WHOM ARE YOU GOING TO CALL? EXAMINING HELP-SEEKING SOURCES AMONG UNIVERSITY STUDENTS WITH A SUICIDE HISTORY

By

MERRILL DIANE REITER

Bachelor of Science in Psychology
University of Missouri
Columbia, Missouri
2013

Master of Science in Clinical Psychology
Loyola University Maryland
Baltimore, Maryland
2017

Submitted to the Faculty of the
Graduate College of the
Oklahoma State University
in partial fulfillment of
the requirements for
the Degree of
DOCTOR OF PHILOSOPHY
July 2021

WHOM ARE YOU GOING TO CALL? EXAMINING HELP-SEEKING SOURCES AMONG UNIVERSITY STUDENTS WITH A SUICIDE HISTORY

Dissertation Approved:

Sarah Johnson, Ph.D.

Dr. Sarah Johnson, Dissertation Adviser

John Romans

Dr. John Romans, Committee Chair

Thomas Berry, PhD

Dr. Thomas Berry, Committee Member

Shelia M. Kennison

Dr. Shelia Kennison, Outside Committee Member

ACKNOWLEDGEMENTS

This dissertation is written in memory of and dedicated to:
Alexander Joseph Reiter and Samantha Alice Quinn
You live on in my passion and efforts to prevent suicide. I love and miss you, so very much.

Acknowledgements reflect the views of the author and are not endorsed by committee members or Oklahoma State University.

Name: MERRILL REITER

Date of Degree: JULY 30, 2021

Title of Study: WHOM ARE YOU GOING TO CALL? EXAMINING HELP-SEEKING SOURCES AMONG UNIVERSITY STUDENTS WITH A SUICIDE HISTORY

Major Field: COUNSELING PSYCHOLOGY

Abstract: Suicide is a concern among college students and on college campuses across the United States. Prior research has shown a number of variables that impact access to help-seeking for students experiencing thoughts of suicide. The present study sought to examine positive and negative relationships among five psychological variables (self-stigma, perceived public stigma, levels of distress, social support, and self-concealment), and their role in students' likelihood to use five types of help-seeking sources (professional help, family support, social relationships, organization sources of support, and virtual sources of support). Additionally, the study examined which sources of support students utilize when experiencing thoughts of suicide. The sample of this study included undergraduate students who endorsed personal experiences of suicide (n = 207). Participants in this study were largely female (n = 155), heterosexual (n = 125), and White (n = 145). Most participants attended public institutions (n = 106), and are attending their classes on the main campus (n = 138). Most had resided in suburban regions prior to going to college (n = 120). Participants' ages ranged from 18 to 42.Results indicated that stigma acts as a barrier to students seeking support for thoughts of suicide. Higher levels of social support and less psychological distress was found to be related to help-seeking intentions. These findings have implications for suicide prevention and intervention on college campuses.

TABLE OF CONTENTS

Chapter Page

LIST OF TABLES

Table Page

CHAPTER I

INTRODUCTION

In the United States, more than 47,500 lives were lost to suicide in 2019 (Center for Disease Control [CDC], 2020). In 2019, 12 million American adults seriously thought about suicide, 3.5 million planned an attempt, and 1.4 million attempted (CDC, 2020). Students are attending college with alarmingly high rates of significant mental health concerns (e.g., depression and suicidal ideation) and more severe diagnoses (e.g., post-traumatic stress disorder and schizophrenia) than in previous years (Cramer et al., 2020; Drum et al., 2009; Gollust, & Golberstein 2009). The risk of experiencing significant psychological distress is increased for individuals between the ages of 18 and 25, corresponding with the age range of a "traditional college student" (i.e., 18-23; De Girolamo, et al., 2012). Student experiencing mental illness in college often have lower grade point averages and are at greater risk for dropout (Golberstein et al., 2009). In a survey, the National Alliance of Mental Health (NAMI; 2012) found that 64% of students identified a mental health concern as their primary reason for withdrawing from their university. Common stressors experienced by students in college include new financial, academic and personal responsibilities, development of friendships and intimate relationships, identity development and exploration, and social pressures (De Girolamo, et al., 20120). Even with higher rates of significant mental health concerns on college campuses, mental health resources are underutilized (Sheehan et al., 2017). Knowing that students are choosing not to seek services, even when considering suicide, is both troubling and alarming.

Suicide is a concern that plagues college campuses across the United States and around the world (Drum et al., 2009; Sheehan et al., 2017). The American College Health Association (2012) found in a national survey that one in ten college students endorsed seriously considering suicide in the past twelve months, and one in twelve made a suicide plan. In a large study involving 70 college campuses, 8% of undergraduate students reported attempting suicide at least once in their lifetime (Drum et al., 2009). Over half of these college student respondents who attempted or seriously considered attempting suicide had not sought any treatment. A possible reason for the lack of engagement in help seeking behaviors could be contributed to a shortage of desired treatment options.

There are numerous components that can affect an individual's decision to accept or seek professional counseling, such as their own perceptions and beliefs about treatment, support received from friends and family, and personal and perceived public stigma (Fischer & Turner, 1970; Vogel et al., 2009). Having a deeper understanding of the facilitators and barriers to help-seeking is crucial. Knowing where students in distress seek support can help tailor mental health prevention and intervention efforts on college campuses. Previously, researchers only looked at informal (paraprofessional) and formal (professional) help-seeking sources (Boldero & Fallon, 1995; Leaf & Bruce, 1987; Masuda et al., 2012; Vogel et al., 2009).

Suicide on College Campuses

Suicide is purported to be the second leading cause of death among college students (CDC, 2018), with trends rising on college campuses (Cramer et al., 2020). Literature suggests that persons in the age group attending college are facing a unique set of transitional risk factors (Hirsch & Barton, 2012). Among these unique factors, many college students face changes such as disruption of social support and separation from traditional support networks, changes in roles and responsibilities, balancing academic demands with a new social environment, career indecision and new financial pressures (Hirsch & Barton, 2012). Many of these lead to an increase in engaging in thoughts of suicide and suicide behaviors. According to information gathered from students using counseling

services between the years of 2010 to 2018, there have been significant increases in rate of lifetime suicide attempt plans (24.0% to 35.8%) and lifetime suicide attempts (8.0 to 10.3%). Moreover, mental health providers are reporting that one in ten students are endorsing suicide as a presenting concern when seeking counseling services (Cramer et al., 2020). According to Wolitzky-Taylor and colleagues (2020), 10% of undergraduate students across the country reported seriously considering attempting suicide, 3.0% planned a suicide attempt, and 1.3% of students attempted suicide.

More recently, the American College Health Association (2015) found that one in ten college students endorsed seriously considering suicide in the past twelve months, and one in twelve students planned how they would die by suicide. In a study of over 1,800 students across four different universities, Westefeld and colleagues (2005) found that 24% of college students seriously considered suicide, and five percent had attempted while enrolled in college. Participants in Drum and colleagues' (2009) study included a sample of 26, 451 undergraduate students from seventy U. S. colleges and universities. Among the group of participants, 47% endorsed experiencing suicidal ideation three or more times while enrolled in college, 18% endorsed seriously considering attempting suicide, and 8% reported attempting suicide at least once. Of the participants in Drum and colleagues (2009) study, 46% did not disclose their experiences to anyone. Two-thirds of the students who disclosed experiencing suicidal thoughts chose to confide in their romantic partner, a roommate, or friend (Drum et al., 2009).

Historically, help-seeking rates among college students with suicidal ideation has been low (Kisch et al., 2005). Eighty percent of college students who die by suicide had never engaged in any counseling resources (Gallagher, 2014; Kisch et al., 2005). However, a recent review indicated a significant increase in students seeking mental health services and severity of mental health concerns (Prince, 2015). However, barriers prevent students from utilizing available resources when in distress. A survey of nearly 9,000 college students reported that 51.5% of participants with suicidal ideation received treatment in the past year, with only 31.6% currently receiving treatment (Burton Denmark

et al., 2012). Participants of this study were also provided a list of barriers to treatment, and asked to endorse which, if any, applied to them. Some of the barriers identified were: doubts their symptoms warranted professional help, stigma, concerns of privacy, and the belief that their social network can help them cope with their distress. Participants who reported utilizing mental health treatment were asked what prompted them to do so, and 89% indicated that others motivated them to seek treatment.

Having information that sheds light on students' perspectives of their experiences and help-seeking decisions during time of suicidal crisis can inform how to structure prevention strategies, while increasing resources and opportunities to support students seriously contemplating suicide or engaging in suicide behaviors (Burton Denmark et al., 2009). Literature suggests that young people have been more likely to confide in informal sources (e.g. friends and family) than professional helpers (Burton Denmark et al., 2009). While questions still remain about where individuals contemplating suicide confide in, it is clear that having sources of support is a significant factor in suicide prevention and intervention.

Sources of Support

Ideally, students in higher education have someone to confide in and somewhere to go if in crisis. Sources of support can range from formal and professional sources to informal and paraprofessional resources. Sources of support within a college community can include mental health professionals, classmates, athletic coaches, directors of student organizations, peers made through university related experiences, academic advisor, and residence hall coordinators. Educators and individuals interacting with college students on a regular basis are typically in the best position to first to notice suicidal behaviors (Sari et al., 2008), particularly because academic problems were rated as having a large effect on suicidal ideation (Drum, et al., 2009) There are also many opportunities for students to seek support outside of their campuses – this includes seeking treatment from a provider in the community or seeking support from an individual who is not affiliated with the school being attended.

Examples of sources of support not affiliated with the college community can include religious clergy, family members, Internet resources, and friendships established prior to or outside of college. An adolescent's decision to confide in a source of support is influenced by the help seekers perception of whether the identified source of support can respond to their needs effectively and without judgment (Sari et al., 2008). It is important to note that despite where the source of support was established, the likelihood of whether a student discloses their distress largely depends on the beliefs, traditions, and values of individual student's cultural groups and their various identities (Ayalon & Young, 2005), as well as the intensity of the distress they are experiencing (Ryan et al., 2010).

College students with suicidal ideation are reported have lower intentions of seeking formal or informal sources of support than non-college students (Kisch et al., 2005; Pagura et al., 2009). Arria and colleagues (2011) assessed whether 158 college students with a lifetime history of suicide ideation sought formal or informal resources. Formal resources included health professionals, counselors, campus-or community-based health and counseling centers, hospitals or other facilities, law enforcement officials, support groups, rehabilitation clinics, or hotlines. Informal resources included friends, family members, significant others, other trusted adults, clergy, Internet research, self-help books, and prayer. They found that participants accessed a wide range of informal and formal sources, including family (65%), friends (54%), psychiatrists (38%), and psychologists (33%). Common informal supports mentioned were significant others (23%), trusted adults (13%), self-help groups (6%), and clergy (4%).

Informal networks are sought after at a higher rate than formal networks (Biddle et al., 2004; Freedenthal & Stiffman, 2007, Michelmore & Hindly, 2012), and young people with a history of suicidal ideation were more likely to seek help from their peers than any other sources (Biddle et al., 2004; Nada Raja et al., 2003; Nixon et al., 2008). Historically, counselors, instructors, academic advisors, and family members were sought for assistance with vocational and educational concerns

(Tinsley et al., 1982). Among younger college students and students living at home, family is often consulted first by the person in distress and found to play a significant role in connecting individuals to professional resources (Rickwood et al., 2007). Regardless of who the identified source of support is, having social support in general can be helpful in decreasing distress and preventing suicide (Kleinman & Liu, 2014).

Social Support

Social support can be understood as the general availability of friends and family members available to provide psychological and material resources related to psychological concerns (Kleinman & Riskind, 2012). Individuals closest to the potential help-seeker play a significant role in influencing whether they seek psychological help when experiencing significant levels of distress as they have the potential of providing tangible benefits (Angermeyer et al., 2001). Psychological, social, and physical factors are three specific tangible mechanisms of social support that contribute to the association between greater social support and lower risk of suicide. An increase in social support contributes to increased self-worth (psychological), increased social support leads to accessibility to friends available to help distract and redirect (social), and an increase in social support means individuals are available to remove deadly means away from the person at-risk (Kleinman & Liu, 2014). Kleinman and Liu (2014) examined whether social support was a protective factor in suicide, and if greater social support was associated with lower likelihood of making a suicide attempt. Results indicated that having social support was a predictor of suicide attempts, specifically, higher levels of social support were associated with a lower likelihood in a lifetime suicide attempt (Kleinman & Liu, 2014).

There is a difference between having social support and utilizing it. Suicidal individuals are more likely to avoid seeking help, a process known as help-negation (Deane et al., 2011). Yakunina and colleagues (2010) note that help-negation is particularly common behavior in college students. Joiner's (2005) interpersonal psychological theory of suicide indicates that social inclusion and

support is crucial for preventing suicide. The theory identifies lack of belongingness as one of the two most crucial risk factors in engaging in suicide behaviors (the other being perceptions of burdensomeness). Negative social interactions can create additional sources of stress and may contribute to thoughts of suicide. Deficits in peer or caregiver support is associated with increased suicidal ideation in college students (Hirsch & Barton, 2011). In general, when social support is provided on a peer, parental, and/or institutional levels, well-being is promoted, suicidal behavior is reduced, and students receive a range of mental health and academic benefits (Hirsch & Barton, 2011). While social support is an important component to suicide preventions, individuals can only provide support if they are made aware that a problem exists.

Self-Concealment

Self-concealment can be understood as discomfort with self-disclosing distressing information, and was a predictor of attitudes and willingness toward seeking professional help (Vogel et al., 2007; Vogel & Wester, 2003). Self-concealment and attitudes towards help-seeking was investigated with a sample of 257 undergraduate students studying psychology at a large Midwestern university (Kelly & Achter, 1995). Participants were administered five different self-report instruments with the intention of measuring self-concealment, intentions to seek counseling, attitudes towards professional help, depression and social support systems. Students with higher scores of self-concealment scale held negative perceptions towards counseling.

Self-concealment is known to involve negative attitudes towards one's own mental health (i.e., involving internalized stigma; Masuda et al., 2012; Masuda & Boone, 2011), and implies a person is hiding or withholding information (Friedlander et al., 2012). In a study examining whether older adults who died by suicide communicated with anyone, investigators found 27% of their sample had not reached out to anyone before taking their life (Waern et al., 1999). Busch and colleagues (2003) found that 78% of hospital patients who died by suicide denied having suicidal thoughts the week

before taking their own lives. Self-concealment was found to increase rumination (Lane & Wegner, 1995), a predictor of both hopelessness and suicidal ideation (Miranda & Nolen-Hoeksema, 2007). Cepeda-Benito and Short (1998) found in their study that investigated help-seeking and self-concealment with a group of 732 undergraduate students in the southwest that students with higher scores of self-concealment had increased psychological distress.

Levels of Distress

The risk of experiencing psychological distress increases for students aged 18-23, (traditionally college aged students) (De Girolamo et al., 2012) as they experience a wide variety of stressors for the first time. Examples of first-time stressors include living independently for the first time, new financial responsibilities, balancing academic responsibilities and social life without supervision. The psychological distress experienced by undergraduate students continues to rise, yet only 25% of students experiencing psychological distress seek mental health resources.

Surapaneni and colleagues (2019) examined whether greater levels of distress were associated with a greater likelihood to seek psychological services. They found that as distress levels increase, the relationship between negative help-seeking attitudes and stigma associated with help-seeking decreases. Researchers suggest this might be because the individual in distress would be willing to seek psychological help despite the risk of being stigmatized.

Stigma

Mental health stigma can be understood as "a multidimensional process of objectifying and dehumanizing a person known to have or appearing to have a mental disorder" (Mendoza et al., 2015, p. 209). Regardless of the source of support, stigma can be a barrier to seeking any type of help or assistance when suicidal. The two most prevalent types of stigma in suicide help-seeking are self-stigma and perceived public-stigma. Self-stigma is defined as, "the reduction of an individual's self-esteem or self-worth caused by the individual self-labeling themselves as someone who is socially

unacceptable" (Vogel et al., 2006. p. 325). Self-stigma exists because of the negative attitudes individuals hold about themselves as a result of internalizing and accepting stigmatized ideas and attitudes held by society (Corrigan & Watson, 2002). Perceived public stigma is defined as "negative stereotypes and prejudices about mental illness held collectively by people in a community" (Golberstein et al., 2009, p. 29). Perceived public stigma can be associated with seeking mental health services (e.g. a person who seeks psychological treatment is weak; Vogel et al., 2006). Perceived public stigma is exemplified in the community through attitudes of intolerance, exclusion, fear, and mistrust of persons (Pescosolido et al., 2007).

