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Institutions of higher education are experiencing an influx of students in distress. It is imperative that all members of campus are involved in prevention and safety efforts, particularly student support professionals who are on the front lines of student interactions. A major gap in the literature exists, as no published studies have principally explored professional student support staff and their attitudes and referral practices with students manifesting a mental health concern. The purpose of this randomized controlled trial was to determine the impact, if any, of Kognito, Inc.'s *At Risk for University and College Faculty and Staff* online gatekeeper training upon student support professionals' attitudes towards the behavior, subjective norm, perceived behavioral control, actual behavioral practices, and intentions to refer distressed college students to counseling services. Using Ajzen's (1991) Theory of Planned Behavior as a guide, this study drew upon a total sample of 123 student support professionals consisting of 19 participants in the elicitation phase, 39 in the pilot study phase, and 65 in the main randomized controlled trial. Findings indicated that the interactive nature of this specific training is effective at altering one's beliefs and attitudes regarding referring a distressed student to counseling services, significantly impacts one's self-efficacy and self-confidence regarding their skills to refer, and modifies one's intentions to refer students to counseling services. Implications for practice are discussed.

ASSISTING DISTRESSED COLLEGE STUDENTS: ASSESSMENT OF AN ONLINE  
INTERACTIVE TRAINING FOR STUDENT SUPPORT PROFESSIONALS

by

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Approved by

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Committee Chair

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To my husband, parents, and siblings,  
Who have provided me with unwavering support, patience, and guidance.

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APPROVAL PAGE

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## CHAPTER I

### INTRODUCTION

Mental health concerns among college students have grown at an increasing rate within the past two decades (Benton, Robertson, Tseng, Newton, & Benton, 2003; Smith et al., 2007). For example, the number of student psychiatric hospitalizations reported nationally in 2012 has tripled from 1994 (Gallagher, 2012). Benton et al. (2003) assessed counseling center student-clients from 1988 to 2001 and found that students reporting sexual assault quadrupled, students experiencing suicidal ideation tripled, and students manifesting depressive symptoms doubled over that time span. Ultimately, student concerns were found to be more complex and multifaceted at the end of the 13-year assessment.

Although some students may manifest severe distress and seek out services, it is unclear if the overall rate of distress among college students as a whole has increased over time, or if students simply are seeking more therapeutic services currently than in the past (Erickson Cornish, Riva, Henderson, Kominars, & McIntosh, 2000; Hunt & Eisenberg, 2010). In the general adult population, help seeking behaviors for mental health disorders has increased over the past three decades, and thus it is unclear if mental health disorders among college-aged individuals are actually more prevalent or if help-seeking is now more socially acceptable (Hunt & Eisenberg, 2010). Furthermore, students may be obtaining therapeutic and/or pharmacological treatment for their mental

health concerns in high school or earlier, allowing more students to attend college (Haas, Hendin, & Mann, 2003; Kadison & DiGeronimo, 2004; Sharkin, 2006).

Although the findings remain unclear if the prevalence of mental health disorders among college-aged students actually has increased over time (see Erickson Cornish et al., 2000; A. J. Schwartz, 2006), clinicians and counseling center directors perceive an increase. In a national study of campus counseling center directors, 88% of participants stated that the recent increase in students seeking services as well as the increase in the severity of presenting issues has resulted in staffing concerns (Gallagher, 2012), leaving counseling centers poorly equipped and overwhelmed (Cook, 2007; Haas et al., 2003; Hodges, 2001; Voelker, 2003). Finally, in an assessment of 133 professional members of the American College Counseling Association, it was found that clinicians perceived that up to 36% of students on their caseloads manifested severe psychological problems (Smith et al., 2007).

The perception that college students are presenting with more severe psychological concerns has been empirically supported on college campuses. Erickson Cornish et al. (2000) assessed the data of 982 undergraduate and graduate students who sought counseling at one university counseling center from 1986 to 1991. The authors reported that significant increases in distressed students seeking services were observed in the latter years of the study, specifically between the years of 1988-1989 and 1990-1991; data for year 1989-1990 were not obtained. Similarly, Benton et al. (2003) reviewed client data from 1988 to 2001 at a large Midwestern university and found that counseling center student-clients who were seen in the later years of the study exhibited

more multifaceted psychological concerns. Soet and Sevig (2006) assessed 939 enrolled students at a large Midwestern public university and found that 22.8% experienced suicidal ideation in the past two weeks, over one-third expressed feeling they consumed more alcohol than what is perceived as being healthy, and 66% reported problems with sleep. Furthermore, 14.9% of students reported experiencing depressive symptoms, 6.1% reported symptoms of eating disorders, and 5.9% experienced anxiety.

The increasing severity of psychiatric conditions are further noted by the American College Health Association (ACHA; ACHA, 2013), who reported that out of a national sample of 123,078 matriculated college students surveyed, 7.4% of students seriously considered suicide and 1.5% attempted suicide in the past year. Furthermore, just over thirty percent of students reported that they were so depressed they found it difficult to function, and 51% experienced overwhelming anxiety in the past year. Keup (2008) stated, “it often seems as if the young men and women entering colleges and universities today are only a few bad days way from significant depression, debilitating anxiety, or substance misuse and abuse” (p. 31). Given the increasing severity of mental health concerns on college campuses, the purpose of this study was to explore student support professionals’ perceptions of and intentions to refer distressed college students to counseling services.

### **Review of Mental Health Concerns and Suicide in Higher Education**

#### **Mental Health Concerns in Higher Education**

An individual’s college years are ripe with a myriad of interpersonal, academic, and occupational experiences that will lead to the occurrence of a range of feelings and

resulting behaviors. Development necessitates learning how to release pent up feelings, discovering methods of handling positive and negative emotions, and learning how to marry actions with thoughts (Chickering & Reisser, 1993). Keup (2008) stated, “a certain level of stress and emotional discomfort can be expected for new college students and is even perhaps necessary for a meaningful transition” (p. 30). As such, a college student’s mental health concerns may not reach clinical severity, as change and instability are common at this time in one’s life (Arnett, 2004). Thus, the term *mental health concern* will be utilized in this paper to refer to any type of mental illness or psychiatric disorder, exclusive of specific diagnosis and devoid of specific detail (Tesfaye, 2009).

Bewick, Koutsopoulou, Miles, Slaa, and Barkham (2010) noted that “university is a time of heightened psychological distress” (p. 643). This time of transition away from one’s family and developmental changes may contribute to the experience or manifestation of mental health concerns or suicidal ideation and related attempts (Westefeld et al., 2006). External factors such as social, academic, and financial concerns, as well as one’s internal coping skills and biology all play a role in how one handles various stressors (Tesfaye, 2009). In addition, current undergraduate students who have been protected from failure by their caregivers may have few conflict management skills, and may be less resilient than previous generations of students (Keup, 2008).

Three-fourths of lifelong mental health concerns, such as anxiety, depression, and substance abuse, are manifested by age 24 (Kessler, Berglund, Demler, Jin, & Walters, 2005). Psychiatric illnesses such as depression and schizophrenia may not manifest until

the early 20s, potentially impacting one's academic functioning and persistence in college (Kessler et al., 2005; Martin, 2010; Megivern, Pellerito, & Mowbray, 2003; Weiner & Weiner, 1996). Research shows that 12-18% of college students manifest a diagnosable psychiatric condition and that psychiatric disabilities are the second most prevalent disability in college populations (Mowbray et al., 2006).

In a longitudinal study of undergraduate students, Bewick et al. (2010) found that college students' emotional wellbeing deteriorated over the course of their college career. Students' reported levels of anxiety rose approximately 50% between their first and second years at college, and then reduced during the second semester of the second year. Although stress was highest during the first semester, students' symptoms did not revert back to pre-matriculation levels in subsequent semesters. Similar results were reported by Stallman and Shochet (2009), who found that students in their study manifested greater levels of distress in the second semester than in the first semester of college. In addition, students' reported rates of depression doubled from pre-matriculation to the end of their third year, possibly due to impending graduation and job searches (Bewick et al., 2010). Furr, Westefeld, McConnell, and Jenkins (2001) report that 53% of their participants ( $n = 1455$ ) manifested depressive symptoms since starting their college career. Finally, Eisenberg, Golberstein, and Gollust (2007) found that 4.2% of undergraduate students manifested symptoms of generalized anxiety disorder or panic disorder.

**College students and their non-attending peers.** Blanco et al. (2008) report that “most college-aged individuals with psychiatric disorders did not seek treatment in the

previous year regardless of their educational status” (p. 1435). Blanco et al. (2008) noted that out of a sample of 5,092 college-aged individuals (ages 18-24), those attending college and those not currently attending, approximately one-half reported experiencing a mental health concern that met the Diagnostic and Statistical Manual, Fourth Version (*DSM-IV*) criteria in the past 12 months. Although college students manifested lower rates of bipolar disorder than their non-attending peers, the prevalence of anxiety and mood disorders across college students and their non-attending peers was approximately equivalent between the two groups.

Alcohol use concerns were the most frequent disorder reported by college attending participants, followed by personality disorder diagnoses. College students manifested lower rates of nicotine and drug use than did their non-college-attending peers, indicating that alcohol concerns were more likely among college attending students than were drug use disorders. In addition, college attending participants were least likely to obtain services for their substance use concerns than individuals who did not attend college. However, college-aged participants did seek treatment for mood disorders at a high rate within the previous year, which is a promising finding regarding possible stigma reduction and awareness of depression and other mood disorders (Blanco et al., 2008). Finally, Blanco et al. (2008) noted that “when considering all individuals of college age, the overall risk of having a psychiatric disorder did not differ between college students and non-college-attending individuals” (p. 1432). In addition, the likelihood of experiencing a mental health concern did not differ among full-time or part-time college students.

**Demographic differences.** Furr et al. (2001) found that students who were matriculated at larger campuses manifested significantly more depressive symptoms than students at a community college or a smaller religiously affiliated campus. In contrast, Westefeld and Furr (1987) found that students at a small, predominately female institution manifested more depressive symptoms and suicidal ideation than did participants at larger coeducational campuses. However, these findings need replication, as the fact that the smaller institution was primarily female may skew these results.

Soet and Sevig (2006) found that professional and graduate students reported depressive symptoms at twice the rate as undergraduate students. In contrast, Eisenberg, Gollust, Golberstein, and Hefner (2007) found that 11.3% of graduate students manifested symptoms of major depression as compared to 13.8% of undergraduate students. Regarding sexual orientation differences, lesbian, gay, or bisexual students reported depressive symptoms at three times the rate of their peers (Soet & Sevig, 2006). Similarly, Eisenberg, Gollust, et al. (2007) found that students who identified as bisexual reported more depressive symptoms than heterosexual participants. Finally, in regards to racial differences, African American students manifested less emotional distress than White or Asian students (Soet & Sevig, 2006). However, Eisenberg, Gollust, et al. (2007) found that students who self-identified their race as “Other” were more apt to manifest depressive symptoms than Caucasian students.

**The impact on academic achievement.** Factors related to one’s social and emotional adjustment during college and the development of mental health concerns may negatively affect one’s academic performance and impact rates of retention (Gerdes &

Mallinckrodt, 1994; Kitzrow, 2009). Brackney and Karabenick (1995) found that “poorly adjusted students perceived themselves as less competent to succeed, experienced greater test anxiety, and were less likely to regulate their study environment, persist in the face of difficulty, and seek academic assistance when needed” (p. 456). Results from the National Comorbidity Study, a national study assessing psychiatric disorders among participants ages 15-54 years old, have shown that 4.7% of college students who fail to complete their degree have struggled with a prior psychiatric disorder, students who struggle with depression are three times less likely to complete college, and that the vast majority of college dropouts do not re-matriculate (Kessler, Foster, Saunders, & Stang, 1995).

The National Alliance on Mental Health (NAMI; Gruttadaro & Crudo, 2012) conducted a survey with 765 current or former college students (enrolled within the previous five years). The authors report that 62% of participants stated that they were no longer enrolled in college due to their mental health concern. Furthermore, 50% of these individuals who stopped college due to mental health issues did not seek out any mental health services during the time of their enrollment. Dropouts reported that some factors that may have helped them remain in college might have been obtaining academic accommodations, attending therapy on campus, and obtaining support from family, friends, and peers.

Megivern et al. (2003) explored the higher education experiences of 35 individuals diagnosed with a mental illness, such as schizophrenia, bipolar disorder, major depression, and generalized anxiety disorder. Nineteen of the participants were

African American and 16 were of Caucasian descent. All of the students had onset of their illness prior to age 25, and all had withdrawn from college at least one time due to their psychiatric symptoms. Nineteen percent of the sample reported moribund academic performance in college due to their illness, primarily difficulty concentrating, falling behind in schoolwork, difficulty with memorization, and low motivation for academics. The main reason given by participants for their withdrawal from college was their severe symptomatology and lack of scholastic incorporation.

Eisenberg, Golberstein, and Hunt (2009) examined the impact that mental health concerns (namely depression, anxiety and eating disorders) have upon one's academic success in college. Surveys were completed at two time points, two years apart. The first survey consisted of 2,798 students and the second was comprised of 747 students who had taken the first survey as well. Participants were matriculated in one large public university. Female students were found to experience eating disorders, anxiety, and depression significantly more than male students. Students ages 18-22 were more likely to experience depressive symptoms and eating disorders. Eating disorders, anxiety, and depression were found to significantly correlate with one another, suggesting comorbidity of these mental health concerns within the sample. In both the longitudinal and within-person analyses, depression, as well as the comorbidity of depression and anxiety, had significant negative impacts upon one's grade point average (GPA). In addition, within-person estimates indicated that eating disorders were significantly related to a poor GPA. Overall, depression was found to be a significant indicator of one dropping out of college.

Drum, Brownson, Burton Denmark, and Smith (2009) found that 45% of graduate students and 43% of undergraduate students who experienced suicidal ideation stated that academic concerns were a major contributing factor to their suicidal thoughts. Eisenberg, Gollust, et al. (2007) reported that 41.2% of graduate students and 44.3% of undergraduate students stated that emotional concerns negatively impacted their academics in the past month. In sum, the most common reported reason for experiencing depression among a sample of 962 college students from three varying institutions was the experience of academic problems (Westefeld & Furr, 1987).

Similarly, in the past 12 months, 12.6% of all student participants reported that depressive symptoms interfered with their academic functioning and 19.7% reported that feelings of anxiety hindered their academic performance (ACHA, 2013). Often, students do not make a connection between their psychiatric symptoms and academic difficulties they are facing (Quinn, Wilson, MacIntyre, & Tinklin, 2009). Martin (2010) found that the primary academic problems students experienced due to their mental health symptoms were difficulties with concentration, getting work completed on time, mustering up motivation for engaging in schoolwork, problems with class attendance, and physical issues such as fatigue. Types of academic accommodations that students reported were beneficial were extensions on projects and papers, support from faculty, and having a continuous relationship with a mental health counselor at the university (Weiner & Weiner, 1996). A general deficit in student awareness of campus mental health services and resources was noted in the literature (Becker, Martin, Wajeesh, Ward, & Shern, 2002; Quinn et al., 2009). This is an important point for higher education

administrators, staff, and faculty members to understand, as education and outreach opportunities need to be continually offered on campus in order to help students get the assistance they need.

### **Suicide in Higher Education**

One out of ten college students have earnestly contemplated making a suicide attempt during the previous year (Brenner, Hassan, & Barrios, 1999). Suicidal ideations may be defined as “thoughts about suicide that may include the planning of suicide attempts” (Waldvogel, Rueter, & Oberg, 2008, p. 110). Suicide may be defined as “a self-inflicted injury resulting in death” (Silverman, Meyer, Sloane, Raffel, & Prat, 1997).

Research indicates that between 22.4% and 32% of college students have contemplated suicide (Curtis, 2010; Westefeld et al., 2005; Westefeld & Furr, 1987). Approximately 1-5% of students have attempted suicide while enrolled in college (Curtis; 2010; Westefeld & Furr, 1987). In a national randomized sample of 26,451 college students, it was found that over 50% of participants experienced some form of suicidal ideation in their lifetime (Drum et al., 2009). The American College Health Association (ACHA, 2013) noted that in the previous year, 4.3% of college men and 4.8% of college women seriously considered suicide, and 0.8% of men and 0.9% of women attempted suicide. Garlow et al. (2008) found that out of their sample of 729 college students, 11.1% reported suicidal ideation within the past month, and 16.5% reported a past occurrence of self-harm or suicide attempt. Furthermore, it was found that as the severity of one’s depression increased, so did the incidence of suicidal ideation. No statistical differences were found between males and females or ethnic groups regarding suicidal

ideation. No significant relationship was found between recent suicidal ideation and substance use in this sample.

Risk factors for adolescent suicide are genetic influences, family history of suicide or mental health concerns, past suicide attempts and/or suicide intent, having a history of abuse, having a desire to end emotional or physical discomfort, experiencing a psychiatric disorder, feeling stressed, having access to firearms, being male, or identifying as gay, lesbian, or bisexual (Drum et al., 2009; Gould, Greenberg, Velting, & Shaffer, 2003; Joffe, 2008; Tesfaye, 2009; Waldvogel et al., 2008; Weber, Metha, & Nelsen, 1997). The top five reported reasons for college student suicide attempts are stress regarding academics, relationship concerns, family issues, depressive symptoms, and feelings of hopelessness. Feelings of anxiety, social isolation, and financial concerns were also frequently reported as contributors to a suicide attempt (Westefeld et al., 2005). Similar findings are reported in the literature, with research indicating that hopelessness, loneliness, depressive feelings, problems concerning romantic relationships, and feelings of helplessness contributed to college students' experience of suicidal ideation (Furr et al., 2001; Heisel, Flett, & Hewitt, 2003; Westefeld & Furr, 1987; Weber et al., 1997). Furthermore, depression and social hopelessness, when entered into a discriminant functional analysis, significantly determined the difference between students who manifested low suicidal ideation versus students who manifested high suicidal ideation (Heisel et al., 2003). Protective factors for college students (i.e., factors that decrease one's risk of suicide) are noted to be identifying reasons for living, having familial, social and romantic supports, being age 25 or older versus being aged 18-22 years, living on

campus, and creating a safety contract with a mental health professional (Drum et al., 2009; Eisenberg, Gollust, et al., 2007; Westefeld et al., 2006).

**Demographic differences.** Students who identify as Pacific Islander, American Indian, Alaskan Native, or of Asian descent and who were not members of a Greek organization are more likely to have contemplated making a suicide attempt than their peers (Brener et al., 1999). Interestingly, Silverman et al. (1997) reported that in their sample over a ten-year time frame of twelve Midwestern United States institutions, 87% of the documented student suicides were completed by White students.

Brener et al. (1999) found that students who lived by themselves or with family or friends who were not romantic partners manifested more suicidal ideation. Analogous findings are reported by Eisenberg, Gollust, et al. (2007), noting that students who resided with family members manifested increased suicidal ideation. Westefeld and Furr (1987) also found that parental conflict contributed to suicidal ideation and/or behaviors for some students. In regards to sexual orientation, lesbian, gay, or bisexual students reported significantly higher levels of loneliness, depression and reported fewer reasons for living than a control group of heterosexual students (Westefeld, Maples, Buford, & Taylor, 2001).

The literature varies in regards to the impact of gender upon rates of suicidal ideation. The extant research has found no differences in gender regarding rates of suicidal ideation among college students (Brener et al., 1999; Garlow et al., 2008; Tesfaye, 2009; Westefeld et al., 2005). In contrast, the well-known Big Ten study examined college student suicides from 1980 to 1990 at 12 Midwestern institutions. It

was found that male undergraduate students died by suicide at twice the rate of female students, and that male students died by suicide earlier in their college years, whereas women were more likely to die by suicide in their graduate school years. Graduate student deaths by suicide did not significantly differ by gender (Silverman et al., 1997). Westefeld et al. (2005) did find that women were more likely to engage in an attempt after contemplating suicide. This finding has implications for institutions of higher education, as working to reduce suicidal ideation and engage in preventative referral practices may help decrease suicide attempts.

Research indicates that college students appear to be less likely to die by suicide than their non-college-attending counterparts (L. J. Schwartz & Friedman, 2009; Silverman et al., 1997). This is attributed to the relative lack of firearms on college campuses and some students residing in campus housing versus off-campus accommodations (A. J. Schwartz, 2011). In addition, college students have affordable access to health and mental health care on campus, in addition to other student support services and readily available peer supports (Silverman et al., 1997). College students who used substances such as alcohol, nicotine, and other drugs were significantly more likely to have considered making a suicide attempt in the past year as compared to their non-substance using peers (Brenner et al., 1999).

Regarding differences among graduate and undergraduate students, Eisenberg, Gollust et al. (2007) reported that 1.6% of graduate students and 2.5% of undergraduate students had contemplated suicide in the past month in their survey of one large public institution. Drum et al. (2009) found that 4% of graduate students and 6% of

undergraduates reported considering taking their own life in the previous year. However, graduate student death by suicide (10.7%), defined as students over the age of 25, was significantly greater than undergraduate deaths (5.8%), defined as students under the age of 25. Furthermore, students in this one-year sample exhibited a 7.5/100,000 suicide rate, which is reported to be half that of the national sample for similar age groupings, indicating that undergraduate college students die by suicide at a reduced rate than their non-college-attending peers. Rates of graduate student deaths by suicide did not differ from their non-college-attending peers (Silverman et al., 1997).

### **Gatekeeper Training**

In order to comprehensively address the issues of distressed students on campus, institutions must engage in preventative strategies, in addition to intervention and postvention strategies. Preventative strategies encourage help-seeking on campus, reduce access to lethal means, and raise awareness of mental health concerns on campus. Intervention strategies may consist of crisis management protocols, such as offering gatekeeper training for campus faculty and staff, and having mental health services on campus. Postvention efforts are geared towards assisting the campus community after a suicide has been completed by a student (The Jed Foundation, 2006). In addition to assessing student support professionals' perceptions of the distressed college student, this research project seeks to examine a gatekeeper intervention for student support professionals and determine the training's impact on intentions to refer a distressed student to counseling services.

Gatekeepers are the individuals who are in frequent contact with students, such as faculty, graduate students, and student affairs professionals (Owen & Rodolfa, 2009; Washburn & Mandrusiak, 2010). The goal of gatekeeper training is to help professionals develop the attitudes, skills, and knowledge necessary for proper identification, assessment, management, and referral of a distressed student (Gould & Kramer, 2001; Waldvogel et al., 2008). In addition, gatekeepers also need skills in motivating and persuading the student to actually seek help (Hollingsworth, Dunkle, & Douce, 2009). Indelicato, Mirsu-Paun, and Griffen (2011) noted that “gatekeeper training is one method used to increase participant awareness of risk factors and warning signs associated with suicidal behavior and to promote the early identification and referral of at-risk persons to helping resources” (p. 350).

Gatekeeper training has been conducted in a variety of settings and populations such as all levels of education, training for peers, primary care physicians, university hospitals, Aboriginal communities, and branches of the armed forces (Isaac et al., 2009). Gatekeeper trainings have also been empirically studied within higher education settings (Cross, Matthieu, Lezine, & Knox, 2010; Cross, Matthieu, Cerel, & Knox, 2007; Indelicato et al., 2011; Pasco, Wallack, Sartin, & Dayton, 2012; Reingle, Thombs, Osborn, Saffian, & Oltersdorf, 2010; Taub et al., 2013; Tompkins & Witt, 2009).

Indelico et al. (2011) longitudinally examined the knowledge, confidence, and comfort levels of higher education staff and student leaders who had completed Question, Persuade, and Respond (QPR) gatekeeper training. Female participants manifested significantly higher scores than male participants regarding their knowledge of suicide

prevention, knowledge of warning signs, and information about resources. Similar findings were reported for female resident assistants after completing a gatekeeper training, who manifested significantly improved crisis response skills than did male resident assistants (Pasco et al., 2012).

Regarding faculty and staff participants, Indelicato et al. (2011) found that knowledge acquired during the gatekeeper training and confidence in speaking with and skills in referring students significantly improved after the training, at both the 1-month and 3-month follow-up assessments. Student participants exhibited less confidence in their persuasion skills than faculty or staff, suggesting that age and life experience may be a factor in one's level of comfort in talking with and referring a distressed student. Interestingly, at all stages of this study (baseline, 1-month, and 3-month follow-up), participants requested more information about how to persuade a student to seek help, as well as requested additional information about local resources, indicating that continuing training and refresher workshops may be warranted. It should be noted that measures utilized in this study were not previously validated and thus findings lack generalization (Indelicato et al., 2011).

Cross et al. (2010) conducted a pre-post study utilizing a one-hour version of QPR with higher education staff such as student affairs staff, faculty, coaches, facilities staff, and residence assistants at five differing institutions. The authors reported that 46% of participants lacked the skill to directly ask about suicide and make a referral for the student after completion of the training. Findings from both Cross et al. (2010) and Wyman et al. (2008) further indicated that gatekeeper participants reported increased

self-efficacy for intervening and knowledge after the gatekeeper training, yet participants lacked skill improvement in communication skills, such as active listening or empathic reflections. Parallel results were found by Tompkins and Witt (2009) and Pasco et al. (2012) among resident assistants, noting that communication skills were not improved by didactic training alone. These results indicate that training may need to be longer and more intensive than one hour for gatekeeper skills to improve. Pasco et al. (2012) noted that after the experimental portion of the gatekeeper training was assessed, participants reported increases in ability to access resources, as well as increased comfort in directly asking another student about their suicidal thoughts and/or behaviors. It should be noted that the training used in Pasco et al. (2012) was a three-hour training that utilized both experiential and didactic training (Campus Connect), whereas Cross et al. (2010), Tompkins and Witt (2009), and Wyman et al. (2008) utilized a one and one-half hour didactic-only version of QPR.

Interestingly, Tompkins and Witt (2009) noted that when resident assistants were asked if they felt comfortable talking to a peer about suicide, 60% indicated that they were comfortable. However, when presented with a hypothetical situation of a student manifesting suicidal ideation, only 36% indicated they would be a “little likely” to broach the topic of suicide. However, the majority of participants stated they would be “very likely” to persuade their peer to seek help.

Self-efficacy, comfort in speaking with a distressed student, and knowledge about suicide have been shown to improve for resident assistants after attending a gatekeeper training (Pasco et al., 2012). Similarly, self-efficacy and intentions to act within a

gatekeeper role were improved for resident assistants after attending a gatekeeper training (Tompkins & Witt, 2009).

Taub et al. (2013) examined the communication skills and knowledge of new and returning resident assistants in a pre-post gatekeeper training study. The gatekeeper training utilized was created specifically for the institution and thus this study lacks generalizability in the sense that this training is not commercially available. Results indicated that new resident assistants benefited greatly from the training, improving in their knowledge of suicide, warning signs, and available resources, as well as manifesting improved communication skills. Returning resident assistants, who received an updated training to reflect their previously having the original training for new resident assistants, did not display any improved skills or behaviors after the training. This may be due to the fact that this training was a refresher for this group, or it may be due to the program being ineffective. However, results also indicated that gains in knowledge were quite separate from gains in communication skills, suggesting that trainings need to separately target these areas.

Jacobson, Osteen, Sharpe, and Pastoor (2012) implemented a longitudinal randomized controlled trial, using QPR training with second-year social work graduate students. Students who participated in the intervention displayed more confidence, knowledge, and self-efficacy beliefs than did the control group participants. At the four-month follow-up, the intervention group improved over time in regards to them feeling prepared to act as a gatekeeper if needed, as well as improvements in their awareness of campus resources. Results should be interpreted with caution, as these participants are

willing members of the mental health field, as well as having engaged in mental health courses and further training, which inherently differs from the average layperson.

In another longitudinal randomized gatekeeper training trial, participants in the intervention group manifested higher scores of knowledge, skills, and attitudes towards suicidal individuals than the control group at the post-test. The intervention group manifested significantly greater abilities in identifying individuals in distress and increased ability to intervene with the adolescent than did control group participants. These skills and improved attitudes were maintained up to six months after the intervention (Chagnon, Houle, Marcoux, & Renaud, 2007). In addition, longitudinal gains resulting from gatekeeper trainings have also been reported by Botega et al. (2007). In a sample of 317 nurses, feelings of positive attitudes towards a suicidal patient improved, as well perceived ability to professionally manage a suicidal patient were noted after participants completed a six-hour gatekeeper training. These increases in positive attitudes were maintained at three and six month follow-ups.

Despite the many benefits of gatekeeper training, other factors may be in play regarding assisting a student in need, such as the perceived distress or severity of the situation. Research has shown that students who are in the greatest emotional distress are the least likely to be referred to counseling. This finding is certainly not ideal, and may be due to the helper perceiving that the situation is not as dire as it was presented, or the student may have downplayed their distress so that the helper does not try to stop a future attempt (Drum et al., 2009). Female students, students whose suicidal thoughts interfered

with academics, and students who had stronger suicidal thoughts were more likely to be referred for treatment by their helper.

Personal factors, such as acceptance of suicide and one's own personal experience of suicidal thoughts or behaviors has been shown to influence one's response to suicidal individuals, with participants who have experienced suicidal ideation manifesting less acceptable suicide intervention skills (Neimeyer, Fortner, & Melby, 2001). Neimeyer et al. (2001) note that it is "clear that attitudes towards the legitimacy of suicide are related to effective responses to life-threatening crisis, with those individuals having more laissez-faire, accepting stances toward bringing about one's own death responding less appropriately to threats of suicide in another" (p. 80). Although these findings were noted in trained mental health professionals, these results imply that one's personal views may impact behaviors more so than professional training. Furthermore, Neimeyer et al. (2001) note that participants who maintained their equanimity when discussing death, but who do not believe that suicide is an acceptable option, engaged in more helpful interventions with the suicidal individual. Ultimately, a participant's past experience with suicidal behavior and their reactions to these situations were more predictive of their suicide intervention skills than was their professional training or various personal background factors.

Similar findings are reported by Scheerder, Reynders, Andriessen, and Van Audenhove (2010), who found that among 980 mental health professionals, community volunteers, professionals, and psychology students, one's past experiences working with individuals manifesting suicidal behavior was directly related to their suicide intervention

skills. Of interest is the finding that self-ratings of skills in working with suicidal individuals was associated with suicide intervention skills in reality, suggesting that one's confidence levels comes into play regarding working with suicidal individuals. However, personal experience with suicide was not related to suicide intervention skills, which is in contrast to the findings of Neimeyer et al. (2001).

Regarding attitudinal differences after a gatekeeper training, Maine, Shute, and Martin (2001) examined parental attitudes, knowledge, responses to suicidal youth, and intention to help suicidal adolescents. It was found that knowledge, responses to suicidal youth, and intentions to help suicidal youth increased after watching a gatekeeper training video. However, attitudes towards suicide manifested no association with a parent's knowledge, with a parent's response to a suicidal youth, or with parental intentions to help a youth after completing the training. This finding implies that one's attitudes may not directly impact their actual intentions or behaviors, allowing them to respond appropriately to a distressed individual despite their personal beliefs about the act of suicide.

### **Institutional Approaches to Suicide Prevention**

Although gatekeeper trainings may be effective at training campus professionals to encourage students to seek counseling, the odds that a student considering suicide successfully follows through on this recommendation may be slim (Joffe, 2008). Drum et al. (2009) stated,

Increasing the precision of referrals would require considerable investment of resources, because laypeople would need to be trained to the level of paraprofessionals. An important supplementary use of resources would be to

create a more connected and caring campus environment so that fewer students initially enter the suicidal process. (p. 218)

Furthermore, individuals who may be seen by the organization as gatekeepers may not view themselves as gatekeepers, possibly leading to poor identification of individuals in distress (Scouller & Smith, 2002). Thus, other institution-wide efforts may be implemented so that the message of seeking help and resources is heard by the student campus-wide.

The University of Illinois embarked upon a mandated counseling plan for students who manifested or expressed suicidal ideation from 1984 to 2005. This plan required that students of concern attend no less than four counseling sessions for assessment purposes at the campus counseling center. These assessment sessions were directly tied to academic and behavioral sanctions for students as part of the psychiatric withdrawal policy of the institution. This long-term program resulted in a 45.3% reduction in the rate of suicide in University of Illinois students, whereas national rates and rates at 11 similar institutions were neutral or rising. Rates of suicide for graduate students during this 21-year period increased by 94.6%, indicating that this is a high-risk population. However, underreporting may have occurred, as graduate students typically live off-campus, and thus these deaths may have been overlooked in the past and may not have been previously reported as a student-related death. Whereas the overall rate of reduction is impressive, counseling centers need to tread carefully regarding mandated assessments versus mandated counseling, due to the belief that counseling should not be mandated in nature (Joffe, 2008).

It is important to note that research does exist discussing campus-specific programming or in-service workshops to improve knowledge regarding student mental health concerns and suicide prevention, however, these programs are not specifically gatekeeper trainings, nor are these programs generalizable to other universities or colleges (Hollingsworth et al., 2009; Joffe, 2008; Mier, Boone, & Shropshire, 2009). Suicide prevention programming within schools may take the form of a suicide knowledge curriculum, emotion regulation skills training for adolescents, the screening of individuals for risk factors, peer educators, and gatekeeper training (Gould et al., 2003). Some essential institutional resources for working with distressed students on campus are educational programs for campus faculty, staff, and students, psychological and medical leave policies, emergency services, campus-based mental health and medical services, as well as educational programming for families and parents (National Mental Health Association & The Jed Foundation, 2002).

### **Problem Statement**

Learning how to effectively identify, manage, and refer a student in distress may assist the student in obtaining services before the issue becomes more severe (Davidson & Locke, 2010). A distressed student may be defined as a student who is “challenged by significant mental health concerns and whose impairment has the potential to negatively affect the larger college or university community” (Owen, Tao, & Rodolfa, 2006, p. 16). The mental health crisis on campus is further exacerbated by the fact that suicide is the second leading cause of death among traditional age college students (National Mental Health Association & the Jed Foundation, 2002). The need for an enhanced safety

network and training on campuses regarding distressed students is due to the fact that 80-90% of college students who die by suicide do not seek help from their college counseling centers (Furr et al., 2001; Kisch, Leino, & Silverman, 2005). Research shows that very few college students have indicated they would seek help from a mental health professional or faculty member in times of need (Drum et al., 2009; Hyun, Quinn, Madon, & Lustig, 2006; Zivin, Eisenberg, Gollust, & Golberstein, 2009).

Despite the fact that counseling center directors are reporting an increase in distressed students on campus (Gallagher, 2012), these statistics indicate that the majority of students on any given campus will not be seen by the counseling center staff, but by staff, other students, and faculty members who interact with them in classrooms and non-clinical settings (Curtis, 2010; Drum et al., 2009). Due to the increase in student severity, campus-based counseling centers have changed from a more preventative model to a crisis model in order to accommodate the more distressed students, possibly leaving less distressed portions of the student body untouched (Erickson Cornish et al., 2000; Kitzrow, 2009). The Jed Foundation (2006) states,

Although suicide is clearly a clinical issue, it is also a public health (or environmental) issue. This necessitates a shift in focus from prevention and treatment at the individual level to prevention and treatment at the community level. Therefore, suicide prevention should no longer be solely the concern of mental health professionals but also that of the entire college community. (p. 4)

Thus, it is imperative that all members of campus are involved in recognition, prevention, and safety efforts (Belch, 2011; Drum et al., 2009; Owen & Rodolfa, 2009), particularly student support professionals who are on the front lines of student interactions (Kitzrow,

2009). A student support professional may be defined as an individual who works within student affairs, or within academic affairs but who does not identify as a faculty member (e.g., admissions, registrar's office, financial aid, undergraduate studies support staff, etc.).

Research indicates that student support staff may be ill equipped to work with students with mental health concerns and may benefit from further training (Belch, 2011; Burkard, Cole, Ott, & Stoflet, 2005; Reynolds, 2011, 2013; Trela, 2008). However, student support professionals are looked to by campus colleagues for assistance in helping to solve the problems created by distressed students (Hollingsworth et al., 2009). Hollingsworth et al. (2009) state that "student affairs professionals are expected to track and communicate about student behaviors, identify potential risk, provide crisis assistance, and close the gap on those who fall through the cracks" (p. 43). Although it is important for student support professionals to have the necessary knowledge and referral skills to identify a distressed student, other internal factors may be at play in one's intention to refer a distressed student to counseling services (Servaty-Seib et al., 2013). Fears of potential legal liability may hinder a student support professional from referring a student in distress. However, these same fears and possible resulting inaction may cause negative legal implications for both the staff member and the institution if proper care is not offered to or obtained by the student.

A natural solution to help improve intentions to refer distressed students to counseling may be to offer trainings and workshops to student support professions to increase awareness and referral skills. However, Belch (2011) notes that it is currently

unknown what specific knowledge and skills are needed to train student support professionals in working with the distressed college student. Thus, in order to begin to tackle the question of what skills and specific knowledge is needed, we must first understand this population's current attitudes, perceptions, perceived level of comfort, and actual referral practices regarding the distressed college student. A major gap in the literature exists, as no published studies have principally explored professional student support staff and their attitudes and referral practices with students manifesting a mental health concern. Although gatekeeper trainings have been examined in the literature, the impact of gatekeeper trainings upon attitudes and referral practices of student support professionals is lacking. The lack of scholarly data is noted by Westefeld et al. (2006), who state that "there appears to be little literature to empirically support the training and education of non-mental health professionals on college campuses" (p. 949).

Only one study has generally assessed student affairs administrators' perceptions surrounding students with psychiatric concerns (Belch & Marshak, 2006). Reingle et al., (2010) and Servaty-Seib et al. (2013) have explored attitudes, organizational culture, level of confidence, and intentions to refer students with mental health and substance use concerns. However, these studies utilized undergraduate resident advisors as participants and not professional-level staff members. Thus, this creates an opportunity for a novel study that will begin to address this gap in the literature by looking beyond a student support professional's knowledge and skills and examining internal meanings that contribute to one's intention to refer.

## **Theoretical Framework**

### **The Impact of Stigma upon Referral Practices**

The response a student receives from a faculty or staff member upon disclosure may influence the student's future help seeking behavior (Martin, 2010; Quinn et al., 2009; Tinklin, Riddell, & Wilson, 2005). Research has reported variable responses by faculty towards distressed college students after the student has disclosed their mental health concern (Quinn et al., 2009; Tinklin et al., 2005). Stigma may be defined as “negative and erroneous attitudes” (Corrigan & Penn, 1999, p. 765) that are discrediting to an individual or a group of individuals, resulting in discrimination towards and separation from that individual or group (Link & Phelan, 2001). Furthermore, “stigma exists when elements of labeling, stereotyping, separation, status loss, and discrimination occur together in a power situation that allows them” (Link & Phelan, 2001, p. 377).

Both stigmas and societal stereotypes have portrayed that individuals with mental health concerns may be erratic in their behavior and possibly violent (Link & Phelan, 2001; McReynolds & Garske, 2003), at times resulting in feelings of fear and avoidance of individuals with mental health concerns (Corrigan & Penn, 1999; Link & Phelan, 1999). Prejudices towards individuals with mental health concerns have been shown to result in social distancing, as higher levels of prejudice have been associated with increased social distancing from individuals perceived to be mentally ill (Corrigan, Edwards, Green, Diwan, & Penn, 2001). Stereotypes may be defined as “efficient knowledge structures that represent a social group” (Corrigan et al., 2001, p. 219) and are considered social due to the “collectively agreed upon notions of groups of persons” (Corrigan et al., 2001, p.

219). Stereotypes are considered to be efficient due to the fact that assumptions about the referent group may be quickly generated by individuals.

Personal factors such as familiarity with mental illness has been found to be associated with negative attitudes towards individuals with mental health concerns, with individuals who are more familiar with mental health concerns, by way of personal experience or formal training, to be less inclined to experience negative attitudes about people perceived to have a mental illness. In addition, it has been found that individuals who identify as being from a minority ethnic group are less inclined to experience negative attitudes about people perceived to have a mental illness (Corrigan et al., 2001).

These hidden attitudinal factors may be “influenced by a wide variety of cultural, personal, and situational factors” (Ajzen & Fishbein, 2005, p. 194). For example, L. S. Schwartz (2010) found that faculty members who manifested an overall negative attitude towards assisting students in distress were not easily swayed by further training or information. Becker et al. (2002) report that “the more fearfulness and discomfort around students with mental illnesses, the fewer referrals and accommodations” were made by faculty (p. 366). Forty-three percent of faculty reported that they did not feel comfortable working with a student who was manifesting mental health symptoms, with 13% of faculty reporting that they are concerned for their own safety when around students who were emotionally unwell (Becker et al., 2002).

McReynolds and Garske (2003) note that “perhaps the greatest barrier for persons with a psychiatric disability . . . is not the disability, but rather the stigma attached to it by members of society” (p. 14). The experience of stigma may be as damaging to the

individual as is the mental illness itself (Corrigan & Penn, 1999). It is important to examine the underlying attitudes of student support professionals towards the distressed college student, as these hidden attitudes may either positively or negatively impact one's intention to refer (McReynolds & Garske, 2003). Sharkin (2006) reports that an attempt to refer a distressed student to speak with a mental health professional may be unconvincing if the individual referring has negative views towards treatment or mental health concerns. In addition, a referral to mental health professional may also be unpersuasive if the individual referring lacks the requisite knowledge regarding available treatment options and counseling in general (Taub & Servaty-Seib, 2011).

Although it is important for student support professionals to have the necessary knowledge and referral skills to identify a distressed student, other internal factors may be at play in one's intention to refer a distressed student to speak with a mental health professional (Servaty-Seib et al., 2013). Taub and Servaty-Seib (2011) describe the differences between a recommendation and a referral as follows: "a recommendation involves one person making a suggestion to another person that counseling might be helpful, whereas a referral involves the active participation of both parties in recognizing the student's need for counseling" (p. 15). This study seeks to examine one's intent to refer, and may be viewed as an active process and collaboration between two individuals.

### **The Theory of Planned Behavior**

The Theory of Planned Behavior (TPB; Ajzen, 1991) was utilized as the theoretical framework for this study, as this theory seeks to examine the internal factors that are related to one's perceptions of and intention to refer a distressed student. Ajzen

(1991) notes that the TPB is “designed to predict and explain human behavior in specific contexts” (p. 181). The TPB (Ajzen, 1991) seeks to examine the internal factors that are related to one’s perceptions of and intention to refer a distressed student (see Figure 1). The TPB is ideal for this study, as this theory focuses upon three constructs that assess an individual’s likelihood of manifesting a specific behavior: attitude toward the behavior, subjective norm, and perceived behavioral control of one’s ability to perform the behavior (Montano & Kasprzyk, 2008).

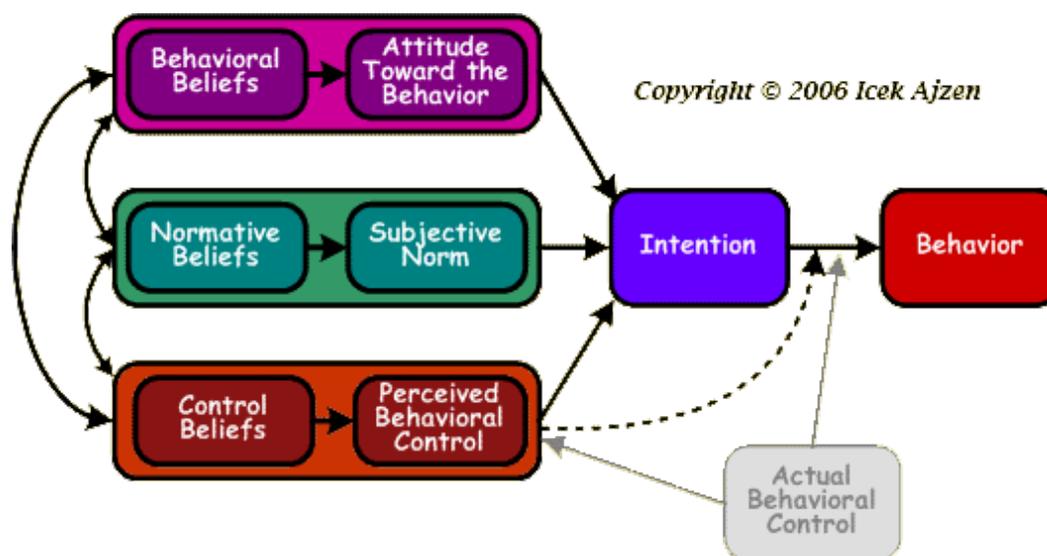


Figure 1. The Theory of Planned Behavior (TPB; Ajzen, 1991).

The TPB has been used extensively in a variety of empirical studies (Armitage & Conner, 2001). Specifically, the TPB has been used in higher education settings to assess faculty members’ intentions to confront students who cheat (Coren, 2012), faculty perceptions of the distressed college student (L. S. Schwartz, 2010), resident advisors’ perceptions and intentions to refer peers with mental health or substance use concerns

(Reingle et al., 2010; Servaty-Seib et al., 2013), and faculty attitudes towards seeking external funding opportunities (Hartmann, 2011).

The TPB requires the researcher to clearly delineate the intended behavior, and to make this behavior specific in regard to target, action, context, and time parameters (Ajzen & Fishbein, 2005; Francis et al., 2004). The *target* in this study consist of student support professionals; the intended *action* is to refer distressed students to speak with a mental health professional; the *context* refers to the distressed college student; and the *time* of the behavior is in regards to during the course of the participant's work as a student support professional.

Ajzen (1991) purports that one's intention to perform a specific behavior may be predicted from the individuals' attitudes towards the specific behavior, subjective norm, and perceived behavioral controls. These three constructs may then account for a significant proportion of explained variance in the actual behavior. The TPB is a modification of Ajzen and Fishbein's Theory of Reasoned Action, with the TPB enhancing the Theory of Reasoned Action (TRA) by adding the variable of perceived behavioral control (Young, Lierman, Powell-Cope, Kasprzyk, & Benoliel, 1991). The addition of the perceived behavioral control variable has been empirically shown to allow for more exacting predictions of intention and achievement of behavioral goals (Ajzen & Madden, 1986). Furthermore, Armitage and Conner (2001) note that the variable of perceived behavioral control "influences behavior directly and indirectly, independent of TRA variables, and therefore represents a useful addition to the TRA" (p. 486).

