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CRITICAL COMPONENTS OF SUICIDE PREVENTION PROGRAMS FOR
COLLEGES AND UNIVERSITIES: A DELPHI STUDY

by

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A Dissertation

Submitted to the Graduate Faculty

of the

University of North Dakota

in partial fulfillment of the requirements

for the degree of

Doctor of Philosophy

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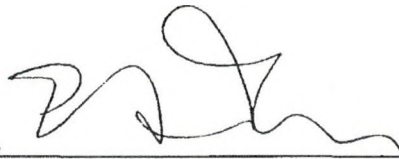
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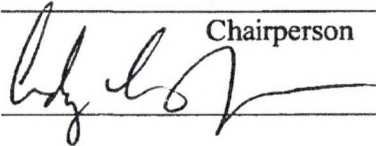


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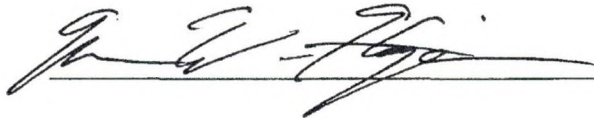
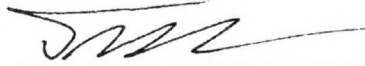
This dissertation, submitted by Colleen A. Johnson in partial fulfillment of the requirements for the Degree of Doctor of Philosophy from the University of North Dakota, has been read by the Faculty Advisory Committee under whom the work has been done and approved.



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This dissertation meets the standards for appearance, conforms to the style and format requirements of the Graduate School of the University of North Dakota, and is hereby approved.



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TABLE OF CONTENTS

LIST OF TABLES	vii
ACKNOWLEDGEMENTS	viii
ABSTRACT	x
CHAPTER	
I. INTRODUCTION	1
II. REVIEW OF THE LITERATURE	8
Risk Factors for Suicide in College Students	8
Prevalence of Suicide Ideation among College Students	25
University and College Counseling Centers	40
Recent Prevention Efforts	71
Summary of the Literature	103
Purpose of Study	106
III. METHOD	107
Why the Delphi Method?	107
Criteria for the Use of the Delphi Method	109
Panel Selection and Participants	110
Overview of the Delphi Method Process	113
Round 1	115
Round 2	117
Round 3	118

	Beyond Round 3	119
	Summary	119
	Strengths and Weaknesses	120
IV.	RESULTS	122
	Round 1 Data Analysis	122
	Round 2 Data Analysis	130
	Round 3 Data Analysis	131
	Critical and Core Critical Components.....	145
V.	DISCUSSION.....	147
	Core Critical Factors.....	147
	Future Research Directions.....	162
	Limitations	163
	Implications.....	165
	Conclusion	168
	APPENDICES	169
	Appendix A Panelist Recruitment Letter.....	170
	Appendix B Informed Consent	172
	Appendix C Demographic Form.....	175
	Appendix D Round 1 Questionnaire.....	177
	Appendix E Round 1 Response Organized by Categories and Themes	179
	Appendix F Round 2 Questionnaire	194
	Appendix G Panelists' Comments from Round 2	205
	Appendix H Sample Round 3 Questionnaire.....	207

Appendix I	Panelists' Comments from Round 3	220
REFERENCES		224

LIST OF TABLES

Table	Page
1. Summary Table of the Steps, Phases, and Activities Involved in the Execution of a Delphi Method with Three Rounds.....	114
2. Questions from the Round 1 Questionnaire.....	115
3. Frequencies of Round 1 Panel Responses Placed into Categories and Themes.....	123
4. Round 3 Items Considered Important with Mean Ratings of 2.5 to 2.99.....	133
5. Round 3 Items Considered Very Important with Mean Ratings of 3.0 to 3.49.....	134
6. Round 3 Items Considered Critical with Mean Ratings of 3.5 and Higher.....	137
7. Data Indicating Little to No Regression to the Mean between Round 2 and 3.....	140
8. Items after Round 3 Completion Considered Significant due to Panel Ranking.....	142

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My hope is that the knowledge gained in this study will help more colleges and universities understand the importance of suicide prevention programs and assist in their development by supplying the critical components from which a program best suited for their student body can be built. This study is close to my heart and I will continue to work with suicide prevention efforts for college students as part of my professional career as a counseling psychologist.