Pedersen and Paves (2015) found a significant positive correlation between self-stigma and perceived public-stigma, such that perceived public stigma increased when personal stigma increased, indicating that when an individual's perceives public stigma is higher, their levels of self-stigma increase. Both self and perceived public stigma have been shown to be associated with impaired help-seeking behavior (Gulliver et al., 2010), but self-stigma has been found to be more consistently associated with lower help-seeking intentions and behaviors (Golberstein et al., 2007; Gulliver et al., 2010; Schomerus et al., 2009). While a significant number of researchers found that stigma has an impact on engaging in help-seeking behaviors, in a few studies, researchers suggest that stigma may not have as significant of an impact on help-seeking behaviors as previously thought (Eisenberg et al., 2009; Eisenberg et al., 2012, Golberstein, 2009). This could be attributed to an increase in efforts aimed at reducing mental health stigma on university and college campuses, and their success in changing students' attitudes towards seeking psychological help.

Cramer's (1999) Model of Help-Seeking

Cramer's (1999) model of help-seeking is the oldest and still one of the most frequently used in help-seeking research (Leech, 2007; Morgan et al., 2003; Tulia, et al., 2016). Mental health help-seeking refers to the process of using informal and professional networks to gain support in coping with mental health problems (Barker et al., 2005; Michelmore & Hindley, 2012). Mental health help-

seeking is defined as, "the use of social networks or professionals to gain support in coping with emotional problems, psychological distress, and suicidal ideas" (Stewart, 2015, p. 9). Cramer's model has been used in attempts to increase understanding of "the service gap," or why the majority of the people with psychological difficulties do not seek help (Brinson & Kottler, 1995; Gottesfeld, 1995; Leaf & Bruce, 1987).

Researchers initially used demographic variables, namely gender, race, education, socioeconomic status, and religion as predictors of help-seeking behaviors (Kelly & Achter, 1995). Kushner and Sher (1991) were among the first researchers to consider how psychological factors may act as intervening variables between the recognition of distress as a result of a psychological problem and the decision to seek help. To further investigate whether there is a relationship between psychological variables and help-seeking, Cramer created a model with four psychologically based variables used to predict help-seeking. The first variable included in the model is level of distress. Level of distress can influence whether they decide to seek help (Cepeda-Benito & Short, 1998). Attitudes toward professional psychological counseling (Rickwood & Braithewaite, 1994) is another variable included in Cramer's (1999) model. The next of Cramer's variables is social support. Many researchers incorporate social support as a predictor variable and find that it has a significant and positive relationship to engaging in informal and formal help-seeking behavior (Catanzarite & Robinson, 2013). The final variable that Cramer included in his help-seeking model was self-concealment. Self-concealment is defined as a predisposition to hide distressing and potentially embarrassing personal information. It has been found to be associated with less favorable attitudes towards help-seeking (Kelly & Achter, 1995).

Cramer (1999) examined the relative contribution of the four psychological variables mentioned above to college students' decision to seek professional help with a sample of undergraduate students from one university using a path model consisting of all relevant connection between psychological antecedents and help-seeking behavior. Results suggested that students were more likely to seek

professional help if they considered their informal support network to be impaired, ineffective, and/or incapable of helping them make their desired change (Cramer, 1999). Students who conceal information were found to experience less social support. This insinuates a greater likelihood that students who conceal their concerns are more likely to struggle coping with their distress. Regardless of distress level, students more inclined to self-conceal will be less likely to seek professional treatment (Cramer, 1999). Overall, Cramer's (1999) mental health help-seeking model suggests students are more likely to seek professional help when distress is high and attitudes towards counseling are positive. The model continues to suggest that distress among students is higher when social support networks are impaired, when students conceal personally distressing information, and hold negative attitudes toward counseling.

Cramer's (1999) model of help-seeking was also applied to Master's level students studying counseling psychology. Leech (2007) investigated how well Cramer's model fit counseling students' willingness to seek counseling using predictors of social support, self-concealment, attitude towards counseling, and level of distress. Participants were 519 Master's level counseling students from across the United States. Structural Equation Modeling (SEM) was used in the analysis. Positive relationships were found between self-concealment and distress, distress and willingness to seek counseling, and lastly, attitude toward counseling and willingness to seek counseling. Results suggested that self-concealment was positively related to distress, such as counseling students with higher self-concealment are likely to have a higher level of distress, and vice versa. A positive attitude toward seeking counseling was found to increase a counseling student's willingness to seek counseling services. Those with negative attitudes toward counseling were found to be less willing to seek counseling. The relationship between self-concealment and social support was negative, such as counseling students who were high in self-concealment tended to be low in social support, and vice versa (Leech, 2007). Social support and distress also were negatively related, suggesting that counseling students with low support tended to have increased levels of distress, and counseling

students with high levels of social support tended to have lower levels of distress. Finally, counseling students with low levels of self-concealment tended to have a more positive attitude towards counseling, and vice versa (Leech, 2007).

The Present Study

The purpose of this research was to examine whether relationships among five psychological variables have a positive or negative relationship to help-seeking, and the role of those variables in students' likelihood to use five types of help-seeking sources. This study contains two more psychological variables (self-stigma and perceived public stigma) in addition to the four included in Cramer's (1999) model. The five psychosocial variables included in this study are self-stigma, perceived public stigma, level of distress, social support, and self-concealment. The five help-seeking sources include: professional help, such as campus clinics, college counseling centers, and campus mental health events. Second is social relationships, which includes best friends, classmates, and intimate partner(s). Third, family support, such as siblings, parents, and cousins are included. Organizational sources of support is the fourth type, and categorized as professors, academic advisors, coaches, university staff members. Lastly, virtual sources support sources, is described by crisis hotlines and self-help platforms. Of the information collected, only the data submitted from students currently enrolled in undergraduate classes who endorse experiences of suicide are being examined. Experiences of suicide is indicated by endorsing one or more of the statements, "I have attempted suicide," "I have previously experienced thoughts of suicide," and/or "I am currently experiencing thoughts of suicide. For the purpose of this study, suicide experiences/experiences of suicide is being defined as having attempted suicide, currently experiencing thoughts of suicide, or previously thinking of completing suicide.

In this study, information was gathered about the relationships between stigma, attitude towards seeking professional mental health resources, self-concealment, social support, and sources of help-seeking. Based upon a review of the existing literature, this study is believed to be the first-time

sources of help-seeking have been broken down into such distinct categories: professional help, social support, family support, organizational sources of support, and virtual sources of support. In addition, no other studies exist that identify self-stigma, perceived public stigma, attitudes towards seeking psychological help, levels of distress, social support, and self-concealment to predict sources of help-seeking among college and university students with a history of suicide.

By identifying sources of support, suicide prevention programming can be designed and offered to the appropriate sources. Having an understanding of the relationship between psychosocial variables and help-seeking can be used to inform individuals about which factors need to be addressed in outreach programming and advocacy efforts to increase the utilization of counseling resources.

The research questions of this dissertation are:

1. What is the relationship between self-stigma and perceived public stigma?

2. What is the relationship between perceived public stigma, self-stigma, and self-concealment?

3. What is the relationship between social support and levels of distress?

4. What is the relationship between perceived public stigma, self-stigma, and intentions to seek counseling?

5. What is the relationship between levels of distress and likelihood of seeking counseling from any category of source of support?

6. What is the relationship between social support and intentions of engaging in help-seeking behaviors from any category of source of support?

7. What is the relationship between social support, attitudes of psychological help, and intentions of engaging in help-seeking behaviors from any category of source of support?

8. Will the models be similar across the five categories of help-seeking?

The following direct paths are hypothesized such as,

1. Perceived public stigma and self-stigma correlate, such as, higher levels of self-stigma associate higher levels of perceived public stigma and vice-versa.
2. Perceived public stigma and self-stigma have a positive relationship with self-concealment. Thus meaning, the higher levels of perceived public and self-stigma, the more likely an individual is to conceal any distress they are experiencing.
3. More social support will have an inverse relationship with distress, such as, higher social support is correlated with lower levels of distress.
4. Perceived public stigma and self-stigma have an inverse relationship with intention to seek counseling, such as, if levels of perceived public and self-stigma are low, intentions to seek counseling from any source increases.
5. Higher levels of distress are positively related to the likelihood of seeking counseling from any category of source of support, such as, the more distressed an individual is, the less likely they are to engage in help-seeking behaviors.
6. Social support has an inverse relationship with intention to engage in help-seeking behaviors from any source, such as, if social support is higher, there is a greater likelihood that an individual will utilize any source of help-seeking.
7. Social support, through attitudes toward psychological help, has a relationship with intentions to seek help from any source of help-seeking.
8. Expectations that the models would be substantially similar across the different loci of help-seeking.

CHAPTER II

METHODS

Participants

Participants were eligible to participate in the study if they were over the age of 18 at the time that they completed the survey, located in the United States, and enrolled as an undergraduate student at an institution of higher education. The responses of participants who self-reported a history of suicide experiences and/or a current experience of suicide (i.e., current thoughts of suicide) were separated. Of the 1,521 participants who completed a survey, 231 responded to a question about their personal experiences with suicide with one or more of the following responses: "I have attempted suicide"; "I have previously experienced thoughts of suicide"; and/or "I am currently experiencing thoughts of suicide". After data cleaning was completed, responses from 207 participants were retained and analyzed.

Measures

Demographic Questionnaire. A self-report questionnaire was utilized to assess participants' gender, age, racial background, sexual orientation, type of institution of higher education being attended, where the majority of their classes are being taken, residency classification, and the geographic area of residency prior to starting college, in addition to their

experiences of suicide from the total number of respondents.

Self-Concealment Scale. The Self-Concealment Scale (SCS; Larson & Chastain, 1990) was utilized to measure participants' self-concealment. The SCS is a ten-item self-report scale intending to measure the "predisposition to actively conceal from others personal information that one perceives as distressing or negative" (p. 440). Participants are asked to rate their level of agreement with each statement on a five-point Likert scale ranging from strongly disagree (1) to strongly agree (5). Responses are summed, making the scores range from 10 to 50, with higher scores indicating greater self-concealment (Cepida-Benita & Short, 1995).

Examples of response items include, "I have an important secret that I have not shared with anyone," "There are a lot of things about me that I keep to myself," and "When something bad happens to me, I tend to keep it to myself." The internal consistency of the SCS is α of .83 (Larson & Chastain, 1990). The SCS is a reliable measure of self-concealment, with test-retest (over 4 weeks) and inter-item reliability estimates of .81 and .83 (Larson & Chastain, 1990). The SCS has been used in many studies with college and/or university students in relation to topics such as stigma (Masuda & Boone, 2011), perfectionism (Kawamura & Frost, 2004) and suicidal behaviors (Friedlander, Nazem, Fiske, et al., 2012). The internal consistency for the present study's sample was good ($\alpha = .85$).

Social Provisions Scale. The Social Provisions Scale (SPS; Cutrona & Russell, 1987) was utilized to measure participants' perceptions of their social support. The SPS is a 24-item self-report measure assessing the strength of one's social support. Respondents rate their agreement with the items utilizing a Likert scale ranging from 1 (*strongly disagree)* to 4 (*strongly agree)*. Items are combined to create six subscales assessing six different types of social support (e.g. reassurance of worth, emotional support and attachment, and tangible help) (Cutrona & Russell, 1987). Kelly and Achter's (1990) used the overall scale as an aggregate measure of

social support. Respondents' scores were added to yield a score from 24 to 96, with higher scores indicating stronger social support.

Examples of response items include, "I lack a feeling of intimacy with another person." Internal consistency scores range from .755 to .880, indicating excellent internal consistency (Cutrona & Russell, 1987). The SPS has been used in many studies with college and/or university students, including an examination of depressive symptoms among Black college students (Mosher et al., 2006). The SPS was normed using a sample of 1,792 respondents, including university students, public school teachers, and military nurses (Cutrona & Russell, 1987). For the sample in the present study, the SPS had good internal consistency ($\alpha = .89$).

Hopkins Symptom Checklist-21. The Hopkins Symptom Checklist-21 **(**HSCL-21; Green et al., 1988) was utilized to measure levels of psychological distress. The HSCL-21 is the 21-item version of the 1974 version of the 58-item Hopkins Symptom Checklist (Derogatis et al., 1974). Respondents endorse items on this measure using a Likert scale from 1 (*not at all*) to 4 (*extremely*). Participants are asked questions about how they felt in the last seven days. Scores can range from 21 to 84, with higher scores indicating more severe symptoms. The HSCL-21 has a three-factor structure: general feelings of distress, somatic distress, and performance difficulty. Rickels and colleagues (1971) found two-month test-retest reliability coefficients for each of the subscales: performance difficulty (.58), general feelings of distress (.63), and total distress (.57).

Examples of response items include, "feeling tense or keyed up," and "suddenly scared for no reason." The HSCL-21 has been used in many studies with college and/or university students, for example it was used in a study about intergenerational family conflict (Lee, 2005) and another about psychological distress in international students (Khawaja & Dempsey, 2007). The HSCL-

21 was normed on clients referred to outpatient psychotherapy in hospitals in New Zealand. For the sample in the present study, the HSCL-21 had excellent internal consistency ($\alpha = .92$).

Self-Stigma of Seeking Psychological Help. The Self-Stigma of Seeking Psychological Help (SSOSH; Vogel et al., 2006) was utilized to measure self-stigma. The SSOSH is a ten-item, self-report scale assessing, predicting, and measuring help-seeking attitudes and intentions. The scale assesses the impact of stigma on one's self-esteem for seeking professional mental health care. Items are rated on a five-point Likert scale from 1 (*strongly disagree*) to 5 (*strongly agree*). Five items are reverse scored. The scores of the scale can range from 10-50, with higher scores indicate higher self-stigma.

Example items include, "I would feel inadequate if I went to a therapist for psychological help" and "I would feel worse about myself if I could not solve my own problems." The SSOSH has demonstrated high internal consistency with alpha of .89 (Vogel et al., 2006). The scale was found to have good test-retest reliability over a two-month period of .72 (Tucker et al., 2013). The authors noted good construct, criterion, and predicative validity across all phases. The SSOSH in Tucker et al.'s (2013) sample had an alpha of .90 at time 1, .88 at time 2, and .88 at time 3. The SSOSH was normed on a sample of university students and has been used in many studies with college and/or university students, including an examination of intentions to seek help for suicidal ideation (Yakunina et al., 2010) and psychocultural factors associated with seeking psychological help among ethnic minority students (Chen et al., 2013). For this study's sample, the SSOSH had good internal consistency ($\alpha = .86$).

Perceptions of Stigmatization by Others for Seeking Help. Perceptions of Stigmatization by Others for Seeking Help (PSOSH; Vogel et al., 2009) was utilized to measure perceived public stigma toward help-seeking. The PSOSH is used to measure the perception of whether seeking psychological help would be stigmatized by individuals the help-seeking person interacts with,

and evaluates the impact of problem severity on the perception for stigmatization for seeking help. Twenty-one items were created to reflect how the stigma associated with seeking treatment might be reflected in the social reactions of others. Participants respond to each item with a five-point Likert scale, with higher scores indicated greater perceived stigma from others.

Items reflect the three types of social reactions others could have. For example, one behavioral item was, "Say something negative about you to others"; an emotional item was, "Be angry with you"; and a cognitive item was, "Think you posed a risk to others." (Vogel et al., 2009.) The internal consistency is .88, and test-re-test reliability after three weeks was .77 (Vogel et al., 2009). This scale was normed on a sample of university students and has been used in many studies with college and/or university students. For example, it was used in a study about the endorsement of masculine norms and its impact on help-seeking (Vogel et al., 2011), and another about seeking help among first- and non-first-generation family university students (Talebi et al., 2013). For the sample in the present study, the PSOSH had excellent internal consistency ($\alpha = .96$).

General Help-Seeking Questionnaire. The General Help-Seeking Questionnaire (GHSQ; Wilson et al., 2005) was utilized to assess intentions to seek help. The GHSQ is a self-report measure assessing intentions to seek help from ten different sources. The items include formal (e.g., mental health professional, phone helpline, clergy, and doctor) and informal (e.g., intimate partner, friend, and parent) help-seeking sources. The GHSQ is divided into two questions: one asking about personal/emotional problems, and the other focusing on suicidal ideation. The measure asks participants how likely they would be to ask for help from informal or formal sources using a seven-point Likert-scale from 1 (*Extremely unlikely)* to 7 (*Extremely likely).* The first question reads, "If you were having a personal or emotional problem, how likely is it that you would seek help from the following people?" The second question is, "If you were

experiencing suicidal ideation, how likely is it that you would seek help from the following people?"

