? Check all that apply.

- Add or delete instruments
- Change (substitute) instruments
- Modify a selected instrument(s)— (add, delete or change items)
- Add or delete variable(s)
- Add or delete a category of participant (e.g., eliminate diabetics, add Hispanics, add students from other courses or student research pools). Please identify courses or subject pools.  
\_\_\_\_\_
- Change inclusion or exclusion criteria
- Change study title (with or without other changes)
- Add a vulnerable population
- Change sample size
- Add or change recruitment sites
- Change recruitment strategies, e.g., recruitment media
- Change content of recruitment materials
- Change compensation plan
- Change incentive plan
- Change wording of consent document
- Change method of obtaining or documenting consent
- Change in investigator
- Change in project staff ONLY (GRA, student or other assistants)
- Obtain protected health information
- Change strategies for protecting confidentiality or privacy
- Change plan for data storage or dissemination )
- Address new Conflict of Interest issue
- Research has gained funding
- Research has lost funding
- OTHER:

2. What is the stimulus for this/these change/s?

- Unanticipated or adverse events have arisen
- Prospects' questions suggest ways to improve study explanation and consent form
- Participants' responses suggest that data collection instruments or procedures should be changed.
- Recruitment is going very slowly (*Please provide numerical details about your recruitment, enrollment, retention, or completion in #3 below.*)

- New information has arisen that suggests an additional population or category of participant should be included or deleted.
- New information has arisen that prospective or current participants should know.
- Reduce participant burden
- Changes in funding require adjustments in study
- Requirement of sponsor
- COI issue requires change in procedure or disclosure to participants
- OTHER: Registrar's office supplying more student email addresses than being requested and lower than expected survey response rate.

3. Please explain rationale or circumstances in detail.

Per my research protocol, I have been requesting student email addresses from the UA Registrar's office and then emailing research invitations and a survey link to those supplied email addresses. In my original IRB application, I indicated I would be seeking a total of 10,000 student email addresses from the Registrar's office. However, I am now requesting to increase that number to 15,000 for the following reasons:

1. For the 2011 Summer 1 term, I requested 1,800 email addresses for students over the age of 18 with last names starting with the letters \_\_\_\_\_; however, I was supplied with \_\_\_\_\_ email addresses. For the 2011 Summer 2 term, I requested 1,500 email addresses for students over the age of 18 with last names starting with the letters \_\_\_\_\_; however, I was supplied with \_\_\_\_\_ email addresses. Since my intention has been to have a true random sample from the student population, I have been reluctant to truncate the email lists being supplied by the registrar's office and have, therefore, used the entire lists. At present, I plan to request an additional 6,700 student email addresses after the 2011 Fall semester begins. I am reluctant to reduce this number for fear of being left with an over-sampling from the summer terms; however, a request of 6,700 email addresses will put me over the original sample target of 10,000 email addresses.
2. Sampling, thus far, from the two summer terms has produced a response rate of approximately 10%, which is lower than the 20% I had originally anticipated. Approval of an increase in sample size would allow leeway for an increase in sampling if the response rate remains low.

4. Describe what exactly will be added to or deleted from your currently approved protocol and what change(s) will be made to your protocol.

My original IRB application indicated my research would include a random student sample of 10,000 from the UA population. I am now requesting to modify that number and increase it to a sample of up to 15,000 UA students. (Please see attached protocol with highlighted revisions.)

5. What is the effect of the requested change(s) on participant burden?

- None
- Increases ---Please explain
- Decreases--- Please explain

6. Will the proposed change(s) affect the risk-benefit ratio for participants?

- No  Yes

If YES, What is your specific appraisal of the new risk-benefit ratio?

- Minimal risk (Potential harm/discomfort not greater than those encountered in everyday life or during routine physical or psychological examinations)
- Greater than minimal risk but has potential direct benefit
- Greater than minimal risk and no direct benefit but with potential to yield generalizeable knowledge about the subjects' disorder or condition.

\_\_\_\_\_ If risk is greater than minimal, are the risks reasonable in relation to the potential benefits?  
Please explain.

\*For modifications involving only change in student personnel (other than as PI), submit only the application face page indicating a revision, this form with the option for “change of project staff only” checked, the revised IRB Application Study Personnel List (Application Page 2), and IRB training certificates for new staff as needed. You need not submit a revised protocol or a copy of the previously approved protocol.

Except for changes in student personnel, please supply (1) a new clean copy of the protocol with all changes incorporated and identified by boldface, underlining, or italics and (2) a copy of the currently approved protocol.

*If you are adding or changing a vulnerable population, please complete and attach the supplementary form appropriate to that population.*

*If your research involves specific on- or off-campus sites such as the Recreation Center, the Child Development Center, rural clinics, or public or private schools, these sites must approve the changes before they can be implemented. Please supply approval letters from officials at those sites with your application for modification or after its approval by IRB but prior to implementation of changes.*

Office for Research  
Institutional Review Board for the  
Protection of Human Subjects

August 17, 2011

THE UNIVERSITY OF  
**ALABAMA**  
R E S E A R C H

Carey N. Marsh, EdS  
Department of Counselor Education  
College of Education  
The University of Alabama

Re: IRB # 10-OR-397 (Revision # 2) "Help Seeking Decisions among  
College Students: The Impact of Mental Health Service Affordability"

Dear Ms. Marsh:

The University of Alabama Institutional Review Board has reviewed the  
revision to your previously approved expedited protocol. The board has  
approved the change in your protocol.

Please remember that your approval period expires one year from the date  
of your original approval, December 13, 2010, not the date of this revision  
approval.

Should you need to submit any further correspondence regarding this  
proposal, please include the assigned IRB application number.

Good luck with your research.

Sincerely,

Carpanato T. Myles, MSM, CIM  
Director & Research Compliance Officer  
Office for Research Compliance  
The University of Alabama



358 Rose Administration Building  
Box 870127  
Tuscaloosa, Alabama 35487-0127  
(205) 348-8461  
FAX (205) 348-7189  
TOLL FREE (877) 820-3066

AUG 16 2011 PM02:00

UNIVERSITY OF ALABAMA  
INSTITUTIONAL REVIEW BOARD FOR THE PROTECTION OF HUMAN SUBJECTS  
REQUEST FOR APPROVAL OF RESEARCH INVOLVING HUMAN SUBJECTS

I. Identifying information

	Principal Investigator	Second Investigator	Third Investigator
Names:	Carey N. Marsh, EdS	S. Allen Wilcoxon, EdD	
Department:	Counselor Education	Counselor Education	
College:	College of Education	College of Education	
University:	University of Alabama	University of Alabama	
Address:	Box 870362	Box 870231	
Telephone:	(205) 348-3863 (Work)	(205) 348-7579	
FAX:	(205) 348-9256 (Work)	(205) 348-7584	
E-mail:	marsh023@sa.ua.edu	awilcoxo@bamaed.ua.edu	

Title of Research Project: Help-Seeking Decisions Among College Students: The Impact of Mental Health Service Affordability

Date Submitted: 8/12/11  
Funding Source: self

Type of Proposal	<input type="checkbox"/> New	<input checked="" type="checkbox"/> Revision	<input type="checkbox"/> Renewal Please attach a renewal application	<input type="checkbox"/> Completed	<input type="checkbox"/> Exempt
Please attach a continuing review of studies form					
Please enter the original IRB # at the top of the page					

UA faculty or staff member signature: Signed copy en route

II. NOTIFICATION OF IRB ACTION (to be completed by IRB):

Type of Review:  Full board  Expedited

IRB Action:

Rejected Date: \_\_\_\_\_  
 Tabled Pending Revisions Date: \_\_\_\_\_  
 Approved Pending Revisions Date: \_\_\_\_\_

Approved-this proposal complies with University and federal regulations for the protection of human subjects.