ABSTRACT

Despite debate over whether or not college student suicide rates are greater or less than similar age groups not enrolled in higher education, the rates of college students experiencing suicide ideation, attempting suicide, and successfully committing suicide are indeed rising. A steady increase in these rates over the last 15 years is evidence that this is an issue of great concern that needs further investigation and action. This study was focused on investigating what college and university counseling center employees with expertise in the development and implementation of suicide prevention programs believe to be critical components of an all-encompassing, workable suicide prevention program for colleges and universities across the nation. The Delphi method was used to collect and analyze data in this study using a panel of 29 identified experts, all who were currently employed as a mental health professional staff in a university or college counseling center.

The result of this study was the identification of 10 core critical components of a suicide prevention program for colleges and universities. The core critical components found were: education/outreach, student beliefs, training, therapist skills, resources, student services, assessment, risk identification, policies/protocols, and collaboration. All of the identified components can be utilized by any institution of higher education and can serve as a foundation from which any specific institution can build a comprehensive program that best fits its student body and overall campus community.

CHAPTER I

INTRODUCTION

Approximately 10.6 out of every 100,000 persons die by suicide and suicide deaths outnumber homicide deaths by five to three in the United States. It has been estimated that there are between 8 and 25 attempted suicides per every suicide death (Moscicki, 2001). There are multiple and complex factors that contribute to how an individual thinks, feels, and behaves. People sometimes find themselves experiencing feelings they perceive as too painful to handle or in situations out of which they cannot see a way. These feelings and situations can occur in any person and can be caused by various factors interacting with reactions and responses of an individual. The statistics about suicide attempts and deaths in the United States call attention to the need for carefully designed prevention efforts, especially among specific sub-groups such as college students.

Conventional wisdom presumes that the college years are often the best years of an individual's life, but are they really? The transition of becoming a college student can be difficult and stressful. This time period in an individual's life includes a change of environment and atmosphere, possible isolation from family and established social networks, vocational choices, important decision making about life, learning how to be an independent and well rounded person, while attending classes and maintaining grades (Mathiasen, 1998; Rickgarn, 1994). Monk (2004) believed that although life as a university student can be exciting, especially for new students, it can also be the catalyst

that can cause unfortunate situations, noting, “stressful events preceding, as well as in relation to the new venture can create a vortex which engulfs the student and spirals out of control” (p. 395).

The American Council of Education (Shea, 2002) has been reporting rising stress levels in college students since 1985, while data from the American College Health Association’s National College Health Assessment reported 76% of students felt overwhelmed in 2002 while 22% reported feeling so depressed they could not function. Although the majority of college students continue to experience significant amounts of stress, there seems to be a growing number of students who are suffering from diagnosable mental health conditions (Haas, Hendin, & Mann, 2003). Not only has there been an increase in the number of students being diagnosed with mental health conditions while attending college, but there has also been a significant increase in the number of students enrolling in college with pre-existing mental health conditions (Haas et al., 2003). Despite the mental health history of college students, this population seems to experience one or more of the following at some point(s) during the college experience: depression or feelings of sadness, loneliness and isolation, hopelessness, anxiousness, negative life events, high levels of stress, pressure to succeed, or low self-esteem and self-concept. All of the above, either alone or in combination, can potentially contribute to a college student experiencing suicidal thoughts, feelings and behaviors (Konick & Gutierrez, 2005; Weber, Metha, & Nelsen, 1997; Westefeld, Whitchard, & Range, 1990).