The scores on both the formal and informal sources of help will be combined to find a total score. Higher scores indicate higher intentions to seek help from that individual or from no one. Both subscales had good psychometric properties. The personal and emotional problems had good internal consistency ($\alpha = .70$) and test-retest reliability over a three-week period ($\alpha = .86$; Wilson et al., 2005). The suicidal thoughts subscale also had good internal consistency ($\alpha = .83$) and test-retest reliability over a three-week period ($\alpha = .88$; Wilson et al., 2005). This measure was normed on a population of high school students (Wilson et al., 2005) and has been used in many studies with college and/or university students. For example, it was used in a study about substance use (Cellucci et al., 2010) and another about using Internet sources to seek psychological help (Chang & Chang, 2011).

For this study, the GHSQ was used to measure help-seeking sources, the items were modified to better fit the population. Items on the scale for this study include significant other, friend not related, family member, academic advisor, professor, anonymous helplines, and/or no one. For this study's sample, the internal consistency for the GHSQ personal/emotional subscale was good ($\alpha = .80$). Similarly, for this study's sample, the internal consistency for the GHSQ suicidal ideation subscale was good ($\alpha = .87$). Because the focus of the study was students with personal experiences of suicide, I utilized the GHSQ suicidal ideation subscale for analysis by summing all items related to the GHSQ suicidal ideation sub scale to create a composite variable.

Procedure

Recruitment occurred after IRB approval was obtained. Advertisements were distributed through social media websites such as Facebook and Instagram, on Oklahoma State University's College of Education, Health, and Aviation's SONA, and through distributions of e-mails (see recruitment

materials in Appendix B). Students outside of OSU were also accessed through e-mails sent to students, faculty, staff, and listservs at other institutions. Data was collected from February 14, 2020 to December 10, 2020. It should be noted that the COVID-19 pandemic was declared a public health emergency in January 2020 (HHS, 2020) and persisted throughout data collection. .

Participants accessed the survey utilizing a QR code featured in recruitment materials or by following a URL link to the Qualtrics survey questionnaire. Qualtrics was the platform used to build the study, collect responses, and store the data. The account was password-protected, and no others had access to the account. After clicking the URL link, respondents were directed to the informed consent page, which provides participants with a description of the study, the potential risks and benefits of participation, acknowledgement that participating is voluntary, incentives for participating, crisis/emergency resources, and contact information of the principal investigator, and the Oklahoma State University IRB. If the student met participation criteria and consented to participation, they would be led to a series of questionnaires. Compensation for all respondents was offered as incentive to complete the survey. At the end of the collection of surveys, participants were provided with the opportunity to submit their e-mail address into a raffle to win one of eight $25 Visa gift cards. Participants who accessed the survey through SONA were automatically offered the option to gain 0.5 extra credit points for select courses as additional compensation. All data were obtained anonymously and reported as aggregate data in order to protect students' confidentiality.

Data Analysis

Initially, it was intended to utilize structural equation modeling to analyze data. However, because the final sample size was insufficient to obtain adequate power for structural equational modeling, bivariate correlation analysis and multiple linear regression analyses were conducted to explore the relationships among the variables and answer the research questions. To check the

accuracy of the data, responses to a question at the end of the survey, which asked if participants answered honestly, was examined. All participants indicated that they had. The final sample size for this study was 207. A power analysis utilizing G*Power confirmed that 207 participants for one-tailed bivariate correlation analysis has a power of .997. An additional power analysis utilizing G*Power confirmed that 207 participants for one-tailed multiple regression analysis has a power of .998 to detect a small effect size (i.e., $f^2 = .10$) or larger.

CHAPTER III

RESULTS

Descriptive statistics, including reliability, and zero-order bivariate correlations among all study variables are summarized in Appendix F (Table G1 and Table G2).

Description of Participants

A total of 1,521 individuals completed the survey, and 231 responded to a question endorsing personal experiences of suicide. Of the total number of participants, responses from 207 participants were retained and analyzed. Participants in this study were largely female (n = 155, 74.88%), heterosexual (n = 125, 60.38%), and White (n = 145, 70.05%). Most participants attended public institutions (n = 106, 51.21%) attending their classes on the main campus (n = 138, 66.67%). Most had resided in suburban regions prior to going to college (n = 120, 57.97%). Participants' ages ranged from 18 to 42 (M = 20.68, SD = 3.09). One participant did not report their age. All participants retained for this sample indicated that they had personal experiences related to suicide, including past thoughts of suicide, past suicide attempts, and/or current thoughts of suicide. These and additional participant demographics are summarized in Appendix H.

Correlation Analyses

Hypotheses 1, 3, 5, and 6 were guided by correlation analysis and are summarized below:

Hypothesis 1: Perceived public stigma and self-stigma positively correlated, such as, higher levels of self-stigma associated with higher levels of perceived public stigma and vice versa.

Hypothesis 3: Social support and distress were negatively correlated, such that higher social support is correlated with lower levels of distress.

Hypothesis 5: Higher levels of distress are positively related to the intentions of seeking counseling from any category of source of support, such as, the more distressed an individual is, the less likely they are to engage in help-seeking behaviors.

Hypothesis 6: Social support has an inverse relationship with intention to engage in help-seeking behaviors from any source, such as, if social support is higher, there is a greater likelihood that an individual will utilize any source of help-seeking.

Assumptions for Pearson correlations, including level of measurement, absence of outliers, normality of variables, and linearity of the relationship, were assessed via visual inspection of histograms, boxplots, and scatterplots, as well as inspection of skewness and kurtosis values for each variable. The data met each assumption for every analysis except for one. Intentions of seeking counseling from any category of source of support (as measured by the GHSQ SI subscale) was found to have five outliers. Therefore, correlation analysis involving this variable was conducted via Spearman's rank-order correlation, which is less sensitive to outliers and should be utilized when there is not a sound justification for removing outliers from analysis (Edgell & Noon, 1984).

For hypothesis 1, perceived public stigma and self-stigma correlate, results of the one-tailed Pearson correlation indicated that there was a significant moderate positive association between self-stigma and perceived public stigma ($r[206] = .458$, $p < .001$). Therefore, the research hypothesis is supported. For hypothesis 3, more social support will have an inverse relationship with distress, results of the one-tailed Spearman correlation indicated that there was a significant

small negative association between social support and distress (r[206] = -.272, p < .001). Therefore, the research hypothesis is supported. For hypothesis 5, higher levels of distress are positively related to the likelihood of seeking counseling from any category of source of support, results of the one-tailed Spearman correlation indicated a significant small negative association between levels of distress and intentions to seek counseling (rs[206] = -.139, p < .05). Although these results are statistically significant, the relationship is in the opposite direction of the research hypothesis, suggesting that greater psychological distress has a negative relationship with intentions to seek help in the sample in this study. Finally, for hypothesis 6, social support has an inverse relationship with intention to engage in help-seeking behaviors from any source, results of the one-tailed Spearman correlation indicated that there was a significant small positive association between social support and intentions of seeking counseling from any source of support (rs[206] = .275, p < .001). Therefore, the research hypothesis is supported.

Multiple Regression Analyses

Hypotheses 2 and 4 were analyzed via multiple regression and are summarized below:

Hypothesis 2, perceived public stigma and self-stigma have a positive relationship with self-concealment. Perceived public stigma and self-stigma positively predict self-concealment. Thus meaning, the higher levels of perceived public and self-stigma, the more likely an individual is to conceal any distress they are experiencing.

Hypothesis 4, perceived public stigma and self-stigma have an inverse relationship with intention to seek counseling. Perceived public stigma and self-stigma negatively predicted intention to seek counseling, such as, if levels of perceived public and self-stigma are low, the individual is more likely to seek counseling from any source.

The assumptions for multiple regression were tested and found to be met. Specifically, multicollinearity was assessed via Tolerance and Variance Inflation Factor (VIF) values (Miles,

2014). Linearity and homogeneity of error variance were assessed by visual inspection of a plot of the standardized predicted value of the dependent variable in the regression against the standardized residuals of the regression fitted with a Loess curve. Normality of residuals was assessed via visual inspection of a normal probability plot (i.e., a P-P plot) for the regression model. Independence of errors was assessed via the model's Durbin-Watson statistic. The acceptable range of Durbin-Watson values is 1 to 3, although values closer to 2 are preferable (Field, 2009). Finally, influential data points were assessed via inspection of the range of Cook's Distance variables. Cook's Distance values that are greater than 1 are considered influential data points (Cook, 1977).

Both multiple regression models met all multiple regression assumptions. All regression tables can be found in Appendix I. For hypothesis 2, results of the multiple linear regression indicated that there was a collective significant effect between the independent variables of self-stigma and perceived public stigma on the dependent variable of self-concealment, $R^2 = .254$, $F[2,205] = 34.676$, $p < .001$. Further inspection of the individual predictors indicated that both self-stigma ($t = 4.126$, $p < .001$) and perceived public stigma ($t = 4.541$, $p < .001$) were significant predictors in the model. Therefore, the hypothesis was supported. The model accounted for 25.4% of the variance in self-concealment scores for this sample. The regression model is summarized in Table I1.

For Hypothesis 4, results of the multiple linear regression indicated that there was a collective significant effect between independent variables self-stigma and perceived public stigma on the dependent variable, intentions to seek counseling, $R^2 = .091$, $F[2,205] = 10.184$, $p < .001$. Further inspection of the individual predictors indicated that self-stigma ($t = -3.424$, $p < .01$) was a significant predictor in the model, but perceived public stigma ($t = -1.045$, $p = .297$) was not. Therefore, the hypothesis was supported, but only self-stigma was found to be a significant predictor of intentions to seek counseling from any source of support. The regression model

accounted for 9.1% of the variance in intentions to seek counseling. The regression model is summarized in Table I2.

Structural Equation Modeling

Hypotheses 7, social support, through attitudes toward psychological help, has a relationship with intentions to seek help from any source of help seeking, and hypothesis 8, expectations that the models would be substantially similar across the different loci of help-seeking, were intended to be analyzed via structural equation modeling. However, the sample size for this study had insufficient power for this type of analysis.

Additional Analysis

Because the study's sample had insufficient power for hypothesis testing for hypothesis 7 and hypothesis 8, the central question of the study—regarding sources of support for college students with personal experiences with suicide—was unanswered. Additional analyses of descriptive statistics across individual sources of support and different categories of support are provided below to provide preliminary information about intentions to utilize different sources of support for this population. Tables for the descriptive statistics for additional analysis are provided in Appendix J.

Individual sources of support. First, to assess this sample's intentions to seek support from individual sources of support, the frequency with which participants indicated that they would seek support from different sources was calculated. Participants in this sample were most likely to seek help from a mental health professional (with 75.9% of the sample endorsing some degree of likelihood to seek help from this source), an intimate partner (68.1%), or a psychiatrist (58.4%). Participants in this sample were least likely to seek help from professors (with 83.6% of the sample endorsing that they were slightly unlikely, moderately unlikely, or extremely unlikely to seek help from this source), university staff and organizational/department leaders (83.6%),

classmates (83.1%), and religious leaders (80.2%). For nine out of the 15 individual sources of support (i.e., professor, university staff and organizational/department leaders, classmates, religious leaders, non-immediate family, online chat, sibling, parent, and doctor), greater than half of the sample indicated some degree of unlikelihood to seek help from that source. The frequency of responses for different individual categories of support are summarized in Table J1.

Categories of support. In order to explore the different categories of sources of support for students experiencing suicidal ideation, the 15 individual sources of support from the GHSQ were combined into five different categories (defined in Table J2). Descriptive statistics for each category of support were calculated. In the GHSQ-SI, larger scores indicate a greater likelihood to seek help from that source of support. Scores for each of these categories ranged from 3.000 to 21.000. Scores appeared to be higher in the professional help (M = 13.256, SD = 5.577) and the social relationships (M = 11.440, SD = 4.496) categories, whereas the categories with the lowest mean scores were family support (M = 8.792, SD = 5.361) and organizational sources of support (M = 5.990, SD = 4.092). Descriptive statistics for the different categories of support are summarized in Table J3

CHAPTER IV

DISCUSSION

In this study, 207 students with personal experiences of suicide were surveyed to better understand their help-seeking behaviors by examining barriers and protective factors to help-seeking. Additionally, analysis was done to gather more information about which sources of support are sought when experiencing thoughts of suicide. On the whole, all but one of the original hypotheses were supported, providing evidence for the roles of stigma, social support, and psychological distress in help-seeking behaviors.

Stigma

Within the current sample, results showed that self-stigma and perceived public stigma were positively correlated, which is consistent with previous literature (e.g., Pederson & Paves 2015). The positive relationship between self-stigma and perceived public stigma may be explained by internalization. For example, stigma related to suicide may take the form of social disapproval, shunning, or isolation (Frey et al., 2015). When individuals experience resulting loneliness, shame, and hopelessness associated with perceived public stigma, they may turn these emotions inward and internalize stigma. Together, self-stigma and public stigma also predicted self-concealment in a multiple regression model, accounting for about 25% of the variance in participants' scores on a self-concealment measure. Because of the stigma associated with suicide, people may be more likely to conceal thoughts of suicide to avoid being a burden to others (Burton Denmark et al., 2012) or to address concerns about judged or shamed (Frey et al.,

2015). Thus, individuals may not receive support services if they do not feel comfortable disclosing their thoughts of suicide. The present findings suggest that the way these experiences prevent access to care is by increasing self-concealment, therefore preventing people from sharing their thoughts of suicide with professionals or people who might connect them to professional resources.

Social Support

Social relationships provide an important source of support for people experiencing thoughts of suicide (Hirsch & Barton, 2011). In this study, social support had a negative relationship with psychological distress, indicating that more social support is associated with less psychological distress. This finding is congruent with existing literature (e.g. Drum et al., 2009; Kleinman & Riskind, 2012). Having more sources of social support may reduce individuals' concerns that they are a burden on others, because they can express their concerns to different people. It stands to reason that people who are less afraid of being a burden, may be more likely to receive support for their problems, leading to decreased psychological distress.

Help-Seeking Behaviors

Many of the aforementioned variables (i.e., self-stigma, perceived public stigma, social support, and psychological distress) are related to help-seeking behaviors and may explain how college students at risk for suicide can receive support. Results of the present study indicated that self-stigma predicted a lower likelihood of help-seeking. One reason for this may be attitudes towards help-seeking. Literature suggests that attitudes towards help-seeking is heavily influenced by self-stigma and serve as a predictor of engaging in help-seeking behavior (Topkaya, 2014). Attitudes such as feeling weak and perceiving oneself as weak for utilizing treatment may prevent individuals from seeking treatment (Pederson & Paves, 2014). Results of previous studies have

shown that individuals endorse believing they would be perceived negatively by peers for seeking treatment resources (Pederson & Paves, 2015).

Surprisingly, perceived public stigma was not a significant predictor of likelihood to seek help. This may be because the sample in this study was largely female. In a study assessing perceptions of stigma related to psychological treatment, men were found to experience greater help-seeking stigma than women (Goodwill & Zhou, 2020). Therefore, if women are less likely to perceive stigma related to psychological help, it may not predict likelihood of seeking help. Additionally, among a sample of college students, Eisenberg and colleagues (2009) found that perceived public stigma did not influence students' use of counseling services. More research is needed in order to better understand this particular finding.

Results also indicated a negative relationship between psychological distress and help-seeking intentions. Thus, students who experienced more psychological distress reported that they were less likely to seek help. Many factors, including risk level, solicitude, privacy, feelings of stigma and shame, fear of repercussions, interference, and perceived lack of confidants have been found to contribute to a lower likelihood of engaging in help-seeking behaviors (Burton Denmark et al., 2012). Lack of privacy can be especially relevant for this population considering data was collected during the COVID-19 pandemic. When students were sent home and/or made to live elsewhere due to the COVID-19 pandemic, it is very possible that they no longer had access to the privacy needed to engage in a counseling session. The risk of being overheard while engaging in telehealth services in spaces that are not private and confidential may dissuade students from reaching out, even when experiencing significant levels of distress. Further research is needed to better understand the impact of the COVID-19 pandemic on perceptions of privacy regarding access to therapy.

Encouragingly, social support had a positive relationship with help-seeking intentions in this study. Social support is one of the strongest protective factors against an individual attempting suicide (Kleinman & Riskind, 2012). According to results of the present study, greater social support is associated with greater likelihood of help-seeking for suicidal ideation for students with a suicide history. Results indicate that 57% of the participants endorsed being likely to seek support from a friend when experiencing thoughts of suicide. These results suggest that peer support may be an effective target of intervention on college campuses.