Approval is effective until the following date: 12-12-11

Items approved:  Research protocol (dated \_\_\_\_\_)  
 Informed consent (dated \_\_\_\_\_)  
 Recruitment materials (dated \_\_\_\_\_)

Approval signature: \_\_\_\_\_

Date: 8/17/2011

## UNIVERSITY OF ALABAMA

### Individual's Consent to be in a Research Study

You are being asked to take part in a research study. This study is called "Help-seeking Decisions Among College Students: The Impact of Mental Health Service Affordability." This study is being done by Carey N. Marsh, MA, EdS, LPC. Ms. Marsh is a doctoral student in counseling in the Program in Counselor Education at the University of Alabama.

#### **What is this study about?**

Many college students experience emotional or mental distress while they are at college. Some students seek professional counseling help for their distress, while many others never seek help at all. Therefore, this study is aimed at understanding why many college students who are experiencing emotional or mental distress do not seek help. In particular, this researcher is interested in finding out if certain barriers get in the way of seeking help for some students. Some of the barriers include not being able to pay for professional help, not knowing where or how to get help, being worried about what others might think, being worried about privacy, and not believing that a professional can help. In order to better understand how these barriers may affect students in distress, this researcher is studying students who have chosen to get professional help, as well as students who have chosen *not* to get professional help.

#### **Why is this study important – What good will the results do?**

The results of this study will help university officials and campus mental health professionals understand why many students who are experiencing emotional or mental distress do not seek help for their distress. This information is important for guiding decisions about how to inform students about campus mental health services, how to improve access to mental health services, and how to reach out to students in distress.

#### **Why have I been asked to take part in this study?**

This study is being conducted only with students enrolled at the University of Alabama. Therefore, you have been asked to take part because you are a currently enrolled student at the University.

#### **How many other people will be in this study?**

This study is being conducted with two different samples of University of Alabama students. For the first group, approximately 15,000 students have been randomly selected to receive emails through their campus email addresses inviting them to participate in the study. For the second group, approximately 400 students who have scheduled an appointment at the University of Alabama Counseling Center are being invited to participate in the study.

#### **What will I be asked to do in this study?**

If you agree to be in this study, you will complete four questionnaires: 1) Demographic Questionnaire, 2) Mental Health Help-Seeking Questionnaire, 3) Attitudes Toward Seeking Professional Psychological Help Scale-Short Form, and 4) Counseling Center Assessment for Psychological Symptoms-62 (CCAPS-62). The first questionnaire asks for basic information pertaining to your age, gender, race/ethnicity, country of origin, and academic level. The other

UNIVERSITY OF ALABAMA IRB  
CONSENT FORM APPROVED: 8-17-11  
EXPIRATION DATE: 12-12-11

three questionnaires ask questions about mental or emotional distress and making decisions to seek mental health services.

**How much time will I spend being in this study?**

It will require approximately 10 to 15 minutes to complete the three questionnaires included with this document. You have already completed the CCAPS-62 questionnaire – one of the questionnaires you completed on the computer.

**Will being in this study cost me anything?**

The only cost to you from this study is your time.

**Will I be paid for being in this study?**

You will not be paid for being in this study.

**What are the risks (problems or dangers) from being in this study?**

The main risk for you for being in this study is that you will be asked questions about mental and emotional distress. Some of these questions could potentially be uncomfortable. You can control this potential by not being in the study, by not answering any question that makes you feel uncomfortable, or by stopping your participation in the study at any time. There is no penalty or consequence for choosing to stop your participation. If you experience distress from completing these questionnaires, you are encouraged to discuss it with the Counseling Center therapist you are meeting with today.

**What are the benefits (good things) of being in this study?**

You will be contributing to research which could result in finding better ways of reaching out to and helping students in distress. There are no other benefits to you for being in this study.

**How will my privacy be protected?**

If you choose to participate in this study, please re-use the envelope you have been provided to place your completed consent form and questionnaires in and return to the Counseling Center receptionist. Your consent form will be removed from your questionnaires and both will be stored separately in locked filing cabinets. The researcher will not know the names or identity of students who have chosen to participate in the study.

**How will my confidentiality be protected?**

Each questionnaire has instructions to not write your name or student number on the questionnaire. As well, before data from your CCAPS-62 questionnaire is supplied to the researcher, your name and other identifying information will be removed. The information from the questionnaires will be reported in the researcher's dissertation only as totals from all students' questionnaires. Your individual responses will never be reported. After the researcher completes her dissertation, all consent forms and paper-and-pencil questionnaires will be destroyed.

**What are the alternatives to being in this study?**

The alternative to participating in this study is to not participate.

UNIVERSITY OF ALABAMA IRB  
CONSENT FORM APPROVED: 8-17-11  
EXPIRATION DATE: 12-12-11

**What are my rights as a participant?**

Being in this study is totally voluntary – it is your free choice. You may choose not to be in it at all. If you start the study, you can stop at any time. If you stop, the information from any questionnaires you have completed will not be included in the study. Not participating or stopping participation will have no effect on your relationships with the University of Alabama.

The University of Alabama Institutional Review Board (IRB) is a committee that looks out for the ethical (fair) treatment of people in research studies. The committee may review the study records if they wish. This is to be sure that people in research studies are being treated fairly and that the study is being carried out as planned. However, since you will not be asked for your name or other identity information, study records will be anonymous to the committee.

**Who do I call if I have a question or problems?**

If you have questions about this study right now, you can request to speak with Dr. Lee Keyes at the Counseling Center. If you have questions about the study later, you may contact the investigator Carey Marsh at (205) 348-7566, or you may contact the investigator’s advisor, Dr. Allen Wilcoxon at (205) 348-7579. If you have any questions about your rights as a research participant you may contact Ms. Tanta Myles, The University of Alabama Research Compliance Officer, at (205) 348-5152.

You may also ask questions, make a suggestion, or file complaints/concerns through the University’s IRB Outreach Website at [http://osp.ua.edu/site/PRCO\\_Welcome.html](http://osp.ua.edu/site/PRCO_Welcome.html). After you participate, you are encouraged to complete the survey for research participants available at that same website. You may also e-mail the IRB at [participantoutreach@bama.ua.edu](mailto:participantoutreach@bama.ua.edu).