The TPB focuses upon four constructs that assess an individual's likelihood of manifesting a specific behavior: (a) attitude toward the behavior, (b) subjective norm, (c) perceived behavioral control of one's ability to perform the behavior, and (d) intention to perform the target behavior of referring the student to counseling services (Montano & Kasprzyk, 2008). Definitions are in order to help clarify this theory. The attitude towards the behavior "refers to the degree to which a person has a favorable or unfavorable evaluation or appraisal of the behavior in question" (Ajzen, 1991, p. 188). Favorable attitudes towards a behavior are formed if the benefits of engaging in the act outweigh the potential disadvantages, and negative attitudes are created if the disadvantages of performing the behavior outweighs the possible advantages. Subjective norm may be defined as perceived social pressure from important personal or professional referents to either execute or not execute the specific behavior, thereby encouraging or discouraging one to perform the intended behavior. Perceived behavioral control is the presumed difficulty or ease of engaging in the behavior, and further encapsulates past behavior, confidence in performing the behavior, as well as potential enabling factors or constraints of performing the behavior (Ajzen, 1991; Ajzen & Fishbein, 2005). Finally, intention may be defined as the motivations that influence the individual to perform the specific behavior (Ajzen, 1991). Ajzen (1991) notes that "the stronger the intention to engage in a behavior, the more likely should be its performance" (p. 181).

Furthermore, behavioral beliefs, normative beliefs, and control beliefs regarding the specific behavior are antecedents to the attitude towards the behavior, subjective

norm, and perceived behavioral control and consist of both indirect and direct measures (Ajzen, 1991; Francis et al., 2004). Behavioral beliefs correspond to attitude toward the behavior, and may be defined as one's beliefs about the possible positive or negative outcomes of the target behavior. In addition, positive or negative feelings associated with the behavior are referred to as outcome evaluations (Francis et al., 2004). Normative beliefs relate to subjective norm, and are one's perceptions if important individuals in their lives will either approve or disapprove of them performing the target behavior, in conjunction with the participant's motivation to comply with the beliefs of the referents (Montanto & Kasprzyk, 2008). Similar to behavioral beliefs, outcome evaluations are present within normative beliefs (Francis et al., 2004). Control beliefs are related to perceived behavioral control. Control beliefs are the perceived barriers and facilitators to performing the behavior, and how these barriers may contribute to the relative ease or difficulty of performing the behavior (Montanto & Kasprzyk, 2008). Control beliefs may be further broken down into controllability factors (e.g., how much control participant believe they have regarding executing the behavior) and self-efficacy factors (e.g., difficulty in performing the behavior and level of confidence in performing the behavior) (Francis et al., 2004). In sum, "according to the TPB, people will have strong intentions to perform a given action if they evaluate it positively, believe that important others would want them to perform it, and think that it's easy to perform" (Sutton, 1998, p. 1318).

Ajzen and Fishbein (2005) note that there are typically contradictions "between intentions and action, that is, between what people say they would do and what they

actually do” (p. 178). In addition, one’s intention to perform a behavior is related to the extent they feel they have actual volitional control over performing the behavior (Ajzen & Fishbein, 2005), referred to in the TPB as actual behavioral control. Actual behavioral control may be thought of as the bridge between perceived behavioral control and the performance of the behavior, even if the intention to engage in the behavior is present. Thus, “when people have control over performance of a behavior, they tend to act in accordance with their intentions” (Ajzen & Fishbein, 2005, p. 192).

Ajzen and Fishbein (2005) report that, although background and demographic variables may account for some of the explained variance in behavior or intentions, this amount of variance is typically very small and does not directly impact the determinants of intentions for performing the behavior. Montano and Kasprzyk (2008) echo this statement and note that external demographic factors “do not independently contribute to explain the likelihood of performing a behavior” (p. 72). Furthermore, Ajzen, Joyce, Sheikh, and Cote (2011) note that in three out of four experimental studies conducted, the accuracy of factual information regarding the specified topic that a participant possesses does not significantly determine intentions to perform the target behavior. Offering accurate information does not override participant’s own beliefs about the behavior, and that it is one’s own beliefs, and not the accuracy of information provided, that guide one’s decision to engage in the behavior. L. S. Schwartz (2010) reported that faculty members who manifested strong negative beliefs towards referring a distressed student, despite having the knowledge that they were encouraged to refer the student to the university counseling center, did not do so due to their strong negative beliefs against the

targeted behavior of referral. Thus, the accuracy or falsity of prior information or training regarding mental health concerns retained by the participant, as well as demographic differences among participants, should not statistically impact one's intention to refer the distressed college student (Ajzen et al., 2011).

Regarding the exploration of past behaviors and how past behavior may or may not impact future behavior, Ajzen (1991) notes that "although past behavior may well reflect the impact of factors that influence later behavior, it can usually not be considered a causal factor in its own right" (p. 203). Past behavior's impact upon future behavior may be more reflective of the stability of personal factors in one's life (Ajzen, 1991). Although the primary focus of this study was on current influencing factors and levels of confidence related to referring distressed students and not the examination of past behavioral habits, this study also examined behavioral practices within the previous four weeks. In this manner, recent past behaviors may be explored in regards to one's attitudes, subjective norm, perceived behavioral control, and intentions to refer.

In sum, the TPB seeks to examine the hidden internal factors that are related to one's perceptions of and intention to refer a distressed student, and is thus ideal for this study (Ajzen, 1991). Previous research conducted with faculty members have sought to explore perceptions and comfort levels regarding students with mental health concerns (Backels & Wheeler, 2001; Becker et al., 2002; Brockelman, Chadsey, & Loeb, 2006; Easton & Van Laar, 1995; Leyser & Greenberger, 2008). Only one qualitative study with faculty members utilized the TPB (L. S. Schwartz, 2010), which offers a solid empirical and theoretical base for researchers. However, the constructs of the TPB are initially

difficult to assess in a quantitative study. Thus, an initial qualitative elicitation study is needed prior to the main quantitative study, in order to fully examine student support professional's attitudes, subjective norm, and perceived behavioral control regarding one's intention to refer.

### **Purpose of the Study**

The purpose of this study was twofold. First, this study explored student support professionals' salient beliefs and meanings towards distressed college students and intentions to refer. Second, this study examined the impact, if any, of an online interactive gatekeeper training upon student support professionals' attitudes, subjective norm, perceived behavioral control, and intentions to refer distressed students to counseling services. Finally, this study examined the behavioral practices of student support professionals within the previous four weeks, as well as after participating in the gatekeeper training.

### **Research Questions**

In the following research questions, "intention to refer" indicates a student support professional's intention to refer a distressed college student to speak with a mental health professional. A mental health professional may be defined as a licensed mental health clinician, e.g., social worker, counselor, or psychologist. The following research questions will guide this study:

1. What are student support professionals' salient beliefs and meanings regarding distressed college students and intentions to refer?

- a) What meaning do student support professionals make of the process of referring a distressed college student?
  - b) What are student support professionals' perceptions of their departmental and professional expectations regarding the referral of the distressed college student?
  - c) What are the issues that enable a student support professional from acting upon their intention to refer the distressed college student?
  - d) What are the issues that constrain a student support professional from acting upon their intention to refer the distressed college student?
2. Is there a relationship between attitudes towards the behavior, perceived behavioral control, and subjective norm towards intent to refer?
  3. How much of the variance in intent to refer is accounted for by attitudes towards the behavior, perceived behavioral control, and subjective norm?
  4. Do attitudes, perceived behavioral control, subjective norm, and intent to refer vary by gender, educational level, years of experience, and job duty?
  5. Does prior suicide prevention training, previous exposure to distressed students, and previous psychological coursework significantly impact attitudes, perceived behavioral control, subjective norm, and intent to refer?
  6. Are there significant differences *between* and *within* the intervention and control groups regarding attitudes towards the behavior, perceived behavioral control, subjective norm, intent to refer, and actual behavioral practices in the past four weeks?

### **Significance of the Study**

Exploring student support professionals' intentions and perceptions of distressed college students will offer a necessary first step in creating a body of work that may help student affairs professionals better understand themselves and their own perceived barriers when working with distressed college students. Outcomes of this doctoral research study may be important to institutional administrators and to those who hire and train student support professionals. Findings may further aid national organizations and practitioner-based graduate programs in assessing student affairs personnel competencies regarding student mental health concerns. Finally, this research will help identify potential modifications of graduate level coursework and continuing education trainings surrounding college student mental health concerns.

### **Definition of Terms**

*Attitude towards the Behavior (Attitudes)*—"refers to the degree to which a person has a favorable or unfavorable evaluation or appraisal of the behavior in question" (Ajzen, 1991, p. 188).

*Distressed Student*—A student who is "challenged by significant mental health concerns and whose impairment has the potential to negatively affect the larger college or university community" (Owen et al., 2006, p. 16).

*Intention*—The motivations that influence the individual to perform the specific behavior (Ajzen, 1991).

*Mental Disorder*—

A syndrome characterized by clinically significant disturbance in an individual's cognition, emotion regulation, or behavior that reflects a dysfunction in the psychological, biological, or developmental processes underlying mental functioning. Mental disorders are usually associated with significant distress or disability in social, occupational, or other important activities. (American Psychiatric Association, 2013, p. 20)

*Perceived Behavioral Control*—The presumed difficulty or ease of engaging in the behavior, and further encapsulates past behavior, confidence in performing the behavior, as well as potential enablement's or constraints of performing the behavior (Ajzen, 1991; Ajzen & Fishbein, 2005).

*Suicidal Ideation*—“Thoughts about suicide that may include the planning of suicide attempts” (Waldvogel et al., 2008, p. 110).

*Suicide*—“A self-inflicted injury resulting in death” (Silverman et al., 1997).

*Stigma*—“Negative and erroneous attitudes” (Corrigan & Penn, 1999, p. 765) that are discrediting to an individual or a group of individuals, resulting in discrimination towards and separation from that individual or group (Link & Phelan, 2001).

*Student Support Professional*—An individual who works within student affairs, or within academic affairs but who does not identify as a faculty member (e.g., admissions registrar's office, financial aid, undergraduate studies support staff, etc.).

*Subjective Norm*—Perceived social pressure from important personal or professional referents to either execute or not execute the specific behavior, thereby encouraging or discouraging one to perform the intended behavior (Ajzen, 1991).

## **CHAPTER II**

### **REVIEW OF THE LITERATURE**

It is important for higher education faculty, staff and students to understand how the current literature defines mental health concerns so consistent and effective discourses may occur. A mental disorder may be defined as

a syndrome characterized by clinically significant disturbance in an individual's cognition, emotion regulation, or behavior that reflects a dysfunction in the psychological, biological, or developmental processes underlying mental functioning. Mental disorders are usually associated with significant distress or disability in social, occupational, or other important activities. (American Psychiatric Association, 2013, p. 20)

Some diagnoses that are considered a mental disorder are major depression, schizophrenia, bipolar disorder, eating disorders, and anxiety disorders (Mowbray et al., 2006). It is important to note that mental disorders are largely invisible to others, further complicating identification and referral (McReynolds & Garske, 2003).

Seven studies in this review (Becker et al., 2002; Belch & Marshak, 2006; Brockelman et al., 2006; Collins & Mowbray, 2005; Kiuahara & Huefner, 2008; Megivern et al., 2003; Weiner & Weiner, 1996) utilized the term psychiatric disability to refer to a mental disorder that impairs at least one major area of life functioning, such as academic or social functioning. The term psychiatric disability includes primarily severe and chronic mental health diagnoses and may exclude traditional developmental concerns of college students, such as stress, relationship concerns, sexuality, and identity concerns.

However, the focus of the present study is regarding the distressed college student, and thus an individual's symptoms may not have reached the point of clinical impairment that is necessary to diagnose an individual with a mental health disorder or psychiatric disability (American Psychiatric Association, 2013). Thus, the term distressed college student was employed throughout this review. Future research would benefit from a consistent definition of mental health concerns and the inclusion of broader and less severe mental health issues.

Overall, there appears to be a paucity of research regarding higher education staff members' attitudes, knowledge, experiences and behaviors when interacting with the distressed college student. To date, no published studies have principally explored student support professionals' and their knowledge, attitudes, and referral practices with distressed students. Due to the complete lack of research regarding student support professionals, the available literature regarding student and faculty members' knowledge, attitudes, and referral practices with distressed students will be examined. Searches of literature databases and reviews of reference sections of relevant studies yielded five empirical studies exploring student experiences and perceived barriers in higher education (Martin, 2010; Megivern et al., 2003; Quinn et al., 2009; Tinklin et al., 2005; Weiner & Weiner, 1996). Six studies explored faculty member's confidence, experience, and knowledge of mental health concerns (Backels & Wheeler, 2001; Becker et al., 2002; Brockelman et al., 2006; Easton & Van Laar, 1995; Leyser & Greenberger, 2008; L. S. Schwartz, 2010), one study examined both faculty and student perspectives (Becker et

al., 2002), and two studies explored resident assistant's perceptions and referral practices (Reingle et al., 2010; Servaty-Seib et al., 2013).

First, help-seeking behaviors of college students will be explored. Second, the legal impact of mental health concerns upon institutions of higher education will be discussed. This literature is important to review due to the legal precedents that exist within higher education related to mental health concerns, which impacts campus policies and training programs. Finally, faculty, staff and undergraduate student employees' perceptions of the distressed college student will be reviewed.

### **Help-Seeking Behaviors of College Students**

Research has indicated that between 9% and 20% of college students have been engaged in mental health treatment (Gallagher, 2012; Garlow et al., 2008; Furr et al., 2001; Kisch et al., 2005; Soet & Sevig, 2006; Westefeld et al., 2005). However, 30% of all students on campus were exposed to outreach presentations, workshops, or student orientation seminars (Gallagher, 2012). This statistic indicates that the majority of students on any given campus will not be seen by the counseling center staff, but by students, faculty and staff who interact with them in classrooms, orientations, and non-clinical settings. Research has shown that 37%–84% of college students who experience anxiety or depression have not obtained any mental health counseling (Eisenberg, Golberstein, et al., 2007). Correspondingly, Garlow et al. (2008) noted that “84% of the students with suicidal ideation and 85% of the moderately severe to severely depressed students were not receiving any form of psychiatric treatment” (p. 487).

Downs and Eisenberg (2012) surveyed 8,487 college students at 15 institutions regarding their help-seeking behaviors. Among students who endorsed suicidal ideation, just over 50% obtained either therapy or medications in the previous year. These results are more promising than the results of Drum et al. (2009), who reported that less than half of the students who reported suicidal ideation were actively engaged in therapy. King, Vidourek, and Stader (2008) examined the help-seeking intentions and desire for autonomy of 641 Australian college students (aged 18-25 years). It was found that only 4.4% of students with a mental health disorder and 8.1% of students experiencing suicidal ideation reported that they were likely to seek out help in general (from family, friends, romantic partner, or mental health professional), and that only 7.6% of students with a mental health disorder and 22.9% of students with thoughts of suicide would seek out help from a mental health professional. Overall, more than 80% of students with mental health concerns or suicidal ideation stated they were unlikely to seek assistance of any kind.

In a national study of 9,282 adults, Wang et al. (2005) found that “delay among those who eventually make treatment contact ranges from 6 to 8 years for mood disorders and 9 to 23 years for anxiety disorders” (p. 603). Younger participants experienced longer postponements in obtaining treatment and less initial treatment contacts than did older participants. These delays in seeking treatment may be due to a lack of awareness of mental health concerns or inadequate access to treatment services. Westefeld et al. (2005) found that only 26% of their college student sample was aware of campus resources for mental health concerns, specifically suicidal ideation and depression.

Regarding student perceptions of suicidal ideation on college campuses, students indicated that they believed suicide was a cause for concern, but not necessarily a cause for concern on their particular campus (Westefeld et al., 2005). Furr et al. (2001) noted similar responses by their sample regarding depression on campus, with only 37%–42% of students perceiving that depression was an issue on their campus. This overall minimization of mental health concerns and suicidal ideation may contribute, along with a myriad of other factors, to the delays in help-seeking behaviors among college students.

### **Demographic Differences**

Benton et al. (2003) reported that students in their third and fourth years at college were more likely to engage in therapy services than students in their first or second years. Curtis (2010) noted similar results, finding that students in their third year of college or beyond expressed significantly more intent to seek services if needed than less-experienced college students. Compared to the general public, a survey consisting of 346 college students at one medium-sized institution were found to be less inclined to seek services for substance use concerns, eating disorders, stress, or anxiety and depression. College students were more likely to indicate that they would seek help for a serious mental health concern than were the general population (Turner & Quinn, 1999).

International college students are considerably less likely to attend counseling than domestic students (Soet & Sevig, 2006). Female college students were more likely to seek assistance for their suicidal ideation from both campus counseling center and institutional staff than male students (Curtis, 2010). Finally, males delayed seeking

treatment longer than did females, and participants of minority backgrounds postponed obtaining treatment longer than non-Hispanic White participants (Wang et al., 2005).

### **Barriers to Help-Seeking**

Drum et al. (2009) noted in their national study that “almost no undergraduates and not a single graduate student confided in a professor” (p. 218) regarding their mental health concern. Indeed, 47% of graduate students and 46% of undergraduates reported that they did not inform another person of their suicidal ideations. Students who did choose to confide their suicidal thoughts did so to peers, friends, or to a romantic partner. Students reported fearing that they would burden loved ones, would be stigmatized if they shared their suicidal thoughts, thought the problem would go away on its own, and reported fearing possible disciplinary actions from school or involuntary hospitalization. In addition, students report the perception that stress is to be expected in college and thus they did not need counseling. Other barriers to help seeking were having a lack of time, or lack of health insurance, or finances to attend counseling sessions. Students also manifested a tendency to minimize the severity of their concerns, a desire to handle their problems independently, lacked awareness of resources, and felt concerned with how they would be perceived by peers if they attended counseling (Corrigan, 2004; Eisenberg, Golberstein, et al., 2007; Hunt & Eisenberg, 2010; King et al., 2008; Martin, 2010).

Furthermore, students have reported fearing disclosing their mental health concerns to institutional staff due to fears of discrimination (Collins & Mowbray, 2005). Students who arrive on campus with a diagnosed psychiatric condition typically do not disclose this information to campus officials (Kadison & DiGeronimo, 2004). Fear of

stigmatization from professors is apparent in the literature (Martin, 2010; Quinn et al., 2009; Tinklin et al., 2005). Choosing to disclose a mental health concern requires an intricate decision-making process for the individual that is predicated upon both theirs and others' experiences with disclosure (Olney & Brockelman, 2003). Kihara and Huefner (2008) state that "professors or instructors may tend to perceive students with mental illness as trying to manipulate them or the university system" (p. 105). This perceived manipulation may come from absenteeism or the request for academic accommodations by the student.

Quinn et al. (2009) explored the experiences of twelve students in higher education who were diagnosed with a mental health concern. Students reported concerns that, if they disclosed their illness to the university, their diagnosis might potentially hurt future career opportunities. Students reported that they felt most comfortable disclosing their disability to friends and family first, then to faculty. Faculty or university staff with frequent contact with a student may be the first authority figure to which a student has disclosed. Quinn et al. (2009) state, "the reluctance of students to seek help is compounded by the often variable response from staff" within the university (p. 406).

Tinklin et al. (2005) also noted this variable response from staff. It was found that from the student's perspective, staff occasionally minimized the student's mental health concerns as ordinary stress. This qualitative study consisted of five students with a mental health concern at three different higher education institutions in Europe. Findings should be interpreted with caution due to lack of generalizability due to the small sample

size of this study, as well as the fact that this study was conducted in European universities.

A variable response by faculty and possible minimization of concerns may only enhance the student's tendency to keep their mental health concern private. Martin (2010) explored the experiences of 54 undergraduate students with mental health concerns at an Australian university. It was found that 34 of the students did not disclose their psychiatric concerns to faculty or staff for reasons of fear of being seen as dishonest, feeling afraid of possible discrimination, having had previous poor experiences disclosing to faculty or staff, or feeling embarrassed by their diagnosis. Students reported that they were "particularly concerned that a lack of understanding from staff and students would result in stigma and negative discrimination leading to restricted opportunities at university and in future employment" (Martin, 2010, p. 268).

Weiner and Weiner (1996) reported that the reluctance to disclose one's psychiatric disability status to faculty and staff was motivated by a fear of stigma and desire to prove to themselves and others that they were capable of doing the work independently. Megivern et al. (2003) found similar results, with only two of their 35 participants reporting that they had disclosed their mental health concern to faculty or staff. Finally, participants in NAMI's study of currently enrolled or recently enrolled college students found that the greatest barriers to disclosing one's mental health concern in college were fear of stigmatization by peers and campus staff and faculty, participants reported not being aware that they could obtain academic accommodations if they

disclosed, and fear that their information would not remain confidential (Gruttadaro & Crudo, 2012).

It should be noted that the “the Americans with Disabilities Act (ADA) of 1990 and the Rehabilitation Act of 1973 (Section 504) protect people with psychiatric disabilities from discrimination in higher education” (Megivern et al., 2003, p. 218). However, students must disclose their disability to the university in order to obtain protection under the ADA (Kihara & Huefner, 2008). Although fear of stigma and variable responses may hinder a student’s decision to disclose, those who did disclose to institutional employees valued faculty and staff who were empathic, understanding, and offered validation, reassurance and information without being invasive (Martin, 2010).

**Fear of stigmatization.** The “threat of social disapproval” about seeking mental health services, in addition to resulting negative thoughts of self for seeking out socially undesirable services, may lead to the lack of use of much needed counseling (Corrigan, 2004). In addition to a fear of being stigmatized for attending therapy, a desire to be self-reliant was found to be a barrier to help-seeking for students (Curtis, 2010). Eisenberg, Downs, Golberstein, and Zivin (2009) examined the perceptions of stigma and help-seeking behaviors among 5,555 college students at 13 institutions around the United States. They noted that “the central finding of this study is that personal stigma was independently associated with help seeking for mental health, whereas perceived public stigma was not” (p. 536). Personal stigma was defined as one’s own prejudices and stereotypes towards individuals who seek out mental health treatment, and perceived public stigma is one’s perception of what society as a whole views as stereotypes or

prejudices. Furthermore, personal stigma was strongest among male students, international students, students who identified as Asian, religious, or students who stated they were from a poor family. Younger college students also manifested higher rates of personal stigma than older students.

Fear of stigmatization and overall minimization of mental health concerns may contribute to the delays in help-seeking behaviors among college students. Research indicates that the majority of students on any given campus will not be seen by the counseling center staff, but by students, faculty and staff who interact with them in classrooms, orientations, and non-clinical settings. Thus, it is necessary that all campus personnel are aware of the mental health concerns of college students, as well as the ripple effect on the institution that may stem from the distressed student.

### **Legal Implications Regarding the Distressed College Student**

Mental health concerns not only impact the student but affect the institution and campus community as well, specifically in regards to student suicide (Kitzrow, 2009; Trela, 2008). As noted earlier, it is important to review the legal precedents surrounding students in distress in order to tailor campus-wide trainings and institutional policies for faculty and staff regarding college student mental health concerns. The specific actions of an individual or an institution can have severe legal consequences if the institution or individual has acted without proper authority. Kaplin and Lee (2007) stated that tort law necessitates that institutions and their agents refrain from harming a student or other individual “to whom the college owes a duty” (p. 87). Kaplin and Lee (2007) note,

Injured students and their parents are increasingly asserting that the institution has a duty of supervision or a duty based on its 'special relationship' with the student that goes beyond the institution's ordinary duty to invitees, tenants, or trespassers. Courts have rejected this 'special relationship' argument for most tort claims, but they have imposed a duty on colleges of protecting students from foreseeable harm. (p. 91)

Specifically, regarding the tort of negligence, an institution will be found negligent if they were found to owe a duty to the injured student but did not execute adequate steps needed to avoid the injury. Furthermore, determining a duty to an injured person is dependent upon state law. Thus, employees and administrators must be aware of their state laws regarding duty to care (Kaplin & Lee, 2007).

### **The Doctrine of *In Loco Parentis***

The concept of an institution of higher education's (IHE) duty to care for student wellbeing began with the doctrine of *in loco parentis*. This doctrine was in effect from the 1700s through 1961 and stated that IHEs were responsible for student behavior and overall wellbeing. This was noted in *Gott v. Berea College* (1913), where the college was found to be responsible for the physical wellbeing of its students. The fact that the 1961 finding of *Dixon v. Alabama State Board of Education* eliminated *in loco parentis* has not allowed institutions to become completely free from charges of neglect towards adult students (Benton & Benton, 2006). *In loco parentis* was utilized by IHEs to help delineate the relationship between student and institution (Stamatakos, 1990). However, "the doctrine of *in loco parentis*, properly understood, never did serve as a basis for tort liability" (Stamatakos, 1990, p. 472).

Kaplin and Lee (2007) note that the cases of *Bradshaw v. Rawlings* (1979), *Beach v. University of Utah* (1986), and *Rabel v. Illinois Wesleyan University* (1987) all ruled that the institution was a bystander in these respective legal situations, and thus the institution did not have a duty of care to the injured party. The concept of the institution-as-bystander is on the opposite spectrum of *in loco parentis*, and this shift in extremes may prove problematic for institutions. As such, it is noted that the institution-as-bystander principle is now being questioned in the courts (Kaplin & Lee, 2007).

### **Duty to Protect**

Factors of consideration when exploring if a duty of care is in existence include the foreseeability of harm, administrative factors such as policy measures taken to prevent harm, the degree of moral blame related to the conduct of the defendant, and the nature of the relationship between the two parties regarding the defendant's conduct and severity of plaintiff's injury (Dyer, 2008; *Tarasoff v. Regents of the University of California*, 1976). It is further noted that "liability for negligence is limited by the scope of the legally defined duty . . . the scope of duty of care often turns on the relationship between the party claiming harm and the party charged with negligence" (*Furek v. University of Delaware*, 1988). Foreseeability may be defined as the ability to perceive that injury or harm may occur from oversight or exclusions of a behavior, or the intentional behaviors of an individual (Phelps & Lehman, 2005).

A duty to protect only arises if a "special relationship" is in existence between the two parties involved. Thus, it is imperative that a special relationship be proven in order to impart liability for the tort of negligence upon an institution or institutional actor

(Stamatakos, 1990). Moore (2007) noted that the establishment of a special relationship may create a duty to protect another from committing suicide; historically this special relationship was limited to mental health professionals or institutions that had custodial responsibilities for another person, such as prisons or hospitals.

### **The Establishment of a Special Relationship**

Enmeshed in between the principles of institution-as-bystander and *in loco parentis* is the concept of a “special relationship” between a student and an IHE. Students’ desires to exercise their legal rights as adults thereby minimized an institution’s duty to protect, as shown in *Bradshaw v. Rawlings* (Kaplin & Lee, 2007). Stamatakos (1990) noted, “the demise of *in loco parentis* altered all facets of the student-college relationship” (p. 474). Various efforts have been made to redefine this relationship, such as utilizing contractual and fiduciary models. However, these models have proven to be insufficient when assessing institutional liability (Stamatakos, 1990).

As noted earlier, tort law denotes that there is no duty of care for another person unless a special relationship can be proven between the two parties (Rhim, 1996). Common relationships, as noted in Section 314A of the 1965 Restatement (Second) of Torts, defines special relationships as land owner and tenant, common carrier and passenger, innkeeper and guest, or one who takes legal or voluntary custody of another person (Dyer, 2008; *Shin v. MIT*, 2005). Additionally, school and student and employee and employer relationships have been added to the list of special relationships (Dunn, 2008). This was noted in *Furek v. University of Delaware* (1991):

Although a university no longer stands in loco parentis to its students, the relationship is sufficiently close and direct to impose a duty under Restatement (Second) of Torts § 314A. The university . . . has a duty to regulate and supervise foreseeable dangerous activities occurring on its property . . . Because of the extensive freedom enjoyed by the modern university student, the duty of the university to regulate and supervise should be limited to those instances where it exercises control. (p. 3)

Furthermore, the Restatement (Second) of Torts §323 notes that if an individual takes leadership and control of a situation, they are then seen as having entered into an association where they have assumed responsibility for the other party. Similarly, if one is offered a right of protection, that protection needs to be executed in full, or else negligence may be validated (*Furek v. University of Delaware*, 1991; *Tarasoff v. Regents of the University of California*, 1976).

Lake and Tribennsee (2002) reports that the U.S. legal system “has been reluctant to hold institutions liable for suicide or self-inflicted injury” (p. 2). However, Gray (2007) notes that the legal system is increasingly holding IHEs responsible as a guardian for students, particularly when institutional administrators were aware of the student’s suicidal ideation. This then brings into question the foreseeability of a student’s death by suicide, as the death may be argued as being foreseeable by the IHE if administrators were aware of the suicidal ideation prior to the death. The question of foreseeability was noted in *Bogust v. Iverson* (1960). Dr. Iverson, the director of Student Personnel Services at Stout State College, was charged with negligence and wrongful death by Ms. Bogust’s parents. It was found that Dr. Iverson had no legal duty to prevent the death by suicide of Ms. Bogust. Dr. Iverson terminated their counseling sessions together six weeks prior to Ms. Bogust’s suicide. However, no evidence was presented indicating that Ms. Bogust

was a harm to herself during her counseling sessions. Thus, the termination of counseling services was not seen as a negligent act by Dr. Iverson.

**The existence of a special relationship.** Two cases regarding a student's death by suicide did manifest special relationships. Elizabeth Shin was a sophomore at the Massachusetts Institute of Technology (MIT) who died by self-immolation in April 2000 (*Shin v. Massachusetts Institute of Technology*, 2005). Due to a 1971 Massachusetts Law, which has a limit of damages for tort claims for educational institutions to be \$20,000, the Shins chose to sue three parties: (a) MIT for contractual claims, (b) individual medical providers for gross negligence and negligent infliction of emotional distress, and (c) individual MIT non-clinician administrators for gross negligence, negligence/wrongful death, conscious pain and suffering, negligent identification of emotional distress, and negligent misrepresentation (*Shin v. MIT*, 2005; Winstein, 2002).

Under Massachusetts state law, persons who are not treating professionals only have a duty to prevent a suicide if they have contributed to or caused the suicidal condition, or if they had physical custody of the deceased, such as in a prison or inpatient psychiatric unit (*Shin v. MIT*, 2005). In this case, MIT obtained summary judgment for the contractual claims issues. However, the argument that specific individuals had a duty to protect Ms. Shin was allowed to proceed to trial (Kaplin & Lee, 2007; *Shin v. MIT*, 2005). The Massachusetts Superior Court denied the request for summary judgment and ruled that Ms. Davis-Millis, Elizabeth's housemaster, and Mr. Henderson, the Dean of Counseling and Support Services, did have a special relationship with Elizabeth, that they

should have foreseen the suicide attempt, and thus they owed Elizabeth a duty of care (*Shin v. MIT*, 2005).

Although this case did not go to trial and the Shins settled with MIT for a confidential amount, MIT endured the costs of this multimillion-dollar lawsuit (Benton & Benton, 2006; Dyer, 2008). This case was instrumental in the courts, as it clearly establishes the legal possibility of non-clinician institutional administrators forming a special relationship with students.

Finally, LaVerne Schieszler, the aunt of Michael Frentzel, brought a wrongful death action against Ferrum College. In addition, Ms. Schieszler also brought a wrongful death action against Mr. Newcombe, the Dean of Student Affairs, and Ms. Holley, a resident advisor at the institution (*Schieszler v. Ferrum College*, 2002). Mr. Frentzel took his own life by hanging himself in his dormitory room in 2002. Three days prior to his death, campus police and Ms. Holley were dispatched to Mr. Frentzel's room after he got into a fight with his girlfriend. The police and Ms. Holley managed to unlock his door, and they found Mr. Frentzel with visible bruises on his neck and head. He informed them that these injuries were self-inflicted. The police and Ms. Holley informed Mr. Newcombe of this incident, who subsequently had Mr. Frentzel sign a "no-harm" contract. Mr. Newcombe then left Mr. Frentzel alone in order to go interview Mr. Frentzel's girlfriend, Crystal. Shortly afterwards, Mr. Frentzel wrote an email to a friend and his girlfriend indicating that he intended to harm himself. Crystal informed the defendants of this email; however, they did not allow her to go to his dormitory room to check upon Mr. Frentzel. Mr. Frentzel wrote another ominous email to Crystal; she again

informed Mr. Newcombe, yet no further action was taken. Mr. Frentzel's remains were later found in his room (*Schieszler v. Ferrum College*, 2002).

Despite any prior case law in Virginia history, the District Court concluded that a special relationship did exist between Mr. Frentzel and Ferrum College. This was concluded on the basis that (a) Mr. Frentzel lived on-campus, (b) defendants had prior knowledge that he had mental health concerns, (c) campus police had previously found him in his dormitory room with bruises on his neck and head with his statement that he self-inflicted these injuries, and (d) recent emails sent by Mr. Frentzel to his girlfriend and another friend indicating that he planned on harming himself. These factors constituted foreseeability, and that the defendants should have known that he was at high risk of harming himself. The wrongful death action against the resident assistant, Ms. Holley, was dismissed. The charges against Ferrum College and Mr. Newcombe were upheld (*Schieszler v. Ferrum College*, 2002).

Themes that have emerged in the courts when determining if a special relationship is manifest are (a) the issue of mutual dependence (*Davidson v. University of North Carolina at Chapel Hill*, 2001), (b) the previous knowledge available and foreseeability of the injury or death (*Kleinknecht v. Gettysburg College*, 1993; *Furek v. University of Delaware*, 1991; *Shin v. MIT*, 2005; *Schieszler v. Ferrum College*, 2002), and (c) the landowner-tenant relationship (*Furek v. University of Delaware*, 1991; *Schieszler v. Ferrum College*, 2002). Alternatively, claims of negligence due to contractual claims made by an institution to offer protection to enrolled students failed in the *Shin v. MIT* (2005) case.

**The non-existence of a special relationship.** Sanjay Jain was a freshman student at the University of Iowa who took his own life by inhaling exhaust fumes from his moped, which he had parked inside his dormitory room. His father sued the institution for wrongful death and claimed that the university did not execute reasonable care for Sanjay. The plaintiff was seeking to find a special relationship under the Restatement (Second) of Torts § 323. This section “applies only when the defendant’s actions increased the risk of harm to plaintiff relative to the risk that would have existed had the defendant never provided the services initially” (*Jain v. State of Iowa*, 2000, p. 6). Both the District and Supreme Courts found that no special relationship existed between the University of Iowa and Sanjay, despite the fact that the resident advisor of Sanjay’s hall, Ms. Merrit, and her supervisor, Mr. Coleman, knew of Sanjay’s suicidal ideation and possible suicide plan and did not relay this information to the Dean of Students (*Jain v. State of Iowa*, 2000).

It was found that the institutional actors’ behaviors did not increase Sanjay’s risk of harm to himself, and that they did offer him assistance, which he declined. Furthermore, it is noted that in the state of Iowa, “the act of suicide is considered a deliberate, intentional and intervening act that precludes another’s responsibility for the harm” (*Jain v. State of Iowa*, 2000, p. 7). Therefore, the Supreme Court affirmed the lower court’s finding of summary judgment for the University of Iowa (*Jain v. State of Iowa*, 2000). It is important to note that this case focused more upon the issue of liability than of establishing a case for a special relationship, as exhibited by the plaintiff utilizing Restatement (Second) of Torts § 323 versus § 314 (*Schieszler v. Ferrum College*, 2002).

The case of *Mahoney v. Allegheny College* (2005) is another example of where a special relationship was found to not be in existence between institutional administrators and Chuck Mahoney, who died by suicide in 2002. Mr. Mahoney's parents claimed negligence, breach of duty, and medical malpractice by Allegheny College, institutional administrators, and Mr. Mahoney's therapist at the college, Ms. Kondrot. The court failed to find a special relationship between the institution or the administrators and Mr. Mahoney, as the administrators in question could not have foreseen Mr. Mahoney's death by suicide. Thus, all charges of negligence and breach of contract were dismissed. The claim of medical malpractice against Ms. Kondrot and the school's psychiatrist, Dr. Richards, was deferred (*Mahoney v. Allegheny College*, 2005). Subsequently, in 2006, Ms. Kondrot and Dr. Richards were both found not liable for Mr. Mahoney's death, and Mr. Mahoney was found to be 100% responsible for his own demise (Cleary, 2006).

Themes that have emerged in the courts when determining that a special relationship is not manifest are (a) the lack of a supervisory relationship with students (*Bradshaw v. Rawlings* 1979; *Orr v. Brigham Young University*, 1997), (b) the lack of a breach of contract by the IHE (*Bash v. Clark University*, 2007; *Jain v. State of Iowa*, 2000), (c) the lack of foreseeability of harm (*Bash v. Clark University*, 2007; *Mahoney v. Allegheny College*, 2005), and (d) finding the student to be at fault for their own demise (*Bash v. Clark University*, 2007; *Jain v. State of Iowa*, 2000; *Mahoney v. Allegheny College*, 2005).

It is apparent from the cases outlined above that the determination of a special relationship between an IHE and a student is, at best, a difficult process (see *Schieszler v.*

*Ferrum College*, 2002; *Shin v. MIT*, 2005; *Wallace v. Broyles*, 1998). Cases such as *Furek v. University of Delaware* (1991), *Kleinknecht v. Gettysburg College* (1993), and *Knoll v. Board of Regents of the University of Nebraska* (1999) show just how difficult the determination is surrounding the actuality of special relationships in higher education. Similarly, Dyer (2008) noted, “the *Shin* and *Schieszler* opinions exemplify the confusion surrounding the doctrine of special relationships” (p. 1393). It is important to note that foreseeability of harm is one of the primary concepts that courts will look for in a wrongful death/negligence case. It is clear from cases such as *Jain v. State of Iowa* (2000) and *Mahoney v. Allegheny College* (2005) that institutional personnel on campus may be able to foresee harm. However, if they have done all that they can do to help the student and the student still takes their own life, they may be found not liable for the death.

### **The Impact on Institutional Employees**

Institutional employees are not always protected under the doctrine of sovereign immunity, as show in the *Texas A & M Bonfire* case. In 2008, the Tenth Court of Appeals stated that plaintiffs in this case could go ahead and sue university administrators as individuals, and that the institution’s defense of sovereign immunity for the individual administrators was untenable (Mangan, 2008). Multiple cases have found non-medical institutional employees liable for failure to provide a duty to protect a student (see *Schieszler v. Ferrum College*, 2002; *Shin v. MIT*, 2005). Institutional employees, medical and non-medical alike, need to understand the limits and extent of the laws in the state in

which they are currently employed regarding the tort of negligence and special relationships on campus.

Moreover, the states of North Carolina and Virginia have both recently created precedents regarding the existence of special relationships and IHEs (*Davidson v. University of North Carolina at Chapel Hill*, 2001; *Schieszler v. Ferrum College*, 2002). This is an interesting finding, as these cases may foreshadow an increase in the legal establishment of special relationships and IHEs.

### **Legal Considerations for Institutions of Higher Education**

Although not all suicides or crises may be prevented on a campus (Kadison & DiGeronimo, 2004), a possible preventative measure may be to open lines of communication with the student's family regarding their current mental health concern (Baker, 2005). Although a collaborative relationship between student affairs personnel and parents is desirable, communication with one's parents may not be viewed positively by the student, and may even further contribute to the student's distress (Baker, 2005). Thus, it is important for student support personnel to thoroughly assess if parental notification will further help or harm the situation.

The Family Educational Rights and Privacy Act (FERPA) is a federal law overseen by the Family Compliance Policy Office within the U.S. Department of Education, with the goal of protecting students' privacy regarding their educational records (FERPA, 1974). FERPA, also known as the Buckley Amendment, applies to nonmedical personnel at IHEs. Private and public educational institutions that obtain federal funding are required to comply with FERPA.

The Health Insurance Portability and Accountability Act (HIPAA) of 1996 applies to medical staff employed at IHEs. HIPAA works in conjunction with state laws to release unauthorized patient health information when needed, such as in order to stop or minimize an imminent or acute threat to self or others. In some states, state law is more stringent than HIPAA, and in that situation the more strict law is followed. It is important to note that FERPA does not apply to student medical records on campus, and thus health care providers at IHEs cannot release information without student permission according to the exceptions of disclosure under FERPA (Baker, 2005). Baker (2005) reports that, “the FERPA emergency exception does, however, permit the student affairs staff and other nonmedical staff members to disclose to parents information in the student’s nonmedical files pertaining to the health emergency” (p. 678). The emergency exceptions under FERPA are broader than HIPAA’s emergency exceptions (Baker, 2005). This is important for IHEs to be aware of, as coordination among medical and non-medical staff may be essential in time of a crisis.

Thus, FERPA regulates non-medical employees at IHEs but does not have authority over medical staff and university mental health counselors (Gray, 2007). A thorough understanding of student privacy and confidentiality issues in higher education, as well as collaboration among departments on campus, may lead to improved networking and communication on campuses regarding emergency disclosures. Finally, IHEs may vary in how they address and handle emergencies and parental notification (Baker, 2005). Consequently, it is important for student support professionals to be familiar with their particular institutions’ policies and practices.

Although an IHE may take precautions to reduce foreseeable harm on campuses, not all deaths or injuries are foreseeable. Moore (2007) notes that ways to address and hopefully reduce student suicides and incidents on campus may be to (a) remove foreseeable hazards on campus, (b) increase collaboration and communication, (c) offer comprehensive on-campus resources, (d) provide current training to campus personnel, (e) identify distressed students, and (f) have a consistent institutional response to all threats and incidents on campus. Despite an institution offering trainings, working to improve communication and campus resources, an institutional response to distressed students must first consider the gatekeepers themselves. Do student support professionals see themselves as gatekeepers and are they comfortable in this role? By assessing attitudes and working to increase awareness and referral skills, institutions may work to protect themselves against future legal liabilities, public relations issues, and potential harm to students.

### **Faculty Perceptions of the Distressed College Student**

As noted earlier, due to the lack of research regarding student support professionals, the available literature regarding faculty members' knowledge, attitudes, and referral practices with distressed students will be examined. Backels and Wheeler (2001) explored faculty members' perceptions of the effect that mental health issues can have on students' academic performance. One hundred thirteen faculty members at an Eastern public university responded to a questionnaire regarding perceptions of 15 different types of mental health concerns (i.e., depression, suicidal ideation, anxiety, self-esteem, rape, eating disorder). The sample consisted of 52.7% men, 56% of the sample

had more than 15 years of teaching experience, and racial demographics were not reported. The authors noted that the greater part of faculty participants perceived that mental health issues did impact students' academic functioning, with half of the participants reporting that they perceived 14 out of the 15 diagnoses surveyed may cause difficulty with academic functioning.

Faculty members may have differing notions of just how a mental health or developmental concern impacts academic success. Backels and Wheeler (2001) reported that less than half of the faculty participants perceived issues surrounding sexual orientation as impacting one's academic functioning. Whereas the majority of faculty reported that many mental health concerns would impact academics, findings varied regarding the degree of flexibility or accommodations a faculty member would offer a student. More flexibility was given to perceived crisis situations, such as experiencing a sexual assault, death of a parent, and suicidal ideation, than were given for more chronic conditions such as anxiety and major depression. However, faculty perceived that depression and anxiety would highly affect one's academic performance and functioning (Backels & Wheeler, 2001).

As Backels and Wheeler (2001) noted, "the results of this study suggest that faculty members may not be aware of the importance of extending flexibility and considering referral for non-crisis mental health issues" (p. 176). Referral practices and flexibility given to students experiencing mental health concerns were not mediated by the mental health concern, but by the gender of the faculty member and years of teaching experience (Backels & Wheeler, 2001). This is an interesting finding and suggests that

other factors besides one's knowledge of mental health concerns, such as gender and experience, are at play when considering academic accommodations or making a referral to counseling services.

### **Faculty Confidence, Experiences, and Knowledge of Mental Health Concerns**

**Faculty confidence.** Becker et al. (2002) explored faculty and student perceptions of mental illness within a university setting. Specifically, one's beliefs, attitudes, knowledge, experience, and referral practices with mental health concerns of students were examined. A multivariate analysis of variance indicated that faculty referral practices and accommodations were paired with predictors of faculty confidence in identifying mental health concerns and faculty degree of social distance and fear of mental illness. Regarding perceived ability to discriminate between a mental illness and signs of temporary upset, 67% of faculty felt they could differentiate the symptoms (Becker et al., 2002). This finding is in contrast to Brockelman et al. (2006) who found that only 43% of faculty felt they could delineate between temporary upset and a mental illness.

Faculty also lacked confidence in their ability to refer students for services. Regarding confidence in one's ability to discuss their concerns with students and ability to persuasively refer a student for services, one-third of faculty reported that they never or rarely felt confident in their referral skills (Becker et al., 2002). Regarding faculty behavior, Becker et al. (2002) reported "the more fearfulness and discomfort around students with mental illnesses, the fewer referrals and accommodations" (p. 366). Forty-three percent of faculty reported that they did not feel comfortable working with a student

who was manifesting mental health symptoms, with 13% of faculty reporting that they are concerned for their own safety when around students who are emotionally unwell. Confidence in making a referral may not just be related to discomfort with mental health concerns but a lack of knowledge of services in general, as the authors reported that over one-third of faculty were unfamiliar with mental health services offered by the university.

Female faculty manifested greater confidence in their abilities to talk about their concerns for a student and to try to convince the student to obtain services. Younger faculty members and faculty with less teaching experience were more likely to consult with university counseling center staff and to have referred students to counseling (Becker et al., 2002). Utilizing a stepwise regression and two univariate analyses of variance, the age of the faculty member was found to account for 5.5% of variance related to confidence, but did not relate to comfort of working with students diagnosed with a mental illness or perception of students diagnosed with a mental illness (Brockelman et al., 2006). Overall, faculty perceptions of academic persistence regarding students struggling with a mental illness are generally positive. It was reported that 81% percent of faculty stated that they believed students struggling with mental illness could persist academically (Becker et al., 2002).