College students are typically in a developmental phase of life that is associated with self-exploration, finding one’s identity, and planning for one’s future (Mueller & Waas, 2002). However, the notion of the traditional college student is changing. The

college student population can consist of a variety of people ranging in age from the early teens to across the lifespan. The population of college students in the United States is comprised of people from all over the world who come from a variety of cultures and backgrounds, each carrying unique and individual beliefs, experiences, knowledge, and skills. Although this component of diversity is extremely important, there are many universal stressors and life events shared among all college students.

According to the National Institute of Mental Health (1997), there are several common stressors that college students often experience. Some of them are: greater academic demands; being independent in a new environment; changes in relationships with significant others, family members, and friends; financial responsibilities; changes in social life; exposure to new people; ideas and temptations; awareness of sexual identity and orientation; and preparing for life after graduation. Not all college students will experience any or all of the above stressors, but many times one or a combination can lead to significant distress. The degree of distress can also be affected by other factors such as diagnosable mental disorders, genetic predispositions, trauma, and critical life events (Monk, 2004; Sharkin, 1997; Westefeld et al., 1990; 2006). The results of interactions between biological, environmental and experiential elements can lead to suicidal thoughts, feelings, and behaviors. Due to the potential for high degrees of distress among college students, colleges and universities are seeing an increase in the mental health services and prevention programming requested by their students.

Once an individual experiences thoughts of suicide, the possibility of a suicide attempt or completion becomes a serious and a realistic concern. It is believed that most college students struggling with suicide ideation also experience feelings of depression,

hopelessness, helplessness, and loneliness (Schwartz & Rogers, 2004; Furr, Westefeld, McConnell, & Jenkins, 2001; Westefeld et al., 1990; 2006). Other thoughts, feelings and behaviors may also contribute to suicidal ideation; however other factors tend to not be as universal. The rates of occurrence for both suicide and suicidal thinking are on the rise across the general population, especially within specific sub-groups (Schwartz & Rogers, 2004; Dixon, Heppner & Anderson, 1991). The college student population is one of the subgroups that have recently experienced a significant increase in suicide activity with an estimated 1100 suicides and 24,000 suicide attempts annually (Lamberg, 2006). The rise in suicidality among college students has prompted a renewed emphasis in the development and implementation of appropriate suicide prevention programs for this population.

There are currently various approaches to suicide prevention programming and intervention techniques utilized with the college student population. However, there is a lack of consensus among mental health professionals and institutions of higher education in regards to the importance and effectiveness of the many prevention and intervention methods. It is important to note there are different target levels and target stages often involved with overall suicide prevention. The Centers for Disease Control and Prevention (CDC) has provided definitions of three target levels and three target stages of prevention. Target levels are often referred to as indicative, selective and universal. Indicative interventions often involve identification, treatment and skill building; focus on early detection and treatment; and are frequently seen within the mental health care delivery system. Selective interventions are more focused on screening and group prevention activities and are generally targeted to high-risk groups. An example would be

a peer support program for students with a number of risk factors. Universal interventions are generally targeted to the larger community and may include media or educational prevention strategies. Examples could include reduction in access to lethal means or barriers on high places (SPAN USA, 2001).

The three stages of prevention are referred to as primary, secondary, and tertiary which correspond to before suicidal behavior occurs, as suicidal behavior occurs and after suicidal behavior occurs, respectively. The intervention strategies used will vary depending on the stage that is being targeted. Primary prevention involves effort that targets the causes of suicide related behavior and injury before the injury or suicidal behavior occurs. Conditions including depression, substance abuse and impulsive behavior are examples of targets of primary prevention which is often done through health and mental health services. Improving access to services and implementing programs that promote social support are examples of primary prevention.. Secondary prevention targets intervention as suicidal behavior is occurring with the hope of minimizing any self-injury that may occur. Early detection of suicide ideation and appropriate referral and treatment for risk would be examples of secondary prevention. Tertiary prevention targets intervention following self-injury or suicidal behavior with goal of minimizing the impact and reducing the likelihood of further injury. Examples would include effective intervention in a suicidal crisis and therapeutic treatment following suicidal behavior to prevent future attempts. By combining the level of intervention and the stage of intervention, descriptions and comparisons of different strategies can be made. (SPAN USA, 2001).