By my signature below, I confirm that I am at least 19 years of age and have read this consent document. I understand its contents and freely consent to participate in this study under the conditions described. I also understand that an extra copy of this consent form has been provided for me to keep.

Research Participant \_\_\_\_\_ Date \_\_\_\_\_  
(Signature)

Witness \_\_\_\_\_ Date \_\_\_\_\_  
(Signature)

UNIVERSITY OF ALABAMA IRB  
CONSENT FORM APPROVED: 8-17-11  
EXPIRATION DATE: 12-12-11

UNIVERSITY OF ALABAMA

Individual's Consent to be in a Research Study

You are being asked to take part in a research study. This study is called "Help-seeking Decisions Among College Students: The Impact of Mental Health Service Affordability." This study is being done by Carey N. Marsh, MA, EdS, LPC. Ms. Marsh is a doctoral student in counseling in the Program in Counselor Education at the University of Alabama.

**What is this study about?**

Many college students experience emotional or mental distress while they are at college. Some students seek professional counseling help for their distress, while many others never seek help at all. Therefore, this study is aimed at understanding why many college students who are experiencing emotional or mental distress do not seek help. In particular, this researcher is interested in finding out if certain barriers get in the way of seeking help for some students. Some of the barriers include not being able to pay for professional help, not knowing where or how to get help, being worried about what others might think, being worried about privacy, and not believing that a professional can help. In order to better understand how these barriers may affect students in distress, this researcher is studying students who have chosen to get professional help, as well as students who have chosen *not* to get professional help.

**Why is this study important – What good will the results do?**

The results of this study will help university officials and campus mental health professionals understand why many students who are experiencing emotional or mental distress do not seek help for their distress. This information is important for guiding decisions about how to inform students about campus mental health services, how to improve access to mental health services, and how to reach out to students in distress.

**Why have I been asked to take part in this study?**

This study is being conducted only with students enrolled at the University of Alabama. Therefore, you have been asked to take part because you are a currently enrolled student at the University.

**How many other people will be in this study?**

This study is being conducted with two different samples of University of Alabama students. For the first group, approximately 15,000 students have been randomly selected to receive emails through their campus email addresses inviting them to participate in the study. For the second group, approximately 400 students who have scheduled an appointment at the University of Alabama Counseling Center are being invited to participate in the study.

**What will I be asked to do in this study?**

If you agree to be in this study, you will complete four questionnaires electronically:

1) Demographic Questionnaire, 2) Mental Health Help-Seeking Questionnaire, 3) Attitudes Toward Seeking Professional Psychological Help Scale-Short Form, and 4) Counseling Center Assessment for Psychological Symptoms-62. The first questionnaire asks for basic information pertaining to your age, gender, race/ethnicity, country of origin, and academic level. The other

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CONSENT FORM APPROVED: 8-17-11  
EXPIRATION DATE: 12-12-11

three questionnaires ask questions about mental or emotional distress and making decisions to seek mental health services.

**How much time will I spend being in this study?**

The four study questionnaires will take approximately 15 to 20 minutes to complete.

**Will being in this study cost me anything?**

The only cost to you from this study is your time.

**Will I be paid for being in this study?**

You will not be paid for being in this study.

**What are the risks (problems or dangers) from being in this study?**

The main risk for you for being in this study is that you will be asked questions about mental and emotional distress. Some of these questions could potentially be uncomfortable. You can control this potential by not being in the study, by not answering any question that makes you feel uncomfortable, or by stopping your participation in the study at any time. There is no penalty or consequence for choosing to stop your participation. If you are currently in distress, you are encouraged to seek support by contacting the University of Alabama Counseling Center at (205)348-3863 or by contacting other sources of help listed at the end of this document.

**What are the benefits (good things) of being in this study?**

You will be contributing to research which could result in finding better ways of reaching out to and helping students in distress. There are no other benefits to you for being in this study.

**How will my privacy be protected?**

You have received an email invitation to participate in this study through your password protected campus email account. No other individuals will know that you have received the email and they will not know if you decide to be in the study. If you decide to be in the study, you can complete the study questionnaires when you are alone and no one else can see how you are answering questions. The web link for this study has no information that connects back to your email address. As a result, no one (not even the researcher) will know which students answered the questionnaires. Because of this protection, reminder emails will be sent to all students who received an email invitation to be in the study. If a student has already completed the questionnaires, he or she will be instructed to ignore the reminder email.

**How will my confidentiality be protected?**

You will not be asked for your name, student number, or any other information that might identify you. The information gathered from the study questionnaires will be password protected and only the researcher will have the password. Also, the information from the questionnaires will be reported in the researcher's dissertation only as totals from all students' questionnaires. Your individual responses will never be reported. After the researcher completes her dissertation, all individual responses to the questionnaires will be electronically deleted.

**What are the alternatives to being in this study?**

The alternative to participating in this study is to not participate.

UNIVERSITY OF ALABAMA IRB  
CONSENT FORM APPROVED: 8-17-11  
EXPIRATION DATE: 12-12-11

**What are my rights as a participant?**

Being in this study is totally voluntary – it is your free choice. You may choose not to be in it at all. If you start the study, you can stop at any time. If you stop, the information from any questionnaires you have completed will not be included in the study. Not participating or stopping participation will have no effect on your relationships with the University of Alabama.

The University of Alabama Institutional Review Board (IRB) is a committee that looks out for the ethical (fair) treatment of people in research studies. The committee may review the study records if they wish. This is to be sure that people in research studies are being treated fairly and that the study is being carried out as planned. However, since you will not be asked for your name or other identity information, study records will be anonymous to the committee.

**Who do I call if I have a question or problems?**

If you have questions about this study, please call the investigator Carey Marsh at (205) 348-7566, or you may contact the investigator’s advisor, Dr. Allen Wilcoxon at (205) 348-7579. If you have any questions about your rights as a research participant you may contact Ms. Tanta Myles, The University of Alabama Research Compliance Officer, at (205) 348-5152.

You may also ask questions, make a suggestion, or file complaints/concerns through the University’s IRB Outreach Website at [http://osp.ua.edu/site/PRCO\\_Welcome.html](http://osp.ua.edu/site/PRCO_Welcome.html). After you participate, you are encouraged to complete the survey for research participants available at that same website. You may also e-mail the IRB at [participantoutreach@bama.ua.edu](mailto:participantoutreach@bama.ua.edu).

**If you are currently experiencing mental or emotional distress, you are encouraged to contact the University of Alabama Counseling Center at (205) 348-3863, located at the South Lawn Office Building, 1101 Jackson Ave, Tuscaloosa, AL 35487. Other resources for help include the University of Alabama Student Health Center located at the corner of University Boulevard and 5th Avenue East, (205) 348-6262, and DCH Regional Medical Center located at 809 University Boulevard East, (205) 759-7111.**

By clicking on the “I Would Like to Participate” button below, I confirm that I am at least 19 years of age and I have read this consent document and I understand its contents and I freely consent to participate in this study under the conditions described. I can print out a copy of this consent form for my own records.