**Faculty experiences.** Brockelman et al. (2006) explored faculty member's personal experiences with mental illness and their perceptions towards students with mental health concerns. A large percentage of faculty members (85%) reported that personal experience with a friend, family member, student, or self-flavored their perceptions of working with students diagnosed or perceived to be experiencing a mental

health concern. These personal experiences were found to be “strong positive predictors of faculty perceptions of working with students with psychiatric disabilities”

(Brockelman et al., 2006, p. 29).

**Faculty knowledge.** Brockelman et al. (2006) queried 115 faculty members at a large Midwestern research university regarding their knowledge and perception of students diagnosed with a mental illness. This sample consisted of 82% of respondents identifying themselves as Caucasian and 62% identifying as male. Whereas most faculty members reported an overall positive view of the potential of academic success of students with a mental illness, respondents were not particularly knowledgeable about mental health concerns, had a somewhat negative perception of mental illnesses, and generally lacked awareness about services available to students. Although 84% of faculty participants reported being open to obtaining resources that would help them learn more about working with students diagnosed with a psychiatric disability, there was no real consensus about how they wanted to learn. A brochure or workshop was identified as possibly being the most helpful tool; however, only 27% and 22% of participants, respectively, desired these interventions. Sixteen percent of faculty participants reported they did not want any resources offered to them.

These findings are similar to Easton and Van Laar (1995), who reported that out of 231 faculty participants, 22% indicated that they did not desire any further information about how to assist distressed students. It was also reported that 31% of participants reported feeling they did not have enough knowledge or information about resources to offer students. Thus, despite one-third of participants feeling that they did not have

enough information about resources for students, one-fifth of participants did not desire to obtain any more information on the topic.

Leyser and Greenberger (2008) explored faculty members' perceptions of students with a disability, which included psychiatric disabilities. Out of 188 faculty members, over 87% of participants reported teaching students with a disability, and 70% stated that they were familiar with disability services on campus. Less experienced faculty reported having more training than seasoned faculty regarding issues related to different types of disabilities.

Findings, however, revealed that almost 60% of faculty did not have any training, or very limited training, in the area of disabilities, whereas a substantial group (about 40%) felt that they did not have the necessary knowledge and skills to make accommodations. (p. 246)

Unfortunately, less than half of participants were interested in obtaining more information and/or training.

**Faculty demographic factors.** Faculty members who teach primarily undergraduate students were found to make more accommodations and referrals than faculty who instruct graduate students (Becker et al., 2002). This may be due to the fact that graduate students are much less likely to disclose mental health concerns to faculty members than are undergraduate students (Drum et al., 2009). Interestingly, Becker et al. (2002) noted that faculty in the health sciences were found to have made fewer accommodations and referrals than other academic departments on campus. Academic discipline was not prognostic of one's confidence, comfort, or perceptions of students diagnosed with a mental illness (Brockelman et al., 2006).

***Faculty gender.*** Chi-square analyses indicated that female faculty members were significantly more likely to refer students for family problems, death of a parent, depression and eating disorders as compared to male faculty members (Brockelman et al., 2006). Female faculty members were more likely to offer flexibility and make accommodations for students manifesting depressive symptoms and test anxiety than male faculty members (Backels & Wheeler, 2001). Similarly, Becker et al. (2002) and Leyser and Greenberger (2008) also noted that female faculty members manifested more willingness to make accommodations for students than male faculty members. These are interesting findings regarding the differences among gender and referral practices and future research is needed to explore possible rationales for these findings.

***Faculty work experience.*** L. S. Schwartz (2010) conducted a qualitative study with 20 faculty members at one university utilizing the Theory of Planned Behavior (TPB). Faculty members' intentions to respond to the distressed college student were found to assume one of three roles: (a) proactive, (b) passive, or (c) aversive. The most noted differences were among the proactive and aversive faculty member profiles. Proactive faculty members were found to manifest less than 10 years of teaching experience and held positive attitudes regarding the faculty-student relationship, and believed that assisting students was part of their job duties. In contrast, faculty members who were identified as aversive in their nature had more than 11 years of teaching experience. Aversive faculty members did not want to be liable for any wrongdoing, and thus kept emotional distance from their students.

Backels and Wheeler (2001) noted that faculty members with less than 15 years of teaching experience perceived that substance abuse issues and test anxiety would affect academic functioning, as compared to faculty with more teaching experience. Faculty with more than 15 years' experience perceived that problems in one's relationships would negatively impact academic performance, and were more likely than less seasoned faculty to refer students experiencing stress to counseling. The researchers deduced that these differences in perceived student issues among faculty of varying tenure may be due to the changing face of mental health concerns on campus over time; long-term faculty deemed relationship concerns as paramount, and younger faculty viewed substance abuse and test anxiety as principal concerns of students.

Inconsistencies in the literature were apparent regarding the degree that faculty members felt confident in their abilities to differentiate between a student who was temporarily upset and a student with a mental illness (Becker et al., 2002; Brockelman et al., 2006). Future research would benefit from the development of empirically validated training resources and streamlined academic accommodation information on mental health concerns for students, faculty, and staff. Information about mental health concerns, academic difficulties that students with a mental illness may experience, and side effects of medications may be helpful to be distributed at multiple levels of the university (Kihara & Huefner, 2008). Offering trainings to faculty regarding mental health issues may be well regarded but poorly attended by faculty members (Brockelman et al., 2006). Finally, information about university and community mental health services and resources should be widely distributed and easily available, as faculty and students

have been found to have a deficit of knowledge regarding available services (Becker et al., 2002; Quinn et al., 2009).

### **Resident Advisors' Perspectives and Referral Practices within Higher Education**

The perspectives of resident advisors are included in this literature review, as these undergraduate student employees are truly on the front lines of student support and interventions. Although this study will exclude undergraduate student employees, it is important to understand the extant literature surrounding this population, as their perceptions and referral practices mirror their training and the campus culture. Reingle et al. (2010) explored undergraduate resident assistant's attitudes and referral practices regarding resident students who manifested mental health or substance use concerns. Forty-eight resident assistants participated from three higher education institutions throughout the United States. Twenty-five resident assistants were interviewed about their perceptions and referral practices of students displaying mental health concerns, and 23 were interviewed about substance abuse concerns. No resident assistant was asked to comment on both mental health and substance abuse concerns, in an effort to focus more in-depth on one topic. Over seventy percent of the sample self-identified as upperclassmen, 64.6% were female, and 66.7% identified as Caucasian. The majority of resident assistants resided in a traditional residence hall that consisted of double occupancy rooms off of a common hallway.

The three institutions that participated in this study had similar resident assistant training regarding substance use and mental health issues on campus. The Theory of Planned Behavior (TPB) was used as a conceptual framework for this qualitative study.

This theory seeks to explain the intentions behind an individual's actions and behaviors. Behavioral intentions are influenced by one's attitude toward executing the behavior, personal norms related to the behavior, and perceived control in performing the behavior (Reingle et al., 2010).

Forty-eight percent of resident assistants reported they had not engaged in a discussion with a resident student or referred a student for services about a possible mental health concern. Thirty-two percent of resident assistants reported having conversations with students about mental health concerns, but did not make a referral to a mental health provider. Only one-quarter of resident assistants interviewed made a referral for mental health services. In the cases where a discussion with the student occurred but no referral was made, resident assistants engaged in an unofficial screening and assessment behavior, and if the concern was seen as minor or temporary in the subjective view of the resident assistant, they did not make a referral to mental health services (Reingle et al., 2010).

Reingle et al. (2010) report that student concerns such as homesickness, a relationship breakup, and social problems were perceived as temporary and would be resolved independently by the student. Resident assistants reported that they would not discuss a substance abuse concern with a student unless the student's behavior was particularly dangerous or grossly unacceptable. Resident assistants overall felt that making referrals to mental health professionals would result in positive outcomes for the students, yet this did not lead to increased referral practices. It was found that resident assistants were hesitant to approach a student they had concerns about due to a possible

negative reaction by the student, fear they would make the situation worse than at present, or for fear that the student would then try to avoid the resident assistant.

Interestingly, 6% of resident assistants ( $n = 3$ ) stated that they would not follow their supervisor's instructions of referring residents for substance use or mental health concerns. If the resident assistant believed that they knew the resident, they would rely on their personal relationship with the student to assist in their decision making process. Furthermore, many resident assistants felt that talking with a student about these concerns and making a referral would be an emotionally draining process for themselves. Resident assistants who were not confident in their referral skills worried about the impact of their referral on the relationship with the student and with their residence hall community overall (Reingle et al., 2010).

Given this information, the resident assistant may not want to risk their relationship with the student and their floor for what they perceive to be a 50% chance of the student actually seeking out help. Limitations of this study include the self-report nature of the face-to-face interviews, thus possible social desirability biases exist. Furthermore, some of the interviewers were the resident assistant's immediate supervisor or superior and were recruited by senior housing staff at their institution. No inter-rater reliability was established prior to these interviews, which occurred at three different institutions, and thus findings may be interpretatively flawed (Reingle et al., 2010).

Servaty-Seib et al. (2013) also examined undergraduate resident assistants' attitudes and referral practices regarding students who are at-risk for suicide. Sixty resident assistants from one institution were surveyed, manifesting a 23.3% response rate.

The TPB was utilized to assess participants' attitudes regarding the benefits of referring a peer to counseling, their perceptions of what others thought of them referring a peer, and their perceptions of how much control they felt they had regarding referring a peer. Over 83% identified as Caucasian and 55% of participants identified themselves as male.

Servaty-Seib et al. (2013) found that international participants manifested more positive attitudes regarding referring a peer than did Hispanic or White resident assistants. The authors note that this is a curious finding, and theorize that since the intention is to refer a peer and not seek counseling for one-self, cultural populations that traditionally manifest low rates of help-seeking may manifest higher rates of intentions to refer others. Furthermore, it was found that a resident assistant's perception that others would expect them to refer a peer, as well as their perceived self-efficacy, were significant predictors of one's intention to refer.

Resident assistants are in a difficult position on campuses, as they are often pitted between their role as a student and peer, and their job duty as a compensated monitor and reporter of student behavior and decorum. This tension is apparent in the literature, most strikingly by Reingle et al.'s (2010) study, where it was found that resident assistants were concerned with ruining their relationship with the student by making a referral to counseling services. Levels of confidence were also a strong indicator of a resident assistant's intention to refer, and increased training may be warranted for this population, as they are truly on the front lines of student interactions.

### **Senior Student Affairs Administrators' Perceptions**

Belch and Marshak (2006) explored student affairs senior administrators' perspectives on issues surrounding students with a mental health concern. A questionnaire that assessed perceived mastery or failure in pertinent aspects of one's job were completed by 62 participants who were employed by a National Association of Student Personnel Administrators member institution, 88.7% of whom were from four-year institutions. Public institutions employed 50% percent of the respondents. Although this study did not assess personal perceptions, knowledge, or confidence levels, it did focus on perceived institutional difficulties related to students with a mental health concern. Four themes emerged: policy issues, legal and privacy concerns, working with parents, and campus mental health services and resources. It was also found that 20% of administrators reported incidents with students that involved individuals who were diagnosed with bipolar disorder. Specific information regarding college student mental health concerns, their prevalence, symptoms, and treatment options and outcomes may prove helpful to institutional administrators, in order to offer the best care for students, parents, and the campus community.

### **Conclusion**

Higher education presents many barriers for students who are struggling with a mental health concern. Students may struggle with fear of stigma and discrimination (Martin, 2010; Megivern et al., 2003; Quinn et al., 2009; Weiner & Weiner, 1996). Students also report receiving variable and unpredictable responses by faculty and staff when they have disclosed their mental health concerns (Quinn et al., 2009; Tinklin et al.,

2005). Symptoms of one's mental illness may affect their academic functioning and persistence in college (Martin, 2010; Megivern et al., 2003). Academic accommodations may be very helpful for students, yet faculty and staff may differ in their willingness to offer accommodations, vary in their perception of the impact of mental health issues on academics, and fluctuate in their perceived ability to discuss their concerns with students (Backels & Wheeler, 2001; Becker et al., 2002, Brockelman et al., 2006; Collins & Mowbray, 2005; Reingle et al., 2010).

Kitzrow (2009) noted that student mental health concerns might have a rippling effect throughout campus, and affect not only the individual but interpersonal and institutional levels as well. In addition, legal considerations for the campus must be taken into account when considering the distressed college student. Trela (2008) reported that this wave of distress only increases in magnitude the longer the student goes without obtaining help. Kitzrow (2009) noted that the increasing acuteness of student mental health concerns and amplified need for services may greatly impact student support staff who may be on the forefront of noticing and managing the student's psychological concerns. Hollingsworth et al. (2009) states that,

The most challenging issue for student affairs professionals is dealing with high-risk students who appear to be disturbed and are creating major disturbances in the university community. Often in these situations, the university community turns to student affairs professionals for assistance and expects them, either implicitly or explicitly, to fix the problems. (p. 44)

Student support professionals would benefit from having basic knowledge of referral procedures, as well as gaining an awareness of the symptoms of common mental health concerns (Trela, 2008).

Keup (2008) reported that there is a need for all members of a campus community to be aware of signs of psychological distress and to offer resources to the student to enhance their mental health and overall wellbeing. Mental health services should be easily accessed on a university campus, and institutions may consider a “no wrong door policy” to admission of mental health services on the university campus (Mowbray et al., 2006, p. 233). It is important to create a culture of openness and care on campus, so students will feel free to disclose their concerns and obtain the services that they deserve (Quinn et al., 2009).

## **CHAPTER III**

### **METHODOLOGY**

#### **Introduction**

This chapter describes the research questions, research design, selection of the sample population, procedures that were conducted, as well as data collection and analyses. The purpose of this study was twofold. First, this study explored student support professionals' attitudes, perceived behavioral control, subjective norm, and intentions to refer distressed students to counseling services. Second, this study examined the impact, if any, of an online interactive gatekeeper training upon student support professionals' perceptions of and intentions to refer distressed college students to counseling services, as well as assessing behavioral practices within the previous four weeks.

#### **Research Questions**

The research questions were as follows:

1. What are student support professionals' salient beliefs and meanings regarding distressed college students and intentions to refer?
  - a) What meaning do student support professionals make of the process of referring a distressed college student?

- b) What are student support professionals' perceptions of their departmental and professional expectations regarding the referral of the distressed college student?
  - c) What are the issues that enable a student support professional from acting upon their intention to refer?
  - d) What are the issues that constrain a student support professional from acting upon their intention to refer?
2. Is there a relationship between attitudes towards the behavior, perceived behavioral control, and subjective norm towards intent to refer?
  3. How much of the variance in intent to refer is accounted for by attitudes towards the behavior, perceived behavioral control, and subjective norm?
  4. Do attitudes, perceived behavioral control, subjective norm, and intent to refer vary by gender, educational level, years of experience, and job duty?
  5. Does prior suicide prevention training, previous exposure to distressed students, and previous psychological coursework significantly impact attitudes, perceived behavioral control, subjective norm, and intent to refer?
  6. Are there significant differences *between* and *within* the intervention and control groups regarding attitudes towards the behavior, perceived behavioral control, subjective norm, intent to refer, and actual behavioral practices in the past four weeks?

## Research Design

As per the Theory of Planned Behavior (TPB) mixed-methods analyses were utilized in order to answer this study's research questions (Ajzen, 1991; Francis et al., 2004; Montano & Kasprzyk, 2008). Quantitatively, this study was a randomized controlled trial design utilizing survey methodology. In order to thoroughly and accurately use the TPB, three phases of research were executed: (a) qualitative elicitation phase to assess the TPB constructs within this specific population, (b) the creation and validation of a survey based upon the findings from the elicitation phase and, (c) dissemination of the survey for both the Intervention and Control groups at two time points spaced six weeks apart, as this was a repeated measures analysis (Ajzen, 1991; Francis et al., 2004; Montano & Kasprzyk, 2008; see Appendix A). The initial elicitation phase "enhances content validity and ensures that the items are salient for both the study population and the target behavior" (Young et al., 1991, p. 142). A quantitative pilot study was created based upon the qualitative elicitation study. The main survey was then based upon this pilot study, after item analysis and making any necessary revisions. Modifications to the Institutional Review Board's initial approval occurred at the pilot phase and main survey phase of this study. These modifications included updated recruitment emails and reminder recruitment emails, updated survey instruments, as well as modified informed consent forms. As described in more detail below, participants from the elicitation and pilot phases were student support professionals from three differing institutions within the same public state institutional system as the main pre-post survey site, where the randomized controlled trial was offered. The sections regarding

participants and sampling and procedures are embedded within following sections, outlining the three phases of this study: (a) qualitative elicitation study, (b) pilot study, and (c) main quantitative study.

This study drew upon a total sample of 123 student support professionals consisting of 19 participants in the elicitation study phase, 39 in the pilot study phase, and 65 in the main quantitative randomized control study. Student support professionals were selected due to their assumed higher level of contact with students in distress, as they are on the front lines of student interactions. This population is also selected due to the fact that it is conventionally expected that student support professionals will assist students. Current research has explored perceptions of faculty members (Backels & Wheeler, 2001; Brockelman et al., 2006; Easton & Van Laar, 1995), but there is a paucity of research regarding student support professionals.

Invitations to participate in either the elicitation or pilot study phases were sent via email to system-wide institutions (see Appendix B). This researcher has omitted the actual letters of agreement from all participating institutions to help maintain participant anonymity. The three institutions that agreed to participate provided this researcher with a contact person at each institution, and this contact person forwarded the recruitment and reminder emails to the staff members at that particular institution. Thus, this researcher did not obtain a list of potential participants. Two system institutions were chosen to participate in the elicitation study, and one institution was asked to participate in the pilot study.

These three system institutions were chosen for the following reasons: (a) these institutions closely match demographic characteristics of the main survey site, as the TPB indicates that qualitative participants be as similar as possible in regards to the primary intervention site (Francis et al., 2004) and, (b) this researcher is not a current employee of either the elicitation or pilot study sites. Participants in the elicitation and pilot phases of this study remained anonymous, with the online survey software scrubbing the Internet Provider address for each participant.

### **Qualitative Elicitation Study**

**Participants and sampling.** Student support professionals at two public institutions from one public institutional system in one Southeastern state were invited to participate in the qualitative elicitation study ( $N = 19$ ). Specifically, full and part-time employees of the departments of student life or student affairs of these two system institutions were invited to participate. Student support professionals from academic affairs were excluded from the qualitative and pilot study phases to avoid any potential confusion at these institutions regarding eligible and ineligible participants. Counselors and trainees employed within the counseling center, faculty members, instructors, undergraduate resident advisors, and undergraduate student employees at all institutions were excluded in all phases of this study.

A total of 152 potential participants were contacted at the two participating system institutions. Nineteen usable responses were collected for the elicitation study, resulting in a response rate of 12.5%. This response rate is lower than the anticipated 20-30% response rate typical for online surveys (Dillman, 2007). This low response rate

may be due to the fact that this survey consisted of open-ended questions, which may have demanded more time and effort from subjects. However, extant literature indicates that theoretical saturation may be achieved after the analysis of twelve participants in a qualitative study (Guest, Bunce, & Johnson, 2006). Guest et al. (2006) conducted a qualitative study that consisted of 60 participants and found that “after analysis of twelve interviews, new themes emerged infrequently and progressively so as analysis continued” (p. 74). Thus, the current sample of 19 participants is more than sufficient in order to obtain saturation of relevant themes.

***Participant demographics.*** Participants identified primarily as White or Caucasian (63.2%), were between the ages of 25-29 years old (31.6%), identified as female (47.4%), and held a Master’s degree (52.6%). Finally, participants varied in their work experience, ranging from new professionals to professionals who have worked up to 20 years in higher education (see Table 1).

Table 1

Descriptive Statistics for Elicitation Study Participants ( $N = 19$ )

Demographic Characteristic	<i>n</i>	%
<i>Gender</i>		
Female	9	47.4
Male	8	42.1
Gender Non-Conforming	0	0.0
Missing	2	10.5

Table 1

(Cont.)

Demographic Characteristic	<i>n</i>	%
<i>Race/Ethnicity</i>		
American Indian/Alaskan Native	1	5.3
Asian American	0	0.0
Black or African American	3	15.8
Hispanic of any race	3	10.5
White or Caucasian	12	63.2
Other	0	0.0
Missing	1	5.3
<i>Age Range</i>		
25-29	6	31.6
30-34	0	0
35-39	3	15.3
40-44	4	21.1
45-49	1	5.3
50+	1	5.3
Missing	4	21.1
<i>Level of Education</i>		
Associate's Degree	1	5.3
Bachelor's Degree	2	10.5
Some Graduate Work	1	5.3
Master's Degree	10	52.6
Doctorate	3	15.8
Missing	2	10.5

Table 1

(Cont.)

Demographic Characteristic	<i>n</i>	%
<i>Years of Professional Work Experience</i>		
0-4	4	21.1
5-9	3	15.8
10-14	4	21.1
15-19	3	15.8
20+	1	5.3
Missing	4	21.1

**Procedures.** Qualitative elicitation study participants were emailed a link to an online survey, asking them to respond to 10 open-ended survey question plus demographic questions (age, race/ethnicity, gender, years of professional experience, and educational level; Appendix C). In order to further the anonymity of participants, the current institution where the participant was employed was not asked of subjects within the elicitation or pilot studies. The elicitation study survey was open for a total of three weeks in duration. One recruitment email and one reminder email were sent to potential participants in the elicitation phase (See Appendices D–F). Sending a reminder email has been shown to increase response rates (Kaplowitz, Hadlock, & Levine, 2004).

### **Pilot Study**

**Participants and sampling.** The original Perceptions and Intention to Refer Survey (PIRS) was created to measure student support professionals' attitudes, perceptions, and intentions to refer distressed students to counseling utilizing the TPB

concepts (Ajzen, 1991). Student support professionals at one public institution from the same public institutional system in one Southeastern state were invited to participate in the pilot study ( $N = 39$ ). Similar to the elicitation study sites, this institution was chosen as it closely resembles the demographics of the main intervention site. Again, full and part-time employees of the departments of student life or student affairs of these three system institutions were invited to participate. Student support professionals from academic affairs were excluded from the qualitative and pilot study phases to avoid any potential confusion at these institutions regarding eligible and ineligible participants. Counselors and trainees employed within the counseling center, faculty members, instructors, undergraduate resident advisors and undergraduate student employees were excluded.

***Participant demographics.*** A total of 215 potential participants were contacted at the participating system institution. Thirty-nine participants completed the pilot study, resulting in an 18.1% response rate. As shown in Table 2, participants identified primarily as White or Caucasian (76.9%), were primarily either of the age group of 25-29 (30.8%) or over the age of 50 (30.8%), identified as female (69.2%), and held a Master's degree (46.2%). Finally, participants varied in their work experience, ranging from new professionals to professionals who have worked up to 20 years in higher education, with the majority of participants reporting 0-4 years of work experience (38.5%). These demographic frequencies are similar to the demographic frequencies of the qualitative elicitation study, indicating that student support professionals at these three state institutions are similar in demographic makeup.

Table 2

Descriptive Statistics for PIRS Pilot Study Participants ( $N = 39$ )

Demographic Characteristic	<i>n</i>	%
<i>Gender</i>		
Female	27	69.2
Male	8	20.5
Gender Non-Conforming	1	2.6
Missing	3	7.7
<i>Race/Ethnicity</i>		
American Indian/Alaskan Native	0	0.0
Asian American	0	0.0
Black or African American	4	10.3
Hispanic of any race	2	5.1
Native Hawaiian or Other Pacific Islander	1	2.6
White or Caucasian	30	76.9
Other	2	5.1
Missing	0	0.0
<i>Age Range</i>		
25-29	12	30.8
30-34	6	15.4
35-39	3	7.7
40-44	3	7.7
45-49	1	2.6
50+	12	30.8
Missing	2	5.1

Table 2

(Cont.)

Demographic Characteristic	<i>n</i>	%
<i>Level of Education</i>		
Some College	5	12.8
Associate's Degree	1	2.6
Bachelor's Degree	2	5.1
Some Graduate Work	3	7.7
Master's Degree	18	46.2
Certificate/Specialist Degree	1	2.6
<i>Level of Education (cont.)</i>		
Doctoral Degree	7	17.9
Missing	2	5.1
<i>Years of Professional Work Experience</i>		
0-4	15	38.5
5-9	8	20.5
10-14	2	5.1
15-19	3	7.7
20+	9	23.1
Missing	2	5.1

**Procedures.** One recruitment email and one reminder email, which included an informed consent form, were sent to potential participants in the pilot phase (see Appendices G–I). The participating institution provided this researcher with a contact person, and this contact person forwarded the recruitment and reminder emails to their employees at that particular institution. Thus, this researcher did not obtain a list of

potential participants. Pilot study participants were emailed a link to an online survey, asking them to respond to 32 Likert-style questions plus demographic questions (age, race/ethnicity, gender, years of professional experience, and educational level; Appendix J). The pilot study was open for a total of three weeks in duration.

### **Main Quantitative Study**

**Participants and Sampling.** Student support professionals from one large Southeastern public institution, from the same state public institution system as the participating institutions in the elicitation and pilot study, were invited to participate in the main randomized controlled trial. Specifically, employees within the Divisions of Student Affairs and non-faculty Academic Affairs at one large Southeastern university were contacted. This population included all full and part-time staff such as graduate assistants, entry, mid-level, and senior administrative staff from both Student Affairs and Academic Affairs. Again, counselors and trainees employed within the counseling center, faculty members, instructors, undergraduate resident advisors and undergraduate student employees at this institution were excluded.

**Participant demographics.** A total of 429 potential participants were contacted at the main study site, and 74 individuals agreed to participate, resulting in an initial response rate of 17.2 %. As described in more detail below, 37 participants were randomly assigned to the Intervention group and 37 were assigned to the Control group. A total of 65 student support professionals completed the PIRS pre-survey, with 34 participants completing the Intervention group pre-survey (91.9% response rate) and 31 participants completing the Control group pre-survey (83.8% response rate). Finally, at

total of 57 participants completed the PIRS post-survey, with 26 participants in the Intervention group (76.5% response rate) and 31 participants in the Control group (100% response rate).

As a collective, participants in the main study identified primarily as White or Caucasian (66.2%), were primarily either of the age groups of 25-29 (16.9%) or 30-34 (16.9%), or over the age of 50 (18.5%), identified as female (70.8%), and held a Master's degree (53.8%; see Table 3). Participants varied in their work experience, ranging from new professionals to professionals who have worked up to 38 years in higher education, with the majority of participants reporting 0-4 years of work experience (32.2%). These demographic frequencies are similar to the demographic frequencies of both the qualitative elicitation and pilot studies, indicating that student support professionals at all research sites are similar in demographic makeup. Regarding having received prior gatekeeper training, 23 participants in the Intervention Group ( $N = 32$ ) and 15 participants in the Control group ( $N = 31$ ) reported having prior training. Twenty-five participants in the Intervention group reported having had prior psychological or counseling coursework, as compared to 19 participants in the Control group. Regarding previous experience working with distressed students, 29 participants in the Intervention group and 21 participants in the Control group reported previous direct experience with emotionally distressed students. Although specific information was gathered regarding what specific department a participant worked in within the main institution (i.e. Dean of Students Office within the Division of Student Affairs), this information is not displayed due to some departments manifesting only one or very few participants. In order to

safeguard participant anonymity and potential identification, the researcher did not include this information in Table 3.

Table 3

Descriptive Statistics for Main Study Participants ( $N = 65$ )

Demographic Characteristic	Intervention Group	Control Group	Total $n$	Total %
<i>Gender</i>				
Female	24	22	46	70.8
Male	7	9	16	24.6
Gender Non-Conforming	1	0	1	1.5
Missing	2	0	2	3.1
<i>Race/Ethnicity</i>				
American Indian	0	0	0	0
Asian American	1	0	1	1.5
African American	7	8	15	23.1
Hispanic of any race	1	0	1	1.5
Pacific Islander	0	0	0	0
Caucasian	21	22	43	66.2
Other	1	0	1	1.5
Missing	4	0	4	6.2
<i>Age Range</i>				
20-24	2	3	5	7.7
25-29	7	4	11	16.9
30-34	6	5	11	16.9
35-39	5	4	9	13.8
40-44	4	2	6	9.2
45-49	2	5	7	10.8

Table 3

(Cont.)

Demographic Characteristic	Intervention Group	Control Group	Total <i>n</i>	Total %
<i>Age Range (cont.)</i>				
50+	4	8	12	18.5
Missing	4	0	4	6.2
<i>Level of Education</i>				
Some College	2	0	2	3.1
Associate's Degree	0	3	3	4.6
Bachelor's Degree	5	5	10	15.4
Some Graduate Work	1	2	3	4.6
Master's Degree	18	17	35	53.8
Specialist Degree	1	0	1	1.5
Doctoral Degree	4	4	8	12.3
Other	1	0	1	1.5
Missing	2	0	2	3.1
<i>Years of Professional Work Experience</i>				
0-4	11	10	21	32.2
5-9	10	5	15	23.1
10-14	5	3	8	12.3
15-19	3	5	8	12.3
20+	3	8	11	16.9
Missing	2	0	2	3.1
<i>Functional Work Area</i>				
Student Affairs	24	25	49	75.4
Academic Affairs	8	6	14	21.5
Missing	2	0	2	3.1

Table 3

(Cont.)

Demographic Characteristic	Intervention Group	Control Group	Total <i>n</i>	Total %
<i>Prior Training (Yes)</i>	23	15	38	58.5
<i>Prior Coursework (Yes)</i>	25	19	44	67.7
<i>Prior Experience (Yes)</i>	29	21	50	77.0

***Pre-existing differences between groups.*** Chi-square tests of independence were run on the following demographic categories for each group (Intervention and Control) shown in Table 3 in order to assess for any pre-existing conditions between the groups. Due to the abundance of small cell sizes (< 5 per cell), the demographic categories were collapsed in order to run the chi-square tests of independence (see Owen, Devdas, & Rodolfa, 2007). Educational level was collapsed into bachelor's level (inclusive of associate's degrees and some college), master's level (inclusive of some graduate work, specialists degree, and included one participant who indicated a degree of "Other," identified as a Juris Doctorate), and doctoral level. In the same fashion, years of professional work experience were grouped according to 0-9, 10-19, and 20+ years. The one participant who identified as "Gender not conforming" was eliminated from the chi-square analysis of Gender, as this one participant would not significantly impact findings and thus this analysis was run with Male and Female identifiers as the categories. Age was collapsed into ranges of 20-29, 30-39, 40-49, and 50+ years. Finally, years of work experience were collapsed into ranges of 0-9, 10-19, and 20+ years. Finally, regarding race/ethnicity, the chi-square tests were executed using the participants who comprised

the African American and Caucasian categories, as the categories of Asian American, Hispanic of any race, and Other consisted of only one participant each. Data were analyzed using the statistical program SPSS 21.0 (IBM Corporation, 2012).

Chi-square tests of independence manifested no significant relationships among any of the demographic categories among the Intervention and Control group participants. Participants did not significantly differ in terms of race ( $\chi^2(1, N = 58) = .02, p > .05, \phi = .02$ ), level of education ( $\chi^2(2, N = 63) = .15, p > .05, \phi = .05$ ), or in terms of gender ( $\chi(1, N = 62) = .34, p > .05, \phi = .07$ ). Similar non-significant results were found for Division (Student Affairs and Academic Affairs;  $\chi^2(1, N = 63) = .29, p > .05, \phi = .07$ ), age ( $\chi^2(3, N = 61) = 1.84, p > .05, \phi = .17$ ), and work experience ( $\chi^2(2, N = 63) = 3.26, p > .05, \phi = .23$ ).

Chi-square tests of independence were also conducted for the following demographic factors between the two groups: prior psychological or counseling coursework, prior gatekeeper training, and prior exposure/experience working with distressed students. No significant relationships were found for prior psychological coursework and random group assignment ( $\chi^2(1, N = 63) = 2.12, p > .05, \phi = .18$ ), or among prior gatekeeper training and group assignment ( $\chi^2(1, N = 63) = 3.63, p > .05, \phi = .24$ ). A significant relationship was found regarding previous experience working with distressed students and group assignment ( $\chi^2(1, N = 63) = 5.04, p < .05, \phi = .28$ ). The majority of participants in the Intervention group did have previous experience working with distressed students, as compared to the Control group (see Table 3). This significant difference may be a limitation of this study, as the participants who received the online

training reported an increased rate of prior exposure to distressed students, which may impact the post-survey results. However, as only three participants in the Intervention group did not report having previous experience, this resulted in a cell with less than five participants.

It should be noted that cell sizes of less than five were also manifest in the following categories: (a) age range of 50+ in the Intervention group had four participants, and (b) 20+ years of work experience in the Intervention group had three participants. Ideally, as mentioned above, each cell would have at minimum five participants. However, due to the relatively small sample size in addition to participants being divided into the Intervention or Control group, these small cell sizes were unavoidable despite collapsing data. Thus, findings of these particular chi-square tests of independence should be interpreted with caution.

A series of independent samples t-tests were utilized to assess for any pre-existing differences in the variables of Attitudes, Perceived Behavioral Control, Subjective Norm, Intent to Refer, and Actual Behavioral Practice between the two groups (Intervention and Control) using the pre-survey data. Levene's test for equality of variances indicated that  $p > 0.05$  for all analyses, signifying that the variances were equal among the two groups. Two-tailed analyses were conducted throughout due the exploratory nature of this study. Participants within the Intervention and Control groups did not significantly differ on ratings of Attitude ( $t(63) = .69, p > .05$ , two-tails), Intent to Refer ( $t(63) = .93, p > .05$ , two-tails), Perceived Behavioral Control ( $t(63) = .82, p > .05$ , two-tails),

Subjective Norm ( $t(63) = 1.67, p > .05$ , two-tails), and Actual Behavioral Practice ( $t(63) = .39, p > .05$ , two-tails).

**Procedures.** Potential participants within the Divisions of Student Affairs and Academic Affairs were contacted via email. One recruitment email and one reminder email were sent to potential participants in the Division of Academic Affairs, and one recruitment email and two reminder emails were sent to potential participants in the Division of Students Affairs. The reason that one more email was sent to Student Affairs employees was due to obtaining institutional permission to contact this group for a third and final time. This researcher also spoke at departmental meetings, distributed informational flyers, and posted information on the Division of Student Affairs website at the main institution site (see Appendices K – P). This researcher was informed that the housekeeping staff of the Division of Student Affairs at the main institution site might not have active university email accounts. Thus, a flyer was distributed to housekeeping staff within the Division of Student Affairs in order to inform this group of potential participants. However, this researcher was unable to know the exact number of housekeeping staff who did not have active university email accounts. Thus, the response rate noted above is based upon potential participants who were directly contacted via email recruitment methods.

A randomized controlled trial design was used in the main quantitative study. Recruitment for participants began one month prior to the distribution of the pre-survey. Again, the letter of agreement from this institution was omitted in the Appendices in order to maintain participant anonymity (see Appendices Q & R). Potential participant

emails were obtained from contact people within the Divisions of Student Affairs and Academic Affairs, as well as this researcher obtaining email addresses from the institution's website where email lists were lacking. In addition, this researcher sent the recruitment and reminder emails to one division's contact person, who then forwarded the emails to employees within that department via a list serve.

Participants from the main survey institution were randomly assigned to either the Intervention or Control groups by use of the random case selector via SPSS (IBM Corporation, 2012). Student support professionals from the main survey institution who were interested in participating indicated their interest via an online survey, where they entered the email address to be used to contact them once group assignment was completed. Participants were able to view the Informed Consent Form at this time, prior to their random group assignment. Participant email addresses were then entered into SPSS (IBM Corporation, 2012). Using SPSS, 37 participants were randomly assigned to the Intervention group and 37 participants were randomly assigned to the Control group. This researcher then emailed all participants and informed them of their group assignment and instructions regarding the PIRS pre-survey and how to access the intervention, if assigned to the Intervention group (Jacobson et al., 2012). See Appendices S–Y.

Participants in both the Intervention and Control groups were contacted to complete the PIRS post-survey six weeks after initial roll-out of the PIRS pre-survey, in order to offer time for participants to complete the training and to potentially interact with distressed students (see Appendices Z–EE). Both the pre and post surveys were open to

participants for three weeks duration. The online training was open to participants in the Intervention group for a total of six weeks. The duration of data collection was scheduled to occur at the end of the spring semester and into the summer, when this researcher believed that participants would be less busy on campus.

Variables assessed were (a) attitudes toward the behavior, (b) perceived behavioral control, (c) subjective norm, (d) intention to refer the student to counseling, and (e) actual behavioral practices as assessed within four weeks prior to the pre survey and during the past four weeks of the total six week lapse of time in between the pre and post surveys. In addition, demographic questions were asked of all participants. Information such as age, race/ethnicity, gender, years of professional experience, and educational level were obtained. In the main quantitative study, demographics such as race/ethnicity, age, gender, education level, years of professional experience, and job duty/functional area were examined. In addition, participants were asked if they have had any previous gatekeeper training, previous psychological or counseling coursework, and past professional experience with distressed college students. These demographic items, with the exception of age and years of work experience, were only asked of participants during the pre-survey and were not repeated during the post-survey.

Participants in both the Intervention and Control groups were informed via the post-survey of free and relevant workshops at their institution that they may choose to attend if they desired more information about working with distressed students (B. Carter, personal communication, March 20, 2014). Additionally, Control group participants were made aware, by way of an email sent after the completion of the post-survey by

both groups, of any remaining/unused online trainings. In this manner, Control group participants were offered the same intervention as the Intervention group. Any remaining trainings, after notification to the Control group, were made available to the university community. Finally, both Intervention and Control group participants were supplied with a local and campus resource sheet for distressed students, embedded in the PIRS post-survey as well as within the online training (See Appendices FF & GG).

The online gatekeeper intervention “At Risk for University and College Faculty and Staff: Identifying and Referring Students in Mental Distress” was utilized (Kognito Interactive, 2013). This interactive training has been implemented at more than 300 institutions of higher education and has earned a place on the Suicide Prevention Resource Center’s Best Practices Registry (Kognito Interactive, 2013; Suicide Prevention Resource Center, 2012). This online role-play training took the participant approximately 45 minutes to complete. In this training “users engage in conversations with emotionally responsive student avatars who exhibit signs of psychological distress. In this process, they practice and learn to use open-ended questions, reflective listening and other motivational interviewing techniques” (Kognito Interactive, 2013). An *avatar* may be defined as “an electronic image that represents and is manipulated by a computer user” (avatar, 2013). This training consists of three conversations between the participant’s avatar and student avatars. Student avatars manifest symptoms of distress, such as suicidal ideation, depression, or anxiety. The goal of the training is for participants to refer the student avatars to counseling services (Albright, Goldman, & Shockley, 2013).

Through the generosity of the National Association of Student Personnel Administrators (NASPA) Foundation, this researcher was awarded a Channing Briggs Small Grant consisting of \$2,496.00 (See Appendix II). Four dollars of departmental funding was used to complete the purchase, as \$2,500.00 was needed to purchase 75 site licenses. By way of this grant, 75 site licenses were purchased for the intervention group at the main survey institution. Kognito, Inc. contributed an additional 25 site licenses without additional charge, totaling 100 site licenses to offer the Intervention group. A Control group of equivalent size was established at the same institution, comprised of student support professionals who were not engaged in the online training.

In order to match participants between time one and time two and maintain anonymity, participants were asked in the online pre-survey to create an individualized identifier consisting of the first letter of their first name, the two-digit numeric of the month of their birth, the two-digit numeric of the year of their birth, and the first letter of their last name (e.g., E0278J). Participants were reminded of the formula for the identifier when the post-survey was distributed. As the pre-survey was underway, it became apparent that in a few cases, the unique identifier was either not recorded by the online survey software or was not created by the participant. Thus, participant ages and years of employment were asked again in the post-survey, in order to match up the participants who did not have recorded unique identifiers, in order to establish redundancy and match participants between time one and time two.

***Participant incentives.*** Incentives were utilized for all phases of research. In both the elicitation and pilot phases, participants had the opportunity to enter their email

address for a chance to win one of ten \$10 gift cards to an online retailer; ten gift cards were offered during the elicitation study and ten gift cards were offered during the pilot study. At the end of the online survey for elicitation and pilot studies, participants had the option to be linked to a new survey, where they were able enter their email address for the raffle. In this manner, their email address remained separate from their anonymous responses and this researcher was not able to link their responses. All email addresses were entered into SPSS 21.0 (IBM Corporation, 2012) and 10 participants were randomly sampled from the elicitation study, and in a separate sorting, 10 participants were randomly sampled from the pilot study. Winning participants received their gift card in an email. Regarding the main quantitative study, this researcher utilized the above protocol and offered a raffle for 40 \$10 gift cards for an online retailer at the completion of the post-test, for all participants in both groups. Thus, a total of \$600.00 of this researcher's personal funds was offered as incentives in this study. Finally, participants in the Intervention group were awarded a certificate of completion from Kognito, Inc. This certificate was made available to the participant directly from Kognito, Inc. upon completion of the training. This researcher has requested and been reassured that Kognito, Inc. will not conduct any follow-up surveys to participants in this study, nor will they conduct any independent pre or post surveys, nor ask any demographic information of participants (B. Rigoli, personal communication, September 30, 2013).

## **Instrument**

As this study is utilizing the TPB as the theoretical framework, salient beliefs specific to the population must first be gathered in order to create a quantitative survey based upon the TPB constructs. As such, no standardized TPB surveys are in existence (Francis et al., 2004). The manual created by Francis et al. (2004) was used in this study in order to create and score a TPB survey. The goal of this manual is “assisting researchers to construct a theory-based research tool in a systematic and replicable manner” (Francis et al., 2004, p. 7). Thus, reliabilities, correlation coefficients, and regression coefficients will be reported from existent literature in order to serve as statistical benchmarks for this novel study.

**Qualitative elicitation study.** In order to assess the salient beliefs of student support professionals, ten open-ended questions along with demographic questions was utilized (See Appendix C). This survey was conducted via an online survey program in order to maintain anonymity of participants. Participants from two of the system institutions were asked about possible advantages or disadvantages about referring a student in distress (i.e., attitudes towards the behavior), their perceptions of how important referents would view them making a referral (i.e., subjective norm), and the possible facilitators or hindrances towards referring a student (i.e., perceived behavioral control; Francis et al., 2004). In addition, participants were also asked to define a distressed student in order to assess understanding of this definition among participants (Servaty-Seib et al., 2013). Results of this elicitation study were utilized in order to

create the original survey as outlined below, per the TPB model (Francis et al., 2004).

Elicitation study results are fully explored in Chapter IV.

**Pilot study.** After completion of the qualitative elicitation study, construction of the original survey began. As noted above, the original Perceptions and Intention to Refer Survey (PIRS) was created to measure student support professionals' attitudes, perceptions, and intentions to refer distressed students to counseling utilizing the TPB concepts (Ajzen, 1991). PIRS questionnaire development was broken down within each construct. To fully measure Attitudes, both direct and indirect measures are necessary. Direct measures consist of using bipolar adjectives to describe a participant's feelings, such as *desirable* or *undesirable*. Positive and negative verbal endpoints may be varied throughout the questions and responses then recoded so that all high scores return to having 7 as their positive endpoint. Indirect beliefs of Attitudes are the potential *advantages* and *disadvantages* of referring a distressed student. To measure Subjective Norm, both direct and indirect measures are utilized as above. Direct measures will assess the perceived opinions of important referents, and indirect measures will assess commonly held beliefs among reference groups and motivation to comply. Perceived behavioral control is directly measured by one's (a) self-efficacy (e.g., the difficulty of performing the behavior and one's confidence level), and (b) controllability (e.g., if performing the behavior is within their decision making power and what factors beyond their control determine their behavior). Indirect measures of Perceived Behavioral Control will be measured by the strength of these beliefs and the perception of control these external factors have over the execution of the behavior. Intention to refer is

evaluated simply by asking a series of questions if the participants intends to, expects to, and wants to refer distressed students to counseling services. Finally, behavioral practices will be assessed by asking participants about the number of students they were concerned about, number of students they approached to share their concerns, number of students referred, number of times they consulted with a colleague, and number of times they consulted with a supervisor within the past four weeks (Albright et al., 2013). This was assessed at both the pre-test and post-test for both groups. At the very minimum, five questions comprised each individual construct. Items from each construct were interspersed among the questionnaire, that is, all questions regarding Attitudes were mixed throughout the survey and not grouped together (Francis et al., 2004). Please See Appendix J for the full PIRS pilot study questionnaire.

As recommended by Francis et al. (2004), a 7-point Likert-style scale (e.g. from 1 to 7) was utilized for behavioral beliefs, alternating among positive and negative endpoints as needed. Scores would then be recoded so that higher values reflect a more positive endpoint, i.e. strongly agree. Francis et al. (2004) recommends a 7-point bipolar Likert-style scale to be used to measure outcome evaluations, with -3 representing a low score of the evaluation and +3 representing a high score of the evaluation. Within each construct, behavioral beliefs would be paired with outcome evaluations, the product of each pair would be calculated, and the products of the pairs would be added to obtain an overall summative score for that particular construct (Francis et al., 2004). However, as demonstrated by Servaty-Seib et al. (2013), this study utilized a seven point Likert-style scale for both behavioral beliefs and outcome evaluations, with 1 indicating a low score,

7 indicating a high score, and 4 indicating a neutral score. Due to the possible mismatch of pairing between behavioral beliefs with outcome evaluations, this research project will not pair these two types of questions. Thus, the mean score from each of the constructs was used for analyses rather than the total summative score of each construct.

**Reliability.** Ajzen (2011) notes that “well-designed measures of attitude towards a behavior of interest, subjective norm, perceived behavioral control, intention and behavior rarely exhibit reliabilities in excess of .75 or .80” (p. 1114). In a recent study of resident advisor’s intentions to refer peer residents to counseling, Cronbach’s alphas were found to range from .76 - .86 regarding the four TPB constructs (Servaty-Seib et al., 2013). It should be noted that internal reliability for perceived behavioral control was initially found to be .37, however three controllability factors were removed from the five item perceived behavioral control construct, and the reliability improved to .76 for this construct.