According to Hepp, Wittmann, Schnyder, and Michel (2004), there are a variety of strategies ranging from prevention to minimal interventions to crisis interventions, but there remains uncertainty as to which prevention and intervention efforts are best suited for particular institutions of higher education and their campus communities.

Successful prevention and intervention efforts made will vary depending on the student/student body population, the situation, the mental health professional(s), and the overall institution and campus community. After examining several different prevention and intervention strategies and their effectiveness, Hepp et al. (2004) found that none had significant success in reducing the incidence of suicide. However, it was also concluded that one of the most important elements in treating a suicidal client was the therapeutic relationship itself. In addition, Hepp et al. suggested that interventions should be aimed less at a cure for suicide and more towards the improvement of the client's resilience and coping skills of psychological stress and crisis. Further, Whitaker and Slimak (as cited in Weber et al., 1997) suggested the importance of community when working with college students. The authors stated, "...depends not merely on the skill of the therapist and the student's motivation and readiness, but also the context of caring influences. Students who have caring friends, professors and staff encouraging them are far more likely to benefit from psychotherapy" (p. 215). More awareness, attention and action are needed in order to begin to make positive progress towards college student suicide prevention.

While limited efforts and progress has been made over the last several years, there is still much more to be done. For example, there have been various trainings and prevention programs developed and implemented in limited institutions of higher education, but there remains a lack of evaluation for many of these programs. More

importantly, the majority of identified prevention programming does not take into consideration of important factors that may contribute to the effectiveness of the program. Some of these factors include the type of institution (public or private), the size of the institution, geographic location of the institution, make-up of the student body and campus community, possible religious affiliation of the institution, the mission and/or reputation of the institution, and availability of financial resources for the institution. Because there are so many factors that can influence whether or not the implementation of a specific program will produce positive results, it is critical that institutions have the ability to build a suicide prevention program that will work for its specific institution and student body.

The three different levels and three different stages of prevention identified by the CDC will not be referred to in the current study as the researcher believes that a suicide prevention program for institutions of higher education will encompass components of all three levels as well as all three stages discussed earlier.

The goal of this study was to identify the critical components of a suicide prevention program for colleges and universities. This was accomplished through the use of the Delphi method which included anonymous communication among an expert panel of full time counseling center staff in a college or university counseling center with expertise in suicide prevention. The panel worked to come to consensus on what they believed to be the critical components of a suicide prevention program for colleges and universities. The critical elements found may serve as a foundation from which any college or university may build their own suicide prevention program in order to best serve their respective college student population and overall campus community.

CHAPTER II

REVIEW OF THE LITERATURE

Increasing suicide rates among college students have resulted in increased discussion, research and application of suicide prevention programs for colleges and universities. Since suicide is such a serious event, researchers have explored possible contributing factors faced by college students that can lead to suicide. Further, research has also explored potential preventative programs for colleges and universities to assist those college students who may experience suicide ideation at some point in their college careers. The following review of literature will explore research in the following four areas: risk factors for suicide in college students, prevalence of suicide ideation among college students, university and college counseling centers and recent prevention efforts. This review of literature demonstrates a need for further research in these three areas in order to better understand the complexities and possibilities of suicide prevention programs for colleges and universities.

Risk Factors for Suicide in College Students

Stress in the life of a college student can be caused by multiple factors and manifested in various ways. However, stress seems to be universally experienced among college students. Monk (2004) stated,

Stressors, it seems, can be wide in range – financial, academic, social, environmental and life events, to name just a few. How these stressors affect the individual depends on a number of variables such as personality, emotional

stability and coping mechanisms. What is evident is that the combination of stressors with individual features and circumstances results in a potent mixture, which causes life to be problematic for many students. (p. 397)

Further, the effects that stress can have on an individual can vary significantly from student to student (Monk, 2004). Intrigued by previous research of stress and control and an interest in why some students manage to retain lower levels of stress and show little psychological or physiological symptoms, Monk (2004) looked at case studies of college students to study specific stressors and problems experienced by the college student population.