**I DO NOT WANT TO PARTICIPATE**

**I WOULD LIKE TO PARTICIPATE**

UNIVERSITY OF ALABAMA IRB  
CONSENT FORM APPROVED: 8-17-11  
EXPIRATION DATE: 12-12-11

APPENDIX D  
DEMOGRAPHIC QUESTIONNAIRE

DEMOGRAPHIC QUESTIONNAIRE  
(For electronic survey)

**THIS IS AN ANONYMOUS QUESTIONNAIRE; PLEASE DO NOT PUT YOUR NAME OR STUDENT NUMBER ON THIS FORM.**

Instructions: Please answer the following demographic questions, choosing the response that best describes you. Please provide only one response for each question.

1. What is your gender?

- Female  
 Male

2. What is your age? \_\_\_\_\_

3. How would you describe your race/ethnicity?

- African American / Black  
 American Indian or Alaskan Native  
 Asian American / Asian  
 Caucasian / White  
 Hispanic / Latino/a  
 Native Hawaiian or Pacific Islander  
 Multi-racial (please specify) \_\_\_\_\_  
 Other (please specify) \_\_\_\_\_

4. What is your current academic status?

- Freshman / First-year  
 Sophomore  
 Junior  
 Senior  
 Graduate / Professional degree student

5. Are you an international student?

- Yes (specify country of origin) \_\_\_\_\_  
 No (specify U.S. state where from) \_\_\_\_\_

DEMOGRAPHIC QUESTIONNAIRE  
(For counseling center participants)

**THIS IS AN ANONYMOUS QUESTIONNAIRE; PLEASE DO NOT PUT YOUR NAME OR STUDENT NUMBER ON THIS FORM.**

Instructions: Please answer the following demographic questions, choosing the response that best describes you. Please provide only one response for each question.

1. What is your gender?

- Female  
 Male

2. What is your age? \_\_\_\_\_

3. How would you describe your race/ethnicity?

- African American / Black  
 American Indian or Alaskan Native  
 Asian American / Asian  
 Caucasian / White  
 Hispanic / Latino/a  
 Native Hawaiian or Pacific Islander  
 Multi-racial (please specify) \_\_\_\_\_  
 Other (please specify) \_\_\_\_\_

4. What is your current academic status?

- Freshman / First-year  
 Sophomore  
 Junior  
 Senior  
 Graduate / Professional degree student

5. Are you an international student?

- Yes (specify country of origin) \_\_\_\_\_  
 No (specify U.S. state where from) \_\_\_\_\_

6. Are you being required to attend counseling by another party (e.g., by the Dean of Students office, Judicial Affairs office, the legal or court system)?

- Yes  
 No

APPENDIX E

MENTAL HEALTH HELP-SEEKING QUESTIONNAIRE-I

MENTAL HEALTH HELP-SEEKING QUESTIONNAIRE – I  
(for electronic survey)

Instructions: The following items relate to decisions about seeking help for mental health services. Please read each question carefully and mark the response that best fits you and your experiences.

1. I am currently receiving mental health services or have received mental health services in the past 12 months from a professional (e.g. a psychologist, a counselor, a social worker, a psychiatrist, or a physician).

Yes                      No

*(If your answer to Item #1 is “No,” please proceed to Item #2. If your answer to Item #1 is “Yes,” please skip to Item #5 and finish the remainder of the questionnaire.)*

2. I am currently experiencing emotional or mental health concerns or have experienced such concerns in the past 12 months.

Yes                      No

3. I currently think or have thought in the past 12 months that I need professional help with emotional or mental health concerns.

Yes                      No

*(If your answer to Item #3 is “Yes,” please proceed to Item #4. If your answer to Item #3 is “No,” please skip to Item #5 and finish the remainder of the questionnaire.)*

4. Please indicate how important the following obstacles have been in influencing your decision to **not** seek professional help for emotional or mental health concerns, using a scale of 0 (not at all important) to 4 (extremely important).

	<u>Not at all</u>	<u>important</u>			<u>Extremely</u>
	<u>important</u>				<u>important</u>
a. Not knowing what services are available.	0	1	2	3	4
b. Lack of transportation.	0	1	2	3	4
c. Cost of services.	0	1	2	3	4
d. Not knowing where services are located.	0	1	2	3	4
e. Worried about what others might think.	0	1	2	3	4
f. Lack of health insurance coverage.	0	1	2	3	4
g. Worried about privacy and confidentiality.	0	1	2	3	4
h. Not enough time in my schedule.	0	1	2	3	4

5. Please read each question carefully and decide how stressful each situation has been for you based on a scale of 0 (never stressful) to 4 (always stressful).

	<u>Never Stressful</u>					<u>Always Stressful</u>				
a. My financial situation while growing up was:	0	1	2	3	4	0	1	2	3	4
b. My financial situation right now is:	0	1	2	3	4	0	1	2	3	4

6. Please read each question carefully and decide the extent to which each item has been a priority for you based on a scale of 0 (very low) to 4 (very high).

	<u>Very Low</u>					<u>Very High</u>				
a. I rate paying for entertainment as a _____ priority.	0	1	2	3	4	0	1	2	3	4
b. I rate paying for travel as a _____ priority.	0	1	2	3	4	0	1	2	3	4
c. I rate paying for dental care as a _____ priority.	0	1	2	3	4	0	1	2	3	4
d. I rate paying for mental health care as a _____ priority.	0	1	2	3	4	0	1	2	3	4
e. I rate paying for books/supplies as a _____ priority.	0	1	2	3	4	0	1	2	3	4
f. I rate paying for clothes as a _____ priority.	0	1	2	3	4	0	1	2	3	4

APPENDIX F

MENTAL HEALTH HELP-SEEKING QUESTIONNAIRE-II

MENTAL HEALTH HELP-SEEKING QUESTIONNAIRE – II  
(for counseling center participants)

**THIS IS AN ANONYMOUS QUESTIONNAIRE; PLEASE DO NOT PUT YOUR NAME OR STUDENT NUMBER ON THIS FORM.**

Instructions: The following items relate to decisions about seeking help for mental health services. Please read each question carefully and mark the response that best fits you and your experiences.

1. Please indicate how important the following obstacles have been in influencing your decision to seek professional help for emotional or mental health concerns, using a scale of 0 (not at all important) to 4 (extremely important).

	<u>Not at all</u>				<u>Extremely</u>
	<u>important</u>				<u>important</u>
a. Not knowing what services are available.	0	1	2	3	4
b. Lack of transportation.	0	1	2	3	4
c. Cost of services.	0	1	2	3	4
d. Not knowing where services are located.	0	1	2	3	4
e. Worried about what others might think.	0	1	2	3	4
f. Lack of health insurance coverage.	0	1	2	3	4
g. Worried about privacy and confidentiality.	0	1	2	3	4
h. Not enough time in my schedule.	0	1	2	3	4

2. Please read each question carefully and decide how stressful each situation has been for you based on a scale of 0 (never stressful) to 4 (always stressful).