Implications

The results of this study provides a significant amount of information that can offer suggestions for ways institutions of higher education and individuals can approach suicide prevention and intervention. The majority of participants endorsed being "extremely likely" to seek support from one or more of the professional sources (doctor, mental health professional, and psychiatrist) when experiencing suicidal ideation. This finding is consistent with data that show an increase in the utilization of health centers and university counseling centers since the early 2000s (New, 2017) Thus, it is important for counseling centers to have the resources (e.g. funding and staff) to effectively provide services to students in distress.

This study indicates that there is a significant need for individuals and institutions of higher education to engage in stigma reduction strategies. Protest, education, and contact are the three strategies to reduce stigma (Corrigan & Wassel, 2008), and can be implemented on college campuses. Protest aims to bring attention to inaccurate representations of mental illness and address negative attitudes and beliefs about mental health and help-seeking. This is often done through rallies and campaigns advocating for change in policies and to disprove negative representations of mental illness and help-seeking (Corrigan & Wassel, 2008). Strategies meant to replace inaccurate stereotypes with information are typically categorized as an educational

approach to stigma reduction (e.g., flyers, panel discussions; Corrigan & Gelb, 2006). Contact based strategies to reducing stigma include interpersonal interactions between the public and a member of the stigmatized group (Corrigan & Gelb, 2006). University administrators and counseling centers can help reduce stigma by supporting student led-campaigns, increase messaging around campus encouraging students to feel less ashamed about using mental health resources, and providing opportunities for students with experiences of seeking professional help to share their stories with those considering whether they should engage in help-seeking services.

University and counseling center administration may also reduce stigma and increase service access by offering campus-wide trainings so faculty, staff, and students know how to respond when approached by someone experiencing thoughts of suicide. As it has been shown that peer support can be effective at increasing help-seeking behaviors, resources should be allocated to programming that specifically involves other students. For example, offering the Question, Persuade, Respond (QPR) Gatekeeper training is a means to educate participants, or gatekeepers, about the warning signs of suicide, questions to ask if they suspect someone is in crisis, where to refer someone who is at risk of engaging in suicide behaviors, and how to deescalate and support someone in crisis (Tsong et al., 2018). Additionally, results of the current study indicate that offering such trainings to parents and caregivers could greatly increase the likelihood that they will be equipped to respond should their student express being in distress and/or display signs of experiencing distress.

Limitations

As mentioned previously, this data was collected at the beginning of the COVID-19 pandemic. COVID-19 made it difficult to recruit participants and collect responses. For example, fliers could not be distributed in person, a social media platform was being used to disseminate

information about the pandemic, and many universities would not send outside research requests for studies unrelated to the pandemic.

The demographics of this sample was relatively homogeneous, limiting the generalizability of the findings. Specifically, the study sample only included students who responded to the e-mail invitation and/or had access to Oklahoma State University SONA's system, limiting generalizability in this way as well. Furthermore, only about half of the sample attended a public university. Therefore, these results should be interpreted with caution.

Additionally, self-report measures and the use of a single-informant introduces the risk of potential bias due to objective measurement. Because of a computer entry error, data about attitudes towards help-seeking could not be collected. Considering the close relationship between attitudes towards help-seeking and suicide, conducting analyses on that data might have been useful in the present study. Finally, while this study did inquire about information on participants' individual experiences with help-seeking by asking if and where they had sought help for having experiences of suicide, the study does not include questions for participants to indicate whether they had attempted suicide and/or were experiencing thoughts of suicide before or while enrolled as an undergraduate student.

Future Directions

It would be beneficial to gain additional information about specific help-seeking behaviors, such as when students sought counseling for their experiences of suicide (e.g. year in college and/or before or after). This would have provided a deeper understanding of help-seeking behaviors among students while attending institutions of higher education. Information containing this specific data would allow for suicide intervention and prevention outreach and advocacy efforts to be even more specifically tailored to undergraduate students experiencing suicidal ideation.

More information about an individual's personal history of suicide would also be helpful to examine further. Research could aim to better understand a student's decision making process with regard to the reason they chose to seek help at a specific time. It may also be beneficial to investigate the reasons individuals decide to confide in a specific individual and/or why they might conceal information from specific individuals, as well as what types of information are shared . Using qualitative findings to gather participant's personal stories and experiences with help-seeking can help mental health providers more effectively assist in recognizing triggers and creating safety plans with students who have a history of suicide. Qualitative research would also provide the opportunity to gain a better understanding of students' personal experiences when professional support was sought while experiencing thoughts of suicide. This information can provide counselors and counseling centers with strategies and ways to clinically approaches suicide prevention and intervention when working with students experiencing thoughts of suicide.

With the sample of this study being relatively homogenous in regards to race, ethnicity, and gender, it would be beneficial examine the role barriers and protective factors have on help-seeking for students with marginalized identities. Additionally, understanding which sources of support marginalized students and students with historically lower rates of help-seeking (e.g. international students, men, and first-generation students) utilize when in distress and experiencing thoughts of suicide will allow campus communities, counseling centers, and individuals to implement life-saving strategies that are inclusive, as well as useful and relevant to as many students on campuses across the United States as possible.

REFERENCES

American College Health Association (2015). http://www.achancha.org/doc/ACHA-NCHAIIReferenceGroup_ExecutiveSummery_Spring2010.pdg

American College Health Association (2012). American College Health Association. National College Assessment: Reference group executive summary fall 2011. Hanover, MD.

Angermeyer, M. C., Matschinger, H., & Riedel-Heller, S. G. (2001). What to do about mental disorder help-seeking recommendations of the lay public. *Journal of Psychiatry, 103*, 220–225.

Arria, A. M., Winick, E. R., Garnier-Dykstra, L. M., Vincent, K. B., Caldeira, K. M., Wilcox, H. C., & O'Grady, K. E. (2011). Help seeking and mental health service utilization among college students with a history of suicide ideation. *Journal of Psychiatric Services, 62*, 1510-1513.

Aubrey, R. F. (1977). Historical development of guidance and counseling and implications for the future. *The Personnel and Guidance Journal, 55*, 288-295.

Ayalon, L., & Young, M.A. (2005). Racial group differences in help-seeking behaviors. *The Journal of Social Psychology, 145*, 391-403.

Barker, G., Olukoya, A., & Aggleton, P. (2005). Young people, social support, and help-seeking. *International Journal of Adolescent Medical Health, 17*, 315-355.

Barreira, P., & Snider, M. (2010). History of college counseling and mental health services and role of the community mental health model. *Mental Health Care in the College Community*, 21-31.

Biddle, L., Gunnell, D., Sharp, D., & Donovan, J. L. (2004). Factors influencing help seeking in mentally distressed young adults: a cross-sectional survey. *British Journal of General Practice, 54*, 248-253.

Brinson, J. A., & Kottler, J. A. (1995). Minorities' underutilization of counseling centers' mental health services: A case for outreach and consultation. *Journal of Mental Health Counseling, 17,* 371-385.

Boldero, J., & Fallon, B. (1995). Adolescent help-seeking: What do they get help for and from whom? *Journal of Adolescence, 18*, 193–209.

Burton Denmark, A., Drum, D. J., Brownson, C., & Smith, S. E. (2009). New data on the nature of suicidal crises in college students: Shifting the paradigm. *Professional Psychology: Research and Practice, 40*, 213–222.

Burton Denmark, A. B., Hess, E., & Becker, M. S. (2012). College students' reasons for concealing suicidal ideation. *Journal of College Student Psychotherapy, 26*, 83-98.

Busch, K. A., Fawcett, J., & Jacobs, D. G. (2003). Clinical correlates of inpatient suicide. *Journal of Clinical Psychiatry, 64,* 14–19.

Catanzarite, J. A., & Robinson, M. D. (2013). Peer education in campus suicide prevention. *New Directions for Student Services, 2013*, 43-53.

Cellucci, T., Krogh, J., & Vik, P. (2010). Help seeking for alcohol problems in a college population. *The Journal of General Psychology, 4*, 421-433.

Centers for Disease Control and Prevention (CDC) (2018). Preventing Suicide. Retrieved https://www.cdc.gov/violenceprevention/pdf/suicide-factsheet.pdf

Centers for Disease Control and Prevention (CDC) (2020). Preventing Suicide. Retrieved https://www.cdc.gov/violenceprevention/pdf/suicide-factsheet.pdf

Cepeda-Benito, A., & Short, P. (1998). Self-concealment, avoidance of psychological services, and perceived likelihood of seeking professional help. *Journal of Counseling Psychology, 45*, 58-64.

Chang, T., & Chang, R. (2011). Counseling and the Internet: Asian American and Asian international college students' attitudes towards seeking online professional psychological help. *Journal of College Counseling, 7*, 140-149.

Cook, R. D. (1977). Detection of influential observation in linear regression. *Technometrics, 19*, 15-18.

Corrigan, P., & Gelb, B. (2006). Three programs that use mass approaches to challenge the stigma of mental illness. *Psychiatric Services, 57*, 393-398.

Corrigan, P. W., & Wassel, A. (2008). Understanding and influencing the stigma of mental illness. Journal of Psychosocial Nursing and Mental Health Services, *45*, 42-48.

Corrigan, P. W., & Watson, A. C. (2002). The paradox of self-stigma and mental illness. *Clinical Psychology: Science and Practice, 9*, 35-53.

Council for the Advancement of Standards in Higher Education. (1999). *CAS standards for leadership programs.* Washington, D.C: Author.

Cramer, K. M. (1999). Psychological antecedents to help-seeking behavior: A reanalysis using path modeling structures. Journal of Counseling Psychology, *46, 381-387*.

Cramer, R. J., Judah, M. R., Badger, N. L., Holley, A. M., Judd, S., Peterson, M., & Foss, J. J. (2020). Suicide on college campuses: A public health framework and case illustration. *Journal of American college health*, 1-8.

Cutrona, C. E., & Russell, D. (1987). The provisions of social relationships and adaptation to stress. AI Press. Greenwhich, CT.

De Girolamo, G., Dagani, J., Purcell, R., Cocchi, A., & McGorry, P. D. (2012). Age of onset of mental disorders and use of mental health services: needs, opportunities and obstacles. *Epidemiology and Psychiatric Sciences, 21*, 47.

Deane F.P., Wilson., C.J., & Ciarrochi, J. (2010). Suicidal ideation and help-negation: Not just hopelessness or prior help. *Journal of Youth and Adolescents, 39*, 291-305.

Derogatis, L. R., Lipman, R. S., Rickels, K., Uhlenhuth, E. H., & Covi, L. (1974). The Hopkins Symptom Checklist (HSCL): A self-report symptom inventory. *Behavioral science, 19*(1), 1-15.

Digest of Education Statistics. (2013). College Enrollment and Work Activity of 2002 High School Graduates. Retrieved from www.bls.gov/news.release/pdf/hsgec.pdf.

Drum, D. J., Brownson, C., Burton Denmark, A., & Smith, S. E. (2009). New data on the nature of suicidal crises in college students: Shifting the paradigm. *Professional Psychology: Research and Practice, 40*, 213.

Edgell, S. E., & Noon. S. M. (1984). Effect of violation of normality on the t test of the correlation coefficient. *Psychological Bulletin, 95*, 576-583.

Elder, M. (2007). A reason for optimism in rural mental health care: Emerging solutions and models of service delivery. *Clinical Psychology: Science and Practice, 14*, 299- 303.

Field, A. (2009). Discovering Statistics using SPSS, third edition. Sage Publications.

Filkowski, M. B. (2008). Leadership for campus mental wellness (Doctoral dissertation).

Fischer, E. H., & Turner, J. L. (1970). Development and research utility of an attitude scale. *Journal of Consulting and Clinical Psychology, 35,* 79-90.

Forest, L. (1989). Guiding, supporting, and advising students: The counselor role. (pp. 265-283) San Francisco: Jossey-Bass.

Friedlander, A., Nazem, S., Fiske, Nadroff, M.A., & Smith, M.D. (2012). Self-concealment and suicidal behaviors. *Suicide and Life-Threatening Behavior, 42,* 332-340.

Freedenthal, S. & Stiffman, A.R. (2007). "They might think I was crazy:" Young American Indians' reasons for not seeking help when suicidal. *Journal of Adolescent Research, 22,* 58-77

Gallagher, R.P. (2009). National survey of counseling center directors. Alexandria, VA: International Association of Counseling Services Inc.

Gallagher, R.P. (2014). *National Survey of College Counseling Directors 2014.* University of Pittsburgh, PA: International Association of Counseling Services, Inc.

Golberstein, E., Eisenberg, D., & Gollust, S.E. (2009). Perceived stigma and helps-seeking behavior: Longitudinal evidence from the healthy minds study. *Psychiatry Services, 3,* 1254-1256.

Goodwill, J. R., & Zhou, S. (2020). Association between perceived public stigma and suicidal behaviors among college students of color in the U.S. *Journal of Affective Disorders, 262,* 1-7.

Gottesfeld, H. (1995). Community context and the underutilization of mental health services by

minority patients. *Psychological Reports, 76*, 207-210.

Green, D. E., Walkey, F. H., McCormick, I. A., & Taylor, A. J. W. (1988). Development and evaluation for a 21-item version of the Hopkins Symptom Checklist with New Zealand and United States respondents. *Australian Journal of Psychology, 40*, 61–70.

Gruittadaro, D., & Crudo, D. (2012). College Students Speak: A survey report on mental health. The National Alliance on Mental Illness (NAMI).

Gsell, M. (2010). Individual Contributions to Stigma and Attitudes Toward Help-Seeking among Rural Emerging Adult College Students. (Doctoral Dissertation).

Gulliver A., Griffiths K.M., & Christensen H. (2010). Perceived barriers and facilitators to mental health help-seeking in young people: A systematic review. *BMC Psychiatry, 0*, 113.

Hewstone, M., Rubin, M., & Willis, H. (2002). Intergroup bias. *Annual Review of Psychology, 53*, 575-604.

Hirsch, J. K., & Barton, A. L. (2011). Positive social support, negative social exchanges, and suicidal behavior in college students. *Journal of American College Health, 59*, 393-398.

Hodges, S. (2001). University counseling centers at the Twenty-First Century: Looking forward, looking back. *Journal of College Counseling, 4*, 161-173.

Joiner, T. E. (2005). Why People Die by Suicide. Cambridge, MA: Harvard University Press.

Kawamura, K.Y. & Frost, R.O. (2004). Self-concealment as a mediator in relationship between perfectionism and psychological distress. *Cognitive Therapy and Research, 28*, 183-191.

Kelly, A. E., & Achter, J. A. (1995). Self-concealment and attitudes toward counseling in university students. *Journal of Counseling Psychology, 42*, 40-46.

Khawaja, N., & Dempsey, J. (2007). Psychological distress in international university students: An Australian study. *Australian Journal of Guidance and Counselling, 17*, 13-27.

Kisch, J., Leino, E. V., & Silverman, M. M. (2005). Aspects of suicidal behavior, depression, and treatment in college students: Results from the Spring 2000 National College Health Assessment Survey. *Suicide and Life-Threatening Behavior, 35*, 3-13.

Kleinman, E. M., Liu, R. T., & Riskind, J. H. (2014). Integrating the interpersonal psychological theory of suicide the depression/suicidal ideation relationship: A short-term prospective study. *Journal of Behavior Therapy, 45*, 212-222.

Kleinman, E. M., & Riskind, J. H. (2012). Utilized social support and self-esteem mediate the relationship between perceived social support and suicide ideation: A test of a Multiple Mediator Model. *The Journal of Crisis Intervention and Suicide Prevention, 3*, 1-9.

Kraft, D. P. (2011). One hundred years of college mental health. *Journal of American College Health, 59*, 477-481.

Kushner, M. G., & Sher, K. J. (1991). The relation of treatment fearfulness and psychological service utilization: An overview. *Professional Psychology: Research and Practice*, *22*, 196.

LaFollette, A.M. (2009). The evolution of university counseling: From educational guidance to multicultural competence, severe mental illnesses and crisis planning. *Graduate Journal of Counseling Psychology, 11*.

Lane, J.D. & Wegner, D.M. (1995). The cognitive consequences of secrecy. *Journal of Personality and Social Psychology, 69*, 237–253.

Larson, D. G., & Chastain, R. L. (1990). Self-concealment: Conceptualization, measurement, and

health implications. *Journal of Social & Clinical Psychology, 9*, 439-455.