Francis et al. (2004) state that it is “not appropriate to assess the reliability of indirect measures using an internal consistency criterion” (p. 9). This is due to the fact that participants may maintain both negative and positive beliefs about the intended behavior, possibly resulting in low correlations among beliefs. Instead, test-retest reliability is preferable. In this manner, a participant is assessed with the same measure at two different time points, and the correlation coefficient is calculated for the two assessments, thereby manifesting the reliability for the measure (Whitley, 2002). As this study used pre-post methodology, test-retest reliability was achievable and was examined for all five constructs for the main quantitative study (i.e., attitudes, subjective norm,

perceived behavioral control, intent to refer, and actual behavioral practices). However, for the purposes of assessing the internal consistency of this pilot survey, Cronbach's alpha coefficients were examined for each construct.

Items manifesting poor internal reliability and/or low construct reliability were either eliminated or modified for use in the main survey instrument. Missing data was excluded list-wise from this analysis. Significance level was set at .05 for this study, as this is the standard in social science research (Howell, 2010). Please note that the item numbering for the pilot study differs from the pre and post survey item numbering. The following item numbers are referring to the pilot study survey only and do not correlate with the main study's pre and post surveys.

***Intention to refer.*** The construct of Intention to Refer was comprised of item numbers 1, 5, 14, 18, 24, and 28, as shown in Table 4.

Table 4

PIRS Pilot Study Items: Intent to Refer

Item Number	Question
1	I intend to refer distressed students to counseling services
5	I intend to assist students whom I am concerned about
14	I want to effectively refer students to counseling services
18	I plan to refer distressed students to counseling services
24	I expect to refer a student in distress to counseling services
28	I will make an effort to refer distressed students to counseling services

The construct of Intent to Refer manifested a Cronbach's Alpha of .79. Item 1 was deleted from this construct, due to the fact that it manifested a negative corrected item-total correlation (-.1), and the fact that removing this item would increase the internal consistency of this scale to .87 (see Table 5).

Table 5

PIRS Pilot Study Item-Total Statistics: Intent to Refer ( $N = 37$ )

Item	Scale Mean, if Item Deleted	Scale Variance, if Item Deleted	Corrected Item-Total Correlation	Square Multiple Correlation	Cronbach's Alpha, if Item Deleted
1	30.70	16.33	-.19	.25	.87
5	30.86	14.90	.19	.11	.82
14	28.86	11.51	.72	.74	.72
18	29.05	9.33	.82	.85	.69
24	29.00	10.11	.81	.85	.68
28	29.22	8.17	.88	.84	.65

Item 5 (“I intend to assist students whom I am concerned about”) remained within this construct, due to the fact that the reliability was re-computed to be .87 after deletion of Item 1 (“I intend to refer distressed students to counseling services”). Despite the low corrected item-total correlation for Item 5 (.19), I believe that Item 5 is theoretically important to this study. This item has been reworked to state “I intend to assist students whom I am concerned about by encouraging them to seek counseling,” as it is possible that this item did not correlate highly with the other items, as this was the only item that did not directly reference making a referral to counseling services and participants may

have not known what was meant by intending to “assist” a student. Thus, since the re-computed internal consistency coefficient was adequate, I chose to leave Item 5 in the survey (Rattray & Jones, 2007). Thus, the construct of Intent to Refer, after analysis and reworking, resulted in a Cronbach’s Alpha of .87 and consisted of 5 items (Table 6).

Table 6

PIRS Pilot Study Item-Total Statistics: Intent to Refer with Item 1 Removed ( $N = 37$ )

Item	Scale Mean, if Item Deleted	Scale Variance, if Item Deleted	Corrected Item-Total Correlation	Square Multiple Correlation	Cronbach’s Alpha, if Item Deleted
5	26.03	15.25	.14	.08	.94
14	24.03	11.25	.80	.72	.83
18	24.22	9.34	.84	.74	.81
24	24.16	9.86	.88	.84	.80
28	24.38	8.19	.91	.83	.80

**Attitudes.** The construct of Attitudes was comprised of items 2, 6, 8, 12 (reverse coded), 13, 19 (reverse coded), 30 and 31 (see Table 7). The construct of Attitudes manifested an initial Cronbach’s Alpha of .67. Reliability computations indicated that deleting Items 12 and 31 would increase the reliability coefficient of this construct (see Table 8).

After these Items 12 and 31 were removed, Cronbach’s Alpha increased to .68. However, it was still apparent that Item 19 was reducing the reliability of this construct, as evidenced by the low corrected item-total correlation (.18), and the indication that if

this item were removed, Alpha would increase to .84 (see Table 9). Thus, Item 19 was also eliminated. The construct of Attitudes, after analysis and reworking, resulted in a Cronbach's Alpha of .84, manifested good convergent validity as evidenced by similar corrected item-total correlations among items, and consisted of 5 items (see Table 10).

Table 7

## PIRS Pilot Study Items: Attitudes toward the Behavior

Item Number	Question
2	Referring a student to counseling will help them gain coping and problem solving skills
6	Encouraging a student to seek professional help is important
8	Early detection of potential safety concerns (to self or others) by making a referral to counseling services is (extremely undesirable/extremely desirable)
12	Referring a distressed student to counseling may only exacerbate the situation
13	Connecting a student with professional counseling services is advantageous
19	Referring a student to counseling services may negatively stigmatize the student
30	Referring a distressed student to counseling may be: (very harmful for the student/very beneficial for the student)
31	For me, referring a distressed student to counseling services is: (very uncomfortable for me/very comfortable for me)

Table 8

PIRS Pilot Study Item-Total Statistics: Attitudes toward the Behavior ( $N = 37$ )

Item	Scale Mean, if Item Deleted	Scale Variance, if Item Deleted	Corrected Item-Total Correlation	Square Multiple Correlation	Cronbach's Alpha, if Item Deleted
2	40.83	21.34	.32	.43	.65
6	40.25	22.31	.55	.63	.64
8	38.47	19.86	.70	.71	.59
12*	39.75	18.82	.26	.46	.69
13	38.61	20.07	.50	.60	.62
19*	39.64	16.69	.36	.43	.66
30	38.58	19.85	.62	.53	.60
31	39.25	21.16	.20	.34	.68

\* Reverse coded items

Table 9

PIRS Pilot Study Item-Total Statistics: Attitudes towards Behavior with Items 12 and 31 Removed ( $N = 39$ )

Item	Scale Mean, if Item Deleted	Scale Variance, if Item Deleted	Corrected Item-Total Correlation	Square Multiple Correlation	Cronbach's Alpha, if Item Deleted
2	29.72	11.18	.38	.43	.65
6	29.14	11.95	.69	.55	.62
8	27.36	10.52	.70	.66	.58
13	27.50	10.14	.59	.60	.59
19*	28.53	9.34	.18	.17	.84
30	27.47	10.66	.58	.50	.60

\* Reverse coded items

Table 10

PIRS Pilot Study Item-Total Statistics: Attitudes towards Behavior with Items 12, 19, and 31 Removed ( $N = 37$ )

Item	Scale Mean, if Item Deleted	Scale Variance, if Item Deleted	Corrected Item-Total Correlation	Square Multiple Correlation	Cronbach's Alpha, if Item Deleted
2	24.31	5.99	.55	.42	.84
6	23.72	7.41	.68	.52	.82
8	21.94	6.05	.76	.66	.77
13	22.08	5.34	.76	.59	.77
30	22.06	6.34	.58	.49	.82

***Perceived behavioral control.*** The construct of Perceived Behavioral Control was comprised of items 4, 11, 17, 21, 22 and 26 (see Table 11). The construct of Perceived Behavioral Control manifested an initial Cronbach's Alpha of .58. As shown in Table 12, Item 4 manifested a negative and very low corrected item-total correlation (-.08), as well as greatly reduced the reliability coefficient of this construct. Item 4 was eliminated, increasing Cronbach's Alpha to .77. Computations indicate that Item 26 is also a bit problematic in this construct, manifesting a lower corrected item-total correlation (.33) than the other items, however, Item 26 was preserved due to the importance of this item to the overall theoretical concept (Ratray & Jones, 2007). Furthermore, since the Cronbach's Alpha with Item 26 remaining is shown to be .77, this was a strong enough reliability coefficient to warrant Item 26 remaining (see Table 13).

Thus, the construct of Perceived Behavioral Control, after analysis and reworking, resulted in a Cronbach's Alpha of .77 and consisted of 5 items.

Table 11

## PIRS Pilot Study Items: Perceived Behavioral Control

Item Number	Question
4	It is easy for me to know how to motivate a student who is refusing to attend counseling
11	If the student of concern is hesitant to go to counseling, it is easy for me to persuade them to seek counseling services
17	For me, it is easy to work with my on-campus counseling center regarding referring students for services
21	I am confident that I could refer a distressed student to counseling services
22	For me, referring a distressed student to counseling services is: (extremely difficult; extremely easy)
26	Whether or not I refer a distressed student to counseling services is entirely up to me

Table 12

PIRS Pilot Study Item-Total Statistics: Perceived Behavioral Control ( $N = 37$ )

Item	Scale Mean, if Item Deleted	Scale Variance, if Item Deleted	Corrected Item-Total Correlation	Square Multiple Correlation	Cronbach's Alpha, if Item Deleted
4	26.62	29.02	-.08	.28	.77
11	26.49	24.09	.53	.65	.47
17	24.70	22.16	.67	.61	.41
21	24.54	25.14	.55	.71	.48
22	24.84	23.47	.62	.75	.44
26	26.19	23.60	.20	.19	.62

Table 13

PIRS Pilot Study Item-Total Statistics: Perceived Behavioral Control with Item 4 Removed ( $N = 37$ )

Item	Scale Mean, if Item Deleted	Scale Variance, if Item Deleted	Corrected Item-Total Correlation	Square Multiple Correlation	Cronbach's Alpha, if Item Deleted
11	22.43	19.03	.73	.57	.67
17	20.65	19.85	.60	.52	.70
21	20.49	21.31	.61	.71	.71
22	20.78	20.06	.65	.74	.69
26	22.14	18.07	.33	.17	.86

**Subjective norm.** The construct of Subjective Norm was comprised of items 3, 7, 10, 16, 20, 25, and 27 (Table 14). Overall, the construct of Subjective Norm manifested an initial Cronbach's Alpha of .65. It is apparent from the computations that Item 3 is reducing the reliability for this scale, as if this item was eliminated, Cronbach's Alpha would increase to .68 (see Table 15). In addition, the corrected item-total correlation for Item 3 is quite low (.02), thus, this item is not working well with the other items overall, and was eliminated from this construct (see Table 16). After analysis and reworking, the construct of Subjective Norm resulted in a Cronbach's Alpha of .68, manifested good convergent validity as evidenced by the similar corrected item-total correlations and consisted of six items.

Table 14

## PIRS Pilot Study Items: Subjective Norm

Item Number	Question
3	My colleagues expect me to refer distressed students to counseling services
7	People important to me think that I should assist a student in distress
10	My direct supervisor thinks that I should refer distressed students
16	Institutional administrators think that I should refer distressed students to counseling services
20	I feel social pressure to know the referral sources on campus
25	I feel social pressure to refer distressed students to counseling
27	The distressed student's parents, peers, and family members expect me to refer their student to counseling services

Table 15

PIRS Pilot Study Item-Total Statistics: Subjective Norm ( $N = 37$ )

Item	Scale Mean, if Item Deleted	Scale Variance, if Item Deleted	Corrected Item-Total Correlation	Square Multiple Correlation	Cronbach's Alpha, if Item Deleted
3	29.35	28.96	.02	.38	.68
7	29.62	25.24	.44	.35	.60
10	27.54	24.98	.47	.75	.60
16	27.65	23.23	.55	.72	.57
20	31.00	20.06	.37	.35	.61
25	30.32	16.89	.52	.42	.57
27	29.00	23.22	.30	.29	.63

Table 16

PIRS Pilot Study Item-Total Statistics: Subjective Norm with Item 3 Removed ( $N = 37$ )

Item	Scale Mean, if Item Deleted	Scale Variance, if Item Deleted	Corrected Item-Total Correlation	Square Multiple Correlation	Cronbach's Alpha, if Item Deleted
7	24.89	24.66	.41	.34	.65
10	22.81	23.66	.54	.62	.62
16	22.92	22.52	.54	.66	.61
20	26.27	19.15	.38	.35	.66
25	25.59	16.08	.52	.42	.60
27	24.27	22.37	.31	.26	.67

***Actual behavioral practice.*** The construct of Actual Behavioral Practice was comprised of item numbers 9, 15, 23, 29 and 32 (Table 17). The construct of Actual Behavioral Practice manifested an initial Cronbach's Alpha of .87. As shown in Table 18, if Item 32 was removed, Cronbach's Alpha would increase to .92. Possible variation is lacking among Items 9, 15, and 23, as evidenced by their highly related corrected item-total correlations. There may be possible differences in actual behavioral practices regarding consulting with a direct supervisor about students of concern, as compared to the other four items of this construct. Due to the already strong reliability coefficient of this construct, and the fact that Item 32 may offer further insight into actual behavioral practices of student support professionals, Item 32 remained in the main PIRS survey. Please see Appendices V & Y for the revised PIRS instrument that was used in the pre-surveys, and Appendices BB and EE for the final post-surveys.

Table 17

## PIRS Pilot Study Items: Actual Behavioral Practice

Item Number	Question
9	Approximately, how many students were you concerned about in the past 4 weeks?
15	Approximately, how many students did you approach to discuss your concerns in the past 4 weeks?
23	Approximately how many students have you referred for counseling services in the past 4 weeks?
29	What is the approximate number of times that you consulted with a colleague about a student you were concerned about in the past 4 weeks?
32	Approximately, how many times did you consult with your direct supervisor about a student of concern in the past 4 weeks?

Table 18

PIRS Pilot Study Item-Total Statistics: Actual Behavioral Practice ( $N = 28$ )

Item	Scale Mean, if Item Deleted	Scale Variance, if Item Deleted	Corrected Item-Total Correlation	Square Multiple Correlation	Cronbach's Alpha, if Item Deleted
9	10.29	266.14	.96	.98	.77
15	10.96	281.81	.93	.98	.79
23	11.29	287.25	.90	.97	.79
29	11.86	445.31	.49	.53	.89
32	12.46	495.52	.32	.66	.92

**Validity.** A factor analysis was attempted in order to assess if the items on the PIRS measure would split into the five constructs as developed. This attempt was unsuccessful, as SPSS could not compute this analysis, possibly due to the small size of

the pilot study. A principal components analysis with a varimax rotation was then executed, where this researcher forced all remaining items of the PIRS instrument into five potential factors. However, this analysis did not assist in manifesting validity. Component 1 accounted for 31.65% of the explained variance, and this factor included items from the constructs of Intent to Refer, Subjective Norm, and Perceived Behavioral Control (see Figure 2 and Table 19). Interestingly, the items that comprised the measure of Actual Behavioral Practice all loaded on Component 2, and the items comprising the construct of Attitudes towards the Behavior all loaded on Component 3, indicating that these groupings of items explained 13.59% and 13.29% of the total variance respectively (Rencher, 2002).

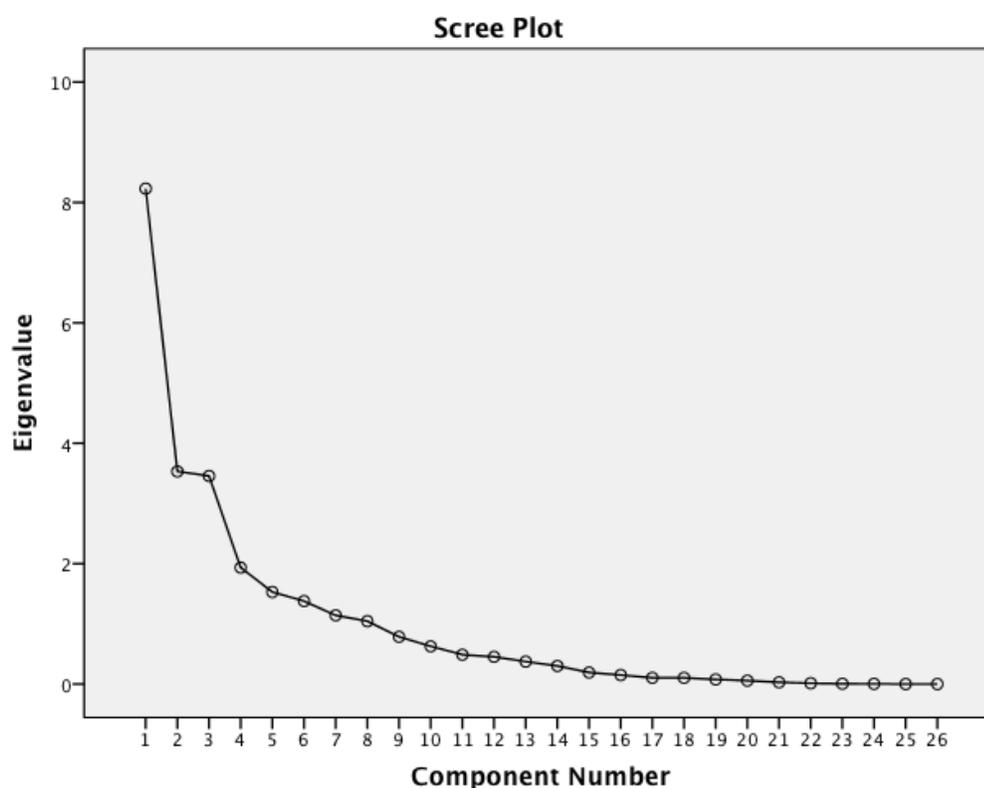


Figure 2. PIRS Pilot Study Scree Plot.

Table 19

PIRS Pilot Study Principal Components Analysis with Varimax Rotation ( $N = 27$ )

Item Number	Component				
	1	2	3	4	5
<i>Intent to Refer</i>					
5	.05	-.07	.34	<b>.65</b>	.01
14	<b>.92</b>	.05	.05	-.11	.05
18	<b>.89</b>	.16	.25	.05	-.05
24	<b>.93</b>	.08	.08	-.03	.01
28	<b>.85</b>	.04	.26	.12	.04
<i>Attitudes towards the Behavior</i>					
2	.21	.02	<b>.47</b>	.39	-.30
6	.02	.08	<b>.73</b>	.15	.07
8	.22	-.03	<b>.73</b>	.01	-.25
13	.18	.13	<b>.74</b>	.16	.01
30	.24	.04	<b>.81</b>	-.04	-.20
<i>Subjective Norm</i>					
7	<b>.44</b>	.11	.16	.29	.13
10	<b>.93</b>	.02	-.00	.03	.01
16	<b>.81</b>	.14	.29	-.03	.20
20	.04	.02	-.21	-.01	<b>.89</b>
25	.18	.31	-.05	.35	<b>.71</b>
27	<b>.40</b>	-.19	-.36	.14	-.19

Table 19

(Cont.)

Item Number	Component				
	1	2	3	4	5
<i>Perceived Behavioral Control</i>					
11	.43	.30	-.21	<b>.71</b>	.04
17	<b>.62</b>	.25	.05	.37	-.40
21	<b>.61</b>	.09	-.04	<b>.60</b>	.15
22	<b>.72</b>	.04	-.03	.48	-.16
26	-.23	.26	.20	<b>.64</b>	.14
<i>Actual Behavioral Practices</i>					
9	.09	<b>.93</b>	.20	.18	.10
15	.05	<b>.91</b>	.18	.21	.04
23	.04	<b>.90</b>	.19	.21	.01
29	.23	<b>.67</b>	-.43	-.22	.02
32	.22	<b>.46</b>	-.26	-.27	.26
Eigenvalues	8.23	3.53	3.45	1.94	1.53
Percent Variance Explained	31.65%	13.59%	13.29%	7.44%	5.88%

Item 5 of the Intent to Refer construct (“I intend to assist students whom I am concerned about”) loaded independently on Component 4, as did Perceived Behavioral Control Items 11 (“If the student of concern is hesitant to go to counseling, it is easy for me to persuade them to seek counseling services”) and 26 (“Whether or not I refer a distressed student to counseling services is entirely up to me”). The average scores for

Items 11 and 26 were lower than the remaining items in the Perceived Behavioral Control construct. Item number 26, while this is the published format for this style of question when constructing a TPB survey (Francis et al., 2004), this question may be perceived as confusing, in the sense the employees may be aware that they are expected to refer distressed students as part of their job duties, and thus may feel that they don't have a direct choice in executing this behavior.

Regarding Item 5, the average response score for this item was much lower than the other items in this construct (Table 20). This is the only remaining item in the construct of Intent to Refer that uses the phrase "I intend to," which may hold different meaning for participants than the phrases "I expect to" or "I plan to." Similarly, Item 20 ("I feel social pressure to know the referral sources on campus") and Item 25 ("I feel social pressure to refer distressed students to counseling") loaded independently on Component 5 and did not load with the other items of the Subjective Norm construct. This may be due to the fact that these two items used the phrase "social pressure," versus the other phrases of "my colleagues expect me" and "people important to me." Items 20 and 25 also manifested lower scores than the other items of the Subjective Norm construct (Table 20). However, this is the wording as used in a published manual for creating a TPB survey (Francis et al., 2004), and rewording of this item was not attempted, as this small pilot study does not offer enough information to overrule the published guidelines.

Table 20

PIRS Pilot Study Selected Construct Item Statistics ( $N = 27$ )

Item Number	<i>M</i>	<i>SD</i>
<i>Intent to Refer</i>		
5	4.67	.68
14	6.74	.86
18	6.44	1.28
24	6.56	1.09
28	6.30	1.35
<i>Subjective Norm</i>		
7	4.44	.85
10	6.56	.89
16	6.44	1.09
20	2.89	1.85
25	3.59	2.12
27	4.93	1.57
<i>Perceived Behavioral Control</i>		
11	4.26	1.23
17	6.00	1.36
21	6.15	1.20
22	5.74	1.40
26	4.44	2.14

Face validity was ensured in the PRIS instrument, as the content of all items was taken directly from elicitation study participants, who closely matched the participant demographics of both the pilot study and the main quantitative pre-post study. In

addition, terms utilized in the PIRS survey were taken from the current available research regarding construction of TPB surveys (Francis et al., 2004). The wording of items may have been further improved in order to enhance validity if the small sample size of the pilot study was not a limiting factor.

### **Main Quantitative Study Reliability**

Since the constructs of Attitudes, Perceived Behavioral Control, Subjective Norm, Intent to Refer, and Actual Behavioral Practice were measured across two time points with a six-week interval in between administrations, test-retest reliability was chosen to examine the internal consistency of the main variables. Due to the exploratory nature of this study, a two-tailed Pearson product-moment coefficient was chosen to analyze the degree of association between the two time points for each construct. As shown in Chapter IV, 50 participants were able to be matched between Time 1 and Time 2, and the following correlation coefficients are based off of these matched participants. The test-retest reliability for Attitudes over six weeks was  $r(48) = .45, p < .01$ , two-tails, Perceived Behavioral Control was  $r(48) = .71, p < .001$ , two-tails, and Subjective Norm manifested  $r(48) = .69, p < .001$ , two-tails. Similarly, the test-retest reliability for Intent to Refer over six weeks was  $r(48) = .49, p < .001$ , two-tails, and Actual Behavioral Practice manifested  $r(48) = .64, p < .001$ , two-tails. Strong test-retest reliability may not be manifest between the PIRS pre and post surveys due to the possible impact of the intervention, impact of the six week time lapse, or the fact that participants' attitudes and perceptions regarding referring distressed students to counseling may have changed over time. In addition, Table 21 shows the Cronbach Alpha coefficients for these constructs in

both the PIRS pre-survey and post-survey. Internal reliability coefficients for both the PIRS pre-survey and post-survey fall within reported TPB guidelines, with all constructs overall manifesting sufficient internal reliability.

Table 21

PIRS Pre and Post Survey Reliability Statistics

Construct	PIRS Pre-Survey	PIRS Post-Survey	Number of Items
Cronbach's Alpha			
Attitudes	.71	.73	5
Intent to Refer	.75	.81	5
PBC	.64	.61	5
SN	.69	.71	6
ABP	.82	.92	5

*Note.* Pre-Survey  $N = 59$ ; Post-Survey  $N = 53$ ; PBC = Perceived Behavioral Control; SN = Subjective Norm; ABP = Actual Behavioral Practices

## Data Analysis

### Qualitative Analysis

**Research question one.** This researcher's goal was to ask open-ended questions in a broad enough manner so that I may gather the participant's meanings and not assume potential responses. As this researcher was working with a well-established theory, this theory has yet to be applied to this population and thus a grounded theory approach was not utilized. Ultimately, this study was guided by an iterative approach (Tracy, 2013). Structured open-ended questions (see Appendix E) were created to draw upon three variables in this study: (a) attitudes towards behavior, (b) subjective norm, and (c)

perceived behavioral control (Patton, 2002). Primary-cycle codes were initially generated in order to answer the broad question of “what’s going on here?” (Tracy, 2013, p. 200). Primary-cycle codes that this researcher used were Attitudes, Perceived Behavioral Control, and Subjective Norm. Questions regarding intention to refer and actual behavioral practices were not asked during the qualitative stage (Francis et al., 2004). Statements were then categorized into secondary-cycle codes of Behavioral Beliefs (Attitudes), Control Beliefs (Perceived Behavioral Control), and Normative Beliefs (Subjective Norm; Francis et al., 2004; Tracy, 2013). Responses within these codes were then synthesized, compared, and were then utilized to create the pilot study. Francis et al. (2004) note that “inclusion of 75% of all beliefs stated should give adequate coverage of the belief ‘population’” (p. 14). Thus, this researcher sought to include at least three-fourths of the most common beliefs in order to obtain a holistic view of the overall population.

### **Quantitative Analysis**

Data was scored and analyzed using the statistical program SPSS 21.0 (IBM Corporation, 2012). Regarding the pilot study, inter-item correlations and item analysis were conducted. Survey items were revised as indicated and Cronbach’s alpha coefficients were analyzed for all constructs in the pilot study in order to examine internal consistency. Regarding the main study, univariate and multivariate statistical analyses were used in order to answer the research questions in this study. Descriptive statistics for participants were obtained. Test-retest reliability was examined for all constructs in the main quantitative study. Statistical tests utilized included Pearson product-moment

correlation, multiple linear regression, multivariate analysis of variance (MANOVA), repeated-measures analysis of variance (two-way mixed design ANOVA), and repeated-measures multivariate analysis of variance (MANOVA). Missing data was excluded listwise from all analyses. Significance level was set at .05 for this study, as this is the standard in social science research (Howell, 2010).

Regarding the Pearson product-moment correlation (research question 2), an *a priori* G\*Power analysis was conducted, with alpha ( $\alpha$ ) set to .05, an effect size of .30, two-tailed test, 90 participants would be required to achieve a power of .82. Regarding the linear multiple regression analysis (research question 3), an *a priori* G\*Power analysis was conducted, with alpha ( $\alpha$ ) set to .05, a moderate effect size of .25, and utilizing three predictors (attitudes towards, subjective norm, perceived behavioral control), 48 participants were the minimum necessary in order to achieve a power of .80. Regarding the two MANOVA's, utilizing an effect size of .06 and power set at .80, 100 participants would be needed to achieve a power of .82 for research question 4, and 126 participants are needed for research question 5. To achieve a power of .80 and moderate effect size of .25 for the repeated measures multivariate analysis of variance (research question 6), 28 participants would be needed for the between factors analysis, and 44 would be necessary for the within factors analysis (two groups and five measurements). Thus, ideally 126 participants would be needed for the main pre-post study, excluding participants in the qualitative and pilot studies, in order to satisfy all analyses according to the power specifications indicated.

The PIRS pre-survey was utilized to examine research questions two, three, four and five (see Figure 2). Both the pre and post PIRS surveys were used to examine research question six. Univariate and multivariate methodology was employed to assess results using IBM Statistics (SPSS) version 21.0 software (IBM Corporation, 2012). Furthermore, any pre-existing differences between the Intervention and Control groups were examined as noted above. Specific analyses for each research question are discussed below.

**Research question two.** The pre-TPB survey was utilized to answer research questions 2 – 5. A Pearson product-moment correlation was employed to answer research question two, in order to examine the relationship among the three independent variables (Attitudes, Perceived Behavioral Control, Subjective Norm) towards the dependent variable (Intent to Refer; see Figure 2). Multicollinearity was examined, as ideally the independent variables will be strongly related to the dependent variable but not to one another (Howell, 2010). This analysis permitted the researcher to determine the direction and strength of possible relationships between the independent variables and the dependent variable.

**Research question three.** Multiple linear regression was utilized in order to answer research question three. The predictor variables were Attitudes, Perceived Behavioral Control, and Subjective Norm. Intent to Refer served as the dependent variable. All variables were continuous in nature. This analysis was chosen so that the researcher may determine which predictor variable(s) most influences the dependent variable, while controlling for other predictor variables. Furthermore, this analysis

manifested how much of the variance in intention to refer can be explained by attitudes, subjective norm, and perceived behavioral control.

**Research question four.** A multivariate analysis of variance (MANOVA) was employed in order to examine research question four. The continuous dependent variables were Attitudes, Perceived Behavioral Control, Subjective Norm, and Intent to Refer. The independent, categorical variables were gender, educational level, years of professional work experience, and functional area. Due to the multiple dependent variables, multivariate methodology was utilized (Rencher, 2002). Follow-up univariate analyses of variance will be conducted if significance is reached, in order to further examine significant independent variables. This analysis was chosen so that the researcher may determine if a significant difference exists among participant demographics in terms of the dependent variables.

**Research question five.** In order to answer research question five, a MANOVA was employed. This analysis allows the researcher to determine if a significant difference exists among participants who have had prior gatekeeper training, prior psychological or counseling coursework, or prior professional experience with distressed students (categorical independent variables) in terms of their Attitudes, Perceived Behavioral Control, Subjective Norm, and Intent to Refer (continuous dependent variables). Due to the multiple dependent variables, multivariate methodology was utilized (Rencher, 2002). Follow-up univariate analyses of variance will be conducted if significance is reached, in order to further examine significant independent variables. Outcomes of this research question may benefit graduate schools and institutional

training programs regarding coursework and trainings offered to student support professionals regarding working with distressed college students.

**Research question six.** Both pre and post PIRS surveys were utilized to answer research question six. A repeated-measures MANOVA and a repeated-measures analysis of variance (ANOVA) were used to examine both *between* subjects and *within* subjects differences. The between-group independent variables were the two conditions (Intervention and Control groups). The within-group independent variables were the time points (Time 1 and Time 2). The TPB constructs of Attitudes, Perceived Behavioral Control, Subjective Norm, and Intent to Refer were analyzed using a repeated-measures MANOVA due to their dependences upon one another. Univariate analyses of variance follow-up tests will be utilized if significance is found in the repeated-measures MANOVA. This research question will assist in determining if the online gatekeeper training intervention has made any impact, both *within* and *between* groups, upon student support professionals' Attitudes, Subjective Norms, Perceived Behavioral Control, Intent to Refer, and Actual Behavioral Practice. The variable of Actual Behavioral Practice was on a different scale than the TPB constructs, as it was interval in nature. In addition, this variable did not manifest the correlational dependencies that the TPB constructs did with one another. Thus, this researcher utilized a separate two-way mixed design ANOVA for this variable to assess any within-subjects or between-subjects differences.

Table 22

## Summary of Research Questions and Corresponding Methodology

<b>Research Question</b>	<b>Assessment &amp; Variables</b>	<b>Statistical Analyses</b>	<b>Utility</b>
RQ1	Structured Open-ended questions	<i>For Pilot Study:</i> Item-total statistics, reliability analysis	1. Salient beliefs particular to the population were identified in order to create a meaningful pilot survey and main survey
RQ2	Pre-TPB survey  DV = Intent to refer (continuous)  3 IV's = Attitudes, Subjective Norm, & Perceived Behavioral Control (continuous)  <i>DV = Dependent Variable</i> <i>IV = Independent Variable</i>	Pearson Correlation	1. Correlation to find the direction and strength of relationship between the IV's towards the DV.
RQ3	Pre-TPB survey  DV = Intent to refer (continuous)  3 IV's = Attitudes, Subjective Norm, & Perceived Behavioral Control (continuous)	Multiple Linear Regression	1. Examines which predictor variable(s) most influence the DV while controlling for other variables

Table 22

(Cont.)

<b>Research Question</b>	<b>Assessment &amp; Variables</b>	<b>Statistical Analyses</b>	<b>Utility</b>
RQ4	<p>Pre-TPB survey</p> <p>4 DV's= Intent to refer, Attitudes, Subjective Norm, &amp; Perceived Behavioral Control (continuous)</p> <p>4 IV's= gender, educational level, years of experience, and functional area (categorical)</p>	Multivariate Analysis of Variance (with univariate follow-up tests if indicated)	1. Demonstrates differences among participant demographics and the DV's.
RQ5	<p>Pre-TPB survey</p> <p>4 DV's= Intent to refer, Attitudes, Subjective Norm, &amp; Perceived Behavioral Control (continuous)</p> <p>3 IV's= Prior training, coursework, experience with distressed students (categorical)</p>	Multivariate Analysis of Variance (with univariate follow-up tests if indicated)	<p>1. Demonstrates differences among participants regarding past training, coursework, and exposure and the DV.</p> <p>2. May benefit graduate curricula and institutions regarding training for student support professionals</p>

Table 22

(Cont.)

Research Question	Assessment & Variables	Statistical Analyses	Utility
RQ6	<p>Pre and Post TPB survey</p> <p>Between group IV's: Group assignment (Intervention and Control)</p> <p>Within Group IV's: Time points (Time 1 and Time 2)</p> <p>5 DV's: Intent to refer, Actual behavioral practices, Attitudes, Subjective Norms, Perceived Behavioral Control</p>	<p>Repeated Measures Multivariate Analysis of Variance for TPB constructs (with univariate follow-up tests if indicated)</p> <p>Two-way mixed design Analysis of Variance for Actual Behavioral Practice</p>	<p>1. Offers insight into differences <i>between</i> the intervention and control groups regarding the 5 DV's, across two time points</p> <p>2. Offers insight into differences <i>within</i> participants identified in either the intervention or control groups, across two time points</p>

## **CHAPTER IV**

### **RESULTS**

#### **Introduction**

As stated in Chapter I, the purpose of this study was twofold. First, this study explored student support professionals' salient beliefs and meanings towards distressed college students and intentions to refer. Second, this study examined the impact, if any, of an online interactive gatekeeper training upon student support professionals' attitudes, perceived behavioral control, subjective norm, and intentions to refer distressed students to counseling services. Finally, this study examined the behavioral practices of student support professionals within the previous four weeks, as well as after participating in the gatekeeper training. This chapter is organized according to the six research questions outlined in Chapter III.

#### **Research Questions**

The research questions for this doctoral study were as follows:

1. What are student support professionals' salient beliefs and meanings regarding distressed college students and intentions to refer?
  - a) What meaning do student support professionals make of the process of referring a distressed college student?

- b) What are student support professionals' perceptions of their departmental and professional expectations regarding the referral of the distressed college student?
  - c) What are the issues that enable a student support professional from acting upon their intention to refer?
  - d) What are the issues that constrain a student support professional from acting upon their intention to refer?
2. Is there a relationship between attitudes towards the behavior, perceived behavioral control, and subjective norm towards intent to refer?
  3. How much of the variance in intent to refer is accounted for by attitudes towards the behavior, perceived behavioral control, and subjective norm?
  4. Do attitudes, perceived behavioral control, subjective norm, and intent to refer vary by gender, educational level, years of experience, and job duty?
  5. Does prior suicide prevention training, previous exposure to distressed students, and previous psychological coursework significantly impact attitudes, perceived behavioral control, subjective norm, and intent to refer?
  6. Are there significant differences *between* and *within* the intervention and control groups regarding attitudes towards the behavior, perceived behavioral control, subjective norm, intent to refer, and actual behavioral practices in the past four weeks?

**Research Question One**

*What are student support professionals' salient beliefs and meanings regarding distressed college students and intentions to refer?*

Research question one was assessed in the elicitation study. In order to assess participants' understanding of what characterizes a distressed college student, elicitation study participants were asked to provide their personal definition of a distressed student (See Appendix E). Definitions offered were consistent with the literature and the definition offered in this doctoral study. Two participant definitions described distress as a having a problem without the means for executing a solution. For example, one participant stated that a distressed student was a student who is "currently dealing with a situation that they lack the mental resources to resolve without intervention." Similarly, another participant noted that a distressed student is "a student who is overwhelmed by current circumstances and does not have or use coping skills to manage their emotional intensity." The problems noted here are that the student is experiencing an emotional crisis that they may not be able to resolve independently, but the solution offered in both responses is that external resources or enhanced coping skill management may be offered to help assist the student. Many participant definitions took into account the broad impact of emotional distress upon the student, impacting not only academic functioning, but social and professional functioning, as well as having the potential to negatively impact physical health as well. Finally, participants indicated that a departure from the student's typical behavior was a clear indicator of distress, and that this would be apparent to the student support professional.

Findings related to research question one are broken into four sections in order to address the four sub questions. Research question 1a is discussed under the heading “attitudes towards the behavior.” Research question 1b will be addressed under the heading “subjective norm.” Finally, research questions 1c and 1d will be discussed under the heading “perceived behavioral control.” Themes for each construct were identified and listed according to their frequency (Francis et al., 2004). Themes with just one response were not included, as this researcher sought to identify the most commonly mentioned themes from this population. The questions that comprised the PIRS pilot survey (and subsequent PIRS pre and post surveys) were generated from the qualitative elicitation study. As noted in Chapter III, at least 75% of the indirect and direct beliefs from the elicitation study results were utilized to create the PIRS survey. Findings from the elicitation study, while used to create the PIRS instrument described in detail in Chapter III, are discussed here in more depth.

**Attitudes towards the behavior.** *What meaning do student support professionals make of the process of referring a distressed college student?* In order to answer research question 1a, three open-ended questions were asked of participants. These questions were 1) what do you believe are the advantages of referring a distressed student to counseling services, 2) what do you believe are the disadvantages of referring a distressed student to counseling services, and 3) is there anything else you think of when you consider your own views about referring a distressed student to counseling services? (See Appendix E). The primary-cycle code utilized for these questions was Attitudes (Tracy, 2013). After compiling responses from these questions into the Attitudes code,

findings were then categorized into secondary-cycle codes of behavioral beliefs (Tracy, 2013).

As stated in Chapter I, behavioral beliefs correspond to attitude toward the behavior, and may be defined as one’s beliefs about the possible positive or negative outcomes of the target behavior. In addition, positive or negative feelings associated with the behavior are referred to as outcome evaluations (Francis et al., 2004). Five main themes were identified as advantages or positive outcomes of referring a distressed student to counseling (see Table 23). The most frequently mentioned advantage of referring a distressed student to counseling was the belief that counseling would help the student gain coping skills and/or assist in problem solving. One participant stated that “counseling services can provide the ongoing support and strategies to help the student gain some sense of stability in coping with life’s challenges.” Another participant stated that counseling “allows the student to help identify and pursue possible solutions to lessen the stressor—or better handle it in a more positive manner.”

Table 23

Advantages of Referring a Distressed Student to Counseling Services ( $N = 19$ )

Theme	Frequency
Enhance coping and/or problem-solving skills	14
Obtain assistance and support	8
Speak with a professionally trained individual	7
Connect with on-campus resources	4
Obtain formal risk assessment	3

The second most commonly mentioned theme regarding the advantage of referring a distressed student to counseling services was connecting the student with much needed assistance and support. Participants indicated that this assistance and support was not just for the short term, but that counseling could offer longer term services and orient the student to the possibility of future services. Participants also indicated that referring a student to counseling was beneficial for them as well, as it reduces the personal liability of the student support professional and reduces any potential harm to the student that may inadvertently occur by the student support professional. To this point, one participant stated that “as a professional, you do not want to be put in harm’s way and therefore you would rather [have] someone trained to do the job.”

The third theme identified was the opportunity to have the student speak with an objective, professionally trained clinician. Participants also indicated that it might be helpful for the student to speak with someone not directly related to their distress. Connecting the student with on-campus resources was also identified as an advantage of referring a student, as well as the fact that students could obtain a formal risk assessment at the campus counseling center. One participant stated that counselors “are equipped to determine if the student is at risk for harming themselves or someone else.” Similarly, another participant noted that “proper referral could help identify and address an issue before it turns critical or fatal.”

Possible disadvantages of referring a distressed student to counseling services are listed in Table 24. In addition to not being able to identify any disadvantages, the most

frequently mentioned disadvantage to referring a distressed student was that the referral itself might exacerbate an already tenuous situation. Participants indicated a fear of the student overreacting, or not reacting well, to their recommendation to seek counseling services. Participants worried that their referral may stigmatize the client, or that the student may feel embarrassed about the referral.

Table 24

Disadvantages of Referring a Distressed Student to Counseling Services ( $N = 19$ )

Theme	Frequency
Cannot identify any disadvantages	7
Referral may exacerbate situation	6
Student may fear stigmatization	4
Student may feel embarrassed	2
Referral source may have overreacted (by giving referral)	2
Student may end up on the institutional radar	2
Student may have to wait to obtain counseling	2

An interesting theme that emerged was the possibility of an overreaction by the referral source, and that possibly, the referral was not necessary. Finally, three institutional challenges emerged as themes. The first was the referral source's fear that referring the student will place that student on the institutional radar. For example, this participant stated that "sometimes students believe that a referral will 'mark' them for the rest of the time they are at the university. The student may believe he/she is being watched by administrators, which may lead to more distress." Similarly, this participant

voiced concerns that “the distressed student may be automatically labeled as an ‘in trouble student.’” The second institutional challenge noted was that the student may have to wait to obtain counseling services on campus. One participant indicated that staffing concerns within the counseling center “could result in a student not being able to get the support needed in a timely manner.”

Third, although this theme was only noted once and thus is not listed in Table 24, the challenge of confidentiality was brought up by one participant. Once a student is referred to the counseling center, the referral source may no longer be in the loop of that student’s care, and thus this may present a challenge to the referral source when they are considering follow-up care or contact.

**Subjective norm.** *What are student support professionals' perceptions of their departmental and professional expectations regarding the referral of the distressed college student?* As noted in Chapter I, normative beliefs relate to subjective norm and are one’s perceptions if important individuals in their lives will either approve or disapprove of them performing the target behavior, in conjunction with the participant’s motivation to comply with the beliefs of the referents (Montanto & Kasprzyk, 2008). The primary-cycle code utilized for these questions was Subjective Norm (Tracy, 2013). After compiling responses from these questions into the Subjective Norm code, findings were then categorized into secondary-cycle codes of normative beliefs (Tracy, 2013).

Question 1b was assessed utilizing the following questions: (a) what groups or individuals (e.g. supervisor, colleague, family member) would approve of you referring a distressed student to counseling services? (Please state your relationship with the

individual(s) and do not state specific names), (b) what groups or individuals (e.g., supervisor, colleague, family member) would disapprove of you referring a distressed student to counseling services? (Please state your relationship with the individual(s) and do not state specific names), and (c) is there anything else that comes to mind when you think of other people's views about referring a distressed student to counseling services? (see Appendix E).

The top two normative groups mentioned by participants who would support a referral to counseling services for a distressed student was one's direct supervisor and institutional colleagues (see Table 25). Institutional administrators were also mentioned, however less frequently. Institutional administrators identified were the Vice Chancellor for Student Affairs, Dean of Students, and the Chancellor, among others. Participants also noted that the distressed students' peers, parents, or friends would approve of the referral.

Table 25

Subjective Norm Approvals of Referring a Distressed Student to Counseling Services  
( $N = 19$ )

Theme	Frequency
Supervisor	14
Institutional colleagues	13
Institutional administrators	5
Student's personal supports (friends of student, student's parents)	5
Most individuals in general	4

When participants were asked who would disapprove of them making a referral to counseling services for a distressed student, the majority of participants indicated that they did not believe that any person would disapprove. Some participants did indicate that their family members, their personal cultural background, or the student's family may disapprove of counseling services in general, and thus disapprove of the referral (see Table 26). One participant stated that "coming from a blue collar ('suck it up/stop crying') values community, I might expect some pushback when talking about my work, regarding sending a student to counseling, namely if that student is male." Another participant indicated similar cultural issues, stating that,

Going to counseling still has [a] negative tone in some cases, especially with parents. There are some cultural considerations that could present as obstacles and barriers to counseling support for some people. These cultural norm or differences need to be considered where appropriate.

Table 26

Subjective Norm Disapprovals of Referring a Distressed Student to Counseling Services  
( $N = 19$ )

Theme	Frequency
No one would disapprove	9
My family	2
My culture	2
Student's family	2

**Perceived behavioral control.** *What are the issues that enable a student support professional from acting upon their intention to refer? What are the issues that constrain*

*a student support professional from acting upon their intention to refer?* Research questions 1c and 1d were assessed with the following questions: (a) what factors or circumstances would enable you to refer a distressed student to counseling services, (b) what factors or circumstances would make it difficult or impossible for you to refer a distressed student to counseling services, and (c) are there any other issues that come to mind when you think about referring a distressed student to counseling services? (see Appendix E). The primary-cycle code utilized for these questions was Perceived Behavioral Control (Tracy, 2013). After compiling responses from these questions into the Perceived Behavioral Control code, findings were then categorized into secondary-cycle codes of control beliefs (Tracy, 2013).

As discussed in Chapter I, control beliefs are related to perceived behavioral control. Control beliefs are the perceived barriers and facilitators to performing the behavior, and how these barriers may contribute to the relative ease or difficulty of performing the behavior (Montanto & Kasprzyk, 2008). Control beliefs may be further broken down into controllability factors (e.g. how much control participant believes they have regarding executing the behavior) and self-efficacy factors (e.g. difficulty in performing the behavior and level of confidence in performing the behavior; Francis et al., 2004).

The main theme that emerged regarding factors that help enable a referral to counseling services was the referral source having a positive relationship with the counseling center or with particular counseling center staff (n =5). This theme also included perceiving that the counseling center was accessible to students, had good

availability, services were offered at low or no cost to students, and that the counseling center offered an on-call system. One participant noted that knowing campus referral sources helped to facilitate a referral, and another participant stated that having training regarding identifying distressed students also assisted them in making referrals.