	<u>Never</u>				<u>Always</u>
	<u>Stressful</u>				<u>Stressful</u>
a. My financial situation while growing up was:	0	1	2	3	4
b. My financial situation right now is:	0	1	2	3	4

(Please proceed to next page >>>)

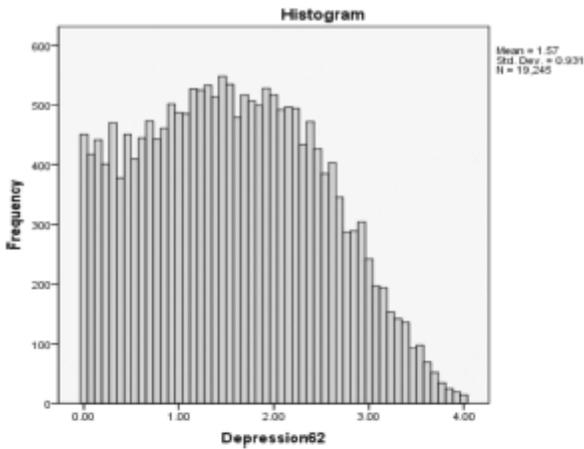
3. Please read each question carefully and decide the extent to which each item has been a priority for you based on a scale of 0 (very low) to 4 (very high).

	<u>Very</u> <u>Low</u>				<u>Very</u> <u>High</u>
a. I rate paying for entertainment as a _____ priority.	0	1	2	3	4
b. I rate paying for travel as a _____ priority.	0	1	2	3	4
c. I rate paying for dental care as a _____ priority.	0	1	2	3	4
d. I rate paying for mental health care as a _____ priority.	0	1	2	3	4
e. I rate paying for books/supplies as a _____ priority.	0	1	2	3	4
f. I rate paying for clothes as a _____ priority.	0	1	2	3	4

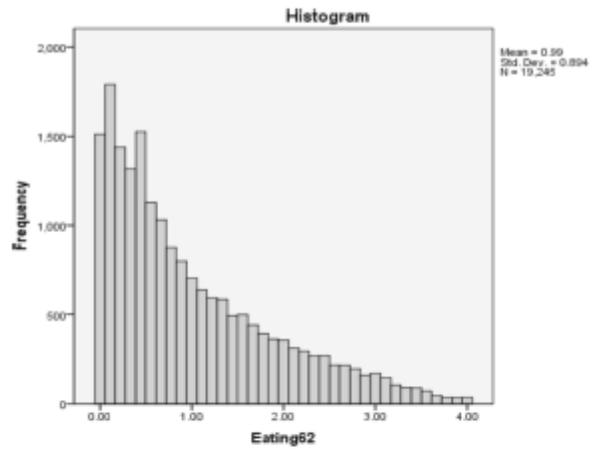
APPENDIX G  
HISTOGRAMS OF CCAPS-62 SUBSCALES

## Histograms of Subscale Distributions for the CCAPS-62 2009 Normative Sample<sup>2</sup>

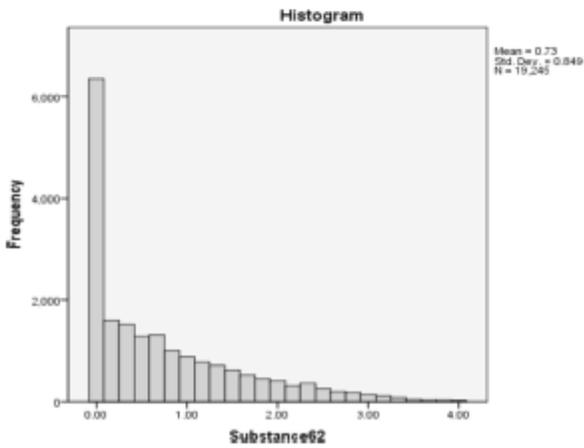
DEPRESSION CCAPS-62



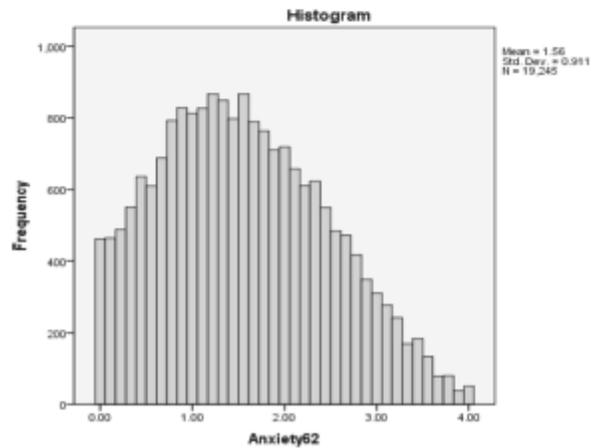
EATING CONCERNS CCAPS-62



SUBSTANCE USE CCAPS-62



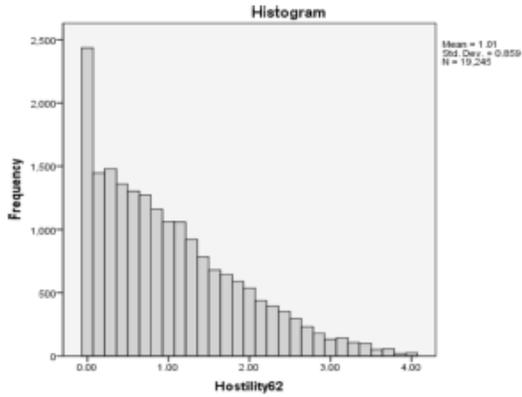
ANXIETY CCAPS-62



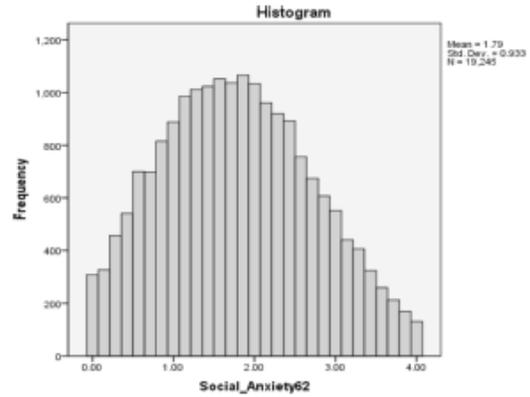
<sup>2</sup> All histograms are from *CCAPS 2010 User Manual* (pp. 28-29), by Center for Collegiate Mental Health, 2010, University Park, PA. Copyright © 2010 by The Pennsylvania State University. Reprinted with permission.