The study was a repeated measures design with an intervening period of 18 months. The participants included sixteen students from Glasgow Caledonian University Faculty of Health. The participant sample consisted of one male under 21 years, four males 21-40 years, seven females 17-20 years and four females 21-40 years. All sixteen participants were re-tested on three of the questionnaires they had completed eighteen months earlier including an abbreviated Problem Questionnaire, the Glasgow Symptom Checklist, and the General Health Questionnaire. In addition, the participants were given the adult and college form of Mooney's Problem Checklist, the Coping Resources Inventory and the Eysenck Personality Questionnaire.

No association between the students' stress levels and coping methods or between the students' personalities and emotional manifestations were found. However, coping resources were found to be consistently poor. Some of the results left the author puzzled; despite the generally low levels of coping strategies and high levels of stress, the students were able to achieve remarkable academic success. This result contradicted the author's

initial hypothesis that the students with a low level of distress would function well academically while the students who were extremely stressed would perform badly academically. Monk concluded that students may and often do greatly suffer in terms of stress and problems during their time at a university, but this suffering did not appear to affect their academic success. However, the suffering may have critical effects on the other aspects of their lives including mental health.

Limitations of this study were the low number of participants and lack of cultural diversity among the background of participants. Also, all participants were finishing their college careers and soon beginning their professional careers, indicating that all had at least in part dealt successfully with the pressures of college and may have had a different mind set at the time of the study than younger, less experienced students. Also, although the study appeared to be measuring stress, coping and the mental health of college students, it seemed to focus on how stress affected the academic outcome of the students more than other areas of life.

Dixon, Heppner and Anderson (1991) found that suicide research has been increasingly centered on the role that stress and stressful life events may play in the etiology, course and development of suicidal thoughts and behaviors. Dixon et al. (1991) surveyed two different groups of college students on the Problem Solving Inventory, Life Experience Survey, Scale for Suicide Ideation and the Hopelessness Scale. Both groups of participants were enrolled in an introductory psychology class with 277 students and 382 students respectively. Results from the study indicated that both negative life stress and poor problem solving skills were associated with higher levels of hopelessness as well as suicide ideation. Individuals who reported higher amounts of stress or ineffective

problem solving skills also reported significantly more hopelessness and suicidal ideation than those who reported lower amounts of stress or better problem solving skills.

Research has shown that that there are many possible factors that can contribute to the experience of suicidal thoughts and behaviors (Heisel, Flett, & Hewitt, 2003; Konick & Gutierrez, 2005). Furthermore, Silverman and Felner (1995) believed that rather than suicide being a response to a single event, it is more likely that a series of events, feelings, and cognitions can put an individual at risk for suicidal thoughts and behaviors. Some of the more common risk factors that have been found to be associated with suicide have also been found to be associated with each other and they include depression, loneliness, stress and hopelessness (Lipschitz, 1995).

Weber et al. (1997) further investigated the relationship between suicide ideation and variables of depression, loneliness, stress and hopelessness among college students. They included 185 college students in their study. All of the students were from a major southwestern university and were enrolled in an undergraduate general education class that was focused on study skills and college survival. The majority of the sample (93%) was between the ages of 18 and 25. Males and females were almost equally represented with 49% male and 51% female. The sample was largely Caucasian (78%), and over half (54%) were in the first year of college. The questionnaire used was created by combining items from the following instruments: the Beck Depression Inventory (BDI), the Revised UCLA Loneliness Scale, the Social Readjustment Rating Scale, the Beck Hopelessness Scale, and the Suicide Ideation Questionnaire. The questionnaires were distributed during a class period and were returned during the class period on a specific date and dropped into a sealed box by each individual participant. The results were obtained through

descriptive statistics and correlations were computed in order to analyze the relationships between suicidal ideation and risk factors and among the various risk factors.