The most common factor that was identified as a barrier to making a referral to counseling for a distressed student was the students themselves ( $n = 6$ ). Participants noted that if the student has a poor attitude towards the referral, and if they are unwilling to go, this was a hindrance to the referral process. Difficulties with the on-campus counseling service was also noted as a hindrance to referral ( $n = 4$ ). One participant indicated that “not having a good working relationship with colleagues within the counseling services office” was a concern, and other participants indicated that lack of service availability or poor accessibility to the counseling office were barriers when making a referral. One participant stated that a hindrance to making a referral was personally knowing the student. Knowing the student in distress may cause one to underestimate the student’s distress, or make it more difficult to bring up the topic of referral due to not wanting to upset the student further.

Finally, when asked about any other issues that come to mind when thinking of making a referral to counseling, one participant questioned “how well does counseling services typically handle distressed students?” This is a fair query, as if the referral source does not know the potential outcome options of making a referral, or do not think that referring the student to counseling will actually help, this may be a barrier. Another participant stated “how will it affect me?” regarding an issue that came to mind when

considering making a referral. This participant may be concerned about having to follow-up with the student, or they may be concerned about potential ramifications if they did not refer the student.

### **Research Question Two**

*Is there a relationship between attitudes towards the behavior, subjective norm and perceived behavioral control towards intention to refer?*

Research questions two through six were analyzed in the main quantitative study. Regarding research questions two through five, the pre-survey data from the Intervention and Control groups were merged in order to answer these particular research questions. A Pearson product-moment correlation coefficient was employed to assess the relationship among the three main variables (Attitudes, Perceived Behavioral Control, and Subjective Norm) towards the variable Intent to Refer. There was a strong and significant positive correlation among Attitudes and Intent to Refer ( $r(63) = .82, p < .001$ , two-tails). Results also indicated a moderate and significant positive correlation between Perceived Behavioral Control and Intent to Refer ( $r(63) = .48, p < .001$ , two-tails), as well as with Subjective Norm and Intent to Refer ( $r(63) = .39, p < .001$ , two-tails; see Table 27).

Multicollinearity among the variables was examined, and results indicated that the variables of Attitudes and Perceived Behavioral Control were moderately and positively correlated with one another ( $r(63) = .61, p < .001$ , two-tails). In addition, Attitudes and Subjective Norm were significantly and positively correlated, however this correlation was weaker in nature ( $r(63) = .29, p < .05$ , two-tails). While these variables were

significantly correlated with one another, these correlations were not overly strong in nature ( $< 0.70$ ), and multicollinearity was not manifested among the independent variables (see Table 27). Finally, Perceived Behavioral Control and Subjective Norm manifested a positive but low and non-significant relationship ( $r(63) = .17, p > .05$ , two-tails).

Table 27

Means, Standard Deviations, and Pearson Product-Moment Correlation Coefficients for Intent to Refer ( $N = 65$ )

	<i>M</i>	<i>SD</i>	1	2	3
Intent	6.29	.66	.82**	.48**	.39**
Variable					
1. Attitudes	6.21	.68	—	.61**	.29*
2. PBC	5.30	.94	.61**	—	.17
3. SN	4.89	.98	.29*	.17	—

Note: Intent = Intent to Refer; PBC = Perceived Behavioral Control; SN = Subjective Norm

\* $p < .05$ , \*\* $p < .001$ .

### Research Question Three

*How much of the variance in intention to refer is accounted for by attitudes towards the behavior, perceived behavioral control, and subjective norm?*

Multiple linear regression was utilized in order to answer research question three. The predictor (independent) variables were Attitudes, Perceived Behavioral Control, and Subjective Norm. Intent to Refer served as the outcome (dependent) variable. The overall model significantly predicted Intent to Refer ( $F(3, 61) = 46.73, p < .001$ ). This model explained 69.7% of the variance (adjusted  $R^2 = .68$ ) of Intent to Refer. Thus,

almost 70% of the variance in scores of Intent to Refer was predicted by the combination of Attitudes, Perceived Behavioral Control, and Subjective Norm. See Table 28 for the unstandardized and standardized regression coefficients, the standard error, and the part-correlation for each variable.

Of the three predictors, Attitudes was the strongest significant predictor variable for Intent to Refer ( $t = 8.61, p < .001$ ), with Subjective Norm following as the next strongest significant predictor ( $t = 2.30, p < .05$ ). Perceived Behavioral Control was a negative and non-significant predictor of Intent to Refer ( $t = -.30, p > .05$ ). Further contributions of the predictor variables to Intent to Refer may be explored by squaring the independent variables part-correlation, with Attitudes uniquely accounting for 36.8% of the variance in Intent to Refer, the largest of all predictor variables, followed by Subjective Norm which uniquely accounted for 2.6% of the variance in Intent to Refer.

Table 28

Multiple Linear Regression Analysis for Three Independent Variables Predicting Intent to Refer ( $N = 65$ )

Predictor	B	SE B	$\beta$	Part Correlation
Constant	.93	.46		
Attitudes	.79	.09	.79**	.61
PBC	-.02	.06	-.03	-.02
SN	.11	.05	.17*	.16

Note. PBC = Perceived Behavioral Control, SN = Subjective Norm; SE B = standard error;  $\beta$  = standardized beta coefficient;  $R^2 = .697$ , \*  $p < .05$ , \*\*  $p < .001$ .

A secondary analysis was conducted regarding research questions two and three, as this researcher was curious as to how the variable of Actual Behavioral Practice would impact, if at all, the variables of Attitudes, Perceived Behavioral Control, Subjective Norm, and Intent to Refer when entered into both the Pearson product-moment correlation analysis (research question two) and the multiple linear regression (research question three). The variable of Actual Behavioral Practice was found to have a mean of 2.40 and a standard deviation 4.97, indicating that the average number of students that a participant met with to discuss concerns, or discussed their concerns regarding a student with a supervisor or colleague, was approximately 2 students in the past four weeks. Interestingly, one participant was found to have a mean of 28.6 students, indicating a wide range of responses within this variable.

When entered into the Pearson product moment correlation with the other three variables and Intent to Refer, Actual Behavioral Practice was positively correlated with Intent to Refer, however this relationship was weak and non-significant ( $r(63) = .21, p > .05$ , two-tails). Similarly, when entered into the multiple linear regression with the three predictor variables (Attitudes, Perceived Behavioral Control, and Subjective Norm) and Intent to Refer serving as the outcome variable, the new overall model remained significant ( $F(4, 60) = 35.23, p < .001$ ), and explained 70.1% of the variance (adjusted  $R^2 = .68$ ) of Intent to Refer. Within the multiple linear regression, Actual Behavioral Practice was a non-significant predictor of Intent to Refer ( $t = .96, p > .05$ , part = .07).

**Research Question Four**

*Do attitudes, perceived behavioral control, subjective norm, and intention to refer vary by gender, educational level, years of experience, and functional area?*

A multivariate analysis of variance (MANOVA) was employed in order to determine if gender, educational level, years of work experience, and functional job area (Division) was related to one's Attitudes, Perceived Behavioral Control, Subjective Norm, and Intent to Refer. The continuous dependent variables were Attitudes, Perceived Behavioral Control, Subjective Norm, and Intent to Refer. The independent, categorical variables were gender, educational level, years of professional work experience, and functional area. Due to the small number of participants in some cells in the educational level demographic (see Table 3), educational level was collapsed into bachelors level (inclusive of associate's degrees and some college), master's level (inclusive of some graduate work, specialists degree, and the one participant who indicated "Other" identified that degree as a Juris Doctorate), and doctoral level. In the same fashion, years of professional work experience were grouped according to the output shown in Table 3.

Prior to executing the MANOVA, this researcher checked model assumptions surrounding univariate normality for each of the four dependent variables utilized in research questions four and five. Q-Q plots were utilized to assess univariate normality. Skewness and kurtosis for all four dependent variables were within an acceptable range. The dependent variables of Attitude, Perceived Behavioral Control, and Subjective Norm, while not shown, appeared to be generally linear and may be deemed to be normally distributed. The dependent variable of Intent to Refer manifested curved tails at

the upper and lower ends, indicating a moderate level of negative skewness (see Table 31) but overall appeared to be approximately univariate normally distributed. The fact that this variable is negatively skewed is not surprising, as the majority of participants reported high ratings regarding their Intent to Refer ( $M = 6.30$ ), thereby pulling the Q-Q plot towards the higher response options. In addition, due to the fact that the dependent variables were measured on a seven-point Likert-style scale, few unique values were available regarding response options, resulting in responses for the Q-Q plot of Intent to Refer appearing largely in groupings of data points. Note that analyses assessing multivariate normality are explained below in Research Question Six.

No significant main effect was found for gender as it relates to Attitudes, Subjective Norm, Perceived Behavioral Control, and Intent to Refer ( $\lambda = .82, F_{8,74} = .99, p > .05$ ). Similarly, no significant main effect was found for educational level ( $\lambda = .75, F_{8,74} = 1.37, p > .05$ ), or for work experience ( $\lambda = .57, F_{16,113.67} = 1.42, p > .05$ ). Finally, no significant main effect was found for functional job area (Division) as it relates to Attitudes, Perceived Behavioral Control, Subjective Norm, and Intent to Refer ( $\lambda = .87, F_{4,37} = 1.33, p > .05$ ; see Table 29).

Interactions between education and work experience were non-significant ( $\lambda = .66, F_{12,98.18} = 1.37, p > .05$ ) as were the interaction between education and gender ( $\lambda = .91, F_{4,37} = .94, p > .05$ ) and education and division ( $\lambda = .81, F_{4,37} = 1.25, p > .05$ ; see Table 29). The interactions among work experience and gender ( $\lambda = .71, F_{16,113.67} = .85, p > .05$ ) as well as between work experience and division ( $\lambda = .86, F_{4,37} = 1.55, p > .05$ ) were also non-significant. Finally, the interaction between gender and

division was non-significant ( $A = .97$ ,  $F_{84,37} = .30$ ,  $p > .05$ ). Tertiary interactions and the four-way interaction were unable to be analyzed due to a lack of degrees of freedom, and thus could not be estimated.

Table 29

Multivariate Analysis of Variance  $F$  Ratios for Education, Work Experience, Gender, and Division by Attitudes, Intent to Refer, Perceived Behavioral Control, and Subjective Norm ( $N = 63$ )

Variable	df	$F$	$p$	$\eta_p^2$	Power
Education (E)	8, 74	1.37	.23	.13	.58
Work Experience (WE)	16, 113.67	1.42	.15	.13	.67
Gender (G)	8, 74	.99	.45	.10	.43
Division (D)	4, 37	1.33	.28	.13	.37
E x WE	12, 98.18	1.37	.19	.13	.64
E x G	4, 37	.91	.45	.09	.27
E x D	4, 37	1.25	.31	.12	.35
WE x G	16, 113.67	.85	.63	.08	.41
WE x D	4, 37	1.55	.21	.14	.43
G x D	4, 37	.30	.88	.03	.11

Note. df = degrees of freedom;  $\eta_p^2$  = partial eta-squared

Partial eta-squared may be defined as the proportion of variability unique to that independent variable. The variable of Education manifested a small partial eta-squared coefficient of .13, and observed power of .58. It was found that the variable of Work Experience manifested a small partial eta-squared coefficient of .13 and power of .67. In addition, the interaction of Education and Work Experience manifested a small eta-

squared coefficient of .13, and observed power of .64. These findings are indicative that the small sample size of the main quantitative study is a limitation, and the sensitivity of these tests may be increased if a larger sample size were obtained.

Table 30 manifests the descriptive statistics for the dependent variables utilized in research questions four and five. The variable Perceived Behavioral Control manifests the greatest range of responses, with 2.80 being the minimum response and 7.00 being the maximum response. Again, response options ranged from (1) Strongly Disagree to (7) Strongly Agree. Please see Table 3 for information pertaining to the independent categorical variables in research questions four and five.

Table 30

Descriptive Statistics for PIRS Pre-Survey Dependent Variables ( $N = 65$ )

Variable	<i>M</i>	<i>SD</i>	Minimum	Maximum	Skew	Kurtosis
Attitudes	6.21	.66	4.40	7.00	-.58	-.12
Intent to Refer	6.30	.66	4.60	7.00	-.93	.41
PBC	5.30	.94	2.80	7.00	-.48	.06
Subjective Norm	4.89	.98	4.60	7.00	-.13	.57

*Note.* PBC = Perceived Behavioral Control; *M* = Mean, *SD* = Standard deviation; Minimum = minimum value; Maximum = maximum value

### Research Question Five

*Does prior suicide prevention training, previous exposure to distressed students, and previous psychological coursework significantly impact attitudes, subjective norm, perceived behavioral control, and intention?*

Similar to research question four, a MANOVA was employed in order to determine if previous suicide prevention training, previous direct experience with distressed students, or previous mental-health related coursework was related to one's Attitudes, Subjective Norm, Perceived Behavioral Control, and Intent to Refer. As shown in Table 31, no significant main effect was found for previous gatekeeper training as it relates to Attitudes, Subjective Norm, Perceived Behavioral Control, and Intent to Refer ( $\Lambda = .93$ ,  $F_{4,52} = 1.04$ ,  $p > .05$ ). Similarly, no significant main effect was found for prior experience with distressed students ( $\Lambda = .89$ ,  $F_{4,52} = 1.68$ ,  $p > .05$ ), or for previous coursework ( $\Lambda = .85$ ,  $F_{4,52} = 2.28$ ,  $p > .05$ ; see Table 31).

Interactions between prior training and prior experience were non-significant ( $\Lambda = .99$ ,  $F_{4,52} = .09$ ,  $p > .05$ ) as was the interaction between prior training and prior coursework ( $\Lambda = .91$ ,  $F_{4,52} = 1.24$ ,  $p > .05$ ). Similarly, the interaction between prior experience and prior coursework was non-significant ( $\Lambda = .88$ ,  $F_{4,52} = 1.76$ ,  $p > .05$ ). Finally, a non-significant finding was manifested for the tertiary interaction among prior training, prior experience, and prior coursework ( $\Lambda = .95$ ,  $F_{4,52} = .65$ ,  $p > .05$ ).

As shown in Table 31, the variable of Prior Experience manifested a partial eta-square coefficient of .11 and observed power of .48. Prior Coursework manifested a partial eta-squared coefficient of .15 and power of .62. Finally, the interaction of Prior Experience x Coursework was shown to have a partial eta-squared coefficient of .12 and power of .50. As stated in research question four, these findings suggest that in order to increase the sensitivity of these tests, a larger sample size is indicated.

Table 31

Multivariate Analysis of Variance  $F$  Ratios for Previous Training, Prior Experience, and Previous Coursework by Attitudes, Intent to Refer, Perceived Behavioral Control, and Subjective Norm ( $N = 63$ )

Variable	df	$F$	$p$	$\eta_p^2$	Power
Prior Training (T)	4, 52	1.04	.39	.07	.31
Prior Experience (E)	4, 52	1.68	.17	.11	.48
Prior Coursework (C)	4, 52	2.27	.07	.15	.62
T x E	4, 52	.09	.99	.01	.07
T x C	4, 52	1.24	.30	.09	.36
E x C	4, 52	1.76	.15	.12	.50
T x E x C	4, 52	.65	.63	.05	.20

Note. df = degrees of freedom;  $\eta_p^2$  = partial eta-squared

### Research Question Six

*Are there significant differences between and within the intervention and control groups regarding attitudes towards the behavior, subjective norm, perceived behavioral control, intention to refer, and actual behavioral practices in the past four weeks?*

The TPB constructs of Attitudes, Perceived Behavioral Control, Subjective Norm, and Intent to Refer were analyzed using repeated-measures MANOVA due to their dependences upon one another. The between-group independent variables were the two conditions (Intervention and Control groups). The within-group independent variables were the time points (Time 1 and Time 2). The variable of Actual Behavioral Practice was on a different scale than the TPB constructs, as it was interval in nature. In addition, this variable did not manifest the correlational dependencies that the TPB

constructs did with one another (see Table 27). Thus, this researcher utilized a separate two-way mixed design ANOVA for this variable to assess any within subjects or between subjects differences. Participants were matched according to either their unique identifier or their age and work experience, resulting in 50 usable matched pairs of pre and post data ensuing in 25 matched-pairs per group. Although 57 participants completed both the pre and post surveys, this researcher, despite asking participants to create a unique identifier and establishing redundancies of age and work experience, was unable to match one participant's pre and post survey scores in the Intervention group, and six participants' scores in the Control group.

Prior to executing the repeated-measures MANOVA and two-way mixed design ANOVA, this researcher used Q-Q plots to check model assumptions of univariate normality for each of the four TPB constructs. These analyses were conducted utilizing SAS software version 9.3 (SAS Institute, Inc., 2013). Univariate skewness and kurtosis for all four variables were within an acceptable range and appeared to be generally linear and are essentially normally distributed. The dependent variable of Intent to Refer manifested curved tails at the upper and lower ends, indicating a moderate level of negative skewness (-.85) but overall appeared to be approximately univariate normally distributed. The majority of participants reported high ratings regarding their Intent to Refer ( $M = 6.26$ ), thereby pulling the Q-Q plot towards the higher response options.

Potential outliers in the data were checked as well utilizing the critical chi-square values related to Mahalanobis Distance. Data from the 50 participants who could be matched were utilized for the following analyses. For the PIRS pre-survey, the largest

value of  $D_{50}^2 = 11.72$ . The  $\alpha = .05$  critical value that is given with  $p = 4$  is 15.89, which is greater than 11.72. This is evidence of a slight departure from multivariate normality. A skew ( $b_{1,p}$ ) of 3.21 was manifested, which is less than the critical value of 3.5 with  $p = 0.05$  and  $n = 50$ . A kurtosis ( $b_{2,p}$ ) value of 25.38 was displayed, which does fit within the 95% confidence interval of 20.3 to 26.6. Regarding the PIRS post-survey, the largest value of  $D_{50}^2 = 20.25$ . The  $\alpha = .05$  critical value that is given with  $p = 4$  is 15.89, which is smaller than 20.25. A skew ( $b_{1,p}$ ) of 4.55 was shown, which is greater than the critical value of 3.5 with  $p = 0.05$  and  $n = 50$ . This is evidence of a slight departure from multivariate normality. Finally, kurtosis ( $b_{2,p}$ ) value of 26.77 was manifest, which does not fit within the 95% confidence interval of 20.3 to 26.6. As a result, this researcher can conclude that there is evidence of at least one multivariate outlier in both the pre and post data sets. However, as noted above, the high ratings of Intent to Refer in the post-survey, as well as the high values of Intent to Refer and Attitudes in the pre-survey may skew the data sets. No data entry errors were apparent, and the lack of multivariate normality in the PIRS pre and post-survey data sets are most likely attributable to mostly positive participant responses on the TPB constructs, which when viewed in a multivariate fashion, may inflate the skew and kurtosis of the constructs. The descriptive statistics for the TPB constructs in the PIRS post-survey are shown in Table 32.

Table 32

Descriptive Statistics for PIRS Post-Survey Dependent Variables ( $N = 50$ )

Variable	<i>M</i>	<i>SD</i>	Minimum	Maximum	Skew	Kurtosis
Attitudes	5.96	.75	3.80	7.00	-.55	-.19
Intent to Refer	6.26	.69	4.60	7.00	-.85	-.25
PBC	5.42	.82	3.20	7.00	-.30	-.20
Subjective Norm	4.96	.96	2.33	7.00	-.52	-.07

Note: PBC = Perceived Behavioral Control; *M* = Mean, *SD* = Standard deviation; Minimum = minimum value; Maximum = maximum value

Regarding the repeated-measures MANOVA, the Box's Test of Equality of Covariance Matrices was non-significant ( $p > .05$ ), indicating that there were no significant differences between the covariance matrices. Assumptions for sphericity were met as well. As shown in Table 33, the interaction for Group x Time was significant ( $\lambda = .39$ ,  $F_{4,45} = 17.84$ ,  $p < .001$ ), and uniquely accounts for 61.0% of the overall variance. This significant interaction is due to the combined effects of the two factors (group assignment and time) upon the five dependent variables. Due to the presence of a significant interaction, main effect findings will be interpreted with caution. The observed power for this interaction was found to be 1.0, indicating that there is a 100% chance of finding a statistically significant difference if one did exist. However, a large partial eta-squared of .61 is also observed, suggesting that this large value for power is related to this moderate effect size. The repeated-measures multivariate main effect for Group was non-significant ( $\lambda = .82$ ,  $F_{4,45} = 2.56$ ,  $p > .05$ ) and the main effect for Time was significant ( $\lambda = .70$ ,  $F_{4,45} = 4.72$ ,  $p < .01$ ). The main effect of Time manifests a

partial eta-squared coefficient of .30, indicating that 30.0% of the variance may be uniquely explained by Time.

As shown in Table 33, the observed power coefficients for the main effects of Time and Group x Time are strong, manifesting .93 and 1.00 respectively. Although the between-subjects main effect of Group ( $\lambda = .82, F_{4,45} = 2.56, p > .05$ ) was non-significant, the manifested partial eta-squared value of .19 and observed power of .68 indicate that in order to increase the sensitivity of the tests, more subjects may be necessary in a future replication.

Table 33

Repeated-Measures MANOVA Summary Table ( $N = 50$ )

Variable	df	$F$	$\rho$	$\eta_p^2$	Power
Between Subjects (Group)	1, 45	2.56	.05	.19	.68
Within Subjects (Time)	1, 45	4.72	.00	.30	.93
Group x Time	4, 52	17.84	.00	.61	1.00

Note: degrees of freedom;  $\eta_p^2$  = partial eta-squared

Follow-up univariate tests for the significant main effect of Time and the interaction of Group x Time were conducted (see Table 34). Regarding the main effect of Time, Attitudes was found to be the only significant variable ( $F_{1,48} = 9.22, p < .01, \eta_p^2 = .16$ ). This variable accounted for 16% of the explained variance. The variables of Intent to Refer ( $F_{1,48} = .01, p > .05, \eta_p^2 = .00$ ), Perceived Behavioral Control ( $F_{1,48} = 3.28, p > .05, \eta_p^2 = .06$ ), and Subjective Norm ( $F_{1,48} = .74, p > .05, \eta_p^2 = .06$ ) were non-significant. Concerning the univariate follow-up of the interaction of Group x Time, the

variables of Attitudes ( $F_{1,48} = 965.71, p < .001, \eta_p^2 = .58$ ), Intent to Refer ( $F_{1,48} = 30.51, p < .001, \eta_p^2 = .39$ ), and Perceived Behavioral Control ( $F_{1,48} = 8.84, p < .01, \eta_p^2 = .16$ ) were found to be significant. The partial eta-squared coefficients for Attitudes, Perceived Behavioral Control, and Intent to Refer indicate that these variables uniquely account for 58.0%, 39.0%, and 16% of the overall variance, respectively. Power for these variables was strong, as shown in Table 34. Observed power for the variables of Attitudes and Intent to Refer was found to be 1.0, suggesting that 100% of the time the observed differences would be statistically significant. The variable of Subjective Norm ( $F_{1,48} = 3.45, p > .05, \eta_p^2 = .07$ ) was non-significant.

Table 34

Repeated-Measures MANOVA Univariate Follow-Up ANOVA Summary Table ( $N = 50$ )

Source	df	SS	MS	$F$	$\eta_p^2$	Power
Time						
Attitudes (A)	1	1.12	1.12	9.22*	.16	.85
Intent (I)	1	.00	.00	.02	.00	.05
PBC	1	.66	.66	3.28	.06	.43
SN	1	.74	.74	3.21	.06	.42
Group X Time						
Attitudes	1	8.01	8.01	65.71*	.58	1.00
Intent	1	3.90	3.90	30.51**	.39	1.00
PBC	1	1.77	1.77	8.84*	.16	.83
SN	1	.79	.79	3.45	.07	.44

Table 34

(Cont.)

Source	df	SS	MS	<i>F</i>	$\eta_p^2$	Power
Error (Time)						
Error (A)	48	5.85	.12			
Error (I)	48	6.14	.13			
Error (PBC)	48	.61	.20			
Error (SN)	48	11.02	.23			

*Note.* \*  $p < .01$ ; \*  $p < .001$ ; Intent = Intent to Refer; PBC = Perceived Behavioral Control; SN = Subjective Norm; df = degrees of freedom; SS = Sum of Squares; MS = Mean Square;  $\eta_p^2$  = partial eta-squared

This analysis was taken a step further by exploring paired *t*-tests for the significant variables found in the univariate follow-up. Participants in the Intervention group manifested significant differences from Time 1 to Time 2 in their ratings of Attitudes ( $t(24) = -3.08, p < .01$ , two-tails), Perceived Behavioral Control ( $t(24) = -3.38, p = .002$ , two-tails), and Intent to Refer ( $t(24) = -3.73, p < .001$ , two-tails). Participants in the Control group manifested significant differences from Time 1 to Time 2 in their ratings of Attitudes ( $t(24) = 9.81, p < .001$ , two-tails) and Intent to Refer ( $t(24) = 4.12, p < .001$ , two-tails). Ratings of Perceived Behavioral Control did not manifest statistically significant differences from Time 1 to Time 2 ( $t(24) = .82, p > .05$ , two-tails).

Table 35 manifests the descriptive statistics for the PIRS pre and post surveys for the TPB constructs. Please see Figures 3–5 for plots of the interaction of Group x Time among the variables of Attitudes, Intent to Refer, and Perceived Behavioral Control,

respectively. Please be aware that these plots are enlarged for effect and results may appear exaggerated, as indicated by the small incremental values on the Y-axis.

Table 35

Descriptive Statistics for PIRS Pre and Post Survey for the Intervention and Control Groups ( $N = 50$ )

Group	Time 1 M	Time 1 SD	Time 2 M	Time 2 SD
Attitudes				
Intervention	6.17	.66	6.52	.47
Control	6.30	.60	5.52	.71
Total	6.23	.63	6.02	.79
Intent to Refer				
Intervention	6.27	.44	6.67	.44
Control	6.37	.57	5.98	.63
Total	6.32	.62	6.33	.64
Perceived Behavioral Control				
Intervention	5.32	.86	5.75	.67
Control	5.31	1.01	5.21	.92
Total	5.32	.93	5.48	.84
Subjective Norm				
Intervention	5.04	1.00	5.39	.80
Control	4.73	.75	4.72	.80
Total	4.86	.90	5.06	.86

Note.  $M$  = Mean,  $SD$  = Standard Deviation

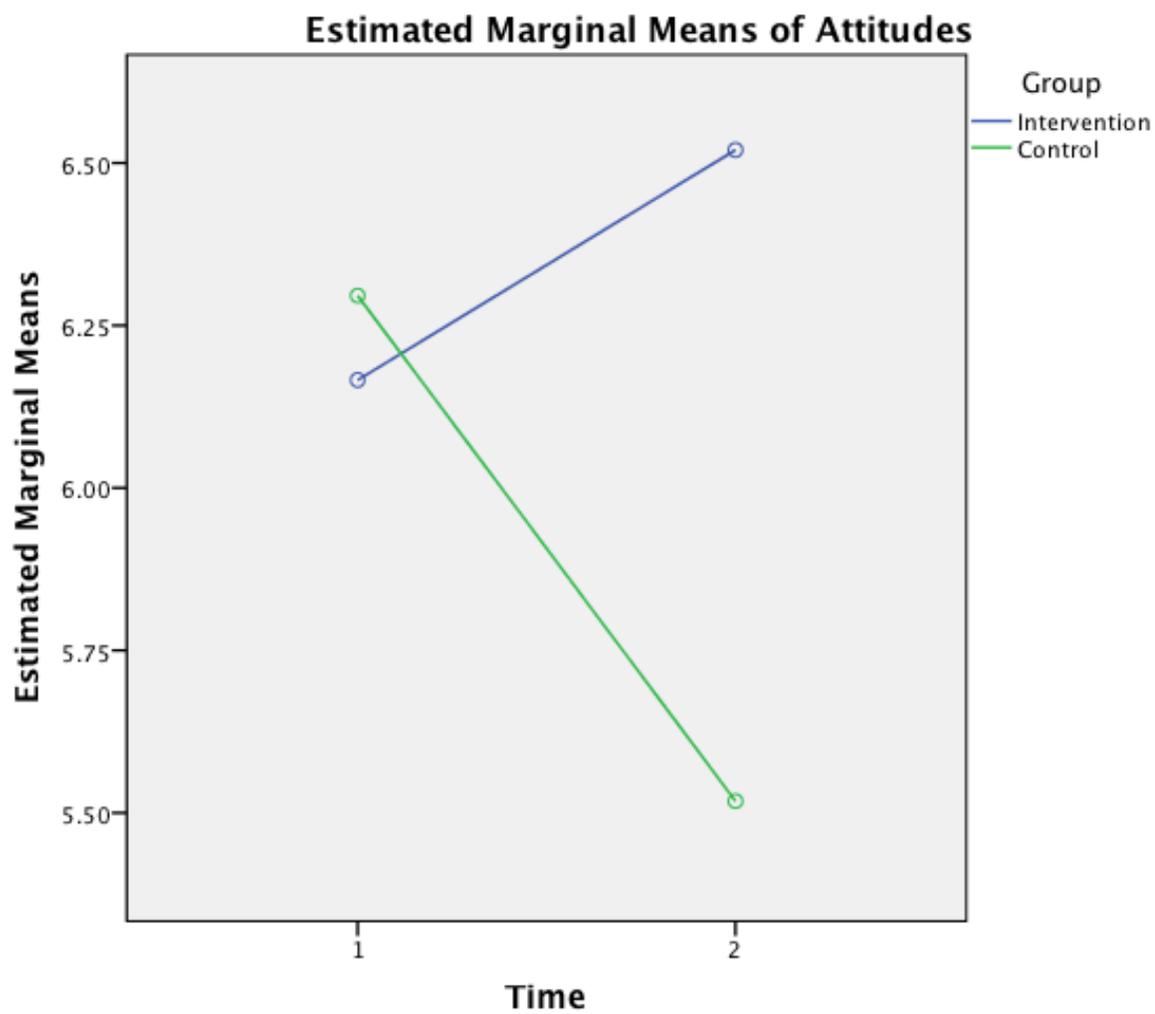


Figure 3. Estimated Marginal Means of Attitudes.

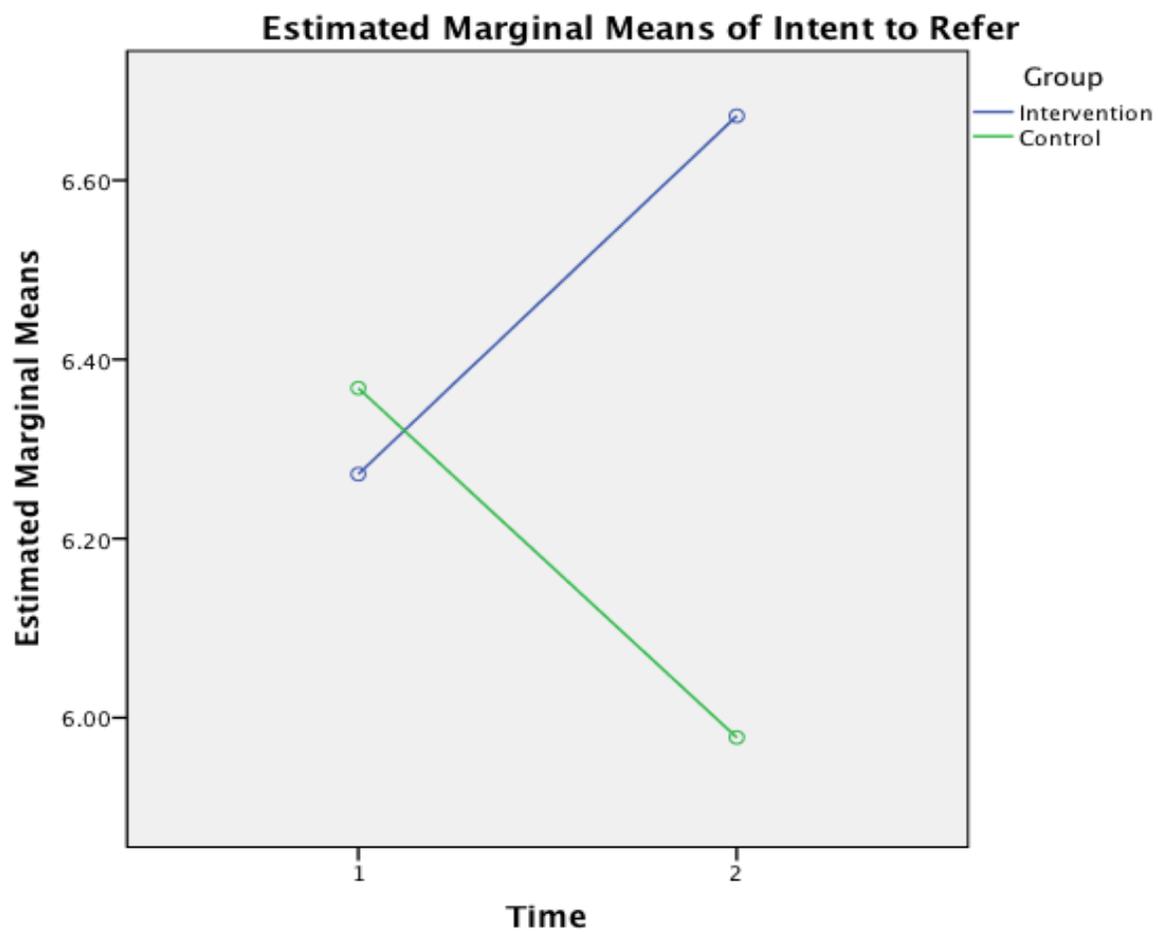


Figure 4. Estimated Marginal Means of Intent to Refer.

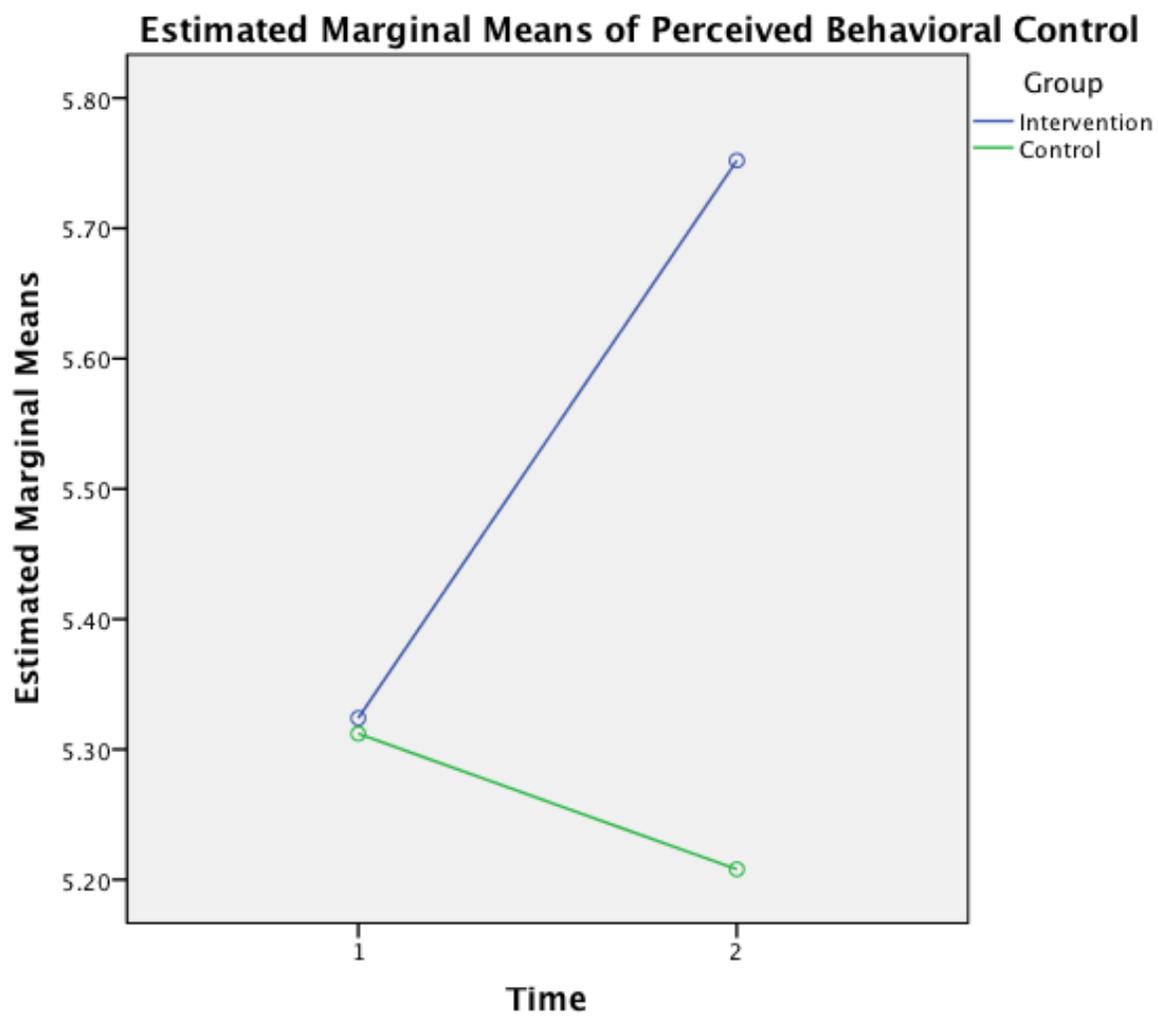


Figure 5. Estimated Marginal Means of Perceived Behavioral Control.

The two-way mixed design ANOVA used to assess any pre-post differences in Actual Behavioral Practice found that the Box's Test of Equality of Covariance Matrices was significant ( $p < .001$ ), indicating that there were significant differences between the covariance matrices. Assumptions for sphericity were met. Due to the fact that Box's M is a highly sensitive test, and there were equal numbers of participants within each group ( $N = 25$  for Intervention;  $N = 25$  for Control), the repeated-measures ANOVA was continued. The PIRS post-survey variable of Actual Behavioral Practice manifested a mean of .87 and a standard deviation of 1.53, with the range varying from a minimum of being concerned about or interacting with 0 students in the past four weeks to 9 students in the past four weeks.

The observed univariate  $F$  value for Group was statistically non-significant ( $F_{1,48} = .40, p > .05, \eta_p^2 = .01$ ) indicating no differences in Actual Behavioral Practice between the Intervention and Control groups. The observed multivariate  $F$  value for Time was statistically significant ( $\Lambda = .85, F_{1,48} = 8.81, p < .01, \eta_p^2 = .16$ ), indicating a difference in Actual Behavioral Practice over the time duration of six weeks (see Table 36 for multivariate findings). The within-effect of Time uniquely accounted for 16% of the variance. This change is visually shown in Figure 6. The interaction of Time x Group was non-significant ( $\Lambda = 1.00, F_{1,48} = .03, p > .05, \eta_p^2 = .00$ ), indicating no statistical difference between the intervention and control groups over time on Actual Behavioral Practices.

Table 36

Two-Way Mixed Design ANOVA Summary Table ( $N = 50$ )

Source	df	F	$p$	$\eta_p^2$	Power
Within Subjects (Time)	1,48	8.81	.00	.16	.83
Time x Group	1,48	.03	.86	.00	.05

Note: df = degrees of freedom;  $\eta_p^2$  = partial eta-squared

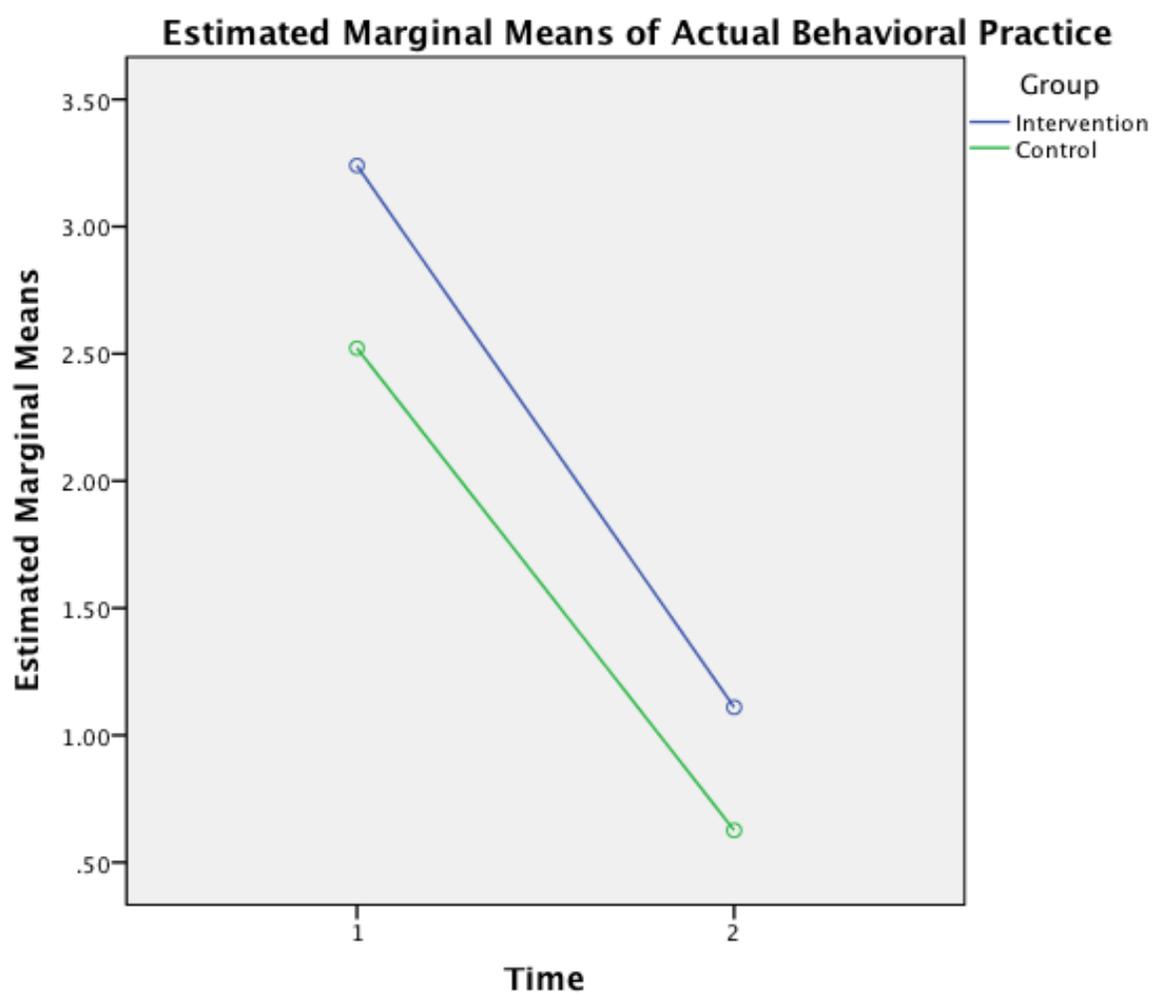


Figure 6. Estimated Marginal Means of Actual Behavioral Practice.

## **CHAPTER V**

### **SUMMARY AND DISCUSSION**

#### **Introduction**

The involvement of all members of the campus community is essential when it comes to recognition and prevention and safety efforts regarding distressed college students (Belch, 2011; Drum et al., 2009; Owen & Rodolfa, 2009), particularly student support professionals who deal directly with students on a regular basis (Kitzrow, 2009). Mitchell, Kader, Haggerty, Bakhai, and Warren (2013) note that,

As many people on campus as possible need to be trained to become effective gatekeepers who are capable of recognizing the signs of distress, are knowledgeable about the resources available on campus and locally, and have the skills to help the student obtain the appropriate level of assistance. (p. 59)

Research indicates that student support staff may be under-equipped to work with students with mental health concerns and may benefit from further training (Belch, 2011; Burkard, Cole, Ott, & Stoflet, 2005; Reynolds, 2011, 2013; Trela, 2008). However, in order to begin to tackle the question of what skills and specific knowledge is needed, it is necessary to understand this population's current attitudes, perceptions, perceived level of comfort, and actual referral practices regarding the distressed college student. To the best of this researcher's knowledge, no published studies have principally explored professional student support staff and their attitudes and referral practices with students manifesting a mental health concern. Although gatekeeper trainings have been examined

in the literature, the impact of gatekeeper trainings upon attitudes and referral practices of student support professionals is lacking.

The purpose of this study was twofold. First, this study explored student support professionals' salient beliefs and meanings towards distressed college students and intentions to refer. Second, this study examined the impact, if any, of an online interactive gatekeeper training upon student support professionals' attitudes, subjective norm, perceived behavioral control, and intentions to refer distressed students to counseling services. Finally, this study examined the behavioral practices of student support professionals within the previous four weeks, as well as after participating in the gatekeeper training. The current chapter, organized by research question, will discuss findings of this study, limitations, the significance of findings, implications for practice and research, and conclusions of the study.

### **Discussion**

As noted earlier, favorable attitudes towards a behavior are formed if the benefits of engaging in the act outweigh the potential disadvantages. Subjective norm may be defined as perceived social pressure from important personal or professional referents to either execute or not execute the specific behavior. Perceived behavioral control is the presumed difficulty or ease of engaging in the behavior, as well as one's perceived confidence in performing the behavior (Ajzen, 1991; Ajzen & Fishbein, 2005).

#### **Research Question One**

*What are student support professionals' salient beliefs and meanings regarding distressed college students and intentions to refer?*

This question was explored in the elicitation study section of the research project.

**Attitudes.** Regarding attitudes towards the behavior, participants in the elicitation study indicated generally favorable views towards referring a distressed student to counseling services. The predominant theme that emerged was the belief that counseling would help the student gain coping skills and/or assist the student in problem solving. The second most frequently mentioned theme was the advantage of the student obtaining short-term and possibly long-term support and professional assistance from a counselor. Thus, the fact that professional counselors are equipped to work with students over a longer-term period, versus a few brief interactions for example, was a benefit of referring students to counseling services. Student support professionals may see a student for only one interaction, and if the student does return, the student support professional likely has other issues to address with the student. Finally, student support professionals may not have the time, skills, or desire to sit with a student in crisis in addition to their many other job duties.