## Histograms of Subscale Distributions for the CCAPS-62 2009 Normative Sample<sup>3</sup>

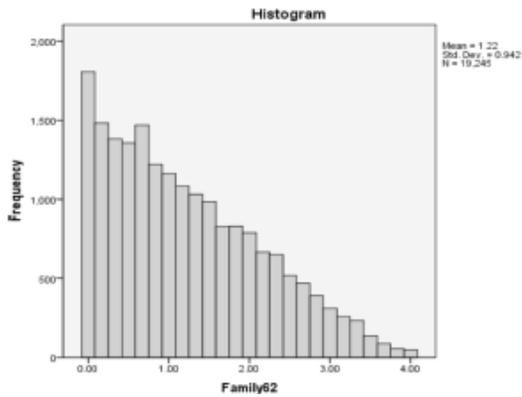
HOSTILITY CCAPS-62



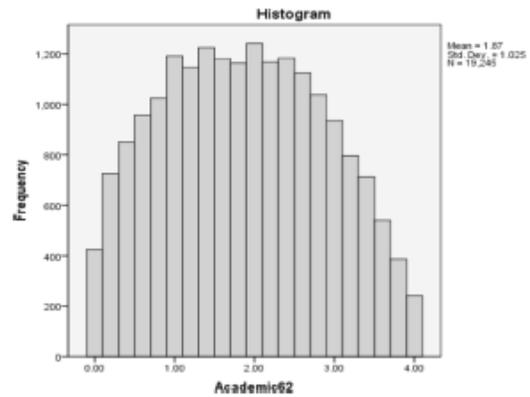
SOCIAL ANXIETY CCAPS-62



FAMILY DISTRESS CCAPS-62



ACADEMIC DISTRESS CCAPS-62



<sup>3</sup> All histograms are from *CCAPS 2010 User Manual* (pp. 28-29), by Center for Collegiate Mental Health, 2010, University Park, PA. Copyright © 2010 by The Pennsylvania State University. Reprinted with permission.

APPENDIX H

ATTITUDE TOWARD SEEKING PROFESSIONAL PSYCHOLOGICAL HELP SCALE-  
SHORT FORM (ATSPPHS-SF)

ATTITUDE TOWARD SEEKING PROFESSIONAL PSYCHOLOGICAL HELP SCALE-  
SHORT FORM

**THIS IS AN ANONYMOUS QUESTIONNAIRE; PLEASE DO NOT PUT YOUR NAME  
OR STUDENT NUMBER ON THIS FORM.**

Directions: Below are a number of statements pertaining to psychology and mental health issues. Read each statement carefully and indicate your agreement, partial agreement, partial disagreement, or disagreement. Please express your frank opinion in rating the statement. There are no “wrong” answers, and the only right ones are whatever you honestly feel or believe. It is important that you answer every item.

1. If I believed I was having a mental breakdown, my first inclination would be to get professional attention.

Agree    Partly Agree    Partly Disagree    Disagree

2. The idea of talking about problems with a psychologist strikes me as a poor way to get rid of emotional conflicts.

Agree    Partly Agree    Partly Disagree    Disagree

3. If I were experiencing a serious emotional crisis at this point in my life, I would be confident that I could find relief in psychotherapy.

Agree    Partly Agree    Partly Disagree    Disagree

4. There is something admirable in the attitude of a person who is willing to cope with his or her conflicts and fears *without* resorting to professional help.

Agree    Partly Agree    Partly Disagree    Disagree

5. I would want to get psychological help if I were worried or upset for a long period of time.

Agree    Partly Agree    Partly Disagree    Disagree

6. I might want to have psychological counseling in the future.

Agree    Partly Agree    Partly Disagree    Disagree

7. A person with an emotional problem is not likely to solve it alone; he or she *is* likely to solve it with professional help.

Agree    Partly Agree    Partly Disagree    Disagree

(Permission for at-large research use granted by Edward H. Fischer & Amerigo Farina, 1995)

8. Considering the time and expense involved in psychotherapy, it would have doubtful value for a person like me.

Agree    Partly Agree    Partly Disagree    Disagree

9. A person should work out his or her own problems; getting psychological counseling would be a last resort.

Agree    Partly Agree    Partly Disagree    Disagree

10. Personal and emotional troubles, like many things, tend to work out by themselves.

Agree    Partly Agree    Partly Disagree    Disagree

APPENDIX I  
RESEARCH INVITATION  
CLINICAL SAMPLE

## Research Invitation

You are being asked to take part in a research study. The study is called " Help-seeking Decisions Among College Students: The Impact of Mental Health Service Affordability." The study is being conducted by principal investigator Carey N. Marsh, a doctoral student in the program of Counselor Education at the University of Alabama. The purpose of this study is to explore how college students who experience mental or emotional distress make decisions about getting help for their distress.

Taking part in this study involves completing a consent form and completing three questionnaires, all contained in the attached envelope. It is estimated that this will take about 10 to 15 minutes. The first questionnaire asks for basic information pertaining to your age, gender, race/ethnicity, country of origin, and academic level. The other two questionnaires ask questions about mental or emotional distress and making decisions to seek mental health services. These questionnaires are confidential and anonymous – you will not be asked to put your name or student number on them. You will be asked to sign the consent form, but it will be separated from the questionnaires and will not be given to the researcher.

Taking part in this study also involves giving permission for your CCAPS-62 questionnaire to be included in this research. The CCAPS-62 questionnaire is one of the documents you filled out on the computer when you first arrived at the Counseling Center today. Although you put your name on the questionnaire, your name and any other identifying information will be removed before the information is provided to the researcher. No individual information from any of the questionnaires will ever be reported. Only summarized data from all participants will be presented in publications or at meetings.

You will not be paid or receive any tangible benefits from this study. However, the results of the study will be useful for college and university personnel who design and offer services for students who experience mental or emotional distress while getting their college education.

The chief risk of this study is that some of the questions may make you uncomfortable. You may skip any question you do not wish to answer or you may stop the study at any time. As well, you can discuss any discomfort upon meeting with a Counseling Center therapist today.

If you have questions about this study, you may contact the investigator, Carey Marsh, at (205) 348-7566 or you may contact the investigator's advisor, Dr. Allen Wilcoxon at (205) 348-7579. If you have any questions about your rights as a research participant you may contact Ms. Tanta Myles, The University of Alabama Research Compliance Officer, at (205)-348-5152.

**YOUR PARTICIPATION IS COMPLETELY VOLUNTARY.** You are free not to participate or stop participating at any time. If you prefer not to participate, please return this envelope to the receptionist. There is no penalty for not participating.

If you understand the statements above, are at least 19 years old, and freely consent to be in this study, you may start your participation by reading and completing the forms inside this envelope.

APPENDIX J  
INFORMED CONSENT  
CLINICAL SAMPLE

## UNIVERSITY OF ALABAMA

### Individual's Consent to be in a Research Study

You are being asked to take part in a research study. This study is called “Help-seeking Decisions Among College Students: The Impact of Mental Health Service Affordability.” This study is being done by Carey N. Marsh, MA, EdS, LPC. Ms. Marsh is a doctoral student in counseling in the Program in Counselor Education at the University of Alabama.