Leech, N. L. (2007). Cramer's model of willingness to seek counseling: A structural equation model for counseling students.

Leaf, P. J., & Bruce, M. L. (1987). Gender differences in the use of mental-health-related services: A re-examination. *Journal of Health and Social Behavior, 28*, 171-183.

Lee, R. (2005). Coping with intergenerational family conflict among Asian American college students. *Journal of Counseling Psychology, 52*, 389-399.

Masuda, A., & Boone, M. S. (2011). Mental health stigma, self-concealment, and help-seeking attitudes among Asian American and European American college students with no help-seeking experience. *International Journal for the Advancement of Counselling, 33*, 266–279.

Masuda, A., Anderson, P. L., & Edmonds, J. (2012). Help-seeking attitudes, mental health stigma, and self-concealment among African American college students. *Journal of Black Studies, 43*, 773–786.

Michelmore, L., & Hindley, P. (2012). Help-seeking for suicidal thoughts and self-harm in young people: A systematic review. *Suicide Life Threatening Behavior, 42*, 507-524.

Mendoza, H., Masuda, A., & Swartout, K. M. (2015). Mental health stigma and self-concealment as predictors of help-seeking attitudes among Latina/o college students in the United States. *International Journal for the Advancement of Counselling, 37*, 207-222.

Miranda, R., & Nolen-Hoeksema, S. (2007). Brooding and reflection: Rumination predicts suicidal at 1-year follow-up in a community sample. *Behaviour Research and Therapy, 45*, 3088–3095.

Mistler, B., Reetz., D. R., Krylowicz, B., & Barr, V. (2013). *The association for university and college counseling center director's annual survey.*

Morgan, M., Ness, T., & Robinson, M. (2003). Students' help-seeking behaviors by gender, racial background, and student status. *Canadian Journal of Counseling, 37,* 151-166.

Monteith, L. L., Holliday, R., Brown, T. L., Brenner, L. A., & Mohatt, N. V. (2020). Preventing suicide in rural communities during the COVID-19 pandemic. *The Journal of Rural Health*.

Mosher, C.E., Prelow, H.M., Chen, W.W., & Yackel, M.E. (2006) Coping and social support as mediators of the relation of optimism to depressive symptoms among Black college students. *Journal of Black Psychology, 32,* 72-86.

New, J. (2017). Colleges struggle to provide ongoing treatment as demands for mental health services increases. Retrieved from https://www.insidehighered.com/news/2017/01/13/colleges-struggle-provide-ongoing-treatment-demands-mental-health-services-increases

Overton, S. L., & Medina, S. L. (2008). The stigma of mental illness. *Journal of Counseling and Development, 86,* 143-151.

Pagura, J., Fotti, S., & Katz, L.Y. (2009). Help seeking and perceived need for mental health care among individuals in Canada with suicidal behaviors. *Psychiatric Services, 60,* 943-949.

Pedersen, F.R., & Paves A.P. (2015). Comparing perceived public stigma and personal stigma of mental health treatment seeking in a young adult sample. *Psychiatry Results, 219,* 143-150.

Pescosolido B.A., Fettes D.L., Martin J.K., Monahan J., McLeod J.D. (2007). Perceived

dangerousness of children with mental health problems and support for coerced treatment. *Psychiatric Services, 58*, 1-7.

Prince, J. P. (2015). University student counseling and mental health in the United States: trends and challenges. *Mental Health & Prevention, 3*, 5-10.

Reyender, A. J., Kerkhof, F. M., Molenberghs, G., & Van Audenhove, C. (2017). Attitudes and stigma in relation to help-seeking intentions for psychological problems in low and high suicide rate regions. *Social Psychiatry and Psychiatric Epidemiology, 49*, 231-239.

Rickwood, D. J., & Braithwaite, V. A. (1994). Social-psychological factors affecting help-seeking for emotional problems. *Social Science & Medicine, 39*, 563-572.

Rickwood, D., Deane, F. P., Wilson, C. J., & Ciarrochi, J. (2007). Young people's help-seeking for mental health problems. *Australian e-Journal for the Advancement of Mental Health, 4*, 239-256.

Rossow, I., & Wichstrøm, L. (2010). Receipt of help after deliberate self-harm among adolescents: changes over an eight-year period. *Psychiatric Services, 61*, 783-787.

Ryan, M.L., Shochet, I.M., & Stallman, H.M. (2010). Universal online interventions might engage psychologically distressed university students who are unlikely to seek formal help. *Advances in Mental Health, 9*, 73 – 83.

Sari, N., de Castro, S., Newman, F. L., & Mills, G. (2008). Should we invest in suicide prevention programs? *The Journal of Socio-Economics, 37*, 262-275.

Schomerus, G., Matschinger, H., & Angermeyer, M.C. (2009). The stigma of psychiatric treatment and help-seeking intentions for depression. *European Archive of Psychiatry Clinical Neuroscience, 259*, 298-306.

Sheehan, A. E., Walsh, R. F., & Liu, R. T. (2018). Racial and ethnic differences in mental health service utilization in suicidal adults: A nationally representative study. *Journal of psychiatric research, 107*, 114-119.

Stewart, N. A. (2015). *Predictive factors for mental health help seeking and academic help seeking in emerging adults* (Doctoral dissertation, Fordham University).

Stone, G. L., & Archer, J. (1990). College and university counseling centers in the 1990s: Challenges and limits. *The Counseling Psychologist, 18*, 539-607.

Stuart, H., & Arboleda-Florez, J. (2001). Community attitudes toward people with schizophrenia. *Canadian Journal of Psychiatry, 46*, 245-252.

Surapaneni, S., Larson, L. M., Heath, P. J., & Vogel, D. L. (2019). The interaction of stigma and distress: Predicting the help-seeking attitudes of United States students. *British Journal of Guidance & Counselling, 47*, 603-608.

Sweeney, T. J. (2001). Historical Origins and Philosophical Roots. The Handbook of Counseling (pp. 3-24). California: Sage Publications.

Tinsley, H. E., de St Aubin, T. M., & Brown, M. T. (1982). College students' help-seeking preferences. *Journal of Counseling Psychology, 29*, 523.

Topkaya, N. (2014). Gender, self-stigma, and public stigma in predicting attitudes toward psychological help-seeking. *Educational Sciences: Theory and Practice, 14*, 480-487.

Tsong, Y., Young, J. T., Killer, J. D., Takemoto, M. A., & Compliment, B. (2019). Suicide prevention program on a diverse college campus: Examining the effectiveness of a peer-to-peer model. *Journal of College Student Psychotherapy, 33*, 131-144.

Tucker, J. R., Hammer, J. H., Vogel, D. L., Bitman, R. L., Wade, N. G., & Maier, E. J. (2013).

Disentangling self-stigma: Are mental illness and help-seeking self-stigmas different? *Journal of Counseling Psychology, 60*, 520.

Vogel, D. L., Heimerdinger-Edwards, S. R., Hammer, J. H., & Hubbard, A. (2011). "Boys don't cry": Examination of the links between endorsement of masculine norms, self-stigma, and help-seeking attitudes for men from diverse backgrounds. *Journal of Counseling Psychology, 58,* 368-382.

Vogel, D. L., Wade, N. G., & Ascheman, P. L. (2009). Measuring perception of stigmatization by others for seeking psychological help: Reliability and validity of a new stigma scale with college students. *Journal of Counseling Psychology, 56,* 301-308.

Vogel, D. L., & Wester, S. R. (2003). To seek help or not to seek help: The risks of self-disclosure. *Journal of Counseling Psychology, 50,* 351-361.

Vogel, D. L.,Wester, S. R.,Wei, M., & Boysen, G. A. (2006). The role of outcome expectations and attitudes on decisions to seek professional help. *Journal of Counseling Psychology, 52,* 459-470.

Wagenfeld, M. (2003) A snapshot of rural and frontier America. In B.H. Stamm (Ed.), Rural behavioral health care: An interdisciplinary guide (pp. 33-40). Washington, D.C.: American Psychological Association.

Waern, M., Beskow, J., Runeson, B., & Skoog, I. (1999). Suicidal feelings in the last year of life in elderly people who commit suicide. *The Lancet, 354*, 917-918.

Watkins, D. C., Hunt, J. B., & Eisenberg, D. (2011). Increased demand for mental health services on college campuses: Perspectives from administrators. *Qualitative Social Work: Research and Practice, 11*, 319-337.

Weckwerth, A.C, & Flynn, D.M. (2006). Effect of sex on perceived support and burnout in university students. *College Student Journal, 40,* 237-245.

Westefeld, J.S., Homaifar, B., Spotts., Furr, S., Range, L., & Werth, J.L. (2005). Perceptions concerning college student suicide: Data from four universities. *Suicide Life Threat Behaviour, 35,* 640-645.

Wilson, C. J., Deane, F. P., Ciarrochi, J., & Rickwood, D. General Help Seeking Questionnaire. *Canadian Journal of Counselling*.

Wolitzky-Taylor, K., LeBeau, R. T., Perez, M., Gong-Guy, E., & Fong, T. (2020). Suicide prevention on college campuses: what works and what are the existing gaps? A systematic review and meta-analysis. *Journal of American college health, 68,* 419-429.

Yakunina E.S., Rogers, J.R., Waehler, C.A., & Werth, J.L. (2010). College students' intentions to seek help for suicidal ideation: Accounting for the help-negation effect. *Suicide and Life-Threatening Behavior, 40,* 438-450.

Zivin, K., Eisenberg, D., Gollust, S. E., & Golberstein, E. (2009). Persistence of mental health problems and needs in a college student population. *Journal of affective disorders, 117,* 180-185.

APPENDICES

APPENDIX A:

EXTENDED REVIEW OF THE LITERATURE

In the United States, more than 47,500 lives were lost to suicide in 2019 (Center for Disease Control [CDC], 2020). In 2019, 12 million American adults seriously thought about suicide, 3.5 million planned an attempt, and 1.4 million attempted (CDC, 2020). Students are attending college and university with alarmingly high rates of significant mental health concerns (e.g., depression and suicidal ideation) and more severe diagnoses (e.g., post-traumatic stress disorder and schizophrenia) than in previous years (Cramer et al., 2020; Drum et al., 2009; Golberstein et al., 2009). The risk of experiencing significant psychological distress is increased for individuals between the ages of 18 and 25, corresponding with the age range of a "traditional college student" (i.e., 18-23; De Girolamo, et al., 2012). Student experiencing mental illness in college often have lower grade point averages and are at greater risk for dropout (Golberstein et al., 2009). In a survey, the National Alliance of Mental Health (NAMI; 2012) found that 64% of students identified a mental health concern as their primary reason for withdrawing from their university. Common stressors experienced by students in college include new financial, academic, and personal responsibilities, development of friendship and intimate relationships, identity development and exploration, and social pressures and access to substances (De Girolamo et al., 2012). Even with higher rates of significant mental health concerns on college campuses, mental

health resources are underutilized (Sheehan et al., 2017). Knowing that students are choosing not to seeking services, even when considering suicide, is both troubling and alarming.

Suicide is a concern that plagues colleges and university campuses across the United States and around the world (Drum et al., 2009; Sheehan et al., 2017). The American College Health Association (2012) found in a national survey that one in ten college students endorsed seriously considering suicide in the past twelve months, and one in twelve made a suicide plan. In a large study involving seventy college campuses, eight percent of undergraduate students reported attempting suicide at least once in their lifetime (Drum et al., 2009). Over half of these college student respondents who attempted or seriously considered attempting suicide had not sought any treatment. A possible reason for the lack of engagement in help seeking behaviors could be contributed to a shortage of desired treatment options.

There are numerous components that can affect an individual's decision to accept or seek professional counseling, such as their own perceptions and beliefs about treatment, support received from friends and family, and personal and perceived public stigma (Fischer & Turner, 1970; Vogel et al., 2009). Having a deeper understanding of the facilitators and barriers to help-seeking is crucial. Knowing where students in distress seek support can help tailor mental health prevention and intervention efforts. Previously, researchers only looked at informal (paraprofessional) and formal (professional) help-seeking sources (Boldero & Fallon, 1995; Leaf & Bruce, 1987; Masuda et al., 2012; Vogel et al., 2009).

The History of College Counseling Centers

The first student health service is credited to Amherst College in 1861, the formal introduction of mental health resources on college campuses was in the early 1900s (Barreira & Snider, 2010). Since then, university counseling centers have been on a never-ending quest to keep up with new demands and expectations, while continuously adapting the services and treatments they offer to

meet the needs of students. In the beginning, centers were structured in a way that required faculty members, professors, and administrative staff to step out of their primary roles and serve as mentors and guidance counselors (Filkowski, 2008). In 1910, Princeton University became the first school to implement mental health services delivered by professional mental health providers on campus (Kraft, 2011). However, Princeton's mental health services were only available for students facing concerns with "personality development," thus limiting the utilization of services for students with other forms of concerns and distress. While more universities began to offer mental health services, very few were accessible to the general student body.

A transformation in accessibility to mental health resources took place after World War II. Students, many of whom were veterans, began enrolling in campuses at an increasingly high rate (Hodges, 2001). Counseling services became more available on college campuses when the Veterans Administration (VA) provided veterans with financial assistance to enroll in higher education that (Forest, 1989). Federal funds provided assistance to veterans with vocational planning, transitioning back to civilian life, and adjustment to college. A significant amount of these funds were used to establish counseling centers on college campuses with a large number of student veterans (Forest, 1989). This development of services on college campuses provided students opportunities to obtain services regardless of veteran status or psychopathology (Aubrey, 1977). In response to the development of services and their increased accessibility, administrative staff, faculty members, and professors no longer provided mental health services; counseling centers were staffed by mental health professionals and any services were provided by trained counselors (Hodges, 2001).

The Council for Advancement of Standards in Higher Education (CAS) (1999) defined the mission of university and college counseling center as, "assisting students to define and accomplish personal, academic, and career goals by providing developmental, preventative, and remedial counseling" (p. 67). While the structure, focus, and role of counseling centers are

different at every university, the presenting concerns remain somewhat consist at colleges across the nation (Hodges, 2011). In the 1930s and 40s, mental health resources focused on assisting with life changes and transitions such as leaving home, academic success, and employment (LaFollette, 2009; Sweeny, 2001;). From 1945 – 1955, counseling centers recognized a trend in students' needs for vocational guidance (Stone & Archer, 1990). Between the years of 1955 and 1970, counseling centers expanded significantly and began providing more individual counseling to students, consultation roles began to develop, and outreach became an important function of many centers (Stone & Archer, 1990). From 1970-1982 counseling centers spent much of their efforts devoted to widely promoting services and making themselves known on campus (Stone & Archer, 1990). From the early 1980s and into the 1990s, campuses and counseling centers were having more discussions about child abuse, rape, alcoholism, and eating disorders (Stone & Archer, 1990). In the 1990s and early 2000s, many students' presenting concerns were related to substance use and academic pressures (Stone & Archer, 1990).

College Counseling Centers in the Present Day

As decades have passed, student demographics are becoming more diverse. More individuals are pursuing secondary education (Digest of Education Statistics, 2013), and nontraditionally aged students, students with varying racial, ethnic, gender, sexual orientation identities, and students with disabilities are attending college at an increasingly significant rate (Paul, 2000). Students are presenting more severe psychological distress and symptomology. Examples of these concerns include, gender dysphoria, concerns regarding sexual orientation, fear of the police and other daily struggles among students of color, and high levels of anxiety surrounding apprehension of possible tragedies such as terrorist attacks and mass school shootings (Kraft, 2011). Researchers have inferred that most of the students currently seeking services on their college campus are part of the 'millennial' generation (Watkins, et al.,2011). With this rise in the

utilization of services brings a number of new concerns to administration and counseling center staff.

An American College Health Association survey (2009) included information from 302 university counseling centers, and represented 2.6 million students. According to the study, 10.4% of students enrolled in college have attended counseling in the past year. Zivin and colleagues (2009) collected data from questionnaires self-administered between 1999 and 2005 in order to examine the rate counseling center services were being utilized. The authors reported that three-fourths of the students reporting clinically significant levels of distress were not receiving counseling (Zivin et al., 2009). While many college students do not seek professional assistance, there is still a considerable amount of students who do take advantage of the mental health resources available to them. In fact, researchers have discovered that since the early 2000s, there has been an increase in the utilization of campus counseling and mental health services (New, 2017). Another reason for an increase in demand is the increase in the severity of psychological concerns students are presenting to the counseling center with. A survey conducted by the Mitzler and colleagues (2012) found that 96% of college counseling center directors believed students were presenting with more significant psychological problems than in previous years (Mistler et al., 2012). Because of this, there is a higher demand for mental health services (Gallagher, 2014).