Participants were concerned that referring a student might only exacerbate the issue and possibly embarrass the student due to negative stigma associated with counseling. In addition, participants were concerned that they may be overreacting to the student's situation, and that a referral was not necessary to begin with. This possible perception of an overreaction by staff may be due largely to the subjectivity of the referral source; that is, what may be deemed a concern by one individual may not be concerning to another individual. However, enhanced campus training targeting

institutional norms and expectations, and communicating the overall atmosphere of campus culture, may work to dissolve these concerns and perceptions.

Finally, one participant stated that “this subject is so taboo so as a professional it is hard to not have any bias and try best to help a student in distress. As a professional, you also do not want to be put in harm's way therefore you would rather someone trained to do the job.” It is these personal biases and attitudes that may hinder a professional from referring a distressed student to counseling services. Schwartz (2010) indicated similar findings, where faculty members who were concerned about potential liability and legal concerns kept their distance from distressed students out of fear. Not only does referring a student to counseling services get more individuals involved in the student's care, but referral also may help ease the stress of the referring professional regarding personal liability or potential harm.

Institutional challenges were apparent as well, with participants fearing that referring a student would negatively stigmatize the student in the eyes of the institution. Horrific acts of campus violence, such as have occurred at Virginia Tech in 2007, Northern Illinois University and the University of Central Arkansas in 2008, Pima Community College in 2011, Oikos University in 2012, Santa Monica College in 2013, and Santa Barbara in 2014, among other incidents (Barnes & O'Connor, 2008; Carter, Marquez, & Gast, 2013; Ellis & Sidner, 2014; Hopper, Friedman, & Adib, 2011; Mohny, 2012; Nolan & Moncure, 2012), have resulted in increased awareness, legislation, institutional involvement, and overall concern regarding campus safety and college student mental health. Thus, it may be understandable in today's campus climate

that one may feel that a student seeking counseling may end up on the institution's "radar." However, as noted in Chapter II, it may be far more detrimental legally not to refer a student to counseling services, despite possible institutional involvement regarding the student's mental health care.

In addition, long wait times at the counseling center for the student, either perceived or in actuality, was a belief that emerged in the data. This possible wait, or even the perception that the student may have to wait to obtain services, may be a deterrent to campus professionals when they are considering effective and efficient referral options. In response to the increase in students on campus with mental health concerns, short-term therapy with session limits have been implemented at campus-based counseling centers, as well as adding part-time staff at busy times of year, expanding off-campus referral networks, and other strategies (Gallagher, 2013). This increase in demand has created concerns for college counseling centers as they simultaneously face decreasing resources (Lacour & Carter, 2002). Currently, 8% of students are referred off-campus for therapy, primarily due to lack of counseling center staff expertise or the need for longer-term therapy (Gallagher, 2013).

**Perceived behavioral control.** Participants indicated that having a positive working relationship with the student in question would help them in referring the student to counseling services. This is an understandable finding, as voicing your concerns to a student with whom one has a previous working relationship may be easier and more comfortable to do versus with a student with whom one is unfamiliar. This finding may further be alluding to a possible hesitancy on the professionals' part if they possess a

strained or negative relationship with the distressed student. Although many gatekeeper programs strive to teach the elements of how to discuss one's concerns and refer a student, in actuality, this type of conversation may be a difficult task for student support professionals when faced with an uncomfortable situation.

The perception that the campus counseling center was accessible, available, free or low cost, and had an on-call crisis system further helped student support professionals believe that they could make an effective referral to the counseling center. Alternatively, participants noted that not having a strong relationship with counseling center staff and perceiving a lack of accessibility to counseling services was a barrier for them when making referrals. It is unclear from this study specifically what was perceived as a lack of accessibility to counseling services, but this researcher surmises that concerns may be a general lack of contact with counseling center staff, possible inconvenient building hours or location, or a lack of (either perceived or in actuality) crisis services, walk-in hours, or after-hours services. Research on faculty members indicates that a general deficit of knowledge is apparent regarding campus mental health services and resources (Easton & Van Laar, 1995); this lack of knowledge may extend to student support professionals. Thus, ongoing campus-wide efforts to improve institutional awareness of campus-based and local mental health resources is vital.

Regarding the perception of a poor relationship with counseling center staff on one's campus, although not further explored in this study, this may be due to the lack of "face time" that many campus-based counselors get on campus. Flynn and Heitzmann (2008) note that "in deploying staff and programs in service to the most troubled

students, the broader mandate of outreach and service to students experiencing typical developmental challenges has been compromised” (p. 485). This compromise in delivery of services not only impacts the students, but the clinicians as well, who are then not as visible to campus peers and colleagues.

Another perceived hindrance to making a referral was the student themselves, i.e. if the student had a poor attitude towards counseling and/or was hesitant to attend counseling. Similar to the finding noted above that referring a student with whom one has a positive relationship is easier, a student who is entrenched, behaving in a difficult manner, or emotionally stuck in their situation may be quite frustrating for a student support professional to handle. Although the student support professional may have good intentions and continue to work to convince the student that counseling is indicated for their concerns, it is important for the professional to maintain boundaries with this student and to not let the student’s “stuckness” become the focus of their working relationship. In these occurrences, it is important for student support professionals to be aware that they may contact their campus counseling center for a consultation, and in this manner they may obtain further information on how to motivate the student, as well as obtain support for themselves.

**Subjective norm.** Participants indicated that the top two most important referents regarding who would approve of them referring a student were one’s direct institutional supervisor and their departmental colleagues. A student support professional is surrounded by colleagues on a regular basis, and thus the culture of one’s department may come into play with the variable of subjective norm. Although this study did not

explore Subjective Norm across varying departments within Student Affairs and Academic Affairs due to the small number of respondents within each department, this may be an area for future research. Although personal, cultural, and familial perceptions may influence one's decision to execute or not execute a behavior, the culture of the department and colleagues that surround one on a consistent and continual basis may be more salient and may directly impact one's behaviors. Although institutional administrators were mentioned by some participants as approving of a referral to counseling services, these referents (i.e. Vice Chancellor for Student Affairs, Dean of Students, etc.) are not typically part of the student support professional's daily culture and surroundings. The fact that some participants mentioned these key institutional players as approving of a referral may indicate a widespread awareness of a campus' culture regarding distressed students.

Overall, participants did not believe that any person would disapprove of them referring a student to counseling services. A few student support professionals reported being pitted between their personal/cultural beliefs and professional roles, as well as considering the student's reported personal/cultural factors versus the student's immediate emotional needs. However, awareness of oneself or of a student's perceptions is not necessarily ill advised, as it is important to understand one's own personal biases that may hinder that professional from executing the most helpful behavior; referring the student. In addition, it is important to know a student's perception of counseling, if possible, as these embedded beliefs and possible stigma may impact the outcome of a referral (Downs & Eisenberg, 2012).

## Research Question Two

*Is there a relationship between attitudes towards the behavior, perceived behavioral control, and subjective norm towards intent to refer?*

Research Questions two through five were explored in the main quantitative portion of the study. Findings from this study indicate that Attitudes manifested the strongest positive and significant relationship with Intent to Refer ( $r(63) = .82, p = .000$ , two-tails). This indicates that, if one possesses positive attitudes and beliefs towards referring a student in distress to counseling services, then that individual is more inclined to intend to refer a student when the situation is presented. Ajzen (2005) notes that “as a general rule, people are likely to perform a specific behavior if they view its performance favorably, and they are unlikely to perform it if they view its performance unfavorably” (p. 96). Thus, if one believes that a referral to counseling may be beneficial and helpful for the student, that individual is more likely to intend to refer or to refer a student in distress.

Perceived Behavioral Control manifested a moderate positive and significant association with Intent to Refer, suggesting that as the perceived ease of and one’s confidence level in performing the behavior increases, inclusive of the perception that one has a degree of control over the behavior, one’s intent to execute the behavior will increase. Ajzen (2005) notes that “people attempt to perform a behavior to the extent that they have confidence in their ability to do so. Their attempts are successful if they in fact are capable of performing the behavior in question” (p. 94). The perception of one’s self-efficacy when discussing a potentially difficult and uncomfortable subject, in

combination with the perception of potential barriers or obstacles when executing the behavior, is vital towards the success or failure when referring the student in question. Thus, institutions of higher education should strive to reduce obstacles in referring students to the campus counseling center, as in this manner, student support professionals might experience less barriers, perceive a greater sense of control over the referral, and thus increase rates of referrals. Reducing obstacles to referral may consist of the option to schedule appointments for students online, in person, or over the telephone, as well as offering extending walk-in hours and immediate access to a campus clinician in times of crisis. In addition, institutions might work to increase campus resources and trainings for faculty and staff regarding distressed students, as an increase in knowledge and information may impact one's self-confidence in their ability to first address their concerns with the student, and then enhance their ability to make an effective referral.

Finally, Subjective Norm was significantly and positively correlated with Intent to Refer, although this relationship was weaker in nature than Perceived Behavioral Control or Attitudes. Thus, the belief that important personal referents (i.e. supervisors, institutional administrators, and colleagues) would approve of and expect one to make a referral correlated with one's increased intention to refer a student in distress. The perception of social pressure to perform a behavior is also encapsulated within the variable of Subjective Norm. That is, if one feels motivated to comply with the instructions and wishes of the important referents, then they are more likely to perform the behavior in question.

Findings from this study are consistent with previous literature, with Attitudes typically manifesting the strong association with Intent to Refer (in current study  $r = .82$ ), and Subjective Norm typically manifesting the weakest relationship (in current study  $r = .39$ ; McEachan et al., 2011). Subjective norm has been empirically shown to be the least predictive variable regarding one's intention to perform a behavior, in both correlational and regression analyses (Ajzen, 2005; Godin & Kok, 1996). However, the finding that subjective norm is a weaker variable may be due to inadequate measurement of this variable in differing TPB studies, as researchers have been reported to use a single-item measure for this variable versus a more reliable measure consisting of multiple items (Armitage & Conner, 2001).

In extant research, the correlation among attitudes with the prediction of intentions has been shown to range from .45 - .60, the relationship of perceived behavioral control with prediction of intention ranges from .35 - .46, and subjective norm with the prediction of intention to range from .34 - .42, (Ajzen & Fishbein, 2005). Similarly, in a meta-analysis conducted by McEachan et al. (2011), correlations of subjective norm, attitudes, and perceived behavioral control with intentions have been found to range from .40 - .57. This study differs from existing literature, in that the correlation of Attitude with Intent to Refer was stronger ( $r = .82$ ) than the reported range of correlation coefficients. Bagozzi (1992) notes that attitudes may first be thought of as desires, which then translate into intentions, and thus the relationship between Attitudes and Intent to Refer may be quite strong. In addition, Young and Elfrink (1991) have recognized altruism, defined as a "concern for the welfare of others" (p. 52) as one of the

seven essential values within the student affairs profession. Offering attention and concern for others is rooted within the student affairs culture, and may explain why the relationship between Attitudes and Intent to Refer was strong in this study. Finally, participants at the main study site may manifest a higher than reported relationship among Attitudes and Intent to Refer due to the main study site's strong institutional culture surrounding caring for and connecting with students of concern. Replicability of results is necessary in order to draw any conclusions from this difference. However, findings from this study related to Perceived Behavioral Control ( $r = .48$ ) and Subjective Norm ( $r = .39$ ) replicate previous findings regarding the ranges of correlation coefficients. Although the current finding regarding the correlation coefficient of Perceived Behavioral Control with Intent to Refer was a bit higher than the reported range found in the literature, this current correlation coefficient was still comparable in nature.

Interestingly, the variables of Attitudes and Perceived Behavioral Control were found to be moderately, positively, and significantly correlated with one another. Whereas this relationship was not strong enough to suggest multicollinearity, this relationship does indicate that if an individual possesses positive attitudes towards referring a student in distress, they may also manifest higher perceived confidence and self-efficacy regarding making an effective referral. Likewise, if an individual manifests strong self-efficacy about their ability to refer, they may manifest more positive attitudes regarding referring a student in distress. Thus, if an individual feels strongly and positively about the behavior in question, they may feel more at ease and confident in

executing a behavior that they believe has high value. The variables of Attitudes and Subjective Norm were significantly and positively correlated; however, this correlation was fairly weak in nature. This finding suggests that having positive beliefs and attitudes towards the behavior and perceiving that important referents would approve of the behavior are associated. This may be related to one's departmental culture, that is, if the culture of the department is to assist distressed students and this is the expectation, the beliefs and attitudes of colleagues within that department may shift towards perceiving that counseling is a valuable resource and that referring students is a desirable endeavor.

### **Research Question Three**

*How much of the variance in intent to refer is accounted for by attitudes towards the behavior, perceived behavioral control, and subjective norm?*

Findings indicate that, overall, Attitudes, Perceived Behavioral Control, and Subjective Norm significantly predicted Intent to Refer, with this model explaining 69.7% of the variance of Intent to Refer. These findings differ from extant research, which has indicated that the TPB variables may explain between 27.0 - 44.3% of the variance for predicting intention (Armitage & Connor, 2001; Godin & Kok, 1996; McEachan, Conner, Taylor, & Lawton, 2011). As noted in research question two, this current study found a stronger correlation among Attitudes and Intent to Refer than in the extant literature. This finding may account for the increased explained variance in the current multiple linear regression model. The variable of Attitudes was a significant predictor of Intent to Refer, uniquely accounting for 36.8% of the variance for Intent to Refer, which is similar to what the full model may explain in other TPB studies

(Armitage & Connor, 2001; Godin & Kok, 1996; McEachan, Conner, Taylor, & Lawton, 2011). This suggests that having favorable views of the outcome of the behavior in question, in addition to manifesting positive views towards the act of referral and in regards to counseling services, is the most influential factor in determining one's intent to perform the behavior.

Subjective Norm was also a significant predictor of Intent to Refer. Results indicate that a student support professional's belief that important institutional referents would approve of them referring a student in distress is a significant predictor of one's Intent to Refer. However, this variable was a fairly weak predictor as it only accounted for 2.6% of the unique variance in Intent to Refer. Although student support professionals may naturally want to assist students, results indicate that student support professionals also are aware of institutional and administrative expectations of their interactions with students, and this awareness, coupled with one's motivation to comply with their superiors, significantly predicts Intent to Refer. Future research is necessary in order to determine if ratings of subjective norm increase one's ratings of intent above and beyond a participant's natural inclination to assist students in distress.

Perceived Behavioral Control was found to be a non-significant and negative predictor of Intent to Refer. This was a surprising finding, as this may indicate that one's beliefs regarding their self-efficacy and the perceived ease or difficulty of performing the behavior are inversely related to one's Intent to Refer. Although future replicability is paramount, this finding, if significant in the future, may have major implications for institutional training efforts, as teaching referral skills to student support professionals in

an effort to increase their confidence and ability to refer may be not be as important as challenging their attitudes towards student mental health concerns.

Regression coefficients for attitudes with the prediction of intention has been empirically shown to range from .13 - .58. The current study found a regression coefficient of .79 for Attitudes, again resulting in a higher than reported coefficient. Again, replicability of results is necessary before drawing any conclusions, but it may be that Attitudes was a much more impactful predictor for the current sample than for populations reported in the literature. It should be noted that a study of this kind has not been reported in the literature, and thus the ranges of reported regression and correlation coefficients are extrapolated from literature with varying topics and populations. Existing literature has noted that the regression coefficients for subjective norm with the prediction of intention has been found to range from .11 - .37, with the current study reporting a regression coefficient of .17. It should be noted that the regression coefficients for perceived behavioral control and the prediction of intention have been found to range from .07 - .66 (Ajzen, 2005).

In a secondary analysis that included Actual Behavioral Practices within the model, although the overall regression model remained significant, the variable of Actual Behavioral Practices was not a significant predictor of Intent to Refer. What an individual does in reality and what they intend to do may be two very separate constructs. Reports of past behavior have been shown to be a strong predictor of present/observed behavior but is typically not a robust predictor of intention (McEachan et al., 2011). Past behavior may predict present behavior but may not impact ratings of intention to perform

that particular behavior in the future, as ratings of intention are associated with enacting a future behavior change while past behavior is a measure of one's historical behaviors. In addition, McEachan et al. (2011) note that "whilst from a predictive perspective it is useful to take past behaviour into account, from an intervention perspective, past behavior is not so readily changed as traditional TPB variables and so is of limited use to those tasked with changing behavior" (p. 126). Thus, when seeking to enact behavior change within a population, it may be more beneficial to focus upon targeting attitudes, subjective norm, and perceived behavioral control. It is important to keep in mind that this study was conducted at the end of the spring semester and into the summer, as this researcher did not want to overburden student support professionals at busy times of the year. However, the timing of this study is a limitation, as student support professionals most likely have decreased direct contact with students of concern during the summer months. Future researchers may wish to conduct surveys during the busier times of the academic year; however, response rates may be negatively impacted.

#### **Research Question Four**

*Do attitudes, perceived behavioral control, subjective norm, and intent to refer vary by gender, educational level, years of experience, and functional area?*

As noted in Chapter I, extant research indicates that demographic variables may not directly impact the determinants of intentions for performing the target behavior (Ajzen & Fishbein, 2005; Montano & Kasprzyk, 2008). The findings of this study echo and expand upon these previous findings, as Attitudes, Perceived Behavioral Control, Subjective Norm, and Intent to Refer (TPB constructs) did not vary by gender,

educational level, years of work experience, or functional area, or any related combination thereof.

To the best of this researcher's knowledge, no published study has specifically explored the four constructs of the TPB among student support professionals; however, research with faculty members regarding their perceptions of students with mental health concerns has found that female faculty members may refer more students than male faculty members for depression, eating disorders, and family problems (Brockelman et al., 2006) and may offer more flexibility regarding academic accommodations for students than male professors (Backels & Wheeler, 2001; Becker et al., 2002; Leyser & Greenberger, 2008). However, gender was not a significant demographic variable in this current study. This finding indicates that other factors may be more relevant to one's Attitudes, Perceived Behavioral Control, Subjective Norm, and Intent to Refer, such as an institutional culture of care, which may transcend one's personal demographic factors.

Regarding faculty member's work experience, L. S. Schwartz (2010) found that faculty members with equal to or less than 10 years of teaching experience held positive attitudes regarding the faculty-student relationship and believed that assisting students was part of their job duties. In contrast, faculty members who had equal to or more than 11 years of teaching experience kept emotional distance from their students, for possible fears of liability. Findings from the current study manifested no significant differences among participants regarding length of work experience. This suggests that time in one's job does not necessarily translate into having more confidence or perceived self-efficacy, more favorable attitudes, or greater intent to refer distressed students.

Over 75% of participants were employed within the Division of Student Affairs. Participants from Academic Affairs self-selected to participate in this voluntary study, and thus these individual may be similar to the participants who reported that they were employed within Student Affairs, in regards to their interest in this topic matter, interest in working with distressed students, or interest in college student mental health. It is important to note that the division of Academic Affairs and Student Affairs duties and functions vary from campus to campus, and this division of functions may be arbitrary in nature. In addition, many student support positions are the same across departmental lines, and many student support professionals in both Academic Affairs and Student Affairs divisions have similar educational backgrounds, and thus presumably manifest similar values. Finally, no differences in educational level were found among the four constructs of the TPB. Over 50% of the current sample held Master's degrees. This finding suggests that one's level of education does not directly impact one's Intent to Refer, nor does it impact ratings of the other TPB constructs.

These are positive findings for an institution of higher education, as an institution certainly cannot directly influence staff members' demographic factors. College campuses are comprised of staff with varied educational backgrounds, gender orientations, and years of professional work experience. Furthermore, the finding that there were no differences across Divisions (Student Affairs and Academic Affairs) is quite positive. This indicates that student support professionals employed within Academic Affairs do not view the act of referring a distressed student to counseling

services any differently than staff members within Student Affairs, inferring a uniformity of perceptions and beliefs across the main campus in this study.

### **Research Question Five**

*Does prior suicide prevention training, previous exposure to distressed students, and previous psychological coursework significantly impact attitudes, perceived behavioral control, subjective norm, and intent to refer?*

Findings indicated that prior training, previous experience with distressed students, and previous psychological coursework did not significantly impact Attitudes, Subjective Norm, Perceived Behavioral Control, or Intent to Refer. The acquisition of knowledge and/or skills by way of a previous gatekeeper training did not result in significant differences in Attitudes, Subjective Norm, Perceived Behavioral Control, or Intent to Refer among participants who had prior training compared to those who lacked prior training. Although the specific type of training one obtained in the past was not examined in this study, previous research indicates that gatekeeper trainings that lack an experiential aspect may not lead to significant changes in one's communication skills, such as active listening or empathic reflections (Cross et al., 2010; Pasco et al., 2012; Tompkins & Witt, 2009; Wyman et al., 2008). Taub et al. (2013) reported that participant gains in knowledge following a gatekeeper training were quite separate from gains in communication skills. The specific type of gatekeeper training received may not be highly relevant regarding the knowledge base received by the participant, as previous research shows that the accuracy or falsity of prior information retained by the participant should not statistically impact one's intention to engage in the target behavior (Ajzen et

al., 2011). However, it is unknown to the researcher the specific amount of time that has lapsed between a participant's previous training and the current study. Longitudinal studies exploring the permanency of attitudes, knowledge, and skills learned in gatekeeper training do indicate that gains may last up to six months (Botega et al., 2007; Chagnon et al., 2007).

Interestingly, participants with previous experience with distressed students did not differ significantly from participants with no experience regarding the four TPB constructs. This is in slight contrast to the literature, as Neimeyer et al. (2001) and Scheerder et al. (2010) both found that a person's past experiences with suicidal behavior was related to their suicide intervention skills, which may be developed by directly working with suicidal individuals. In addition, past experience was more predictive of one's intervention skills than was previous training or personal background factors (Neimeyer et al., 2001). Furthermore, Sheerder et al. (2010) found that self-ratings of skills in working with suicidal individuals was associated with suicide intervention skills in reality, suggesting that one's confidence levels comes into play regarding working with suicidal individuals. Although a student support professional may have experience and exposure to students in distress, these experiences may have been negative in nature, and thus previous exposure does not necessarily indicate that an individual feels more confident and comfortable in potentially uncomfortable situations with students. In addition, previous experience may not influence one's attitudes towards the behavior, or impact one's views of subjective norms. Ongoing experience and exposure does also not

necessarily equate to improved skills and techniques, as one may be engaging in awkward and difficult conversations repeatedly without relief.

Finally, participants who had engaged in previous coursework regarding psychological or counseling skills were not significantly different regarding their Attitudes, Perceived Behavioral Control, Subjective Norm and Intent to Refer as compared to participants who did not have any prior coursework. Coursework regarding college student mental health may offer general information regarding the current mental health crisis on campuses; however, this coursework may not impact one's ratings of the TPB constructs. Learning about a topic may be helpful; however, learning about a topic and engaging in the desired behavior are two very different objectives. In addition, acquiring knowledge and education may not significantly alter one's pre-existing attitudes towards the behavior or change one's perception of self-efficacy or confidence in their referral skills when faced with the situation in reality.

### **Research Question Six**

*Are there significant differences between and within the intervention and control groups regarding attitudes towards the behavior, perceived behavioral control, subjective in norm, intent to refer, and actual behavioral practice the past four weeks?*

As noted in Chapter III, a repeated-measures MANOVA and a two-way mixed ANOVA were utilized in order to answer research question six. Regarding the repeated-measures MANOVA for the TPB constructs, findings indicated that the main effect for Time was significant, indicating that participants' responses on the four TPB constructs (Attitudes, Perceived Behavioral Control, Subjective Norm, and Intent to Refer)

significantly changed from Time 1 to Time 2. Univariate follow-up tests indicated that participant responses changed significantly regarding ratings of Attitudes over time, irrespective of group assignment. Participants in the Control group manifested lower ratings of Attitudes at Time 2 than they did at Time 1. As this main study occurred at the end of a spring semester and into the summer, it is possible that as fewer students were on campus, participants' Attitudes in the Control group declined due to reduced interaction with potentially distressed students. Participants in the Intervention group manifested greater ratings of Attitudes at Time 2 versus Time 1. However, as discussed below, a significant Group x Time interaction was manifested, thus this significant within-subjects main effect of Time should be interpreted with caution.

There was a significant interaction among Group x Time. Univariate follow-up tests indicated that the variables of Attitudes, Intent to Refer, and Perceived Behavioral Control significantly changed within and between the two groups across the two time points. These findings indicate that participants within the Intervention and Control groups significantly differed on the three variables indicated above, as well as the finding that participants' responses on these variables significantly changed over time. Results indicate that participants in the Control group manifested significantly *decreased* ratings of Attitudes at Time 2, and the Intervention group manifested significantly *increased* ratings of Attitude at Time 2, suggesting that the intervention helped improve participants' beliefs, perceived positive outcomes of counseling, and perceived benefits of referring students to counseling. Participants in the Control group manifested significantly *decreased* ratings of Intent to Refer at Time 2 while members of the

Intervention group showed a significant *increase* in Intent to Refer from Time 1 to Time 2, indicating that the online intervention helped to increase participants' desire to refer distressed students to counseling services. Finally, members of the Control group did not manifest significant changes in their ratings of Perceived Behavioral Control from Time 1 to Time 2, whereas participants in the Intervention group manifested *significant gains* in their perceived self-efficacy and confidence (Perceived Behavioral Control) after engaging in the intervention. Subjective Norm was not a significant variable in the interaction of Group x Time, indicating that participants in either group did not differ in their ratings of Subjective Norm from Time 1 to Time 2, nor did the online intervention alter participants' ratings of Subjective Norm. Due to the multiple significant dependencies within the four TPB constructs and the significant interaction term in the RM-MANOVA, findings must be interpreted with caution.

The findings that the Control group significantly decreased in their ratings from Time 1 to Time 2 on Attitudes, Intent to Refer, and Perceived Behavioral Control is a curious finding. The members of the Control group were aware prior to taking the PIRS pre-survey of their group assignment, and thus this researcher does not believe that ratings went down due to potential feelings of disappointment in their group assignment, as this would have been reflected in the PIRS pre-survey. The six-week lag time between Time 1 and Time 2 may have attributed to these decreases, however this researcher cannot identify any potential current events in the local or national media that may have contributed to history efforts. As noted above, this study was concluded in the summer time when fewer students are on campus and members of the Control group may not be

as concerned with student mental health as much as they may be during the semester. It is also possible as this was a repeated-measures study, that Control group participants felt fatigued by completing both the pre and post PIRS surveys without obtaining the benefit of the training in between. It is also possible that social desirability biases were present when participants took the PIRS pre-survey and these biases were dampened when Control group participants took the PIRS post-survey.

As noted above, participants in the Intervention group manifested significant increases in Attitudes, Intent to Refer, and Perceived Behavioral Control after engaging in the online training. The interactive nature of Kognito, Inc.'s *At Risk* training engages the participant to assess the student avatars, virtually engage with the avatars in a discussion, and actively make decisions regarding a potential referral to campus-based counseling services. Participants had the opportunity to practice open-ended questions, reflective listening skills, and learned ways to encourage a student to seek assistance. Findings suggest that the interactive nature of this specific training is effective at altering one's beliefs and attitudes regarding referring a distressed student to counseling services, significantly impacts one's self-efficacy and self-confidence regarding skills to refer, and modifies one's intentions to refer students to counseling services. The findings of this current study are similar to findings by Pasco et al. (2012), who noted that after the experimental portion of a gatekeeper training was assessed, participants were better able to access resources, as well as manifested increased comfort in directly asking about an individual's suicidal thoughts and/or behaviors. Similarly, communication skills have been shown to not improve by didactic training alone (Pasco et al., 2012; Tompkins &

Witt, 2009). The interactive nature of this online training actively engaged participants and required the participant to respond to the distressed student avatar, thereby building an individuals' communication and reflective listening skills and resulting in increased ratings of Perceived Behavioral Control and Intent to Refer. Additionally, this training positively impacted an individual's Attitudes by way of manifesting helpful and encouraging ways to refer a student to counseling services, thereby challenging the individual's previous belief system.

It is not surprising that ratings of Subjective Norm were not significantly altered by this intervention, as this training does not directly address the institutional norms involved in referring distressed students. In order to significantly change ratings of Subjective Norm, institutions of higher education may need to take the lead and implement social norms campaigns specific to their campus, while making resources such as the *At Risk* training, or other comparable gatekeeper trainings, available to faculty and staff. Finally, it should be noted that the majority of participants in the Intervention group (96.2%) stated that they would recommend Kognito, Inc.'s *At Risk* online training to a colleague, suggesting that this training was well-received by the main-study site participants.

A two-way mixed ANOVA was used to examine any within-subjects or between-subjects differences for the variable of Actual Behavioral Practice. Findings indicated that ratings of Actual Behavioral Practice did not differ among the Intervention or Control groups. However, both groups reported a significant and parallel decrease in their ratings of Actual Behavioral Practices over time, indicating that they were

interacting with and/or concerned about fewer distressed students at Time 2 than they were six weeks previously at Time 1. As noted in the limitations section, this may be a direct result of this study being completed over the summer time on campus, when students are at a minimum, and thus student support professionals may have had very little opportunity to interact with students when the PIRS post-survey was distributed.

### **Limitations of Study**

Due to the self-report nature of both the qualitative elicitation survey and PIRS survey that were utilized in this study, social desirability biases may be present. The fact that this researcher conducted the elicitation and pilot studies within the same state higher education system where the researcher was employed, in addition to the fact that this researcher works within the same institution as participants in the main quantitative study, social desirability response biases may result due to this researcher's known professional identity as a mental health clinician. As participants were asked about their attitudes towards distressed students and their intentions to refer these students, they may have preconceived ideas that the researcher expected them to want to help, expected them to refer, and thus their answers may be censored. Since the theory utilized in this study is quite specific and defined, participants were aware of the researcher's intentions with this research, and thus potential for deception is quite minimal in this study. By being transparent with research purposes and benefits of this research to the field, this researcher was hoping to increase honesty in participants and reduce social desirability biases (Tracy, 2010).

This study lacks generalizability, as participants in the elicitation and pilot studies were from one of four system institutions, and all participants in the main quantitative study were from one institution of higher education. Findings cannot be generalized to other state systems, private or religiously affiliated institutions, or other types of higher education professionals. The fact that all institutions of higher education have a differing plan on how they train staff and faculty regarding suicide prevention and mental health concerns certainly comes into play with replicability of results. A study of this kind may be a good “temperature gauge” for institutions considering expanding upon their current staff trainings and workshops, and thus the lack of generalizability is indeed beneficial for the particular institution being studied (Maxwell, 2013).

A further limitation of this current research was the small sample size in the main quantitative study. Ideally, this researcher would have like to obtained more participants within both the Intervention and Control groups. However, this researcher exhausted the pool of potential participants at the main study site, as well as within the state institutional network. Also, this researcher is aware that this study asked quite a bit of participants regarding participant involvement and effort. Due to the fact that much was asked of participants, and that some higher education employees are nine or ten month employees, participating in a research project that was extended in time and efforts, and occurring over the summer, may have deterred potential participants.

One limitation surrounding the online training, offered by Kognito, Inc., was that participants engaged in the training online alone in their offices or on a computer available at their institution. Thus, since this training was self-directed; participants did

not have any opportunities to ask questions regarding the training when they were actively engaged in the intervention. This training differs from other gatekeeper trainings such as QPR and ASIST, among others, where professional trainers offer the workshop in-person. In addition, participants within the Intervention and Control groups were aware of the group to which they were assigned. This researcher believed that this knowledge was unavoidable in the current design of this study, due to the self-directed nature of the online gatekeeper training. However, future research may conduct either a blind or a double-blind trial by offering another training that may be used as the baseline. Finally, as the recruitment for this study and the online training occurred solely online, a level of technological savvy and access was necessary for participants, and thus participants who lacked online capabilities were naturally excluded.

Participants within the Intervention group were asked to complete the online training by a deadline, and participants were not strictly monitored by this researcher to assess if they had fully completed the training or not prior to taking the post-survey; this researcher left completion of the training up to the participants' own self-motivation and goodwill. Although the online nature of this study was designed to be as convenient as possible for the participant, the researcher's inability to offer the training in person, and/or confirm that the training was fully completed prior to participants taking the post-survey is a limitation of this pre-post aspect of this study. It should be noted that, although 26 individuals activated the online training, only 23 completed the training in its entirety. In addition, it did come to this researcher's attention that two participants had difficulty gaining access to the training website. Although this researcher worked with

Kognito, Inc. to correct the technical problem, it is unclear if other participants had difficulty gaining entry but did not contact this researcher for assistance. In addition, this researcher had some difficulty matching participants from Time 1 to Time 2, despite the redundancies in place. It appears that participants may have made multiple identifier codes, and/or entered differing ages and years of work experience. This may have been an artifact of the six-week lag time of this study. Future research may wish to more closely monitor the assignment of unique identifiers.

Heterogeneous attrition is apparent in this study, as the rate of attrition among the Intervention group (.76% rate of attrition) and Control group (0% rate of attrition) differ slightly. This is a potential minor threat to internal validity, as this current research design may not have exuded enough control over the conditions, resulting in a difference among the groups not attributable to the manipulation. Intervention group participants may have manifested a higher rate of attrition due to fact that this group had more asked of them than the Control group participants by completing the online training. However, the rate of attrition manifested in the Intervention group is much lower than noted in the literature, whereby rates of attrition for studies incorporating interventions have been show to range from 35-55% (Whittemore & Melkus, 2008). In addition, minor technical problems as noted above may have deterred participants in the Intervention group.

Although having participants take the PRIS survey at two time points was an aspect of the main randomized controlled trial, testing effects may be apparent, where participants then knew what to expect for the PIRS post-survey and altered responses according to their previous experience taking the PIRS pre-survey.

Finally, as the post-survey was completed in mid-June through early July, the variable of Actual Behavioral Practices for the post-survey may be flawed. Students are not typically on campus during the summer months at the same rate as students are present during the academic year, and thus student support professionals may not have had opportunity to interact with distressed students for the four-weeks prior to taking the post-survey. Timing of a study of this kind is difficult, as participation rates may be low during the busy time of year, however access to students is much lower during the less-busy times of the campus life cycle. In addition, it is possible that some participants are not employed in a position that grants them access to students, thus, their responses on this variable may be lower than participants who have steady direct access to students.

### **Significance of the Study**

Despite these limitations, findings from this study significantly contribute to the knowledge base regarding student support professionals' perceptions of and intentions to refer distressed students to counseling services. To the best of this researcher's knowledge, there is a paucity of research regarding higher education staff members' attitudes, knowledge, experiences and behaviors when interacting with the distressed college student. Extant literature has focused primarily upon faculty members' experiences, (Backels & Wheeler, 2001; Becker et al., 2002; Brockelman et al., 2006; Easton & Van Laar, 1995; Leyser & Greenberger, 2008; Schwartz, 2010) or the experience of resident advisors (Reingle et al., 2010; Servaty-Seib et al., 2013). Similarly, although gatekeeper trainings have been examined in the literature, the impact of gatekeeper trainings upon attitudes and referral practices of student support professionals

is lacking (Westefeld et al., 2006). Thus, this study offers novel findings and further enhances the current body of literature.

Findings from this study indicate that a focus upon one's attitudes, stigma, and beliefs regarding distressed college students and referring distressed students to counseling services may be the most influential component when creating and/or implementing professional gatekeeper trainings and workshops on campus. Furthermore, the messages that a campus sends regarding expectations in assisting distressed students is also imperative, as this study manifests that intention to refer is associated with the perception of institutional norms and expectations regarding the behavior in question. Institutions of higher education may work to promote their expectations and viewpoints by the types of trainings offered, by making these trainings strongly encouraged and thus emphasizing that learning about mental health needs is a high campus priority, as well as by manifesting positive "water-cooler talk" about mental health concerns and student needs on campus on a daily basis.

In addition, findings from the randomized controlled trial indicate that offering this specific online, interactive, and engaging gatekeeper training to student support staff works to enhance one's attitudes, increases confidence and self-efficacy, and boosts one's intent to refer distressed students to counseling services. Online trainings offer an ease-of-use for higher education student support professionals, as trainings may occur in the privacy of their own offices and on their own time frame. In addition, engaging with a student avatar may be initially less threatening and authentic than role-playing with a colleague in a more traditional face-to-face workshop.

Although having previous psychological or counseling coursework was not significant in this study, graduate level coursework remains highly valuable as one method of challenging one's pre-existing attitudes and working to reduce the stigma surrounding mental health concerns and counseling services. Being up-to-date on mental health concerns, as well as engaging in conversations surrounding one's personal beliefs, are imperative when exploring and possibly challenging one's attitudes.

### **Implications for Practice**

Overall, student support professionals had a very positive view of the purpose and utility of the campus-based counseling center. Findings from the elicitation study indicate that one's relationship with the campus-based counseling center is related to directly one's intention to refer distressed students to counseling services. Thus, the perceived accessibility and overall knowledge of the campus-based counseling center to student support professionals is vital. While counselors are indeed busy seeing clients during the day, it is also important to conduct outreach to faculty and staff, in addition to outreach to students. By allowing counselors time to serve on campus-wide committees, attend campus events, etc., the "face" of the counseling center may be broadened.

This study found that the perception of counseling center wait-times were an issue when one was considering a referral. Reducing perceived obstacles for making a referral to counseling center may be to advertise walk-in hours, to have a comprehensive after-hours on-call system, to allow for the creation of online appointments, and to have clinicians available to consult with faculty and staff during business hours and possibly after hours if indicated. Online resources may be offered on the counseling center's

website for faculty and staff, such as frequently asked questions about the center, how to effectively work with distressed students, resources regarding enhancing one's referral skills, resources addressing the stigma surrounding mental health treatment, as well as resources the staff member may share with students as indicated, such as mental health screening questionnaires and emergency contacts. By offering comprehensive online resources, student support staff may feel more supported during potential wait-times at a campus-based counseling center.

Overall, findings indicated that no matter one's training, educational background or level of previous experience with distressed students, student support professionals in this current sample manifested similar perceptions and beliefs regarding the four TPB constructs. While replicability is indicated, this finding suggests that workshops and trainings do not need to focus upon participant's background or demographic factors, but do need to focus upon the factors manifested within one's Attitudes and Perceived Behavioral Control.

Regarding graduate level training, this study's findings have implications for graduate-level preparation of future student support professionals. Graduate level training may wish to go beyond teaching helping-skills and offer a course solely dedicated to college student mental health concerns, encapsulating cultural concerns of seeking mental health treatment, as well as a professional's own cultural background and how this impacts their views upon referring a distressed student to counseling services. In addition, this course may also address the broader forms of stigma associated with mental health concerns and treatment, as well as discuss the potential fear of the student

support professional when working with distressed students and potential institutional liability concerns regarding this high-risk population.

Finally, the impact that a campus culture has upon employee behavior should not be underestimated. Offering enhanced campus training and working to institutionalize the expectation and norm that a referral is encouraged may help to alleviate student support professionals' fears of liability and reduce stigma associated with mental health concerns.

### **Implications for Research**

An increased sample size for the main quantitative study is recommended for future research, in order to determine if non-significant findings are indeed non-significant or only due to the small sample size of this current study. In order to increase sample size, future research may wish to include faculty members, non-tenure track instructors, as well as institutional administrators and academic deans. In addition, future research is indicated in order to fully flush out possible significant differences to either confirm or disconfirm the findings related to the randomized controlled trial.

Future research may wish to maintain participant confidentiality but not make the study anonymous. In this manner, participants may be tracked throughout the online training process. This researcher was highly concerned with the fact that she was employed at the same institution as the main study participants, and thus made this study anonymous in nature to encourage participation, as well as to prevent possible awkward working relationships for the present and the future for both participants and the researcher.

Regarding the online intervention, tighter controls over participants in the Intervention group may be warranted. One option may be to have participants sign up for space in a campus-based computer lab. In this manner, the researcher may then be confident that all participants have fully completed the online training. However, this option slightly detracts from the ease of use and personal autonomy that comes with an entirely online, self-directed training intervention.

The variable of Attitudes was found to manifest the strongest positive and significant association with Intent to Refer, in addition to being the strongest unique predictor of Intent to Refer. This begs the questions: How do we increase favorable views of the referral process? How do we bolster the belief that making a referral to counseling will be successful/worthwhile? How do we improve one's view of counseling in general? Future research may explore not only the specific attitudes and beliefs that influence intent to refer, but also examine the specific factors underlying Attitudes that may be then disseminated via trainings and workshops. Future research may wish to further flush out the findings specific to the randomized controlled trial. Replicability is indicated, as the finding that the Control group participants decreased on ratings of Attitudes, Intent to Refer, and Perceived Behavioral Control is a perplexing finding, and further research is indicated to fully explore these results.

Future research may also wish to explore possible comparisons and contrasts between student support professionals and faculty members, and their respective similarities and differences among the TPB constructs. In addition, while this study

explored the attitudes and perceptions of student support professionals across a six week time period, however a longitudinal analysis would be interesting to examine.

Finally, issues in the timing of this study have been noted throughout, and future research may wish to replicate this study at more active times of year on campus in order to fully examine if the online training would impact Actual Behavioral Practice, if at all, as exploration of this potential relationship (e.g., potential impact of gatekeeper training upon actual behavioral practices) is sorely lacking in the literature. Timing of this study proved difficult, as if this study was offered during the peak of either the fall or spring semester, reports of Actual Behavioral Practice would certainly be more accurate and hypothetically greater in magnitude, however, rates of participation may be lower during peak times of year due to the busy schedules of student support professionals. Ideally, a study of this kind would occur during peak academic times to fully capture Actual Behavioral Practices. However, for this to occur, an overall institutional directive may need to occur in order for student support professionals to take the time out of their busy days to participate.

### **Conclusion**

Ongoing campus-wide efforts at increasing awareness of campus and local mental health resources and college student mental health concerns in general is vital on today's college campus. Student support professionals are on the front-lines of student interactions (Kitzrow, 2009), however current research was lacking regarding what specific knowledge and skills are needed to train student support professionals in working with the distressed college student (Belch, 2011). This study sought to begin to fill this

gap by exploring this population's current attitudes, perceptions, and perceived level of comfort regarding referring the distressed college student to counseling services.

Findings from this study indicate that one's attitudes towards referring a distressed student to counseling services may arguably be the most important and influential factor regarding student support professionals' perceptions. Findings further suggest that the use of this specific online, interactive gatekeeper training manifests changes in student support professionals' ratings of Attitudes, Perceived Behavioral Control, and Intent to Refer. The results of this study suggest that institutions of higher education may work to influence and alter one's attitudes, self-efficacy, and intention to refer distressed students by offering appropriate training. Although future research is indicated, this study serves as a strong starting-point regarding the perceptions of student support professionals and the related impact of an online gatekeeper training.

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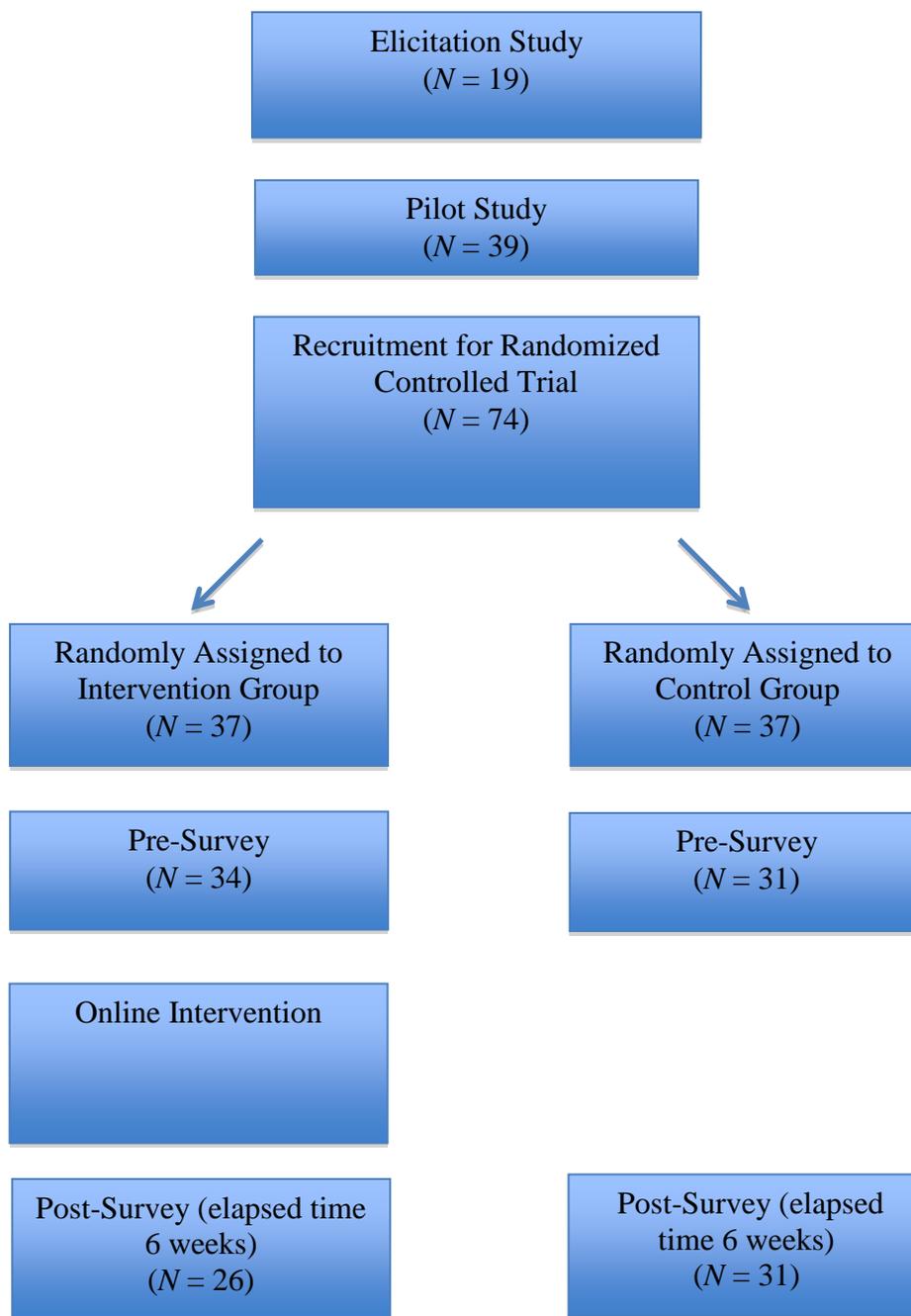
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## APPENDIX A

## FLOW CHART OF RESEARCH DESIGN



**APPENDIX B****LETTER OF AGREEMENT EMAIL SENT TO SYSTEM INSTITUTIONS**

[Date]

[Name of Organization]

Dear [Organization contact],

I am currently a Higher Education doctoral student at The University of North Carolina at Greensboro, under the mentorship of Dr. Deborah J. Taub, conducting dissertation research on student support professionals' attitudes towards, subjective norms, perceived behavioral control, and intent to refer distressed college students to counseling. For the purposes of my study, student support professionals are defined as all members of departments of student affairs/student life. Counseling center staff and undergraduate student employees will be excluded from my sample. I am seeking to sample student affairs professionals from (*name of state institutional system omitted*) system institutions and would like to include your institution and its employees in my research.