#### **What is this study about?**

Many college students experience emotional or mental distress while they are at college. Some students seek professional counseling help for their distress, while many others never seek help at all. Therefore, this study is aimed at understanding why many college students who are experiencing emotional or mental distress do not seek help. In particular, this researcher is interested in finding out if certain barriers get in the way of seeking help for some students. Some of the barriers include not being able to pay for professional help, not knowing where or how to get help, being worried about what others might think, being worried about privacy, and not believing that a professional can help. In order to better understand how these barriers may affect students in distress, this researcher is studying students who have chosen to get professional help, as well as students who have chosen *not* to get professional help.

#### **Why is this study important – What good will the results do?**

The results of this study will help university officials and campus mental health professionals understand why many students who are experiencing emotional or mental distress do not seek help for their distress. This information is important for guiding decisions about how to inform students about campus mental health services, how to improve access to mental health services, and how to reach out to students in distress.

#### **Why have I been asked to take part in this study?**

This study is being conducted only with students enrolled at the University of Alabama. Therefore, you have been asked to take part because you are a currently enrolled student at the University.

#### **How many other people will be in this study?**

This study is being conducted with two different samples of University of Alabama students. For the first group, approximately 10,000 students have been randomly selected to receive emails through their campus email addresses inviting them to participate in the study. For the second group, approximately 400 students who have scheduled an appointment at the University of Alabama Counseling Center are being invited to participate in the study.

#### **What will I be asked to do in this study?**

If you agree to be in this study, you will complete four questionnaires: 1) Demographic Questionnaire, 2) Mental Health Help-Seeking Questionnaire, 3) Attitudes Toward Seeking Professional Psychological Help Scale-Short Form, and 4) Counseling Center Assessment for Psychological Symptoms-62 (CCAPS-62). The first questionnaire asks for basic information pertaining to your age, gender, race/ethnicity, country of origin, and academic level. The other

three questionnaires ask questions about mental or emotional distress and making decisions to seek mental health services.

**How much time will I spend being in this study?**

It will require approximately 10 to 15 minutes to complete the three questionnaires included with this document. You have already completed the CCAPS-62 questionnaire – one of the questionnaires you completed on the computer.

**Will being in this study cost me anything?**

The only cost to you from this study is your time.

**Will I be paid for being in this study?**

You will not be paid for being in this study.

**What are the risks (problems or dangers) from being in this study?**

The main risk for you for being in this study is that you will be asked questions about mental and emotional distress. Some of these questions could potentially be uncomfortable. You can control this potential by not being in the study, by not answering any question that makes you feel uncomfortable, or by stopping your participation in the study at any time. There is no penalty or consequence for choosing to stop your participation. If you experience distress from completing these questionnaires, you are encouraged to discuss it with the Counseling Center therapist you are meeting with today.

**What are the benefits (good things) of being in this study?**

You will be contributing to research which could result in finding better ways of reaching out to and helping students in distress. There are no other benefits to you for being in this study.

**How will my privacy be protected?**

If you choose to participate in this study, please re-use the envelope you have been provided to place your completed consent form and questionnaires in and return to the Counseling Center receptionist. Your consent form will be removed from your questionnaires and both will be stored separately in locked filing cabinets. The researcher will not know the names or identity of students who have chosen to participate in the study.

**How will my confidentiality be protected?**

Each questionnaire has instructions to not write your name or student number on the questionnaire. As well, before data from your CCAPS-62 questionnaire is supplied to the researcher, your name and other identifying information will be removed. The information from the questionnaires will be reported in the researcher's dissertation only as totals from all students' questionnaires. Your individual responses will never be reported. After the researcher completes her dissertation, all consent forms and paper-and-pencil questionnaires will be destroyed.

**What are the alternatives to being in this study?**

The alternative to participating in this study is to not participate.

**What are my rights as a participant?**

Being in this study is totally voluntary – it is your free choice. You may choose not to be in it at all. If you start the study, you can stop at any time. If you stop, the information from any questionnaires you have completed will not be included in the study. Not participating or stopping participation will have no effect on your relationships with the University of Alabama.

The University of Alabama Institutional Review Board (IRB) is a committee that looks out for the ethical (fair) treatment of people in research studies. The committee may review the study records if they wish. This is to be sure that people in research studies are being treated fairly and that the study is being carried out as planned. However, since you will not be asked for your name or other identity information, study records will be anonymous to the committee.

**Who do I call if I have a question or problems?**

If you have questions about this study right now, you can request to speak with Dr. Lee Keyes at the Counseling Center. If you have questions about the study later, you may contact the investigator Carey Marsh at (205) 348-7566, or you may contact the investigator’s advisor, Dr. Allen Wilcoxon at (205) 348-7579. If you have any questions about your rights as a research participant you may contact Ms. Tanta Myles, The University of Alabama Research Compliance Officer, at (205) 348-5152.

You may also ask questions, make a suggestion, or file complaints/concerns through the University’s IRB Outreach Website at [http://osp.ua.edu/site/PRCO\\_Welcome.html](http://osp.ua.edu/site/PRCO_Welcome.html). After you participate, you are encouraged to complete the survey for research participants available at that same website. You may also e-mail the IRB at [participantoutreach@bama.ua.edu](mailto:participantoutreach@bama.ua.edu).

By my signature below, I confirm that I am at least 19 years of age and have read this consent document. I understand its contents and freely consent to participate in this study under the conditions described. I also understand that an extra copy of this consent form has been provided for me to keep.

Research Participant \_\_\_\_\_ Date \_\_\_\_\_  
(Signature)

Witness \_\_\_\_\_ Date \_\_\_\_\_  
(Signature)

APPENDIX K

RESEARCH INVITATION  
NONCLINICAL SAMPLE

## Research Invitation

You are being asked to take part in a research study. The study is called " Help-seeking Decisions Among College Students: The Impact of Mental Health Service Affordability." The study is being conducted by principal investigator Carey N. Marsh, a doctoral student in the program of Counselor Education at the University of Alabama. The purpose of this study is to explore how college students who experience mental or emotional distress make decisions about getting help for their distress.

Taking part in this study involves completing a web survey that will take about 15 to 20 minutes. This survey includes four questionnaires. The first questionnaire asks for basic information pertaining to your age, gender, race/ethnicity, country of origin, and academic level. The other three questionnaires ask questions about mental or emotional distress and making decisions to seek mental health services.

This survey is completely anonymous and confidential. At no point will you be asked to give your name, student number, or any other identification. As well, the link to this survey contains no identifying information connected with your email address. The investigator is the only person that will have access to the password-protected research data. Only summarized data from all participants will be presented in publications or at meetings.

You will not be paid or receive any tangible benefits from this study. However, the results of the study will be useful for college and university personnel who design and offer services for students who experience mental or emotional distress while getting their college education.

The chief risk of this study is that some of the questions may make you uncomfortable. You may skip any question you do not wish to answer or you may stop the survey at any time. As well, you will be provided with information about resources available for students who would like to get help with distress.