Suicide on College Campuses

Among college and university students, suicide is purported to be the second leading cause of death (Centers for Disease Control and Prevention (CDC), 2018; Suicide Prevention Resource Center, 2004), with trends rising on college campuses (Cramer et al., 2020). Literature suggests that persons in the age group attending college are facing a unique set of transitional risk factors (Hirsch & Barton, 2012). Among these unique factors, many college students face changes such as disruption of social support and separation from traditional support networks, changes in roles

and responsibilities, balancing academic demands with a new social environment, career indecision and new financial pressures (Hirsch & Barton, 2012).

Many of these lead to an increase in engaging in thoughts of suicide and suicide behaviors. According to information gathered from students using counseling services between the years of 2010 to 2018, there have been significant increases in rate of lifetime suicide attempt plans (24.0% to 35.8%) and lifetime suicide attempts (8.0 to 10.3%). Moreover, mental health providers are reporting that 1 in 10 students are endorsing suicide as a presenting concern when seeking counseling services (Cramer et al., 2020). According to Wolitzky-Taylor and colleagues (2019), 10% of undergraduate students across the country reported seriously considering attempting suicide, 3.0% planned a suicide attempt, and 1.3% of students attempted suicide.

Many of these lead to an increase in engaging in thoughts of suicide and suicide behaviors. According to information gathered from students using counseling services between the years of 2010 to 2018, there have been significant increases in rate of lifetime suicide attempt plans (24.0% to 35.8%) and lifetime suicide attempts (8.0 to 10.3%). Moreover, mental health providers are reporting that 1 in 10 students are endorsing suicide as a presenting concern when seeking counseling services (Cramer et al., 2020). According to Wolitzky-Taylor and colleagues (2019), 10% of undergraduate students across the country reported seriously considering attempting suicide, 3.0% planned a suicide attempt, and 1.3% of students attempted suicide.

More recently, the American College Health Association (2015) found that one in ten college students endorsed seriously considering suicide in the past twelve months, and one in twelve students planned how they would die by suicide. In a study of over 1,800 students across four different universities, Westefeld and colleagues (2005) found that 24% of college students seriously considered suicide, and five percent had attempted while enrolled in college. Participants in Drum and colleagues' (2009) study included a sample of 26, 451 undergraduate

students from seventy U. S. colleges and universities. Among the group of participants, 47% endorsed experiencing suicidal ideation three or more times while enrolled in college, 18% endorsed seriously considering attempting suicide, and 8% reported attempting suicide at least once. Of the participants in Drum and colleagues (2009) study, 46% did not disclose their experiences to anyone. Two-thirds of the students who disclosed experiencing suicidal thoughts chose to confide in their romantic partner, a roommate, or friend (Drum et al., 2009).

Historically, help-seeking rates among college students with suicidal ideation has been historically low (Kisch et al., 2005). Eighty percent of college students who die by suicide had never engaged in any counseling resources (Gallagher, 2004; Kisch et al., 2005). However, a recent review indicated a significant increase in students seeking mental health services and severity of mental health concerns (Prince, 2015). However, barriers prevent students from utilizing available resources when in distress. A survey of nearly 9,000 college students reported that 51.5% of participants with suicidal ideation received treatment in the past year, with only 31.6% currently receiving treatment (Burton Denmark, 2012). Participants of this study were also provided a list of barriers to treatment, and asked to endorse which, if any, applied to them. Some of the barriers identified were: doubts their symptoms warranted professional help, stigma, concerns of privacy, and the belief that their social network can help them cope with their distress. Participants who reported utilizing mental health treatment were asked what prompted them to do so, and 89% indicated that others motivated them to seek treatment.

Having information that sheds light on students' perspectives of their experiences and help-seeking decisions during time of suicidal crisis can inform how to structure prevention strategies, while increasing resources and opportunities to support students seriously contemplating suicide or engaging in suicide behaviors (Burton Denmark et al., 2009). Literature suggests that young people have been more likely to confide in informal sources (e.g. friends and family) than professional helpers (Burton Denmark et al., 2009). While questions still remain about where

individuals contemplating suicide confide in, it is clear that having sources of support is a significant factor in suicide prevention and intervention.

Sources of Support

Ideally, students in higher education have someone to confide in and somewhere to go if in crisis. Sources of support can range from formal and professional sources to informal and paraprofessional resources. Sources of support within a university community can include mental health professionals, classmates, athletic coaches, directors of student organizations, peers made through university related experiences, academic advisor, and residence hall coordinators. Educators and individuals interacting with college students on a regular basis are typically in the best position to first to notice suicidal behaviors (Sar et ali, 2008), particularly because academic problems were rated as having a large effect on suicidal ideation (Burton Denmark et al., 2009) There is a particularly unique opportunity for individuals working within the university community to serve as a source of support, but it is not the only avenue students can utilize help-seeking resources.

Examples of sources of support not affiliated with the university community can include religious clergy, family members, Internet resources, and friendships established prior to or outside of college. Regardless of who the source of support is research literature on the delivery of mental health services states that an adolescent's decision to confide in a source of support is influenced by the help seekers perception of whether the identified source of support can respond to their needs effectively and without judgment (Sullivan, 2002). It is important to note that despite where the source of support was established, the likelihood of whether a student discloses their distress largely depends on the beliefs, traditions, and values of individual student's cultural groups and their various identities (Ayalon & Young, 2005), as well as the intensity of the distress they are experiencing (Ryan et al., 2010).

College students with suicidal ideation are reported to have the lowest intentions of seeking formal or informal sources of support than non-college students (Kisch et al., 2005; Pagura et al., 2009). Arria and colleagues (2011) assessed whether 158 college students with a lifetime history of suicide ideation sought formal or informal resources. Formal resources included health professionals, counselors, campus-or community-based health and counseling centers, hospitals or other facilities, law enforcement officials, support groups, rehabilitation clinics, or hotlines. Informal resources included friends, family members, significant others, other trusted adults, clergy, Internet research, self-help books, and prayer. They found that participants accessed a wide range of informal and formal sources, including family (65%), friends (54%), psychiatrists (38%), and psychologists (33%). Common informal supports mentioned were significant others (23%), trusted adults (13%), self-help groups (6%), and clergy (4%).

Informal networks are sought after at a higher rate than formal networks (Biddle et al., 2004; Freedenthal & Stiffman, 2007), and young people with a history of suicidal ideation were more likely to seek help from their peers than any other sources (Biddle et al., 2004; Rossow & Wichstrom, 2010). Historically, counselors, instructors, academic advisors, and family members were sought for assistance with vocational and educational concerns (Tinsley et al., 1982). Among younger college students and students living at home, family is often consulted first by the person in distress and found to play a significant role in connecting individuals to professional resources (Rickwood et al., 2007). Regardless of who the identified source of support is, having social support in general can be helpful in decreasing distress and preventing suicide (Kleinman & Riskind, 2012).

Social Support

Social support can be understood as the general availability of friends and family members available to provide psychological and material resources related to psychological concerns

(Kleinman et al., 2014). Individuals closest to the potential help-seeker play a significant role in influencing whether they seek psychological help when experiencing significant levels of distress as they have the potential of providing tangible benefits (Angermeyer et al., 2001). Psychological, social, and physical factors are three specific tangible mechanisms of social support that contribute to the association between greater social support and lower suicidal risks. An increase in social support contributes to increased self-worth (psychological), increased social support leads to accessibility to friends available to help distract and redirect (social), and an increase in social support means individuals are available to remove deadly means away from the person at-risk (physical; Kleinman & Liu, 2014). Kleinman and Liu (2014) examined whether social support was a protective factor in suicide, and if greater social support was associated with lower likelihood of making a suicide attempt. Results indicated that having social support was a predictor of suicide attempts, specifically, higher levels of social support were associated with a lower likelihood in a lifetime suicide attempt (Kleinman & Liu, 2014).

There is a difference between having social support and utilizing it. Suicidal individuals are more likely to avoid seeking help, a process known as help-negation (Deane et al., 2011). Yakunina and colleagues (2010) note that help-negation is particularly common behavior in college students. Joiner's (2005) interpersonal psychological theory of suicide indicates that social inclusion and support is crucial for preventing suicide. The theory identifies lack of belongingness as one of the two most crucial risk factors in engaging in suicide behaviors (the other being perceptions of burdensomeness). Negative social interactions can create additional sources of stress and may contribute to thoughts of suicide. Deficits in peer or caregiver support is associated with increased suicidal ideation in college students (Hirsch & Barton, 2012). In general, when social support is provided on a peer, parental, and/or institutional levels, well-being is promoted, suicidal behavior is reduced, and students receive a range of mental health and academic benefits (Hirsch & Barton, 2012). While social support is an important component to

suicide preventions, individuals can only provide support if they are made aware that a problem exists.

Self-Concealment

Self-concealment can be understood as an individual's comfort with self-disclosing distressing information and was a predictor of attitudes and willingness toward seeking professional help (Vogel et al., 2007; Vogel & Wester, 2003). Self-concealment and attitudes towards help-seeking was investigated with a sample of 257 undergraduate students studying psychology at a marge Midwestern university (Kelly & Achter, 1995). Participants were administered five different self-report instruments with the intention of measuring self-concealment, intentions to seek counseling, attitudes towards professional help, depression and social support systems. Students with higher scores of self-concealment scale held negative perceptions towards counseling.

Self-concealment is known to involve negative attitudes towards one's own mental health (i.e., involving internalized stigma; Masuda et al., 2012; Masuda et al., 2009), and implies a person is hiding or withholding information (Fischer, 1984). In a study examining whether older adults who died by suicide communicated with anyone, investigators found 27% of their sample had not reached out to anyone before taking their life (Waern et al., 1999). Busch and colleagues (2003) found that 78% of hospital patients who died by suicide denied having suicidal thoughts the week before taking their own lives. Self-concealment was found to increase rumination (Lane & Wegner, 1995), a predictor of both hopelessness and suicidal ideation (Miranda & Nolen-Hoeksema, 2007). Cepeda-Benito and Short (1998) found in their study that investigated help-seeking and self-concealment with a group of 732 undergraduate students in the southwest that students with higher scores of self-concealment had increased psychological distress.

Levels of Distress

Traditional-aged college students (18-23) are at higher risk for experiencing psychological distress (De Girolamo et al., 2012) as they experience a wide variety of stressors for the first time. Examples of first-time stressors include living independently for the first time, new financial responsibilities, balancing academic responsibilities and social life without supervision. The psychological distress experienced by undergraduate students continues to rise, yet only 25% of students experiencing psychological distress seek mental health resources.

Surapaneni et al. (2019) examined whether greater levels of distress were associated with a greater likelihood to seek psychological services. They found that as distress levels increase, the relationship between negative help-seeking attitudes and stigma associated with help-seeking decreases. Researchers suggest this might be because the individual in distress would be willing to seek psychological help despite the risk of being stigmatized.

Stigma

Mental health stigma can be understood as "a multidimensional process of objectifying and dehumanizing a person known to have or appearing to have a mental disorder" (Mendoza & et al., 2015, p. 209). Regardless of the source of support, stigma can be a barrier to seeking any type of help or assistance when suicidal. The two most prevalent types of stigma in suicide help-seeking are self-stigma and perceived public-stigma. Self-stigma is defined as, "the reduction of an individual's self-esteem or self-worth caused by the individual self-labeling themselves as someone who is socially unacceptable" (Vogel et al., 2006. p. 325). Self-stigma exists because of the negative attitudes individuals hold about themselves as a result of internalizing and accepting stigmatized ideas and attitudes held by society (Corrigan & Watson, 2002). Perceived public stigma is defined as "negative stereotypes and prejudices about mental illness held collectively by people in a community" (Eisenberg et al., 2009, p. 29). Perceived public stigma can be associated with seeking mental health services (e.g. a person who seeks psychological treatment is weak;

Vogel et al., 2006). Perceived public stigma is exemplified in the community through attitudes of intolerance, exclusion, fear, and mistrust of persons (Pescosolido & Martin, 2007).

Pedersen and Paves (2015) found a significant positive correlation between self-stigma and perceived public-stigma, such that perceived public stigma increased when personal stigma increased, indicating that when an individual's perceives public stigma is higher, their levels of self-stigma increase. Both self and perceived public stigma have been shown to be associated with impaired help-seeking behavior (Gulliver et al., 2010), but self-stigma has been found to be more consistently associated with lower help-seeking intentions and behaviors (Golberstein et al., 2007; Gulliver et al., 2010; Schomerus et al., 2009). While a significant number of researchers found that stigma has an impact on engaging in help-seeking behaviors, in a few studies, researchers suggest that stigma may not have as significant of an impact on help-seeking behaviors as previously thought (Eisenberg et al., 2009; Eisenberg et al., 2012, Golberstein, 2009). This could be attributed to an increase in efforts aimed at reducing mental health stigma on university and college campuses, and their success in changing students' attitudes towards seeking psychological help.

In response to the stigmatization of mental health and help-seeking, there has been an increase in creating and implementing programs and strategies aimed at reducing stigma (Overton & Medina, 2008). The three methods for reducing stigma involve real world anti-stigma campaigns (protest), educational programming (education), and direct interaction (contact). Protest is a strategy that aims to discredit individuals perpetuating the unjust treatment of those with mental illness and endorsing disrespectful representations of mental health (Corrigan & Wassel, 2008). Protest interventions contain two messages (Corrigan & Wassel, 2008). The first is bringing attention to inaccurate representations of mental illness, and the second is to address negative attitudes and beliefs about mental health and help seeking.

Strategies meant to replace inaccurate stereotypes with factual information are typically categorized as an educational stigma reduction intervention (Overton & Medina, 2008). Examples of educational strategies include presentations, discussions, workshops, public service announcements, flyers, lectures, movies, videos, and other types of aids with the purpose of dispelling myths, countering false assumptions, disseminating information, and promoting resources. This approach is widely accepted for two reasons: education is considered to be a fundamental component to altering human behavior, and dissemination of educational materials can be a convenient and efficient way to educate large audiences (Corrigan and Wassel, 2008). Research has demonstrated that when individuals with more knowledge about mental illness are less likely to perpetuate stigmatized attitudes and beliefs, and behave in less discriminating ways (Stuart and Alboleda-Florez, 2001).

Contact based interventions refers to any type of interpersonal interaction between the public and a member of the stigmatized group (Corrigan & Wassel, 2008). While contact strategies are more effective when they are interpersonal and intimate (Hewstone, et al., 2002), interaction can be direct (e.g., face-to-face), or indirect (e.g., through the media), and can be targeted to reduce stigma in groups and individuals (Overton & Medina, 2008). Contact interventions are known to be more effective under conditions such as, an equal status between participants, institutional support for contact, cooperative interaction, high levels of intimacy, frequent contact with individuals who mildly disconfirm the stereotype, and real-world opportunities to interact (Hewstone et al., 2002).

Cramer's (1999) Model of Help-Seeking

Cramer's (1999) model of help-seeking is the oldest and still one of the most frequently used in help-seeking research (Leech, 2007; Liao & Rounds, 2001; Morgan et al., 2003; Tulia, et al., 2016). Mental health help-seeking refers to the process of using informal and professional

networks to gain support in coping with mental health problems (Barker et al., 2005; Cauce, et al., 2002; Michelmore & Hindley, 2012). Mental health help-seeking is defined as, "the use of social networks or professionals to gain support in coping with emotional problems, psychological distress, and suicidal ideas" (Stewart, 2015, p. 9). Cramer's model has been used in attempts to increase understanding of "the service gap," or why the majority of the people with psychological difficulties do not seek help (Brinson & Kottler, 1995; Gottesfeld, 1995; Leaf & Bruce, 1987).

Researchers initially used demographic variables, namely gender, race, education, socioeconomic status, and religion as predictors of help-seeking behaviors (Kelly & Achter, 1995). Kushner and Sher (1991) were among the first researchers to consider how psychological factors may act as intervening variables between the recognition of distress as a result of a psychological problem and the decision to seek help. To further investigate whether there is a relationship between psychological variables and help-seeking, Cramer created a model with five psychologically based variables used to predict help-seeking. The first variable included in the model is level of distress. Level of distress can influence whether they decide to seek help (Cepido & Short, 1998). Attitudes toward professional psychological counseling (Rickwood & Braithewaite, 1994) is another variable included in Cramer's (1999) model. The next of Cramer's variables is social support. Many researchers incorporate social support as a predictor variable and find that it has a significant and positive relationship to engaging in informal and formal help-seeking behavior (Catanzarite & Robinson, 2013). The final variable that Cramer included in his help-seeking model was self-concealment. Self-concealment is defined as a predisposition to hide distressing and potentially embarrassing personal information. It has been found to be associated with less favorable attitudes towards help-seeking (Kelly & Achter, 1995).