I would like to request permission from the authority within your institution who has the ability to grant permission for an initial/invitational email and one follow-up reminder email to be distributed to your employees, requesting approximately 15 minutes of their time to complete an anonymous, online survey related to their perceptions of and intentions to refer distressed college students to counseling services. I am not requesting access to your employee list but merely the ability to forward the email to the appropriate authority who would then distribute the email on my behalf to your staff. There is a possibility I might request for one reminder email to also be sent out, depending on the result from the initial invitation.

For purposes of my institution's Institutional Review Board (IRB), I must have written authorization from each institution granting me permission to seek participation from its membership. I have provided a generic permission form below that can be easily filled in by the appropriate authority and emailed back to me from his or her email account. A copy of the email will be submitted, along with my forms, to the IRB for formal approval to carry out my study.

I appreciate your consideration and attention to this request. It is my hope to add to the student affairs knowledge base and work to add to the scarce literature base that exists regarding student support professionals and their perceptions of and intentions to refer distressed students.

Please do not hesitate to contact me if you have any questions or concerns.

\*\*\*\*\*

Please copy the following, filling in the needed information, and return to Elizabeth Jodoin via email at [ecjodoin@uncg.edu](mailto:ecjodoin@uncg.edu).

I confirm that I have the authority to grant permission for an email to be forwarded to the department of student affairs/student life, on behalf of Elizabeth Jodoin, in order to invite student affairs/life staff to participate in an anonymous online survey for the purpose of gathering information for a doctoral dissertation research study. Additionally, I agree to assist in sending out this email to our employees.

Name of person granting authority:

Position of person granting authority:

Organization above person represents:

Approximate number of people who will receive the email request:

---

**APPENDIX C**  
**ELICITATION STUDY SURVEY**

Thank you for agreeing to participate in this brief doctoral student research project regarding your perceptions of and intentions to refer distressed college students to counseling services. All responses are anonymous. At the end of the survey, you will be automatically redirected to another survey in order to enter your email address for the raffle, if you so desire. In this manner, your email address will not be able to be paired with your responses.

By clicking “Next,” you are indicating that you have viewed the informed consent form (below) and are willing to participate in this voluntary survey.

Thank you very much for your time.

([Hyperlink to Informed Consent Form pdf](#))

What is your personal definition of a distressed student?

What do you believe are the **ADVANTAGES** of referring a distressed student to counseling services?

What do you believe are the **DISADVANTAGES** of referring a distressed student to counseling services?

Is there anything else you think of when you consider your own views about referring a distressed student to counseling services?

What groups or individuals (e.g. supervisor, colleague, family member) would **APPROVE** of you referring a distressed student to counseling services? (Please state your relationship with the individual(s) and do not state specific names)

What groups or individuals (e.g. supervisor, colleague, family member) would **DISAPPROVE** of you referring a distressed student to counseling services? (Please state your relationship with the individual(s) and do not state specific names)

Is there anything else that comes to mind when you think of other people’s views about referring a distressed student to counseling services?

What factors or circumstances would **ENABLE** you to refer a distressed student to counseling services?

What factors or circumstances would make it DIFFICULT or IMPOSSIBLE for you to refer a distressed student to counseling services?

Are there any other issues that come to mind when you think about referring a distressed student to counseling services?

What is your current age?

How do you describe yourself? (Please select all that apply)

- American Indian or Alaska Native
- Asian
- Black or African American
- Hispanic of any race
- Native Hawaiian or Other Pacific Islander
- White or Caucasian
- Other (Please specify): \_\_\_\_\_

With which gender do you identify?

- Female
- Male
- Gender non-conforming

Including this year, how many years have you worked in higher education?

What is your highest level of education?

- Some high school
- High school diploma
- Some college
- Associate's degree
- Bachelor's degree
- Some graduate school work
- Master's degree
- Certificate/Specialist degree
- Doctoral degree
- Other (Please specify): \_\_\_\_\_

Thank you very much for your time!

By clicking Next, you will be redirected to a separate survey to enter the raffle for one of ten \$10 Amazon.com gift cards. Even if you would not like to enter the raffle, please click Next to submit the survey.

#### Elicitation Study Raffle

Please enter your email address below if you would like enter the raffle for one of ten \$10 Amazon.com gift cards. If you win, the gift card will be sent electronically to your email account. You will only be contacted if you win. Your email address will be kept confidential and will be destroyed after the drawing has occurred at the end of data collection.

If you do not want to enter, please leave the text box below blank and click “Next” to exit.

Thank you!

Email address: \_\_\_\_\_

## APPENDIX D

### ELICITATION STUDY RECRUITMENT EMAIL

Dear Colleague:

My name is **Elizabeth Jodoin, MA, LPCS** (Student Researcher) and I am a graduate student in the Higher Education department at the University of North Carolina at Greensboro (UNCG), under the mentorship of **Deborah J. Taub, Ph.D.** I am also employed full-time as a Staff Counselor at the Counseling Center at UNCG. I am conducting dissertation research on student support professionals' attitudes towards, subjective norms, perceived behavioral control, and intent to refer distressed college students to counseling. For the purposes of my study, student support professionals are defined as all members of departments of student affairs/student life and non-faculty members of departments of academic affairs. I am seeking participants to complete an online survey.

This study has been approved by the UNCG Office of Research Compliance, IRB #13-0426. You have been contacted due to your employment within the department of student affairs/student life at your institution. Please note that counseling center staff and trainees/interns and undergraduate student employees will be excluded from my sample. This survey is voluntary and will take you approximately 20 minutes to complete, and consists of 10 open-ended questions

This survey will ask you questions regarding your demographic information, your feelings regarding assisting distressed students, and what helps or hinders you from referring a distressed student to counseling services on your campus. *All information given by participants is anonymous and will be kept in a confidential manner.*

**As a token of my appreciation for your time, you are invited to enter your email address for a chance to win one of ten \$10 Amazon.com gift cards.** If you would like to enter the raffle, please follow the instructions at the end of the survey, where you will be redirected to another secure survey website. *By entering your email in a separate webpage, your survey responses will remain anonymous.* Your email address will be kept private and in a confidential manner. You will only be contacted via the email address you provide if you win one of the gift cards. Your email address will be destroyed once the raffle is completed.

**By clicking on the link below you are indicating your willingness to participate.**

**Follow this link to the Survey:**

[https://uncg.qualtrics.com/SE/?SID=SV\\_07Ket7gPpYZazbL](https://uncg.qualtrics.com/SE/?SID=SV_07Ket7gPpYZazbL)

**This survey will close at 11:59 pm on Monday, February 3, 2014.**

Thank you in advance for your participation!

If you have questions, want more information or have suggestions, please contact Elizabeth Jodoin at [ecjodoin@uncg.edu](mailto:ecjodoin@uncg.edu). If you have any concerns about your rights, how

Approved IRB  
11/26/13

you are being treated, concerns or complaints about this project or benefits or risks associated with being in this study please contact the Office of Research Integrity at UNCG toll-free at (855)-251-2351.

Approved IRB  
11/26/13

## APPENDIX E

### ELICITATION STUDY RECRUITMENT REMINDER EMAIL

#### Elicitation Study Recruitment Reminder Email

Dear Colleague:

Recently, you received an email (*see original message below*), inviting you to participate in a doctoral student research project about student support professionals' perceptions and attitudes towards students in distress. If you have already completed this survey, please accept my gratitude and disregard this email.

My name is **Elizabeth Jodoin, MA, LPCS** (Student Researcher) and I am a graduate student in the Higher Education department at the University of North Carolina at Greensboro (UNCG), under the mentorship of **Deborah J. Taub, Ph.D.** I am also employed full-time as a Staff Counselor at the Counseling Center. I am conducting dissertation research on student support professionals' attitudes towards, subjective norms, perceived behavioral control, and intent to refer distressed college students to counseling. For the purposes of my study, student support professionals are defined as all members of departments of student affairs/student life and non-faculty members of departments of academic affairs. I am seeking participants to complete an online survey.

This study has been approved by the UNCG Office of Research Compliance, IRB #13-0426. You have been contacted due to your employment within the department of student affairs/student life at your institution. Please note that counseling center staff and trainees and undergraduate student employees will be excluded from my sample. This survey is voluntary and will take you approximately 20 minutes to complete, and consists of 10 open-ended questions. This survey will ask you questions regarding your demographic information, your feelings regarding assisting distressed students, and what helps or hinders you from referring a distressed student to counseling services on your campus. *All information given by participants is anonymous and will be kept in a confidential manner.*

**As a token of my appreciation for your time, you are invited to enter your email address for a chance to win one of ten \$10 Amazon.com gift cards.** If you would like to enter the raffle, please follow the instructions at the end of the survey, where you will be redirected to another secure survey website. *By entering your email in a separate webpage, your survey responses will remain anonymous.* Your email address will be kept private and in a confidential manner. You will only be contacted via the email address you provide if you win one of the gift cards. Your email address will be destroyed once the raffle is completed.

**By clicking on the link below you are indicating your willingness to participate.**

**Follow this link to the Survey:**

[https://uncg.qualtrics.com/SE/?SID=SV\\_07Ket7gPpYZazbl](https://uncg.qualtrics.com/SE/?SID=SV_07Ket7gPpYZazbl)

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11/26/13

**This survey will close at 11:59 pm on Monday, February 3, 2014.**

Thank you in advance for your participation!

If you have questions, want more information or have suggestions, please contact Elizabeth Jodoin at [ecjodoin@uncg.edu](mailto:ecjodoin@uncg.edu). If you have any concerns about your rights, how you are being treated, concerns or complaints about this project or benefits or risks associated with being in this study please contact the Office of Research Integrity at UNCG toll-free at (855)-251-2351.

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11/26/13

## APPENDIX F

### ELICITATION STUDY INFORMED CONSENT FORM

#### UNIVERSITY OF NORTH CAROLINA AT GREENSBORO

Project Title: Assisting Distressed College Students: Assessment of an Online Interactive Training for Student Support Professionals

UNCG IRB# 13-0426

Project Director: Elizabeth C. Jodoin, M.A., LPC and Deborah J. Taub, Ph.D.

Participant's Name: \_\_\_\_\_

#### **What is the study about?**

This is a dissertation research project. Your participation is voluntary. Learning how to effectively identify, manage, and refer a student in distress may assist the student in obtaining services before the issue becomes more severe. The need for an enhanced safety network and training on campuses regarding distressed students is due to the fact that 80-90% of college students who die by suicide do not seek help from their college counseling centers. A distressed college student is defined as a student who is "challenged by significant mental health concerns and whose impairment has the potential to negatively affect the larger college or university community" (Owen, Tao, & Rodolfa, 2006, p. 16). Thus, it is imperative that all members of campus are involved in recognition, prevention, and safety efforts, particularly student support professionals who are on the front lines of student interactions. A student support professional may be defined as an individual who works within student affairs, or within academic affairs but who does not identify as a faculty member (e.g. admissions, registrar's office, financial aid, undergraduate studies support staff, etc.). Research indicates that student support staff may be ill equipped to work with students with mental health concerns and may benefit from further training. However, student support professionals are looked to by campus colleagues for assistance in helping to solve the problems created by distressed students. In this study I am seeking to examine the internal factors that may be at play in one's intention to refer a distressed student to counseling services, such as attitudes and perceptions towards distressed students, as well as exploring any barriers to referring students towards counseling.

#### **Why are you asking me?**

You have been chosen to participate in this study because you (1) work within a department of student affairs/student life within a \_\_\_\_\_ system institution and (2) do not identify as a counselor or counseling trainee/intern or as an undergraduate employee.

#### **What will you ask me to do if I agree to be in the study?**

You will be asked to participate in a brief online survey regarding your professional experiences within an institution of higher education or community setting. The survey will ask questions regarding your demographic information, questions regarding how you perceive distressed

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college students, and aspects that may help or hinder you from referring a distressed student to counseling services on your campus. This survey contains 10 open-ended questions. Your participation should take approximately 20 minutes of your time.

**Is there any audio/video recording?**

No audio or video recording will occur.

**What are the dangers to me?**

The Institutional Review Board at the University of North Carolina at Greensboro has determined that participation in this study poses minimal risk to participants. If you have questions, want more information or have suggestions, please contact Elizabeth C. Jodoin, Principal Investigator (336.334.3533, [ecjodoin@uncg.edu](mailto:ecjodoin@uncg.edu)) or Deborah J. Taub, Ph.D., faculty advisor (336.334.3437, [djtaub@uncg.edu](mailto:djtaub@uncg.edu)). If you have any concerns about your rights, how you are being treated, concerns or complaints about this project or benefits or risks associated with being in this study please contact the Office of Research Integrity at UNCG toll-free at (855)-251-2351.

Questions about this project or your benefits or risks associated with being in this study can be answered by Elizabeth C. Jodoin (336.334.3533, [ecjodoin@uncg.edu](mailto:ecjodoin@uncg.edu)) or Dr. Deborah J. Taub (336.334.3437, [djtaub@uncg.edu](mailto:djtaub@uncg.edu)).

**Are there any benefits to society as a result of me taking part in this research?**

The results of this study may inform policy and practice, potentially helping improve graduate and professional training for student support professionals regarding distressed college students. It may also improve our understanding of how student support professionals perceive distressed students, and thus work to further enhance employee-student interactions.

**Are there any benefits to *me* for taking part in this research study?**

There are no direct benefits to you other than having your voice and opinions heard.

**Will I get paid for being in the study? Will it cost me anything?**

There are no costs to you for participating in this study. You will be asked if you would like to enter your email address for a chance to win one of twenty \$10 Amazon.com gift cards. If you would like to enter the raffle, please follow the link at the end of the survey to a separate webpage. By entering your email in a separate webpage, your responses will remain anonymous. Your email address will be kept privately and in a confidential manner and will be destroyed after the raffle is completed.

**How will you keep my information confidential?**

Please note that all responses will be anonymous may choose not to answer any question that

makes you feel uncomfortable or you may stop at any time. Absolute confidentiality of data provided through the Internet cannot be guaranteed due to the limited protections of Internet access. Please be sure to close your browser when finished so no one will be able to see what you have been doing. Survey responses will be stored electronically in a password protected computer. All information obtained in this study is strictly confidential unless disclosure is required by law.

**What if I want to leave the study?**

You have the right to refuse to participate or to withdraw at any time, without penalty. If you do withdraw, it will not affect you in any way. If you choose to withdraw, you may request that any of your data which has been collected be destroyed unless it is in a de-identifiable state.

**What about new information/changes in the study?**

If significant new information relating to the study becomes available which may relate to your willingness to continue to participate, this information will be provided to you.

**Voluntary Consent by Participant:**

By completing the survey, you are agreeing that you read, or it has been read to you, and you fully understand the contents of this document and are openly willing consent to take part in this study. All of your questions concerning this study have been answered. By completing the survey, you are agreeing that you are 18 years of age or older and are agreeing to participate.

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

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11/26/13

**APPENDIX G**  
**PILOT STUDY RECRUITMENT EMAIL**

Dear Colleague:

My name is **Elizabeth Jodoin, MA** (Student Researcher) and I am a graduate student in the Higher Education department at the University of North Carolina at Greensboro (UNCG), under the mentorship of **Deborah J. Taub, Ph.D.** I am conducting dissertation research on student support professionals' attitudes towards and intent to refer distressed college students to counseling. I am seeking participants to complete an online survey.

This study has been approved by the UNCG Office of Research Compliance, IRB #13-0426. You have been contacted due to your employment within the department of student affairs/student life at your institution. Please note that counseling center staff and trainees/interns, as well as undergraduate student employees are excluded from my sample. This survey is voluntary and will take you approximately 10 minutes to complete, and consists of 32 Likert-style items plus demographic questions.

This survey will ask you questions regarding your demographic information and about your attitudes and feelings regarding referring a distressed student to counseling services on your campus. *All information given by participants is anonymous and will be kept in a confidential manner.*

**As a token of my appreciation for your time, you are invited to enter your email address for a chance to win one of ten \$10 Amazon.com gift cards.** If you would like to enter the raffle, please follow the instructions at the end of the survey, where you will be redirected to another secure survey website. *By entering your email in a separate webpage, your survey responses will remain anonymous.* Your email address will be kept private and in a confidential manner. You will only be contacted via the email address you provide if you win one of the gift cards. If you win, please be aware that an email from Amazon.com will be sent from my personal account ([lizjodoin@gmail.com](mailto:lizjodoin@gmail.com)). Your email address will be destroyed once the raffle is completed.

**By clicking on the link below you are indicating your willingness to participate.**

**Follow this link to the Survey:**

[https://uncg.qualtrics.com/SE/?SID=SV\\_br0ZYxnlo7Y1c2x](https://uncg.qualtrics.com/SE/?SID=SV_br0ZYxnlo7Y1c2x)

**This survey will close at 11:59 pm on Thursday, March 20, 2014.**

Thank you in advance for your participation!

If you have questions, want more information or have suggestions, please contact Elizabeth Jodoin at [ecjodoin@uncg.edu](mailto:ecjodoin@uncg.edu). If you have any concerns about your rights, how you are being treated, concerns or complaints about this project or benefits or risks associated with being in this study please contact the Office of Research Integrity at UNCG toll-free at (855)-251-2351.

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2/26/14

## APPENDIX H

### PILOT STUDY RECRUITMENT REMINDER EMAIL

Dear Colleague:

Recently, you received an email (*see original message below*), inviting you to participate in a doctoral student research project about student support professionals' perceptions and attitudes towards students in distress. If you have already completed this survey, please accept my gratitude and disregard this email.

My name is **Elizabeth Jodoin, MA** (Student Researcher) and I am a graduate student in the Higher Education department at the University of North Carolina at Greensboro (UNCG), under the mentorship of **Deborah J. Taub, Ph.D.** I am conducting dissertation research on student support professionals' attitudes towards and intent to refer distressed college students to counseling. I am seeking participants to complete an online survey.

This study has been approved by the UNCG Office of Research Compliance, IRB #13-0426. You have been contacted due to your employment within the department of student affairs/student life at your institution. Please note that counseling center staff and trainees/interns, as well as undergraduate student employees are excluded from my sample. This survey is voluntary and will take you approximately 10 minutes to complete, and consists of 32 Likert-style items plus demographic questions.

This survey will ask you questions regarding your demographic information and about your attitudes and feelings regarding referring a distressed student to counseling services on your campus. *All information given by participants is anonymous and will be kept in a confidential manner.*

**As a token of my appreciation for your time, you are invited to enter your email address for a chance to win one of ten \$10 Amazon.com gift cards.** If you would like to enter the raffle, please follow the instructions at the end of the survey, where you will be redirected to another secure survey website. *By entering your email in a separate webpage, your survey responses will remain anonymous.* Your email address will be kept private and in a confidential manner. You will only be contacted via the email address you provide if you win one of the gift cards. If you win, please be aware that an email from Amazon will be sent from my personal account ([lizjodoin@gmail.com](mailto:lizjodoin@gmail.com)). Your email address will be destroyed once the raffle is completed.

**By clicking on the link below you are indicating your willingness to participate.**

**Follow this link to the Survey:**

[https://uncg.qualtrics.com/SE/?SID=SV\\_br0ZYxnlo7Y1c2x](https://uncg.qualtrics.com/SE/?SID=SV_br0ZYxnlo7Y1c2x)

**This survey will close at 11:59 pm on Thursday, March 20, 2014.**

Thank you in advance for your participation!

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If you have questions, want more information or have suggestions, please contact Elizabeth Jodoin at [ecjodoin@uncg.edu](mailto:ecjodoin@uncg.edu). If you have any concerns about your rights, how you are being treated, concerns or complaints about this project or benefits or risks associated with being in this study please contact the Office of Research Integrity at UNCG toll-free at (855)-251-2351.

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2/26/14

## APPENDIX I

### PILOT STUDY INFORMED CONSENT FORM

#### UNIVERSITY OF NORTH CAROLINA AT GREENSBORO

Project Title: Assisting Distressed College Students: Assessment of an Online Interactive Training for Student Support Professionals

UNCG IRB# 13-0426

Project Director: Elizabeth C. Jodoin, M.A., and Deborah J. Taub, Ph.D.

Participant's Name: \_\_\_\_\_

#### **What is the study about?**

This is a dissertation research project. Your participation is voluntary. Learning how to effectively identify, manage, and refer a student in distress may assist the student in obtaining services before the issue becomes more severe. The need for an enhanced safety network and training on campuses regarding distressed students is due to the fact that 80-90% of college students who die by suicide do not seek help from their college counseling centers. A distressed college student is defined as a student who is "challenged by significant mental health concerns and whose impairment has the potential to negatively affect the larger college or university community" (Owen, Tao, & Rodolfa, 2006, p. 16). Thus, it is imperative that all members of campus are involved in recognition, prevention, and safety efforts, particularly student support professionals who are on the front lines of student interactions. A student support professional may be defined as an individual who works within student affairs, or within academic affairs but who does not identify as a faculty member (e.g. admissions, registrar's office, financial aid, undergraduate studies support staff, etc.). Research indicates that student support staff may be ill equipped to work with students with mental health concerns and may benefit from further training. However, student support professionals are looked to by campus colleagues for assistance in helping to solve the problems created by distressed students. In this study I am seeking to examine the internal factors that may be at play in one's intention to refer a distressed student to counseling services, such as attitudes and perceptions towards distressed students, as well as exploring any barriers to referring students towards counseling.

#### **Why are you asking me?**

You have been chosen to participate in this study because you (1) work within a department of student affairs/student life within a \_\_\_\_\_ system institution and (2) do not identify as a counselor or counseling trainee/intern or as an undergraduate employee.

#### **What will you ask me to do if I agree to be in the study?**

You will be asked to participate in a brief online survey regarding your thoughts and opinions related to referring a distressed college student to counseling services. This survey contains 32 Likert-Style items, plus demographic questions. Your participation should take approximately

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10 minutes of your time.

**Is there any audio/video recording?**

No audio or video recording will occur.

**What are the dangers to me?**

The Institutional Review Board at the University of North Carolina at Greensboro has determined that participation in this study poses minimal risk to participants. You may choose not to answer any question that makes you feel uncomfortable. You may stop the survey at any time. If you have questions, want more information or have suggestions, please contact Elizabeth C. Jodoin, Principal Investigator (336.334.3533, [ecjodoin@uncg.edu](mailto:ecjodoin@uncg.edu)) or Deborah J. Taub, Ph.D., faculty advisor (336.334.3437, [djtaub@uncg.edu](mailto:djtaub@uncg.edu)). If you have any concerns about your rights, how you are being treated, concerns or complaints about this project or benefits or risks associated with being in this study please contact the Office of Research Integrity at UNCG toll-free at (855)-251-2351.

Questions about this project or your benefits or risks associated with being in this study can be answered by Elizabeth C. Jodoin (336.334.3533, [ecjodoin@uncg.edu](mailto:ecjodoin@uncg.edu)) or Dr. Deborah J. Taub (336.334.3437, [djtaub@uncg.edu](mailto:djtaub@uncg.edu)).

**Are there any benefits to society as a result of me taking part in this research?**

The results of this study may inform policy and practice, potentially helping improve graduate and professional training for student support professionals regarding distressed college students. It may also improve our understanding of how student support professionals perceive distressed students, and thus work to further enhance employee-student interactions.

**Are there any benefits to *me* for taking part in this research study?**

There are no direct benefits to you other than having your voice and opinions heard.

**Will I get paid for being in the study? Will it cost me anything?**

There are no costs to you for participating in this study. You will be asked if you would like to enter your email address for a chance to win one of ten \$10 Amazon.com gift cards. If you would like to enter the raffle, please follow the link at the end of the survey to a separate webpage. By entering your email in a separate webpage, your responses will remain anonymous. Your email address will be kept privately and in a confidential manner and will be destroyed after the raffle is completed.

**How will you keep my information confidential?**

Please note that all responses will be anonymous and you may choose not to answer any question that makes you feel uncomfortable. You may stop the survey at any time. Absolute

confidentiality of data provided through the Internet cannot be guaranteed due to the limited protections of Internet access. Please be sure to close your browser when finished so no one will be able to see what you have been doing. Survey responses will be stored electronically in a password protected computer. All information obtained in this study is strictly confidential unless disclosure is required by law.

**What if I want to leave the study?**

You have the right to refuse to participate or to withdraw at any time, without penalty. If you do withdraw, it will not affect you in any way. If you choose to withdraw, you may request that any of your data which has been collected be destroyed unless it is in a de-identifiable state.

**What about new information/changes in the study?**

If significant new information relating to the study becomes available which may relate to your willingness to continue to participate, this information will be provided to you.

**Voluntary Consent by Participant:**

By completing the survey, you are agreeing that you read, or it has been read to you, and you fully understand the contents of this document and are openly willing consent to take part in this study. All of your questions concerning this study have been answered. By completing the survey, you are agreeing that you are 18 years of age or older and are agreeing to participate.

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2/25/14

**APPENDIX J**  
**PILOT STUDY SURVEY**

Thank you for agreeing to participate in this brief doctoral student research project regarding your thoughts and opinions related to referring distressed college students to counseling services. Many questions in this survey make use of a 7-point rating scale. Please indicate the number that best describes your opinion. All responses are anonymous. At the end of the survey, you will be automatically redirected to another survey in order to enter your email address for the raffle, if you so desire. In this manner, your email address will not be able to be paired with your responses. The informed consent form is available for you to view below.

(Informed Consent Form attached)

Thank you very much for your time!



9. Approximately, how many students were you concerned about in the past 4 weeks?

For the following questions, please note that Strongly Disagree = 1, Neutral = 4, and Strongly Agree = 7

	Strongly Disagree/1	2	3	4	5	6	Strongly Agree/7
10. My direct supervisor thinks that I should refer distressed students to counseling	<input type="radio"/>						
11. If the student is hesitant to go to counseling, I am confident that I could persuade them to attend	<input type="radio"/>						
12. Referring a distressed student to counseling may only exacerbate the situation	<input type="radio"/>						
13. Connecting a student with professional counseling services is advantageous	<input type="radio"/>						
14. I want to effectively refer students to counseling services	<input type="radio"/>						

15. Approximately, how many students did you approach to discuss your concerns in the past 4 weeks?





31. For me, referring a distressed student to counseling services is:

	1	2	3	4	5	6	7
Very Uncomfortable (for me): Very Comfortable (for me)	<input type="radio"/>						

32. Approximately, how many times did you consult with your direct supervisor about a student of concern in the past 4 weeks?

What is your current age?

How do you describe yourself? (Please select all that apply)

- American Indian or Alaska Native
- Asian American
- Black or African American
- Hispanic of any race
- Native Hawaiian or Other Pacific Islander
- White or Caucasian
- Other (Please specify): \_\_\_\_\_

With which gender do you identify?

- Female
- Male
- Gender non-conforming

Including this year, how many years have you worked in higher education?

What is your highest level of education?

- Some high school
- High school diploma or equivalency
- Some college
- Associate's degree
- Bachelor's degree
- Some graduate school work
- Master's degree
- Certificate/Specialist degree
- Doctoral degree
- Other (Please specify): \_\_\_\_\_

Thank you very much for your time! By clicking "Next", you will be redirected to a separate survey to enter the raffle for one of ten \$10 Amazon.com gift cards. Even if you would not like to enter the raffle, please click "Next" to submit the survey.

#### Pilot Study Raffle

Please enter your email address below if you would like enter the raffle for one of ten \$10 Amazon.com gift cards. If you win, the gift card will be sent electronically to your email account. You will only be contacted if you win. If you win, you will receive the gift card from my personal email account (lizjodoin@gmail.com). Your email address will be kept confidential and will be destroyed after the drawing has occurred at the end of data collection. If you do not want to enter, please leave the text box below blank and click "Next" to exit. Thank you!

- Email address: \_\_\_\_\_

## APPENDIX K

### MAIN STUDY RECRUITMENT EMAIL

Dear Colleague:

My name is **Elizabeth Jodoin, MA** (Student Researcher) and I am a graduate student in the Higher Education department at the University of North Carolina at Greensboro (UNCG), under the mentorship of **Deborah J. Taub, Ph.D.** While I am also an employee of \_\_\_\_\_, *I am offering this research participation opportunity as a PhD Candidate and not as a fellow staff member.* I am conducting dissertation research on student support professionals' attitudes towards and intent to refer distressed college students to counseling. I am seeking participants to partake in an online randomized controlled trial. This research request has been approved by Dr. \_\_\_\_\_ and Dr. \_\_\_\_\_.

This study has been approved by the UNCG Office of Research Compliance, IRB #13-0426. You have been contacted due to your employment within the department of Student Affairs or Academic Affairs at \_\_\_\_\_. Please note that counseling center staff and trainees, as well as undergraduate student employees are excluded from my sample. Participation is voluntary.

This study will randomly assign participants into either an Intervention group or a Control group. All participants (in both the Intervention and Control groups) will be asked to complete a brief 26 item pre-survey (will take approximately 5 minutes), which will be sent out on May 1, 2014. This same survey will then be sent out again on June 12, 2014, known as the post-survey. **From May 1 – June 12, the Intervention group will engage in a FREE online gatekeeper training: *At Risk for University and College Faculty and Staff.* This is an interactive online training that would take no more than 45 minutes of your time, you may start and stop this training as is convenient for you.** You may view a 59 second preview of this program at: <http://vimeo.com/35019671>. This training will help you:

1. Identify students experiencing high levels of distress
2. Approach and discuss your concern with a student in distress
3. Make an effective referral to support services (if necessary)

**At the completion of the training, you will be issued a Certificate of Completion.** Control group participants will not engage in the online training, but are crucial to this study in order to assess the effectiveness of this intervention.

*All information given by participants is anonymous and will be kept in a confidential manner. I do ask for your email in this survey in order to randomly assign you to a group (Intervention or Control), and I will use the email address provided to contact you regarding your group membership. In subsequent surveys, you will create a unique identifier so I will not be able to identify your responses personally, but I will be able to match your responses from the pre-survey to the post-survey.*

**As a token of my appreciation for your time, at completion of the post-survey, you will be invited to enter your email address for a chance to win one of forty \$10 Amazon.com gift cards.**

Approved IRB

3/31/14

**By clicking on the link below you are indicating your willingness to participate in either the Intervention or Control group.** I will email you further instructions once you have been randomly assigned to either the Intervention group or the Control group.

**Follow this link to enter your email address:**

[https://uncg.qualtrics.com/SE/?SID=SV\\_0VUzoLGSAGuzcTH](https://uncg.qualtrics.com/SE/?SID=SV_0VUzoLGSAGuzcTH)

**Enrollment will close at 11:59 pm on Wednesday, April 30, 2014.**

Please note that this study is supported in part by a grant from the National Association of Student Personnel Administrators (NASPA) (Grant # 220247).

Thank you in advance for your consideration!

If you have questions, want more information or have suggestions, please contact Elizabeth Jodoin at [ecjodoin@uncg.edu](mailto:ecjodoin@uncg.edu). If you have any concerns about your rights, how you are being treated, concerns or complaints about this project or benefits or risks associated with being in this study please contact the Office of Research Integrity at UNCG toll-free at (855)-251-2351.

Approved IRB  
3/31/14

## APPENDIX L

### MAIN STUDY RECRUITMENT REMINDER EMAIL

Dear Colleague:

Recently, you received an email inviting you to participate in an online doctoral student research project about student support professionals' attitudes towards and intent to refer distressed college students to counseling. **I am still seeking participants** and would appreciate your consideration. If you have already signed up, thank you!

My name is **Elizabeth Jodoin, MA** (Student Researcher) and I am a graduate student in the Higher Education department at the University of North Carolina at Greensboro (UNCG), under the mentorship of **Deborah J. Taub, Ph.D.**

All participants will be asked to complete a brief pre-survey (will take approximately 5 minutes), which will be sent out on May 1, 2014. A post-survey will be sent out on June 12, 2014. For this study, participants will be randomly assigned to either an Intervention group or the Control group. Participant responses for both the pre and post-surveys are **anonymous**.

**Intervention** group participants will engage in a **FREE online** gatekeeper training: *At Risk for University and College Faculty and Staff*. This is an **interactive** training that would take no more than 45 minutes of your time, you may start and stop this training as is convenient for you. Participants will have 6 weeks to complete this training (from May 1 – June 12, 2014). You may view a 59 second preview of this program at: <http://vimeo.com/35019671>. This training will help you:

1. Identify students experiencing high levels of distress
2. Approach and discuss your concern with a student in distress
3. Make an effective referral to support services (if necessary)

At the completion of the training, you will be issued a **Certificate of Completion**. Control group participants will not engage in the online training, but are crucial to this study in order to assess the effectiveness of this intervention. **Any remaining trainings will be offered to the Control group participants after data collection is completed.**

**As a token of my appreciation for your time, at completion of the post-survey, you will be invited to enter your email address for a chance to win one of forty \$10 Amazon.com gift cards.**

By clicking on the link below you are indicating your willingness to participate in either the Intervention or Control group. I ask only for your email at this time in order to randomly assign you to a group (Intervention or Control), and I will use the email address provided to contact you regarding your group membership. You will be contacted with this information on May 1, 2014.

**Follow this link to enter your email address in order to enroll in this study:**

[https://uncg.qualtrics.com/SE/?SID=SV\\_0VUzoLGSAGuzcTH](https://uncg.qualtrics.com/SE/?SID=SV_0VUzoLGSAGuzcTH)

Approved IRB

4/7/14

*Enrollment for this study will close at 11:59 pm on Wednesday, April 30, 2014.*

Thank you in advance for your consideration!

If you would like to opt out of any future emails regarding this study, please let me know by emailing me at [ecjodoin@uncg.edu](mailto:ecjodoin@uncg.edu). If you are receiving this message via a listserve, please understand that I cannot remove your name from the list, and thus please just disregard my emails.

Please note that this study is supported in part by a grant from the National Association of Student Personnel Administrators (NASPA) (Grant # 220247). This study has been approved by the UNCG Office of Research Compliance, IRB #13-0426. You have been contacted due to your employment within the department of Student Affairs or Academic Affairs at UNCG. Please note that counseling center staff and trainees, as well as undergraduate student employees are excluded from my sample. Participation is voluntary. This research request has been approved by Dr. \_\_\_\_\_ and Dr. \_\_\_\_\_. While I am also an employee of \_\_\_\_\_, I am offering this research participation opportunity as a PhD Candidate and not as a fellow staff member. If you have questions, want more information or have suggestions, please contact Elizabeth Jodoin at [ecjodoin@uncg.edu](mailto:ecjodoin@uncg.edu). If you have any concerns about your rights, how you are being treated, concerns or complaints about this project or benefits or risks associated with being in this study please contact the Office of Research Integrity at UNCG toll-free at (855)-251-2351.

Approved IRB  
4/7/14

**APPENDIX M**  
**MAIN STUDY RECRUITMENT SURVEY**

Main Study Recruitment Survey

Thank you for agreeing to participate in this doctoral student research project regarding your perceptions of and intentions to refer distressed college students to counseling services. The informed consent form is available for you to view below.

Informed Consent Form

Thank you very much!

Please enter your email address in the space below. I will use this email address to contact you about your group assignment (Intervention group or Control group). Participants will be randomly assigned into either the Intervention group or the Control group. Further instructions will follow once participants are assigned.

Please click "Next" after entering your email address in order to submit your response.

Email address \_\_\_\_\_

Custom Thank You Message:

Thank you! I will email you the pre-survey on May 1, 2014 once participants have been randomly assigned into either the Intervention group or the Control group.

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## APPENDIX N

## MAIN STUDY RECRUITMENT FLYER



Are you a non-faculty staff member in either  Division of Student Affairs or Academic Affairs?

Are you interested in participating in a doctoral research study?

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Are you interested in the possibility of **anonymously** completing a **FREE, ONLINE, INTERACTIVE** gatekeeper training and obtaining a **Certificate of Completion**?

This is a randomized controlled trial, and interested participants will be randomly assigned to either the Intervention or Control group. Participants will be asked to complete a brief (approx. 5 minute) pre-survey, complete the online training if assigned to the Intervention Group (approximately 45 minutes), and then complete a brief post-survey. If assigned to the Intervention Group, you will have 6 weeks to complete the training (from May 1 – June 12, 2104).

Participants have the opportunity to enter a raffle to **win one of 40 \$10 Amazon.com gift cards**.

Would you like to learn how to:

1. Identify students experiencing high levels of distress
2. Approach and discuss your concern with a student in distress
3. Make an effective referral to support services

**If so, please contact Liz Jodoin, a UCG Ph.D. Candidate, at [ecjodoin@uncg.edu](mailto:ecjodoin@uncg.edu) by April 30, 2014 to obtain more information.** Please be on the lookout for a recruitment email as well.

*Note:* This study is supported in part by a grant from the National Association of Student Personnel Administrators (NASPA) (Grant # 220247).

**APPENDIX O****MAIN STUDY RECRUITMENT WEBSITE POSTING**

Website: <https://sites.google.com/a/... .edu/saf/>

**Research Participation Opportunity!**

Hello, my name is Liz Jodoin I am a Ph.D. Candidate in the UNCG Department of Higher Education. I am currently conducting dissertation research on student support professionals' attitudes towards and intent to refer distressed college students to counseling. I am seeking participants to partake in an online randomized controlled trial.

This research request has been approved by Dr. ... and Dr. ... Please note that this IRB approved study is supported in part by a grant from the National Association of Student Personnel Administrators (NASPA) (Grant # 220247).

Please view the attached flyer to learn more about this research opportunity. Thank you for your consideration!

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## APPENDIX P

### MAIN STUDY RECRUITMENT MEETING/PRESENTATION TALKING POINTS

#### Meeting/Presentation Talking Points

As many of you may already know, I am a PhD Candidate in the Higher Education department at UNCG. I am currently conducting dissertation research on student support professionals' attitudes towards and intent to refer distressed college students to counseling. I am seeking participants to partake in an online randomized controlled trial. This research request has been approved by Dr. \_\_\_\_\_ and Dr. \_\_\_\_\_ and it is IRB approved. This study is supported in part by a grant from the National Association of Student Personnel Administrators (NASPA) (Grant # 220247). Finally, please note that I am offering this research opportunity as a Ph.D. Candidate and not as a fellow \_\_\_\_\_ employee.

You are being asked to consider participating in this study because you (1) work within a department of Student Affairs or Academic Affairs within \_\_\_\_\_ and (2) do not identify as a counselor or counseling trainee/intern or as an undergraduate employee. Your participation is voluntary and all responses will be anonymous.

This is a randomized controlled trial design. Interested participants will be randomly assigned to either the Intervention group or the Control group. Participants of both groups will be asked to take a 26-item pre-test. This survey will ask about your thoughts and opinions related to referring a distressed college student to counseling services. Your participation should take approximately 5 minutes of your time. You will have three weeks to complete this pre-survey.

The Intervention group participants will then access the free, interactive, online gatekeeper training: *At Risk for University and College Faculty and Staff* at their convenience. This training should take approximately 45 minutes of your time. You would have 6 weeks, from May 1 – June 12, 2014 to complete this training at your convenience. You will obtain a Certificate of Completion at the end of this training. There are 100 site licenses available to \_\_\_\_\_.

Both the Intervention and Control groups will be asked to take the same 26-item survey, referred to as the post-survey. This survey will be open for three weeks. Both Intervention and Control group participants will be made aware of local and \_\_\_\_\_ resources, as well as free \_\_\_\_\_ Cares trainings if they would like to further enhance their identification and referral skills. All data collection will be completed by July 3, 2014.

Finally, participants who complete both the pre and post surveys will be eligible to enter a raffle to win one of forty \$10 Amazon.com gift cards.

Any questions?

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**APPENDIX Q****LETTER OF AGREEMENT EMAIL SENT TO MAIN INSTITUTION  
(ACADEMIC AFFAIRS)**

[Date]

[Name of Organization]

Dear [Organization contact],

I am currently a Higher Education doctoral student at The University of North Carolina at Greensboro, under the mentorship of Dr. Deborah J. Taub. I am conducting dissertation research on student support professionals' perceptions of and intention to refer distressed college students to counseling. For the purposes of my study, student support professionals are defined as members of departments of student affairs and non-faculty academic affairs staff. Counseling center staff and undergraduate student employees will be excluded from my sample. I am seeking to sample student support professionals and would like to include your institution and its employees in my research. Specifically, I would like to invite staff members from the following Academic Affairs departments: *(department names omitted to protect participant confidentiality)*.

I would like to request permission from the authority within your institution who has the ability to grant permission for an initial/invitational email and one follow-up reminder email to be distributed to your employees, requesting their participation. This study will randomly assign participants into either a Control or Intervention group. The Control group will be asked to complete an anonymous, online pre-survey and a post-survey (four weeks later), both of which will take approximately 15-20 minutes of their time. Intervention participants will be asked to complete an anonymous, online pre-survey (15-20 minutes), the online intervention (45 minutes), and the post-survey four weeks later (15-20 minutes). I am not requesting access to your employee list but merely the ability to forward the email to the appropriate authority who would then distribute the email on my behalf to your staff. For further information, attached is a grant application I have submitted that best explains my dissertation study.

For purposes of my institution's Institutional Review Board (IRB), I must have written authorization from each institution granting me permission to seek participation from its employees. I have provided a generic permission form below that can be easily filled in by the appropriate authority and emailed back to me from his or her email account. A copy of the email will be submitted, along with my forms, to the IRB for formal approval to carry out my study.

I appreciate your consideration and attention to this request. It is my hope to add to the student affairs knowledge base and work to add to the scarce literature base that exists regarding student support professionals and their perceptions of and intentions to refer distressed students.

Please do not hesitate to contact me if you have any questions or concerns.

\*\*\*\*\*

Please copy the following, filling in the needed information, and return to Elizabeth Jodoin via email at [ecjodoin@uncg.edu](mailto:ecjodoin@uncg.edu).

I confirm that I have the authority to grant permission for an email to be forwarded to the department of student affairs, on behalf of Elizabeth Jodoin, in order to invite Academic Affairs staff to participate in an anonymous online survey for the purpose of gathering information for a doctoral dissertation research study. Additionally, I agree to assist in sending out this email to our employees.

Name of person granting authority:

Position of person granting authority:

Organization above person represents:

Approximate number of people who will receive the email request:

\*\*\*\*\*

**APPENDIX R****LETTER OF AGREEMENT EMAIL SENT TO MAIN INSTITUTION  
(STUDENT AFFAIRS)**

[Date]

[Name of Organization]

Dear [Organization contact],

I am currently a Higher Education doctoral student at The University of North Carolina at Greensboro, under the mentorship of Dr. Deborah J. Taub, conducting dissertation research student support professionals' attitudes towards, subjective norms, perceived behavioral control, and intent to refer distressed college students to counseling. For the purposes of my study, student support professionals are defined as all members of departments of student affairs/student life and non-faculty academic affairs staff. Counseling center staff and undergraduate student employees will be excluded from my sample. I am seeking to sample student support professionals (student affairs staff, non-faculty academic affairs staff) and would like to include your institution and its employees in my research.

I would like to request permission from the authority within your institution who has the ability to grant permission for an initial/invitational email and possibly one follow-up reminder email to be distributed to your employees, requesting approximately 15-20 minutes of their time (for BOTH the pre and post surveys) to complete an anonymous, online survey related to their perceptions of and intentions to refer distressed college students to counseling services. In addition, participants will be placed into either a control or experimental group, and the experimental group will be asked to complete a 45 minute online interactive gatekeeper training. I am not requesting access to your employee list but merely the ability to forward the email to the appropriate authority who would then distribute the email on my behalf to your staff.

For purposes of my institution's Institutional Review Board (IRB), I must have written authorization from each institution granting me permission to seek participation from its membership. I have provided a generic permission form below that can be easily filled in by the appropriate authority and emailed back to me from his or her email account. A copy of the email will be submitted, along with my forms, to the IRB for formal approval to carry out my study.

I appreciate your consideration and attention to this request. It is my hope to add to the student affairs knowledge base and work to add to the scarce literature base that exists regarding student support professionals and their perceptions of and intentions to refer distressed students.

Please do not hesitate to contact me if you have any questions or concerns.

\*\*\*\*\*

Please copy the following, filling in the needed information, and return to Elizabeth Jodoin via email at [ecjodoin@uncg.edu](mailto:ecjodoin@uncg.edu).

I confirm that I have the authority to grant permission for an email to be forwarded to the department of student affairs/student life, on behalf of Elizabeth Jodoin, in order to invite student affairs/student life staff to participate in an anonymous online survey for the purpose of gathering information for a doctoral dissertation research study. Additionally, I agree to assist in sending out this email to our employees.

Name of person granting authority:

Position of person granting authority:

Organization above person represents:

Approximate number of people who will receive the email request:

\*\*\*\*\*

## APPENDIX S

### MAIN STUDY INFORMED CONSENT FORM

#### UNIVERSITY OF NORTH CAROLINA AT GREENSBORO

Project Title: Assisting Distressed College Students: Assessment of an Online Interactive Training for Student Support Professionals

UNCG IRB# 13-0426

Project Director: Elizabeth C. Jodoin, M.A., and Deborah J. Taub, Ph.D.