If you have questions about this study, you may contact the investigator, Carey Marsh, at (205) 348-7566 or you may contact the investigator's advisor, Dr. Allen Wilcoxon at (205) 348-7579. If you have any questions about your rights as a research participant you may contact Ms. Tanta Myles, The University of Alabama Research Compliance Officer, at (205)-348-5152.

**YOUR PARTICIPATION IS COMPLETELY VOLUNTARY.** You are free not to participate or stop participating at any time.

If you understand the statements above, are at least 19 years old, and freely consent to be in this study, click on the CONTINUE button to begin.

**CONTINUE**

APPENDIX L

INFORMED CONSENT  
NONCLINICAL SAMPLE

## UNIVERSITY OF ALABAMA

### Individual's Consent to be in a Research Study

You are being asked to take part in a research study. This study is called “Help-seeking Decisions Among College Students: The Impact of Mental Health Service Affordability.” This study is being done by Carey N. Marsh, MA, EdS, LPC. Ms. Marsh is a doctoral student in counseling in the Program in Counselor Education at the University of Alabama.

#### **What is this study about?**

Many college students experience emotional or mental distress while they are at college. Some students seek professional counseling help for their distress, while many others never seek help at all. Therefore, this study is aimed at understanding why many college students who are experiencing emotional or mental distress do not seek help. In particular, this researcher is interested in finding out if certain barriers get in the way of seeking help for some students. Some of the barriers include not being able to pay for professional help, not knowing where or how to get help, being worried about what others might think, being worried about privacy, and not believing that a professional can help. In order to better understand how these barriers may affect students in distress, this researcher is studying students who have chosen to get professional help, as well as students who have chosen *not* to get professional help.

#### **Why is this study important – What good will the results do?**

The results of this study will help university officials and campus mental health professionals understand why many students who are experiencing emotional or mental distress do not seek help for their distress. This information is important for guiding decisions about how to inform students about campus mental health services, how to improve access to mental health services, and how to reach out to students in distress.

#### **Why have I been asked to take part in this study?**

This study is being conducted only with students enrolled at the University of Alabama. Therefore, you have been asked to take part because you are a currently enrolled student at the University.

#### **How many other people will be in this study?**

This study is being conducted with two different samples of University of Alabama students. For the first group, approximately 10,000 students have been randomly selected to receive emails through their campus email addresses inviting them to participate in the study. For the second group, approximately 400 students who have scheduled an appointment at the University of Alabama Counseling Center are being invited to participate in the study.

#### **What will I be asked to do in this study?**

If you agree to be in this study, you will complete four questionnaires electronically:  
1) Demographic Questionnaire, 2) Mental Health Help-Seeking Questionnaire, 3) Attitudes Toward Seeking Professional Psychological Help Scale-Short Form, and 4) Counseling Center Assessment for Psychological Symptoms-62. The first questionnaire asks for basic information pertaining to your age, gender, race/ethnicity, country of origin, and academic level. The other

three questionnaires ask questions about mental or emotional distress and making decisions to seek mental health services.

**How much time will I spend being in this study?**

The four study questionnaires will take approximately 15 to 20 minutes to complete.

**Will being in this study cost me anything?**

The only cost to you from this study is your time.

**Will I be paid for being in this study?**

You will not be paid for being in this study.

**What are the risks (problems or dangers) from being in this study?**

The main risk for you for being in this study is that you will be asked questions about mental and emotional distress. Some of these questions could potentially be uncomfortable. You can control this potential by not being in the study, by not answering any question that makes you feel uncomfortable, or by stopping your participation in the study at any time. There is no penalty or consequence for choosing to stop your participation. If you are currently in distress, you are encouraged to seek support by contacting the University of Alabama Counseling Center at (205)348-3863 or by contacting other sources of help listed at the end of this document.

**What are the benefits (good things) of being in this study?**

You will be contributing to research which could result in finding better ways of reaching out to and helping students in distress. There are no other benefits to you for being in this study.

**How will my privacy be protected?**

You have received an email invitation to participate in this study through your password protected campus email account. No other individuals will know that you have received the email and they will not know if you decide to be in the study. If you decide to be in the study, you can complete the study questionnaires when you are alone and no one else can see how you are answering questions. The web link for this study has no information that connects back to your email address. As a result, no one (not even the researcher) will know which students answered the questionnaires. Because of this protection, reminder emails will be sent to all students who received an email invitation to be in the study. If a student has already completed the questionnaires, he or she will be instructed to ignore the reminder email.

**How will my confidentiality be protected?**

You will not be asked for your name, student number, or any other information that might identify you. The information gathered from the study questionnaires will be password protected and only the researcher will have the password. Also, the information from the questionnaires will be reported in the researcher's dissertation only as totals from all students' questionnaires. Your individual responses will never be reported. After the researcher completes her dissertation, all individual responses to the questionnaires will be electronically deleted.

**What are the alternatives to being in this study?**

The alternative to participating in this study is to not participate.

**What are my rights as a participant?**

Being in this study is totally voluntary – it is your free choice. You may choose not to be in it at all. If you start the study, you can stop at any time. If you stop, the information from any questionnaires you have completed will not be included in the study. Not participating or stopping participation will have no effect on your relationships with the University of Alabama.

The University of Alabama Institutional Review Board (IRB) is a committee that looks out for the ethical (fair) treatment of people in research studies. The committee may review the study records if they wish. This is to be sure that people in research studies are being treated fairly and that the study is being carried out as planned. However, since you will not be asked for your name or other identity information, study records will be anonymous to the committee.

**Who do I call if I have a question or problems?**

If you have questions about this study, please call the investigator Carey Marsh at (205) 348-7566, or you may contact the investigator’s advisor, Dr. Allen Wilcoxon at (205) 348-7579. If you have any questions about your rights as a research participant you may contact Ms. Tanta Myles, The University of Alabama Research Compliance Officer, at (205) 348-5152.

You may also ask questions, make a suggestion, or file complaints/concerns through the University’s IRB Outreach Website at [http://osp.ua.edu/site/PRCO\\_Welcome.html](http://osp.ua.edu/site/PRCO_Welcome.html). After you participate, you are encouraged to complete the survey for research participants available at that same website. You may also e-mail the IRB at [participantoutreach@bama.ua.edu](mailto:participantoutreach@bama.ua.edu).

**If you are currently experiencing mental or emotional distress, you are encouraged to contact the University of Alabama Counseling Center at (205) 348-3863, located at the South Lawn Office Building, 1101 Jackson Ave, Tuscaloosa, AL 35487. Other resources for help include the University of Alabama Student Health Center located at the corner of University Boulevard and 5th Avenue East, (205) 348-6262, and DCH Regional Medical Center located at 809 University Boulevard East, (205) 759-7111.**

By clicking on the “I Would Like to Participate” button below, I confirm that I am at least 19 years of age and I have read this consent document and I understand its contents and I freely consent to participate in this study under the conditions described. I can print out a copy of this consent form for my own records.

**IDO NOT WANT TO PARTICIPATE**

**I WOULD LIKE TO PARTICIPATE**