Kelly and Achter (1995) focused on the relationship between self-concealment and intentions to seek counseling among 257 undergraduate students at a large Midwestern university. They found

that higher self-concealers were more likely to indicate that they would seek counseling, despite having less positive attitudes towards counseling. Kelly and Achter (1995) found no relationship between available social support and psychological distress, which was significantly related to help-seeking intentions, whereas Cepeda-Benito and Short (1998) found that higher levels of psychological distress, lower levels of social support, and positive attitudes towards counseling each significantly predicted a greater intention to seek counseling in their study with a sample of 732 undergraduate students at a large university in the South. Cramer (1999) integrated the variables identified by Kelly and Achter (1995) and Cepeda-Benito and Short (1998) into a single path model.

Cramer (1999) examined the relative contribution of the four psychological variables mentioned above to college students' decision to seek professional help with a sample of undergraduate students from one university using a path model consisting of all relevant connection between psychological antecedents and help-seeking behavior. Results suggested that students were more likely to seek professional help if they considered their informal support network to be impaired, ineffective, and/or incapable of helping them make their desired change (Cramer, 1999). Students who conceal information were found to experience less social support. This insinuates a greater likelihood that students who conceal their concerns are more likely to struggle coping with their distress. Regardless of distress level, students more inclined to self-conceal will be less likely to seek professional treatment (Cramer, 1999). Overall, Cramer's (1999) mental health help-seeking model suggests students are more likely to seek professional help when distress is high and attitudes towards counseling are positive. The model continues to suggest that distress among students is higher when social support networks are impaired, when students conceal personally distressing information, and hold negative attitudes toward counseling. Many studies used Cramer's (1999) model to use psychological variables of predictors of help-seeking.

Morgan and colleagues (2003) used Cramer's (1999) model to examine whether gender, racial background, and student status contributed to their help-seeking attitudes. Participants were 194 students at a large Western Canadian university. Respondents answered a series of self-report measures and found that gender, racial background (Asian and Caucasian), and student status (undergraduate and graduate) were significant and positive predictions. These results were highly consistent with Cramer's (1999) model. With the added variables to Cramer's (1999) model, there was a relatively good fit, indicating that differences in these variables accounted for additional variance in intentions to seek counseling (Morgan et al., 2003). They contributed to help-seeking literature by offering information about which types of students are more likely to utilize a university's counseling center. Morgan and colleagues (2003) aimed to provide insight into how to facilitate increased participation at campus mental health outreach events. In other studies, researchers were able to provide additional empirical evidence supporting Cramer's (1999) model of help-seeking.

Cramer's (1999) model of help-seeking was also applied to Master's level students studying counseling psychology. Leech (2007) investigated how well Cramer's model fit counseling students' willingness to seek counseling using predictors of social support, self-concealment, attitude towards counseling, and level of distress. Participants were 519 Master's level counseling students from across the United States. Structural Equation Modeling (SEM) was used in the analysis. Positive relationships were found between self-concealment and distress, distress and willingness to seek counseling, and lastly, attitude toward counseling and willingness to seek counseling. Results suggested that self-concealment was positively related to distress, such as counseling students with higher self-concealment are likely to have a higher level of distress, and vice versa. A positive attitude toward seeking counseling was found to increase a counseling student's willingness to seek counseling services. Those with negative attitudes toward counseling were found to be less willing to seek counseling. The relationship between self-

concealment and social support was negative, such as counseling students who were high in self-concealment tended to be low in social support, and vice versa (Leech, 2007). Social support and distress also were negatively related, suggesting that counseling students with low support tended to have increased levels of distress, and counseling students with high levels of social support tended to have lower levels of distress. Finally, counseling students with low levels of self-concealment tended to have a more positive attitude toward counseling, and vice versa (Leech, 2007).

APPENDIX B:

INSTITUTIONAL REVIEW BOARD EXAMPT APPROVAL LETTER

Oklahoma State University Institutional Review Board

Date:	01/28/2020
Application Number:	IRB-20-19
Proposal Title:	Whom are you going to call? Examining help-seeking sources amonguniversity students with a suicide history
Principal Investigator:	Merrill Reiter
Faculty Adviser:	Sue Jacobs Project Coordinator:
Research Assistant(s):	
Processed as:	Exempt
Exempt Category:	

Status Recommended by Reviewer(s): Approved

The IRB application referenced above has been approved. It is the judgment of the reviewers that the rights and welfare of individuals who may be asked to participate in this study will be respected, and that the research will be conducted in a manner consistent with the IRB requirements as outlined in 45CFR46.

This study meets criteria in the Revised Common Rule, as well as, one or more of the circumstances for which <u>continuing review is not required.</u> As Principal Investigator of thisresearch, you will be required to submit a status report to the IRB triennially.

The final versions of any recruitment, consent and assent documents bearing the IRB approval stamp areavailable for download from IRBManager. These are the versions that must be used during the study.

As Principal Investigator, it is your responsibility to do the following:

1. Conduct this study exactly as it has been approved. Any modifications to the research protocol must be approved by the IRB. Protocol modifications requiring approval may include changes tothe title, PI, adviser, other research personnel, funding status or sponsor, subject population composition or size, recruitment, inclusion/exclusion criteria, research site, research procedures and consent/assent process or forms.
2. Submit a request for continuation if the study extends beyond the approval period. Thiscontinuation must receive IRB review and approval before the

research can continue.

3. Report any unanticipated and/or adverse events to the IRB Office promptly.
4. Notify the IRB office when your research project is complete or when you are no longer affiliatedwith Oklahoma State University.

Please note that approved protocols are subject to monitoring by the IRB and that the IRB office has the authority to inspect research records associated with this protocol at any time. If you have questions aboutthe IRB procedures or need any assistance from the Board, please contact the IRB Office at 405-744- 3377 or irb@okstate.edu.

Sincerely,

Oklahoma State University IRB

APPENDIX C:

STUDY RECRUITMENT MATERIALS

Dissertation Recruitment Flier and E-mail Recruitment

Dear Potential Participant,

My name is Merrill Reiter and I am a doctoral candidate in counseling psychology at Oklahoma State University. For my dissertation, I am conducting a study examining who students turn to for support when experiencing emotional distress and/or thoughts of suicide. The online survey is estimated to take approximately 20-minutes to complete. The purpose of this research study is to gather information so that suicide intervention and prevention programs can be targeted to the most sought out source of support.

To participate you must be enrolled in undergraduate courses at an institution of higher education and be 18-years or older. Upon completion of the study, participants will be provided an opportunity to enter into a drawing for 1 of 8 $25 VISA gift cards. A separate link will be provided at the end of the survey where you may enter in your email address for the raffle.

Thank you for time and consideration in reading this email and participating in this study. Should you have any questions or concerns about the study, please do not hesitate to contact me at mereite@okstate.edu.

If you wish to participate, please click below.

Click to participate in the study!

Best,
Merrill Reiter, M.S.
Doctoral Candidate
Counseling Psychology | Oklahoma State University

SONA RECRUITMENT MATERIALS

Participants will be recruited through the College of Health, Education, and Aviation's SONASystem.

The purpose of this study is to examine which sources of support are utilized when undergraduate students are experiencing psychological distress and/or thoughts of suicide. Therewill be seven questionnaires to answer, along with two sets of demographics questions. Information gathered from this study will be used to gain a deeper understanding of who studentsseek help from in times of distress, especially related to suicide. This information can contribute to knowing more about how, where, and to whom outreach and programming efforts related to mental health, suicide intervention, and suicide prevention are directed. It will take about 30-minutes to complete the series of surveys, and those who participate will receive .5 of SONA credit. Credits will be automatically credited to you. At the end of the study, you will also be presented with a list of on and off campus mental health resources should you need to seek assistance. Thank you for your consideration in participating and helping me prevent suicide at Oklahoma State University.

APPENDIX D:

INFORMED CONSENT DOCUMENT

Project Title: Whom are you going to call: Examining help-seeking sources among university students with a suicide history

Investigator(s): Merrill Reiter, M.S.; Sue C. Jacobs, Ph.D., Oklahoma State University

Purpose: This study is in partial fulfillment for a Ph.D. in counseling psychology. The purpose of this study is to gather information about the sources of support sought by Oklahoma State University students with a suicide history. This information will provide university counseling centers with information that can help them design and implement effective mental health services and suicide prevention programming. If preferred help sources are examined, suicide prevention and intervention resources and efforts can then be directed towards the identified individuals.

Procedures: Starting the web-based survey implies your consent to participate in this study. If you decide to participate, you will first indicate your age and then be directed to the survey. **Only individuals who are age 18 or over can participate**. All questions will be answered online. You are eligible to participate in this study if you **(1) have previously attempted suicide, (2) have previously experienced thoughts of suicide and/or suicidal ideation, (3) are currently experiencing thoughts of suicide and/or suicidal ideation, (4) enrolled in undergraduate courses.**

You will be asked to complete a demographics questionnaire followed by seven self-report instruments. One self-report instrument will ask you questions about your attitudes towards seeking professional psychological help, one self-report will ask you questions about your current level of distress, one self-report will ask you questions about social support, one self-report will ask you about your tendency to self-conceal distressing information, two-self reports will ask you about stigma – one about self-stigma, and another about perceived public stigma, and one self-report will ask you about general help-seeking behaviors. The amount of time to complete the survey will be between 20 to 30-minutes. When you complete the survey you will be asked to submit your answers. **Any information gained from this study will be confidential and your privacy will be protected.**

Risks of Participation: The risks associated with this study are minimal. You may experience some emotional discomfort when answering a few questions related to suicide history, help-seeking, and stigmatized attitudes. Your participation in this study is voluntary. If you are experiencing mental health distress, suicidal ideation, and/or thoughts of suicide, and taking this survey will put you in harm's way for any reason, I strongly suggest you do not take this survey. These risks are not greater than those ordinarily encountered in daily life. Moreover, you

may simply not answer any survey items that you perceive as threatening and/or discomforting; you may also stop at any time.

If you are currently at risk for attempting suicide, please call 911 or go to the nearest emergency room.

APPENDIX E:

EMERGENCY RESOURCES PROVIDED FOR PARTICIPANTS

Suicide and crisis resources:

Call SAM (Students Assistance by Mercy): 1-855-225-2SAM (726)
- Suicide Prevention Lifeline: 1-800-273-Talk (8255)
- The Trevor Project: 866-488-7386 (Lifeline) // Text START to 678678 // Trevorproject.org/get-help-now (Chat)
- Crisis Text Line: Text CONNECT to 741741

If you would like to seek services, please contact the following resources:

- University Counseling Services*: 405-744-5472 // 320 Student Union. Stillwater
- University Health Services*: 405-744-7665 // 1202 West Farm Road. Stillwater
- Oklahoma State University – Tulsa Counseling Center*: 918-594-8568 // 700 North Greenwood, Ave. Tulsa
- Counseling and Counseling Psychology Clinic*: 405-744-3287 // 111 PIO Building. Stillwater
- Center for Family Services*: 405-744-5058 // 101 Human Sciences West. Stillwater
- Psychological Services Center*: 405-744-5975 // 118 North Murray Hall. Stillwater

* Located on an OSU campus

APPENDIX F:

DEBRIEFING STATEMENT

Thank you for participating in this research. In the study, the researcher studied barriers to help-seeking resources and preferred sources of support for undergraduate students. If you would like a copy of the results of the study, please contact the researcher and arrangements will be made.

Researcher: Merrill D. Reiter, M.S.
School of School of Community Health Sciences, Counseling and Counseling Psychology
Oklahoma State University
434 Willard Hall
Stillwater, OK 74078
Email: mereite@okstate.edu

Advisor: Sue C. Jacobs
School of Community Health Sciences, Counseling and Counseling Psychology
Oklahoma State University
434 Willard Hall
Stillwater, OK 74078
Email: sue.c.jacobs@okstate.edu

If you have questions about your rights as a research volunteer, you may contact the Oklahoma State University Institutional Review Board (IRB) Chair.

Oklahoma State University
223 Scott Hall
Stillwater, OK 74078,
Email: irb@okstate.edu

Thank you for participating.

APPENDIX G:

STUDY MEASURES

Demographic Questionnaire Section I

Are you current enrolled in undergraduate classes at Oklahoma State University?

a. Yes
b. No

(If participant answers "yes" to first question)
If you are currently enrolled in undergraduate classes at Oklahoma State University, which campus do you primarily attend?

a. Stillwater
b. Tulsa
c. Online

(If participant answers "no" to first question)
If you are not currently enrolled in undergraduate classes at Oklahoma State University, what type of institution do you attend?

a. Private Institution
b. Public Institution
c. Community College

(If participant answers "no" to first question)
Where do you take the majority of your classes?

a. Main Campus
b. Satellite Campus
c. Online

What is your age? _____
Which gender might you identify with? (Please select all that apply)

a. Female
b. Male
c. Transgender
d. Gender non-conforming
e. Genderqueer
f. Identity Not Listed _____

Which sexual orientation might you identify with?

a. American Indian or Alaska Native
b. Asian or Asian American
c. Black or African American

d. Latino or Hispanic
e. White or Caucasian
f. More than one race
g. Race not listed _____

Residency Classification

a. In-state student
b. Out-of-state student
c. International Student

Geographic Area of Residency before Coming to College

a. Rural
b. Suburban
c. Urban

End of Demographic Questionnaire Section I

Self-Concealment Scale

This scale measures self-concealment, defined here as a tendency to conceal from others personal information that one perceives as distressing or negative. Please use the **5-point scale** to indicate the degree to which each item best describes how much you personally agree or disagree with the statement.

Strongly Disagree	Disagree	Don't agree or disagree	Agree	Strongly Agree
1	2	3	4	5

1. I have an important secret that I haven't shared with anyone.
2. If I shared all my secrets with my friends, they'd like me less.
3. There are lots of things about me that I keep to myself
4. Some of my secrets have really tormented me
5. When something bad happens to me, I tend to keep it to myself
6. I'm often afraid I'll reveal something I don't want to
7. Telling a secret often backfires and I wish I hadn't told it
8. I have a secret that is so private I would lie if anybody asked me about it
9. My secrets are too embarrassing to share with others
10. I have negative thoughts about myself that I never share with anyone

Perceptions of Stigmatization of Seeking Help

Imagine you had an emotional or personal issue that you could not solve on your own. If you sought counseling services for this issue, to what degree do you believe that the people you interact with would…… Use the **5-point scale** answer to indicate the score that best fits your perception.

Not at all	A little	Some	A lot	A great degree

1 2 3 4 5

1. Think of you in a less favorable way
2. Think bad things of you
3. React negatively to you
4. See you as seriously disturbed
5. Think you posed a risk to others
6. Think you were crazy
7. Be scared of you
8. See you as weak
9. Like you less
10. Say something negative about you to others
11. Be ashamed of you
12. Treat you like a child
13. See you as less attractive
14. Believe you were unpredictable
15. Think it was your fault
16. Deny you access to a job
17. Believe you were more violent or dangerous
18. Be angry with you
19. Be uncomfortable around you
20. Treat you differently
21. Believe that you could not handle your own

Self-Stigma of Seeking Help Scale

People at times find that they face problems that they consider seeking help for. This can bring up reactions about what seeking help would mean. Please use the **5-point scale** to indicate the degree to which each item describes how you might react in this situation.

Strongly Disagree Disagree Agree/Disagree Equally Agree Strongly Agree

1 2 3 4 5

1. I would feel inadequate if I went to a therapist for psychological help.
2. My self-confidence would NOT be threatened if I sought professional help.
3. Seeking psychological help would make me feel less intelligent.
4. My self-esteem would increase if I talked to a therapist.
5. My view of myself would not change just because I made the choice to see a therapist.
6. Please choose Disagree (2) for this item
7. It would make me feel inferior to ask a therapist for help.
8. I would feel okay about myself if I made the choice to seek professional help.
9. If I went to a therapist, I would be less satisfied with myself.
10. My self-confidence would remain the same if I sought professional help for a problem I could not solve
11. I would feel worse about myself if I could not solve my own problems.

The Social Provisions Scale

In answering the next set of questions think about your current relationship with friends, family members, coworkers, community members, and so on. Please use the **4-point scale** to indicate the degree to which each item describes your current relationships with other people.