Participant's Name: \_\_\_\_\_

#### **What is the study about?**

This is a dissertation research project. Your participation is voluntary. Learning how to effectively identify, manage, and refer a student in distress may assist the student in obtaining services before the issue becomes more severe. The need for an enhanced safety network and training on campuses regarding distressed students is due to the fact that 80-90% of college students who die by suicide do not seek help from their college counseling centers. A distressed college student is defined as a student who is “challenged by significant mental health concerns and whose impairment has the potential to negatively affect the larger college or university community” (Owen, Tao, & Rodolfa, 2006, p. 16). Thus, it is imperative that all members of campus are involved in recognition, prevention, and safety efforts, particularly student support professionals who are on the front lines of student interactions. A student support professional may be defined as an individual who works within student affairs, or within academic affairs but who does not identify as a faculty member (e.g. admissions, registrar’s office, financial aid, undergraduate studies support staff, etc.). Research indicates that student support staff may be ill equipped to work with students with mental health concerns and may benefit from further training. However, student support professionals are looked to by campus colleagues for assistance in helping to solve the problems created by distressed students. In this study I am seeking to examine the internal factors that may be at play in one’s intention to refer a distressed student to counseling services, such as attitudes and perceptions towards distressed students, as well as exploring actual referral practices.

#### **Why are you asking me?**

You have been chosen to participate in this randomized controlled trial because you (1) work within a department of Student Affairs or Academic Affairs within \_\_\_\_\_ and (2) do not identify as a counselor or counseling trainee/intern or as an undergraduate employee.

#### **What will you ask me to do if I agree to be in the study?**

This is a randomized controlled trial design. Interested participants will be randomly assigned to either the Intervention group or the Control group. Participants of both groups will be asked to

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take a 26-item pre-test. This survey will ask about your thoughts and opinions related to referring a distressed college student to counseling services. This survey contains 26 Likert-Style items, plus demographic questions. Your participation should take approximately five minutes of your time. You will have three weeks to complete this pre-survey.

The Intervention group participants will then access the online training: *At Risk for University and College Faculty and Staff* at their convenience. This training should take approximately 45 minutes of their time. The Intervention group will have six weeks to complete this training at their convenience.

Finally, both the Intervention and Control groups will be asked to take the same 26-item survey, referred to as the post-survey. This survey will be open for three weeks. Both Intervention and Control group participants will be made aware of local and resources, as well as free Cares trainings if they would like to further enhance their identification and referral skills. This information will be provided along with the post-survey.

**Is there any audio/video recording?**

No audio or video recording will occur.

**What are the dangers to me?**

The Institutional Review Board at the University of North Carolina at Greensboro has determined that participation in this study poses minimal risk to participants. If any of the questions make you feel uncomfortable, you may choose not to respond or withdraw from the study. If you have questions, want more information or have suggestions, please contact Elizabeth C. Jodoin, Principal Investigator (336.334.3533, [ecjodoin@uncg.edu](mailto:ecjodoin@uncg.edu)) or Deborah J. Taub, Ph.D., faculty advisor (336.334.3437, [djtaub@uncg.edu](mailto:djtaub@uncg.edu)). If you have any concerns about your rights, how you are being treated, concerns or complaints about this project or benefits or risks associated with being in this study please contact the Office of Research Integrity at UNCG toll-free at (855)-251-2351.

Questions about this project or your benefits or risks associated with being in this study can be answered by Elizabeth C. Jodoin (336.334.3533, [ecjodoin@uncg.edu](mailto:ecjodoin@uncg.edu)) or Dr. Deborah J. Taub (336.334.3437, [djtaub@uncg.edu](mailto:djtaub@uncg.edu)).

**Are there any benefits to society as a result of me taking part in this research?**

The results of this study may inform policy and practice, potentially helping improve graduate and professional training for student support professionals regarding distressed college students. It may also improve our understanding of how student support professionals perceive distressed students, and thus work to further enhance employee-student interactions.

**Are there any benefits to *me* for taking part in this research study?**

There are no direct benefits to you other than having your voice and opinions heard.

**Will I get paid for being in the study? Will it cost me anything?**

There are no costs to you for participating in this study. At completion of the post-survey, you will be asked if you would like to enter your email address for a chance to win one of forty \$10 Amazon.com gift cards. If you would like to enter the raffle, please follow the link at the end of the post-survey to a separate webpage. By entering your email in a separate webpage, your responses will remain anonymous. Your email address will be kept privately and in a confidential manner and will be destroyed after the raffle is completed.

**How will you keep my information confidential?**

Please note that all responses will be anonymous and you may choose not to answer any question that makes you feel uncomfortable. You may stop the survey at any time. Absolute confidentiality of data provided through the Internet cannot be guaranteed due to the limited protections of Internet access. Please be sure to close your browser when finished so no one will be able to see what you have been doing. Survey responses will be stored electronically in a password-protected computer. All information obtained in this study is strictly confidential unless disclosure is required by law.

**What if I want to leave the study?**

You have the right to refuse to participate or to withdraw at any time, without penalty. If you do withdraw, it will not affect you in any way. If you choose to withdraw, you may request that any of your data which has been collected be destroyed unless it is in a de-identifiable state.

**What about new information/changes in the study?**

If significant new information relating to the study becomes available which may relate to your willingness to continue to participate, this information will be provided to you.

**Voluntary Consent by Participant:**

By completing the survey, you are agreeing that you read, or it has been read to you, and you fully understand the contents of this document and are openly willing consent to take part in this study. All of your questions concerning this study have been answered. By completing the survey, you are agreeing that you are 18 years of age or older and are agreeing to participate.

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

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**APPENDIX T****INTERVENTION GROUP PRE-SURVEY RECRUITMENT EMAIL**

Dear Colleague:

**You have been randomly assigned to the Intervention group.** As an Intervention group participant, you are asked to complete a brief pre-survey (approx. 5 minutes). The pre-survey will be open for three weeks. You will be instructed via the pre-survey (and below) how to access the online training. You have until June 12, 2014 to complete this training. Remember to print off your Certificate of Completion! Finally, on June 12, 2014 I will send you a link to complete the post-survey.

As I have mentioned, as a token of my appreciation for your time, upon completion of the post-survey you will be invited to enter your email address for a chance to win one of forty \$10 Amazon.com gift cards.

**Follow this link to take the Pre-Survey:**

[https://uncg.qualtrics.com/SE/?SID=SV\\_3Oboqg1a0qWf0Cp](https://uncg.qualtrics.com/SE/?SID=SV_3Oboqg1a0qWf0Cp)

*This survey will close at 11:59 pm on Thursday, May 22, 2014.*

At the end of the pre-survey, you will be automatically redirected to the online training. However, details for how to access the training are outlined below, so that you will have this information at hand. **PLEASE TAKE THE PRE-SURVEY BEFORE ACCESSING THE TRAINING.**

Website: <http://www.kognitocampus.com/faculty> (Then click "Access Training")  
Enrollment key: greensboro11

Thank you in advance for your participation!

*All information given by participants is anonymous and will be kept in a confidential manner. You will create a unique identifier so I will not be able to identify you personally, but I will be able to match your responses from the pre-survey to the post-survey. Participation is voluntary.*

If you have questions, want more information or have suggestions, please contact Elizabeth Jodoin at [ecjodoin@uncg.edu](mailto:ecjodoin@uncg.edu). If you have any concerns about your rights, how you are being treated, concerns or complaints about this project or benefits or risks associated with being in this study please contact the Office of Research Integrity at UNCG toll-free at (855)-251-2351.

Approved IRB

4/7/14

## APPENDIX U

## INTERVENTION GROUP PRE-SURVEY RECRUITMENT REMINDER EMAIL

Dear Colleague:

If you have already completed the pre-survey, please accept my gratitude and disregard this reminder email.

**You have been randomly assigned to the Intervention group.** As an Intervention group participant, you are asked to complete a brief pre-survey (approx. 5 minutes). The pre-survey will be open for three weeks. You will be instructed via the pre-survey (and below) how to access the online training. You have until June 12, 2014 to complete this training. Remember to print off your Certificate of Completion! Finally, on June 12, 2014 I will send you a link to complete the post-survey.

As I have mentioned, as a token of my appreciation for your time, upon completion of the post-survey you will be invited to enter your email address for a chance to win one of forty \$10 Amazon.com gift cards.

**Follow this link to take the Pre-Survey:**

[https://uncg.qualtrics.com/SE/?SID=SV\\_3Oboqg1a0qWf0Cp](https://uncg.qualtrics.com/SE/?SID=SV_3Oboqg1a0qWf0Cp)

*This survey will close at 11:59 pm on Thursday, May 22, 2014.*

At the end of the pre-survey, you will be automatically redirected to the online training. However, details for how to access the training are outlined below, so that you will have this information at hand. **PLEASE TAKE THE PRE-SURVEY BEFORE ACCESSING THE TRAINING.**

Website: <http://www.kognitocampus.com/faculty> (Then click "Access Training")  
Enrollment key: greensboro11

Thank you in advance for your participation!

*All information given by participants is anonymous and will be kept in a confidential manner. You will create a unique identifier so I will not be able to identify you personally, but I will be able to match your responses from the pre-survey to the post-survey. Participation is voluntary.*

If you have questions, want more information or have suggestions, please contact Elizabeth Jodoin at [ecjodoin@uncg.edu](mailto:ecjodoin@uncg.edu). If you have any concerns about your rights, how you are being treated, concerns or complaints about this project or benefits or risks associated with being in this study please contact the Office of Research Integrity at UNCG toll-free at (855)-251-2351.

Approved IRB

4/7/14

**APPENDIX V****INTERVENTION GROUP PRE-SURVEY**

1 Thank you for agreeing to participate in this doctoral student research project regarding your thoughts and opinions related to referring distressed college students to counseling services. Many questions in this survey make use of a 7-point rating scale. Please indicate the number that best describes your opinion. All responses are anonymous. Thank you very much for your time!

2 Please create a unique identifier for yourself by using the following formula: The first letter of your FIRST name, the two-digit numeric of the MONTH of your birth, the two-digit numeric of the YEAR of your birth, and the first letter of your LAST name, e.g. E0278J. For example, the first letter of my first name (Elizabeth) is “E,” I was born in the month of February “02,” I was born in the year 1978 “78,” and the first letter of my last name (Jodoin) is “J.” Thus, my unique identifier would be E0278J. This identifier will be used in order to pair your pre and post survey responses in an anonymous manner. (I will remind you of this identifier formula for use in the post-survey).

Please enter your unique identifier here: \_\_\_\_\_

3 For the following questions, please note that Strongly Disagree = 1, Neutral = 4, and Strongly Agree = 7

	Strongly Disagree/1	2	3	4	5	6	Strongly Agree/7
For me, it is easy to work with my on-campus counseling center regarding referring students for services	<input type="checkbox"/>						
I intend to assist students whom I am concerned about by encouraging them to seek counseling	<input type="checkbox"/>						
Encouraging a student to seek professional help is important	<input type="checkbox"/>						
People important to me think that I should assist a student in distress	<input type="checkbox"/>						
Referring a student to counseling will help them gain coping and problem solving skills	<input type="checkbox"/>						

4 Early detection of potential safety concerns (to self or others) by making a referral to counseling services is:

	1	2	3	4	5	6	7
Extremely Undesirable: Extremely Desirable	<input type="checkbox"/>						

5 Approximately, how many students were you concerned about in the past 4 weeks?

6 For the following questions, please note that Strongly Disagree = 1, Neutral = 4, and Strongly Agree = 7

	Strongly Disagree/1	2	3	4	5	6	Strongly Agree/7
My direct supervisor thinks that I should refer distressed students to counseling	<input type="checkbox"/>						
If the student is hesitant to go to counseling, I am confident that I could persuade them to attend	<input type="checkbox"/>						
Connecting a student with professional counseling services is advantageous	<input type="checkbox"/>						
I want to effectively refer students to counseling services	<input type="checkbox"/>						

7 Approximately, how many students did you approach to discuss your concerns in the past 4 weeks?

8 For the following questions, please note that Strongly Disagree = 1, Neutral = 4, and Strongly Agree = 7

	Strongly Disagree/1	2	3	4	5	6	Strongly Agree/7
Institutional administrators think that I should refer distressed students to counseling services	<input type="checkbox"/>						
I plan to refer distressed students to counseling services	<input type="checkbox"/>						
I feel social pressure to refer distressed students to counseling	<input type="checkbox"/>						
I am confident that I could refer a distressed student to counseling services	<input type="checkbox"/>						

9 For me, referring a distressed student to counseling services is:

	1	2	3	4	5	6	7
Extremely Difficult: Extremely Easy	<input type="checkbox"/>						

10 Approximately how many students have you referred for counseling services in the past 4 weeks?



14 Approximately, how many times did you consult with your direct supervisor about a student of concern in the past 4 weeks?

15 Have you had any prior suicide prevention/gatekeeper training at any time during your professional career? (This may include workshops, seminars, etc. Gatekeeper training addresses identifying and referring students in distress to appropriate services)

- Yes
- No

16 Have you had any prior coursework regarding helping skills, or counseling or psychology related courses at any time during your academic training? (This may include undergraduate or graduate coursework)

- Yes
- No

17 Have you had previous experience (i.e. direct interaction) working with distressed students within your professional career? This may have occurred at your current position or in past positions)

- Yes
- No

18 What is your highest level of education?

- Some high school
- High school diploma or equivalency
- Some college
- Associate's degree
- Bachelor's degree
- Some graduate school work
- Master's degree
- Certificate/Specialist degree
- Doctoral degree
- Other (Please specify): \_\_\_\_\_

19 Including this year, how many years have you worked in higher education?

20 With which gender do you identify?

- Female
- Male
- Gender non-conforming

21 In what division/functional area are you currently employed?

- Student Affairs
- Academic Affairs

22 In what department of Student Affairs are you currently employed?

- Office of Accessibility Resources and Services
- Campus Activities and Programs
- Campus Recreation
- Career Services
- Dean of Students Office
- Elliott University Center
- Housing and Residence Life
- Leadership and Service Learning
- Multicultural Affairs
- New Student and Spartan Family Programs
- Student Health Services
- Other (please specify): \_\_\_\_\_

23 In what department of Academic Affairs are you currently employed?

- Communication Across the Curriculum
- Faculty Teaching and Learning Commons
- Financial Aid
- International Students and Scholar Services
- Learning Communities
- Learning Technologies
- Multi-Literacy Centers (Digital Center, Speaking Center, Writing Center)
- Spartan Athletic Academic Success
- Student Success Center
- Students First Office
- Study Abroad & Exchanges
- Transfer & Adult Student Academic Success
- Undergraduate Admissions
- Undergraduate Research
- Undergraduate Student Excellence
- University Registrar
- Other (please specify) \_\_\_\_\_

24 What is your current age?

25 How do you describe yourself? (Please select all that apply)

American Indian or Alaska Native

Asian American

Black or African American

Hispanic of any race

Native Hawaiian or Other Pacific Islander

White or Caucasian

Other (Please specify): \_\_\_\_\_

26 Please click on “Next” to submit the survey. You will then be redirected to the website where the training is hosted (also shown below).

Website: <http://www.kognitocampus.com/faculty> (Click on Access Training)

Enrollment Key: greensboro11

The above information is also included in the email you received (that gave you the link to this pre-survey). Once you have accessed the training, you will create a username. In this manner, you may save your work and take this training at your convenience. Please email me at [ecjodoin@uncg.edu](mailto:ecjodoin@uncg.edu) if you have any questions or concerns. I will email you the link for the post-survey on June 12, 2014.

**APPENDIX W****CONTROL GROUP PRE-SURVEY RECRUITMENT EMAIL**

Dear Colleague:

**You have been randomly assigned to the Control group.** As a Control group participant, you will not engage in the online training, but are crucial to this study in order to assess the effectiveness of this intervention. At this time, you are asked to complete a brief pre-survey (approx. 5 minutes). On June 12, 2014 I will send you a link to complete the post-survey.

*All information given by participants is anonymous and will be kept in a confidential manner. You will create a unique identifier so I will not be able to identify you personally, but I will be able to match your responses from the pre survey to the post survey. Participation is voluntary.*

As I have previously mentioned, as a token of my appreciation for your time, at completion of the post-survey you will be invited to enter your email address for a chance to win one of forty \$10 Amazon.com gift cards. Also, please note that if there are any remaining online trainings after completion of this study, I will offer these trainings to Control group participants. You will be notified via email if there are any remaining trainings at the end of data collection (data collection ends July 3, 2014).

By clicking on the link below you are indicating your willingness to participate:

**Follow this link to the Pre-Survey:**

[https://uncg.qualtrics.com/SE/?SID=SV\\_9GnovHKch9pocBv](https://uncg.qualtrics.com/SE/?SID=SV_9GnovHKch9pocBv)

*This survey will close at 11:59 pm on Thursday, May 22, 2014.*

Thank you in advance for your participation!

If you have questions, want more information or have suggestions, please contact Elizabeth Jodoin at [ecjodoin@uncg.edu](mailto:ecjodoin@uncg.edu). If you have any concerns about your rights, how you are being treated, concerns or complaints about this project or benefits or risks associated with being in this study please contact the Office of Research Integrity at UNCG toll-free at (855)-251-2351.

Approved IRB

4/7/14

**APPENDIX X****CONTROL GROUP PRE-SURVEY RECRUITMENT REMINDER EMAIL**

Dear Colleague:

If you have already completed the pre-survey, please accept my gratitude and disregard this email.

**You have been randomly assigned to the Control group.** As a Control group participant, you will not engage in the online training, but are crucial to this study in order to assess the effectiveness of this intervention. At this time, you are asked to complete a brief pre-survey (approx. 5 minutes). On June 12, 2014 I will send you a link to complete the post-survey.

*All information given by participants is anonymous and will be kept in a confidential manner. You will create a unique identifier so I will not be able to identify you personally, but I will be able to match your responses from the pre survey to the post survey. Participation is voluntary.*

As I have previously mentioned, as a token of my appreciation for your time, at completion of the post-survey you will be invited to enter your email address for a chance to win one of forty \$10 Amazon.com gift cards. Also, please note that if there are any remaining online trainings after completion of this study, I will offer these trainings to Control group participants. You will be notified via email if there are any remaining trainings at the end of data collection (data collection ends July 3, 2014).

By clicking on the link below you are indicating your willingness to participate:

**Follow this link to the Pre-Survey:**

[https://uncg.qualtrics.com/SE/?SID=SV\\_9GnovHKch9pocBv](https://uncg.qualtrics.com/SE/?SID=SV_9GnovHKch9pocBv)

*This survey will close at 11:59 pm on Thursday, May 22, 2014.*

Thank you in advance for your participation!

If you have questions, want more information or have suggestions, please contact Elizabeth Jodoin at [ecjodoin@uncg.edu](mailto:ecjodoin@uncg.edu). If you have any concerns about your rights, how you are being treated, concerns or complaints about this project or benefits or risks associated with being in this study please contact the Office of Research Integrity at UNCG toll-free at (855)-251-2351.

Approved IRB

4/7/14

**APPENDIX Y****CONTROL GROUP PRE-SURVEY**

1 Thank you for agreeing to participate in this doctoral student research project regarding your thoughts and opinions related to referring distressed college students to counseling services. Many questions in this survey make use of a 7-point rating scale. Please indicate the number that best describes your opinion. All responses are anonymous. Thank you very much for your time!

2 Please create a unique identifier for yourself by using the following formula: The first letter of your FIRST name, the two-digit numeric of the MONTH of your birth, the two-digit numeric of the YEAR of your birth, and the first letter of your LAST name, e.g. E0278J. For example, the first letter of my first name (Elizabeth) is “E,” I was born in the month of February “02,” I was born in the year 1978 “78,” and the first letter of my last name (Jodoin) is “J.” Thus, my unique identifier would be E0278J. This identifier will be used in order to pair your pre and post survey responses in an anonymous manner. (I will remind you of this identifier formula for use in the post-survey).

Please enter your unique identifier here: \_\_\_\_\_

3 For the following questions, please note that Strongly Disagree = 1, Neutral = 4, and Strongly Agree = 7

	Strongly Disagree/1	2	3	4	5	6	Strongly Agree/7
For me, it is easy to work with my on-campus counseling center regarding referring students for services	<input type="checkbox"/>						
I intend to assist students whom I am concerned about by encouraging them to seek counseling	<input type="checkbox"/>						
Encouraging a student to seek professional help is important	<input type="checkbox"/>						
People important to me think that I should assist a student in distress	<input type="checkbox"/>						
Referring a student to counseling will help them gain coping and problem solving skills	<input type="checkbox"/>						

4 Early detection of potential safety concerns (to self or others) by making a referral to counseling services is:

	1	2	3	4	5	6	7
Extremely Undesirable: Extremely Desirable	<input type="checkbox"/>						

5 Approximately, how many students were you concerned about in the past 4 weeks?

6 For the following questions, please note that Strongly Disagree = 1, Neutral = 4, and Strongly Agree = 7

	Strongly Disagree/1	2	3	4	5	6	Strongly Agree/7
My direct supervisor thinks that I should refer distressed students to counseling	<input type="checkbox"/>						
If the student is hesitant to go to counseling, I am confident that I could persuade them to attend	<input type="checkbox"/>						
Connecting a student with professional counseling services is advantageous	<input type="checkbox"/>						
I want to effectively refer students to counseling services	<input type="checkbox"/>						

7 Approximately, how many students did you approach to discuss your concerns in the past 4 weeks?

8 For the following questions, please note that Strongly Disagree = 1, Neutral = 4, and Strongly Agree = 7

	Strongly Disagree/1	2	3	4	5	6	Strongly Agree/7
Institutional administrators think that I should refer distressed students to counseling services	<input type="checkbox"/>						
I plan to refer distressed students to counseling services	<input type="checkbox"/>						
I feel social pressure to refer distressed students to counseling	<input type="checkbox"/>						
I am confident that I could refer a distressed student to counseling services	<input type="checkbox"/>						

9 For me, referring a distressed student to counseling services is:

	1	2	3	4	5	6	7
Extremely Difficult: Extremely Easy	<input type="checkbox"/>						

10 Approximately how many students have you referred for counseling services in the past 4 weeks?



14 Approximately how many times did you consult with your direct supervisor about a student of concern in the past 4 weeks?

15 Have you had any prior suicide prevention/gatekeeper training at any time during your professional career? (This may include workshops, seminars, etc. Gatekeeper training addresses identifying and referring students in distress to appropriate services)

- Yes
- No

16 Have you had any prior coursework regarding helping skills, or counseling or psychology related courses at any time during your academic training? (This may include undergraduate or graduate coursework)

- Yes
- No

17 Have you had previous experience (i.e. direct interaction) working with distressed students within your professional career? (This may have occurred at your current position or in past positions)

- Yes
- No

18 What is your highest level of education?

- Some high school
- High school diploma or equivalency
- Some college
- Associate's degree
- Bachelor's degree
- Some graduate school work
- Master's degree
- Certificate/Specialist degree
- Doctoral degree
- Other (Please specify): \_\_\_\_\_

19 Including this year, how many years have you worked in higher education?

20 With which gender do you identify?

- Female
- Male
- Gender non-conforming

21 In what division/functional area are you currently employed?

- Student Affairs
- Academic Affairs

22 In what department of Student Affairs are you currently employed?

- Office of Accessibility Resources and Services
- Campus Activities and Programs
- Campus Recreation
- Career Services
- Dean of Students Office
- Elliott University Center
- Housing and Residence Life
- Leadership and Services Learning
- Multicultural Affairs
- New Student and Spartan Family Programs
- Student Health Services
- Other (please specify): \_\_\_\_\_

23 In what department of Academic Affairs are you currently employed?

- Communication Across the Curriculum
- Faculty Teaching and Learning Commons
- Financial Aid
- International Students and Scholar Services
- Learning Communities
- Learning Technologies
- Multi-Literacy Centers (Digital Center, Speaking Center, Writing Center)
- Spartan Athletic Academic Success
- Student Success Center
- Students First Office
- Study Abroad & Exchanges
- Transfer & Adult Student Academic Success
- Undergraduate Admissions
- Undergraduate Research
- Undergraduate Student Excellence
- University Registrar
- Other (please specify): \_\_\_\_\_

24 What is your current age?

25 How do you describe yourself? (Please select all that apply)

American Indian or Alaska Native

Asian American

Black or African American

Hispanic of any race

Native Hawaiian or Other Pacific Islander

White or Caucasian

Other (Please specify): \_\_\_\_\_

Custom Thank You:

Thank you! I will send you the post-survey on June 12, 2014.

Please note that I will notify all Control group participants of any remaining online trainings for your use (if desired) after data collection is completed (data collection will end on July 3, 2014).

**APPENDIX Z****INTERVENTION GROUP POST-SURVEY RECRUITMENT EMAIL**

Dear Colleague:

**Thank you for serving as an Intervention group participant.** Please complete the post-survey at this time. Again, all information given by participants is anonymous and will be kept in a confidential manner. Participation is voluntary.

**As a token of my appreciation for your time, you will be invited to enter your email address for a chance to win one of forty \$10 Amazon.com gift cards.** You will be directed to enter this raffle at the end of this post-survey. Please note that you will only be contacted if you win. The gift card from Amazon.com will be sent to you (via the email address you enter in the raffle survey) from my personal account: lizjodoin@gmail.com.

**Follow this link to the Post-Survey:**

[https://uncg.qualtrics.com/SE/?SID=SV\\_06txxHd8msO9XXD](https://uncg.qualtrics.com/SE/?SID=SV_06txxHd8msO9XXD)

*This survey will close at 11:59 pm on Thursday, July 3, 2014.*

Thank you in advance for your time!

If you have questions, want more information or have suggestions, please contact Elizabeth Jodoin at [ecjodoin@uncg.edu](mailto:ecjodoin@uncg.edu). If you have any concerns about your rights, how you are being treated, concerns or complaints about this project or benefits or risks associated with being in this study please contact the Office of Research Integrity at UNCG toll-free at (855)-251-2351.

Approved IRB

4/7/14

**APPENDIX AA****INTERVENTION GROUP POST-SURVEY  
RECRUITMENT REMINDER EMAIL**

Dear Colleague:

If you have already completed the post-survey, please accept my gratitude and disregard this reminder email.

**Thank you for serving as an Intervention group participant.** Please complete the post-survey at this time. Again, all information given by participants is anonymous and will be kept in a confidential manner. Participation is voluntary.

**As a token of my appreciation for your time, you will be invited to enter your email address for a chance to win one of forty \$10 Amazon.com gift cards.** You will be directed to enter this raffle at the end of this post-survey. Please note that you will only be contacted if you win. The gift card from Amazon.com will be sent to you (via the email address you enter in the raffle survey) from my personal account: lizjodoin@gmail.com.

**Follow this link to the Post-Survey:**

[https://uncg.qualtrics.com/SE/?SID=SV\\_06ttxHd8msO9XXD](https://uncg.qualtrics.com/SE/?SID=SV_06ttxHd8msO9XXD)

*This survey will close at 11:59 pm on Thursday, July 3, 2014.*

Thank you in advance for your time!

If you have questions, want more information or have suggestions, please contact Elizabeth Jodoin at [ecjodoin@uncg.edu](mailto:ecjodoin@uncg.edu). If you have any concerns about your rights, how you are being treated, concerns or complaints about this project or benefits or risks associated with being in this study please contact the Office of Research Integrity at UNCG toll-free at (855)-251-2351.

Approved IRB

4/7/14

**APPENDIX BB****INTERVENTION GROUP POST-SURVEY**

1 Thank you for agreeing to participate in this doctoral student research project regarding your thoughts and opinions related to referring distressed college students to counseling services. Many questions in this survey make use of a 7 point rating scale. Please indicate the number that best describes your opinion. All responses are anonymous.

2 Please enter your unique identifier using the following formula: The first letter of your FIRST name, the two-digit numeric of the MONTH of your birth, the two-digit numeric of the YEAR of your birth, and the first letter of your LAST name, e.g. E0278J. For example, the first letter of my first name (Elizabeth) is "E," I was born in the month of February "02," I was born in the year 1978 "78," and the first letter of my last name (Jodoin) is "J." Thus, my unique identifier would be E0278J.

○ Please enter your unique identifier here: \_\_\_\_\_



5 Approximately, how many students were you concerned about in the past 4 weeks?

6 For the following questions, please note that Strongly Disagree = 1, Neutral = 4, and Strongly Agree = 7

	Strongly Disagree/1	2	3	4	5	6	Strongly Agree/7
My direct supervisor thinks that I should refer distressed students to counseling	<input type="radio"/>						
If the student is hesitant to go to counseling, I am confident that I could persuade them to attend	<input type="radio"/>						
Connecting a student with professional counseling services is advantageous	<input type="radio"/>						
I want to effectively refer students to counseling services	<input type="radio"/>						

7 Approximately, how many students did you approach to discuss your concerns in the past 4 weeks?

8 For the following questions, please note that Strongly Disagree = 1, Neutral = 4, and Strongly Agree = 7

	Strongly Disagree/1	2	3	4	5	6	Strongly Agree/7
Institutional administrators think that I should refer distressed students to counseling services	<input type="radio"/>						
I plan to refer distressed students to counseling services	<input type="radio"/>						
I feel social pressure to refer distressed students to counseling	<input type="radio"/>						
I am confident that I could refer a distressed student to counseling services	<input type="radio"/>						

9 For me, referring a distressed student to counseling services is:

	1	2	3	4	5	6	7
Extremely Difficult: Extremely Easy	<input type="radio"/>						

10 Approximately how many students have you referred for counseling services in the past 4 weeks?

11 For the following questions, please note that Strongly Disagree = 1, Neutral = 4, and Strongly Agree = 7

	Strongly Disagree/1	2	3	4	5	6	Strongly Agree/7
I will make an effort to refer distressed students to counseling services	<input type="radio"/>						
I feel social pressure to make effective referrals for distressed students	<input type="radio"/>						
Whether or not I refer a distressed student to counseling services is entirely up to me	<input type="radio"/>						
The distressed student's parents, peers, and family members think that I should refer their student if needed	<input type="radio"/>						
I expect to refer a student in distress to counseling services	<input type="radio"/>						

12 What is the approximate number of times that you consulted with a colleague about a student you were concerned about in the past 4 weeks?

13 For me, referring a distressed student to counseling services is:

	1	2	3	4	5	6	7
Very Uncomfortable (for me): Very Comfortable (for me)	<input type="radio"/>						

14 Approximately, how many times did you consult with your direct supervisor about a student of concern in the past 4 weeks?

15 Would you recommend this training to a friend/colleague? (Kognito, Inc.: At Risk for University and College Faculty and Staff)

- Yes
- No

16 What is your current age?

17 Including this year, how many years have you worked in higher education?

18 Please be aware that free workshops regarding working with students in distress are available from the Dean of Students Office for university faculty and staff if you would like further training (<http://sa.uncg.edu/dean/outreach>).

Please click on Next to submit the survey. You will now be redirected to another webpage in order to enter the raffle for one of 40 \$10.00 Amazon.com gift cards, if you so desire. By redirecting you to another webpage, I will not be able to link up your email address with your unique identifier.

A campus and local resources handout is attached below for your information

Campus and Local Resources

Raffle:

Please enter your email address below if you would like enter the raffle for one of 40 \$10 Amazon.com gift cards. If you win, the gift card will be sent electronically to your email from my personal email ([lizjodoin@gmail.com](mailto:lizjodoin@gmail.com)). You will only be contacted if you win.

Your email address will be kept confidential and will be destroyed after the drawing has occurred at the end of data collection. After entering your email, please click “Next” to submit your response.

If you do not want to enter, please leave the text box below blank and click “Next” to exit. Thank you!

- Email Address:

**APPENDIX CC****CONTROL GROUP POST-SURVEY RECRUITMENT EMAIL**

Dear Colleague:

**Thank you for serving as a Control group participant.** Please complete the post-survey at this time. Again, all information given by participants is anonymous and will be kept in a confidential manner. Participation is voluntary.

**As I mentioned in my previous email, as a token of my appreciation for your time, you will be invited to enter your email address for a chance to win one of forty \$10 Amazon.com gift cards.** You will be directed to enter this raffle at the end of this post-survey. Please note that you will only be contacted if you win. The gift card from Amazon.com will be sent to you (via the email address you enter in the raffle survey) from my personal account: [lizjodoin@gmail.com](mailto:lizjodoin@gmail.com).

If there are remaining online trainings available, I will send all Control group participants an email notifying you of these free training opportunities at the completion of data collection. This email will be sent after data collection is completed on July 3, 2014.

**Follow this link to the Post-Survey:**

[https://uncg.qualtrics.com/SE/?SID=SV\\_0e3BwUzlxSNP2zX](https://uncg.qualtrics.com/SE/?SID=SV_0e3BwUzlxSNP2zX)

*This survey will close at 11:59 pm on Thursday, July 3, 2014.*

Thank you in advance for your time!

If you have questions, want more information or have suggestions, please contact Elizabeth Jodoin at [ejodoin@uncg.edu](mailto:ejodoin@uncg.edu). If you have any concerns about your rights, how you are being treated, concerns or complaints about this project or benefits or risks associated with being in this study please contact the Office of Research Integrity at UNCG toll-free at (855)-251-2351.

Approved IRB  
4/7/14

**APPENDIX DD****CONTROL GROUP POST-SURVEY RECRUITMENT REMINDER EMAIL**

Dear Colleague:

If you have already completed the post-survey, please accept my gratitude and disregard this reminder email.

**Thank you for serving as a Control group participant.** Please complete the post-survey at this time. Again, all information given by participants is anonymous and will be kept in a confidential manner. Participation is voluntary.

**As I mentioned in my previous email, as a token of my appreciation for your time, you will be invited to enter your email address for a chance to win one of forty \$10 Amazon.com gift cards.** You will be directed to enter this raffle at the end of this post-survey. Please note that you will only be contacted if you win. The gift card from Amazon.com will be sent to you (via the email address you enter in the raffle survey) from my personal account: [lizjodoin@gmail.com](mailto:lizjodoin@gmail.com).

If there are remaining online trainings available, I will send all Control group participants an email notifying you of these free training opportunities at the completion of data collection. This email will be sent after data collection is completed on July 3, 2014.

**Follow this link to the Post-Survey:**

[https://uncg.qualtrics.com/SE/?SID=SV\\_0e3BwUzlxSNP2zX](https://uncg.qualtrics.com/SE/?SID=SV_0e3BwUzlxSNP2zX)

*This survey will close at 11:59 pm on Thursday, July 3, 2014.*

Thank you in advance for your time!

If you have questions, want more information or have suggestions, please contact Elizabeth Jodoin at [ecjodoin@uncg.edu](mailto:ecjodoin@uncg.edu). If you have any concerns about your rights, how you are being treated, concerns or complaints about this project or benefits or risks associated with being in this study please contact the Office of Research Integrity at UNCG toll-free at (855)-251-2351.

Approved IRB

4/7/14

**APPENDIX EE****CONTROL GROUP POST-SURVEY**

1 Thank you for agreeing to participate in this doctoral student research project regarding your thoughts and opinions related to referring distressed college students to counseling services. Many questions in this survey make use of a 7-point rating scale. Please indicate the number that best describes your opinion. All responses are anonymous.

2 Please enter your unique identifier using the following formula: The first letter of your FIRST name, the two-digit numeric of the MONTH of your birth, the two-digit numeric of the YEAR of your birth, and the first letter of your LAST name, e.g. E0278J. For example, the first letter of my first name (Elizabeth) is "E," I was born in the month of February "02," I was born in the year 1978 "78," and the first letter of my last name (Jodoin) is "J." Thus, my unique identifier would be E0278J.

○ Please enter your unique identifier here: \_\_\_\_\_



5 Approximately, how many students were you concerned about in the past 4 weeks?

6 For the following questions, please note that Strongly Disagree = 1, Neutral = 4, and Strongly Agree = 7

	Strongly Disagree/1	2	3	4	5	6	Strongly Agree/7
My direct supervisor thinks that I should refer distressed students to counseling	<input type="radio"/>						
If the student is hesitant to go to counseling, I am confident that I could persuade them to attend	<input type="radio"/>						
Connecting a student with professional counseling services is advantageous	<input type="radio"/>						
I want to effectively refer students to counseling services	<input type="radio"/>						

7 Approximately, how many students did you approach to discuss your concerns in the past 4 weeks?

8 For the following questions, please note that Strongly Disagree = 1, Neutral = 4, and Strongly Agree = 7

	Strongly Disagree/1	2	3	4	5	6	Strongly Agree/7
Institutional administrators think that I should refer distressed students to counseling services	<input type="radio"/>						
I plan to refer distressed students to counseling services	<input type="radio"/>						
I feel social pressure to refer distressed students to counseling	<input type="radio"/>						
I am confident that I could refer a distressed student to counseling services	<input type="radio"/>						

9 For me, referring a distressed student to counseling services is:

	1	2	3	4	5	6	7
Extremely Difficult: Extremely Easy	<input type="radio"/>						

10 Approximately how many students have you referred for counseling services in the past 4 weeks?

11 For the following questions, please note that Strongly Disagree = 1, Neutral = 4, and Strongly Agree = 7

	Strongly Disagree/1	2	3	4	5	6	Strongly Agree/7
I will make an effort to refer distressed students to counseling services	<input type="radio"/>						
I feel social pressure to make effective referrals for distressed students	<input type="radio"/>						
Whether or not I refer a distressed student to counseling services is entirely up to me	<input type="radio"/>						
The distressed student's parents, peers, and family members think that I should refer their student if needed	<input type="radio"/>						
I expect to refer a student in distress to counseling services	<input type="radio"/>						

12 What is the approximate number of times that you consulted with a colleague about a student you were concerned about in the past 4 weeks?

13 For me, referring a distressed student to counseling services is:

	1	2	3	4	5	6	7
Very Uncomfortable (for me): Very Comfortable (for me)	<input type="radio"/>						

14 Approximately, how many times did you consult with your direct supervisor about a student of concern in the past 4 weeks?

15 What is your current age?

16 Including this year, how many years have you worked in higher education?

17 Please be aware that free workshops regarding working with students in distress are available from the Dean of Students Office for university faculty and staff if you would like further training (<http://sa.uncg.edu/dean/outreach>).

Finally, I will email Control group participants notifying you of any remaining online trainings available at the conclusion of this study (data collection ends July 3, 2014). Please click on Next to submit the survey. You will now be redirected to another webpage in order to enter the raffle for one of 40 \$10.00 Amazon.com gift cards, if you so desire. By redirecting you to another webpage, I will not be able to link up your email address with your unique identifier.

A campus and local resources handout is attached for your information.

Campus and Local Resources

Raffle:

Please enter your email address below if you would like enter the raffle for one of 40 \$10 Amazon.com gift cards. If you win, the gift card will be sent electronically to your email from my personal email (lizjodoin@gmail.com). You will only be contacted if you win.

Your email address will be kept confidential and will be destroyed after the drawing has occurred at the end of data collection. After entering your email, please click “Next” to submit your response.

If you do not want to enter, please leave the text box below blank and click “Next” to exit. Thank you!

Email Address:

## APPENDIX FF

## LOCAL AND CAMPUS RESOURCES SHEET

**The University of North Carolina at Greensboro  
Local Resources OR Where to Find Help**

There are a variety of resources on-campus and in the community that can help you be an effective gatekeeper. Remember, you are not alone when it comes to helping a student in distress. Use your resources!

**In Crisis:**

UNCG Police  
336-334-4444

911

Monarch Crisis Center (24/7)  
201 N. Eugene Street  
Greensboro, NC  
336-676-6840

Moses Cone Behavioral Health Center (24/7)  
700 Walter Reed Drive  
Greensboro, NC  
336-832-9700

Wesley Long ER (24/7)  
501 Elam Ave  
Greensboro, NC  
336-832-0212

**On-Campus:**

The Counseling Center  
107 Gray Drive  
336-334-5874  
<http://shs.uncg.edu/cc>

Student Health Services  
107 Gray Drive  
336-334-5340  
<http://studenthealth.uncg.edu>

The Dean of Students Office  
210 Elliot University Center  
336-334-5514  
<http://sa.uncg.edu/dean/>



Office of Accessibility and Resources  
215 Elliot University Center  
336-334-5440  
<http://ods.uncg.edu>

**National Resources:**

**ULifeline**  
Your online resource for college mental health.  
[ulifeline.org](http://ulifeline.org)

**The Jed Foundation**  
Promoting emotional health and preventing suicide.  
[www.jedfoundation.org/](http://www.jedfoundation.org/)

**National Alliance on Mental Illness (NAMI)**  
[nami.org](http://nami.org)

**The Trevor Lifeline (for LGBTQ youth)**  
866-488-7386  
[thetrevorproject.org](http://thetrevorproject.org)

**Veterans Crisis Line**  
1-800-273-8255 Press 1  
[veteranscrisisline.net](http://veteranscrisisline.net)

**APPENDIX GG****CONTROL GROUP REMAINING TRAININGS EMAIL**

Dear Colleague:

Thank you for serving as a Control group participant. At this time, there are remaining *At Risk for University Faculty and Staff* online trainings available to Control group participants.

To access this training, please go to the following website:

Website: <http://www.kognitocampus.com/faculty> (Then click "Access Training")  
Enrollment key: greensboro11

Please note that this is a first-come first-serve offering. Trainings will expire on May 1, 2015.

Take care,  
Elizabeth Jodoin

If you have questions, want more information or have suggestions, please contact Elizabeth Jodoin at [ecjodoin@uncg.edu](mailto:ecjodoin@uncg.edu). If you have any concerns about your rights, how you are being treated, concerns or complaints about this project or benefits or risks associated with being in this study please contact the Office of Research Integrity at UNCG toll-free at (855)-251-2351.

Approved IRB  
4/7/14

## APPENDIX HH

## NOTICE OF AGREEMENT TO USE THE THEORY OF PLANNED BEHAVIOR

people.umass.edu/aizen/faq.html

Clean Eating Recipes Statistical Tests in SPSS Fitness Pal iSpartan Login PaleOMG Civilized Caveman

 **Icek Ajzen**  
Frequently Asked Questions

[Home](#)

[Contact](#)

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[Research](#)

[Publications](#)

[TPB](#)

[Consulting](#)

[Workshops](#)

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- *How can I get permission to use the TPB in my research, or to include a figure of the theory in my thesis, dissertation, presentation, poster, article, or book?* [\[Answer / Close\]](#)

The theory of planned behavior is in the public domain. No permission is needed to use the theory in research, to construct a TPB questionnaire, or to include an original drawing of the model in a thesis, dissertation, presentation, poster, article, or book. However, if you would like to reproduce a published drawing of the model, you need to get permission from the publisher who holds the copyright. You may use the drawing on this website for non-commercial purposes so long as you retain the copyright notice.

- *Could you look at my research plan, questionnaire, model, or project and comment on it?* [\[Answer / Close\]](#)

Last modified: November 30, 2011

## APPENDIX II

**NATIONAL ASSOCIATION OF STUDENT PERSONNEL ADMINISTRATORS  
FOUNDATION CHANNING BRIGGS SMALL GRANT AWARD**

UNCG Mail - NASPA Foundation Channing Briggs Grant

<https://mail.google.com/mail/u/0/?ui=2&ik=408841ae4c&view=pt&se...>


Elizabeth Jodoin &lt;ecjodoin@uncg.edu&gt;

---

**NASPA Foundation Channing Briggs Grant**

1 message

foundation <foundation@naspa.org>  
To: "ecjodoin@uncg.edu" <ecjodoin@uncg.edu>

Thu, Oct 24, 2013 at 3:35 PM



October 24, 2013

Elizabeth Jodoin  
Staff Counselor  
The University of North Carolina at Greensboro  
1409 Wrenwood Court  
  
Greensboro, NC 27455

Dear Elizabeth,

Thank you for submitting a proposal for potential funding from the NASPA Foundation for the July 2013 Channing Briggs Small Research Grant. The grants committee has reviewed your proposal and I am pleased to report that we will fund your project, *Assisting Distressed College Students: Assessment of an Online Interactive Training for Student Support Professionals* in the amount of **\$2496**. The NASPA Foundation will only fund direct costs related to conducting the research project. It does not pay for overhead expenses; therefore, the funds may not be used for stipends or gift cards for participants or as graduate tuition or fees.

We ask that recipients of support from the Foundation acknowledge that support in all phases of the research project. We also ask that you submit a referred article and/or for a presentation of the findings at the NASPA Annual Conference. Currently the journals include: *the Journal of Student Affairs Theory and Practice*, *the Journal of Women in Higher Education* and *the Journal of College and Character*.

UNCG Mail - NASPA Foundation Channing Briggs Grant

<https://mail.google.com/mail/u/0/?ui=2&ik=408841ae4c&view=pt&se...>

Please work with Lucy Fort in the NASPA office regarding any questions you may have at (202) 265-7500 ext 1171, [lfort@naspa.org](mailto:lfort@naspa.org). NASPA will require receipts and expense logs of how your funding has been spent since funding is being provided up front. Lucy will be in touch with follow-up detailed instructions regarding this process. Any money left over is to be returned to the NASPA Foundation at the conclusion of your work on the project.

We appreciate having the opportunity to review your proposal.

Sincerely yours,

A handwritten signature in black ink that reads "Cherry Callahan". The signature is written in a cursive, flowing style.

Cherry Callahan  
Chair, NASPA Foundation

## APPENDIX JJ

## KOGNITO, INC. ONLINE TRAINING SECURITY STATEMENT

UNCG Mail - Re: "spread the word" information

<https://mail.google.com/mail/u/0/?ui=2&ik=408841ae4c&view=pt&c...>

Elizabeth Jodoin &lt;ecjodoin@uncg.edu&gt;

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**Re: "spread the word" information**

1 message

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**Katherine Walsh** <katherine@kognito.com>  
To: Liz Jodoin <ecjodoin@uncg.edu>

Fri, Feb 28, 2014 at 5:19 PM

Hi Liz,

Below is a statement of confidentiality that we generally use, without the sections for the demographics and survey data:

"Kognito only stores student training performance data. Our application servers are hosted on Rackspace which has been audited for SSAE16 Type II SOC1, SOC2, and SOC3. All sensitive learner data is generally handled exclusively by the customer or sanctioned Kognito employees who will be identified as official points of contact."

Best,

Katherine Walsh  
Junior Account Manager  
= Kognito Interactive  
135 W. 26th Street, 12th floor  
New York, NY 10001  
P: (212) 675-9234  
F: (646) 217-3677  
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