Strongly Disagree	Disagree	Agree	Strongly Agree
1	2	3	4

1. There are people I can depend on to help me if I really need it.
2. I feel that I do not have close personal relationships with other people.
3. There is no one I can turn to for guidance in times of stress.
4. There are people who depend on me for help.
5. There are people who enjoy the same social activities I do.
6. Other people do not view me as competent.
7. I feel personally responsible for the well-being of another person.
8. I feel part of a group of people who share my attitudes and beliefs.
9. I do not think other people respect my skills and abilities.
10. If something went wrong, no one would come to my assistance.
11. I have close relationships that provide me with a sense of emotional security and well-being.
12. There is someone I could talk to about important decisions in my life.
13. I have relationships where my competence and skills are recognized.
14. There is no one who shares my interests and concerns.
15. There is no one who really relies on me for their well-being.
16. There is a trustworthy person I could turn to for advice if I were having problems.
17. I feel a strong emotional bond with at least one other person.
18. There is no one I can depend on for aid if I really need it.
19. There is no one I feel comfortable talking about problems with.
20. There are people who admire my talents and abilities.
21. I lack a feeling of intimacy with another person.
22. There is no one who likes to do the things I do.
23. There are people I can count on in an emergency.
24. No one needs me to care for them.

Hopkins Symptoms Check-List-21

Please read each statement use **the 4-point scale** to best indicate how much the symptom listed has bothered you during the **past month**

Not at all	Sometimes	Often	Extremely
1	2	3	4

1. Headaches
2. Worrying too much about things
3. Feeling tense
4. Difficulties falling asleep

5. Loss of sexual interest
6. Nervousness or shakiness
7. Feeling blue
8. Crying easily
9. Feeling fearful
10. Feeling low in energy
11. Feeling everything is an effort
12. Feeling lonely
13. Feeling hopeless about the future
14. Heart pounding or racing
15. Blaming yourself for things
16. Feeling no interest in things
17. Faintness, dizziness
18. Suddenly scared for no reason
19. Restless and can't sit still
20. Poor appetite
21. Thoughts of ending your life

Please answer the following questions using a 7-point scale
General Help-Seeking Scale

If you were having a **personal or emotional problem**, how likely is it that you would seek help from the following people? Use the **7-point scale** to indicate the answer that best describes your intention to seek help from each source that is listed.

Extremely	Unlikely	Likely	Extremely Likely
1	3	5	7

1. Mental health professional (e.g. therapist)
2. Intimate partner (e.g. spouse)
3. Parent(s)/Primary caregiver(s)
4. Professor(s)
5. Phone helplines (e.g. Suicide Prevention Lifeline)
6. Doctor (e.g. General Practitioner)
7. Friend(s)
8. Sibling(s)
9. University Staff and Organization/Department leaders (e.g. Academic advisors, coaches, Residence Life coordinators, Greek Life leaders)
10. Online Chat (e.g. Crisis Text Line)
11. Psychiatrist
12. Classmate(s)
13. Non-immediate family members (e.g. grandparent(s), cousin)
14. Religious leader (s) person(s) from place of worship (e.g. Rabbi, leader of Bible study group)
15. Internet resources

If you were experiencing **suicidal ideation**, how likely is it that you would seek help from the following people? Use the **7-point scale** to indicate the answer that best describes your intention to seek help from each source that is listed.

Extremely	Unlikely	Unlikely Likely	Extremely Likely
1	3	5	7

2. Mental health professional (e.g. therapist)
3. Intimate partner (e.g. spouse)
4. Parent(s)/Primary caregiver(s)
5. Professor(s)
6. Phone helplines (e.g. Suicide Prevention Lifeline)
7. Doctor (e.g. General Practitioner)
8. Friend(s)
9. Sibling(s)
10. University Staff and Organization/Department leaders (e.g. Academic advisors, coaches, Residence Life coordinators, Greek Life leaders)
11. Online Chat (e.g. Crisis Text Line)
12. Psychiatrist
13. Classmate(s)
14. Non-immediate family members (e.g. grandparent(s), cousin)
16. Religious leader (s) person(s) from place of worship (e.g. Rabbi, leader of Bible study group)
17. Internet resources

Demographic Questionnaire Section II

Have you sought counseling resources for any reason?

a. Yes
b. No

(If "yes" is selected to previous question)

From where did you seek those services?

a. On campus

Where: _____

b. Off – Campus
c. Online

Have you ever sought counseling services for thoughts of suicide?

a. Yes
b. No

(If "Yes" is selected for previous question)

From where did you seek those services?

a. On campus

Where: _____

b. Off – Campus
c. Online

Do you have experience with suicide?

a. Yes
b. No

(If "Yes" is selected for previous question)
What experiences do you have with suicide?

a. I am only familiar with suicide because someone I know has struggled with suicide, attempted, and/or completed suicide
b. I have participated in suicide prevention and intervention programming, trainings, and events
c. I have personal experiences with suicide

(If "Personal experiences with suicide" is selected)
What personal experiences do you have with suicide? (*Please select all that apply)*

a. I have previously thought of suicide
b. I am currently experiencing thoughts of suicide
c. I have attempted suicide

Did you answer the questions in this survey honestly?

a. Yes b. No

APPENDIX H:

DESCRIPTIVE STATISTICS AND ZERO-ORDER BIVARIATE CORRELATIONS

Table H1
Descriptive Statistics for Study Variables

Variable[a]	Min	Max	*M*	*SD*	Skewness	Kurtosis
Self-stigma	10.000	45.000	25.324	7.662	.367	-.427
Self-concealment	10.000	50.000	34.565	8.236	-.383	-.387
Perceived stigma	21.000	99.000	47.546	19.550	.496	-.751
Social support	46.000	93.000	72.787	10.299	-.151	-.594
Psychological distress	23.000	79.000	52.536	13.032	-.045	-.672
Intentions to seek help for SI	15.000	105.000	50.097	18.296	.560	.339

[a]*n* = 207 for each variable

Table H2
Correlations among Study Variables

Variable[a]	1	2	3	4	5	6	α
1. Self-stigma	—						.860
2. Self-concealment	.422**	—					.849
3. Perceived stigma	.458**	.438**	—				.960
4. Social support	-.227**	-.350**	-.388**	—			.887
5. Psychological distress	.154*	.359**	.339**	-.272**	—		.924
6. Intentions to seek help for SI	-.293**	-.218**	-.196**	.271**	-.150*	—	.866

[a]*n* = 207 for each variable
*Correlation is significant at the .05 level (2-tailed).
**Correlation is significant at the .01 level (2-tailed).

APPENDIX I:

PARTICIPANT DEMOGRAPHICS

Table I1
Participant demographics.

Characteristic	*n*	%
Gender		
Female	155	74.88%
Male	29	14.01%
Gender non-conforming/Genderqueer	19	9.18%
Identity not listed	4	1.9%
Racial identity		
Black or African American	5	2.42%
Hispanic or Latino	6	2.90%
American Indian or Alaska Native	7	3.38%
Asian or Asian American	13	6.45%
White/Caucasian	145	70.05%
Multiracial	28	13.53%
Race not listed	2	0.97%
Did not report	1	0.48%
Sexual/Affectional orientation[a]		
Straight/Heterosexual	125	60.38%
Gay	11	5.31%
Lesbian	10	4.83%
Bisexual	46	22.22%
Pansexual	17	8.21%
Asexual	10	4.38%
Not listed	1	0.48%
Type of institution		
Public	106	51.21%
Private	62	29.95%
Community college	7	3.38%
Did not report	32	15.45%
Location of Majority of Classes		
Main campus	138	66.67%
Online	31	14.98%
Satellite campus	2	0.97%
Residency Classification		
In-state	131	63.29%
Out-of-state	73	35.27%
International	3	1.45%
Geographic region of residence pre-college		
Rural	49	23.67%
Suburban	120	57.97%
Urban	37	17.87%
Did not report	1	0.48%
Personal experience with suicide[c]		

Past thoughts of suicide	191	92.27%
Previous suicide attempt(s)	85	41.06%
Current thoughts of suicide	39	18.84%
Did not respond**	2	0.97%

**Percentages may not add to 100% due to rounding errors.*

***Participants who did not respond to this question indicated that they had personal experience with suicide on a prior question. They did not disclose what type of personal experience they had.*

[a]*Percentages add to greater than 100% because participants could select more than one response to describe their racial and/or ethnic identity.*

[b]*Percentages add to greater than 100% because participants could select more than one sexual orientation to account for unique experiences of sexual and romantic attraction.*

[c]*Percentages add to greater than 100% because participants could select more than one response to account for different personal experiences with suicide.*

APPENDIX J:

MULTIPLE REGRESSION RESULTS

Table J1
Regression Analysis of Self-Concealment on Self-Stigma and Perceived Public Stigma

Variable	*B*	*β*	*SE*	*t*	*p*	95% CI
Constant	20.734			11.550	.000*	[17.195, 24.274]
Self-stigma	.302	.281	.073	4.126	.000*	[.158, .446]
Perceived public stigma	.130	.309	.029	4.541	.000*	[.074, .187]

Notes: n = 207, *$p < .001$

Table J2
Regression of Attitudes toward Help-Seeking on Self-Stigma and Perceived Public Stigma

Variable	*B*	*β*	*SE*	*t*	*p*	95% CI
Constant	69.140		4.402	15.708	.000**	[60.461, 77.819]
Self-stigma	-.614	-.257	.179	-3.424	.001*	[-.968, -.260]
Perceived public stigma	-.073	-.078	.070	-1.045	.297	[-.212. .065]

Notes: n = 207, *$p < .01$, **$p < .001$

APPENDIX K:

ADDITIONAL ANALYSIS

Table K1
Likelihood of Seeking Help for Suicidal Ideation from Individual Sources

Source and Likelihood	Frequency	Percentage
Mental health professional		
Extremely likely	79	38.2%
Moderately likely	50	24.2%
Slightly likely	28	13.5%
Neither likely nor unlikely	6	2.9%
Slightly unlikely	10	4.8%
Moderately unlikely	12	5.8%
Extremely unlikely	22	10.6%
Intimate partner		
Extremely likely	74	35.7%
Moderately likely	42	20.3%
Slightly likely	25	12.1%
Neither likely nor unlikely	18	8.7%
Slightly unlikely	13	6.3%
Moderately unlikely	16	7.7%
Extremely unlikely	19	9.2%
Parent/Primary caregiver		
Extremely likely	34	16.4%
Moderately likely	19	9.2%
Slightly likely	27	13.0%
Neither likely nor unlikely	8	3.9%
Slightly unlikely	17	8.2%
Moderately unlikely	26	12.6%
Extremely unlikely	76	36.7%
Professor		
Extremely likely	7	3.4%
Moderately likely	2	1.0%
Slightly likely	14	6.8%
Neither likely nor unlikely	11	5.3%
Slightly unlikely	15	7.2%
Moderately unlikely	32	15.5%
Extremely unlikely	126	60.9%
Phone helpline		
Extremely likely	34	16.4%
Moderately likely	24	11.6%
Slightly likely	37	17.9%
Neither likely nor unlikely	14	6.8%
Slightly unlikely	21	10.1%
Moderately unlikely	20	9.7%
Extremely unlikely	57	27.5%

Doctor		
Extremely likely	30	14.5%
Moderately likely	22	10.6%
Slightly likely	33	15.9%
Neither likely nor unlikely	16	7.7%
Slightly unlikely	19	9.2%
Moderately unlikely	22	10.6%
Extremely unlikely	65	31.4%
Friend		
Extremely likely	40	19.3%
Moderately likely	40	19.3%
Slightly likely	39	18.8%
Neither likely nor unlikely	16	7.7%
Slightly unlikely	15	7.2%
Moderately unlikely	20	9.7%
Extremely unlikely	37	17.9%
Sibling		
Extremely likely	23	11.1%
Moderately likely	24	11.6%
Slightly likely	16	7.7%
Neither likely nor unlikely	21	10.1%
Slightly unlikely	13	6.3%
Moderately unlikely	25	12.1%
Extremely unlikely	85	41.1%
University staff and Organization/Department leaders		
Extremely likely	9	4.3%
Moderately likely	6	2.9%
Slightly likely	7	3.4%
Neither likely nor unlikely	12	5.8%
Slightly unlikely	13	6.3%
Moderately unlikely	25	12.1%
Extremely unlikely	135	65.2%
Online chat		
Extremely likely	17	8.2%
Moderately likely	26	12.6%
Slightly likely	21	10.1%
Neither likely nor unlikely	16	7.7%
Slightly unlikely	17	8.2%
Moderately unlikely	19	9.2%
Extremely unlikely	91	44.0%
Psychiatrist		
Extremely likely	51	24.6%
Moderately likely	41	19.8%
Slightly likely	29	14.0%
Neither likely nor unlikely	18	8.7%
Slightly unlikely	6	2.9%
Moderately unlikely	14	6.8%
Extremely unlikely	48	23.2%
Classmates		

Extremely likely	6	2.9%
Moderately likely	8	3.9%
Slightly likely	8	3.9%
Neither likely nor unlikely	13	6.3%
Slightly unlikely	11	5.3%
Moderately unlikely	24	16.4%
Extremely unlikely	127	61.4%
Nonimmediate family		
Extremely likely	10	4.8%
Moderately likely	13	6.3%
Slightly likely	15	7.2%
Neither likely nor unlikely	14	6.8%
Slightly unlikely	13	6.3%
Moderately unlikely	19	9.2%
Extremely unlikely	123	59.4%
Religious leaders		
Extremely likely	11	5.3%
Moderately likely	7	3.4%
Slightly likely	16	7.7%
Neither likely nor unlikely	7	3.4%
Slightly unlikely	8	3.9%
Moderately unlikely	15	7.2%
Extremely unlikely	143	69.1%
Internet resources		
Extremely likely	35	16.9%
Moderately likely	31	15.0%
Slightly likely	33	15.9%
Neither likely nor unlikely	16	7.7%
Slightly unlikely	11	5.3%
Moderately unlikely	17	8.2%
Extremely unlikely	64	30.9%

Note: $n = 207$

Table K2

Categories of Support Definitions

Category of Support	Individual Sources in the Category
Professional Help	Mental health professional; Doctor; Psychiatrist
Family support	Parent/primary caregiver; Siblings; Non-immediate family member
Social relationships	Intimate partner; Friends; Classmates
Organizational sources of support	Professors; University staff and organization/development leaders; Religious leaders
Virtual sources of support	Phone helplines; Online chat; Internet resources

Table K3

Descriptive Statistics for Different Categories of Support

Category of support	Min	Max	*M*	*SD*
Professional help	3.000	21.00	13.256	5.577
Family support	3.000	21.00	8.792	5.361
Social relationships	3.000	21.00	11.440	4.496
Organizational sources of support	3.000	21.00	5.990	4.092
Virtual sources of support	3.000	21.00	10.618	5.570

Note: $n = 207$

VITA

Merrill Diane Reiter

Candidate for the Degree of Counseling Psychology

Doctor of Philosophy

Thesis: WHOM ARE YOU GOING TO CALL? EXAMINING HELP-SEEKING SOURCES AMONG UNIVERSITY STUDENTS WITH A SUICIDE HISTORY

Major Field: Counseling Psychology

Biographical:

Education:

Completed the requirements for the Doctor of Philosophy in counseling psychology at Oklahoma State University, Stillwater, Oklahoma in July, 2021

Completed the requirements for the Master of Science in clinical psychology at Loyola University Maryland, Baltimore, Maryland, 2017

Completed the requirements for the Bachelor of Science in psychology at University of Missouri, Columbia, Missouri, 2013

Experience:

Psychology Internship: George Mason University, Counseling and Psychological services (2020-2021)

Counseling Practicums/Externships: University of Baltimore (2015-2016); Johns Hopkins Bayview - Adolescent Mood Disorders Clinic (2015-2017); Oklahoma State University (OSU) – Tulsa Counseling Center (2017-2018); Counseling and Counseling Psychology Clinic (2018-2020); OSU College of Osteopathic Medicine (2019-2020)

- Individual and group counseling; program development and outreach; assessments (intake, crisis, psychological); provision of supervision

Assistantships: Disability Support Services – Graduate Assistant (Loyola, 2014-2017); Diversity Issues in Psychology – Teaching Assistant (Loyola, 3 semesters); OSU University Counseling Services – Intake Coordinator (2018-2019); OSU-Tulsa Counseling Center – Assistant Director (2019-2020)

Teaching: Cultural Diversity in Professional Life (CPSY 4443, F2017-SP2018)