Relationships between suicide ideation in college students and each risk factor tested were found. Significant positive correlations were found between suicide ideation and depression ($r = .62$), suicide ideation and loneliness ($r = .52$) and suicide ideation and hopelessness ($r = .52$). Another correlation that was much smaller yet still significant was found between suicide ideation and stress ($r = .20$). Furthermore, positive correlations were also found between depression and loneliness, depression and hopelessness, loneliness and hopelessness, depression and stress, as well as a small relationship between stress and hopelessness.

The majority of results were found to be consistent with studies that had reported multiple risk factors associated with suicidal behavior (Konick & Gutierrez, 2005; Sanchez, 2001). However, the rather weak relationship found between suicide ideation and stress did contrast with earlier studies such as Bonner and Rich (1988) that reported a stronger relationship between stress and suicidal ideation. A limitation of the study was that the sample of participants was not representative of a larger college student population being that they were all first year students who were predominantly Caucasian. Another limitation was the method of gathering data was self-report, which could be highly variable depending on the mood and the experiences of the participants at the time of the study. Further, self-report is also subjected to other variables that may impact the report such as social desirability. Despite the limitations, the results clearly demonstrated the presence of multiple risk factors for suicide ideation as well as associations among the risk factors.

In a similar study, Heisel et al. (2003) investigated various predictive psychological factors that could contribute to suicide ideation in college students with a focus on social hopelessness. Heisel et al. (2003) noted the following,

Despite the inherent value and possible protection afforded by the pursuit of higher education, the combined pressures of young adulthood and college life can overwhelm the coping skills of some students, leading to potential psychological disturbance, and all too frequently eventuating in suicidal considerations and behavior. (p. 222)

Flett, Hewitt, Gayle, and Davidson (2003) defined social hopelessness as negative perceptions and beliefs about an individual's future social or interpersonal relationships. They continued to state that socially hopeless individuals often anticipate not being able to experience positive interpersonal relationships or be comfortable in social situations. Although Heisel et al. (2003) studied the relationship between suicide ideation and various predictive factors, the study was one of the first explorations of social hopelessness and suicidality among college students, a group who is typically found in the identity and self-worth stage of development. It was hypothesized that social hopelessness would predict suicide ideation better than a more general sense of hopelessness.

The study's participants included 143 college students who were enrolled in an introductory psychology course. The sample consisted of 40 males and 103 females. The average age of the participants was 20.5. A specific instrument measured each predictive factor. Suicide ideation was measured with the suicide ideation subscale of the Suicide Probability Scale. The Problem Checklist measured stress. Depression was measured by

an 11-item version of the Center for Epidemiologic Studies Depression Scale. The Beck Hopelessness Scale measured general hopelessness, and the Social Hopelessness Questionnaire measured social hopelessness. The participants completed all five questionnaires anonymously during a break in the class.

Descriptive statistics, correlational analyses, and Multivariate Analysis of Variance (MANOVA) were all used to organize and understand the data from all of the questionnaires. Overall, the participants were found to be low to average on measures of daily stress, depression, general hopelessness, and suicide ideation, but elevated scores on measures of social hopelessness. The correlational analysis showed positive associations between suicide ideation and daily stress ($r = .36$), depression ($r = .58$), general hopelessness ($r = .54$) and social hopelessness ($r = .45$). The MANOVA was used to compare the predictive factors in those with high versus low suicide ideation and the effect was significant across all predictors. It was shown that those with high suicide ideation had significantly higher levels of daily stress, depression, general hopelessness, and social hopelessness than those with low suicide ideation. These results clearly supported a multidimensional model of student suicide ideation as well as established the relevance of social hopelessness to college student suicide ideation.

The result of social hopelessness being associated with suicide ideation among college students is not something that has been extensively researched, but does suggest the importance of attending to interpersonal issues with suicidal college students. Despite the importance of the results for professionals working with suicidal college students, there were limitations. The study focused on suicidal thoughts and not on suicidal behaviors and the prevalence for suicide ideation in the participants was low, thus making

conclusions about suicide ideation and predictive factors more difficult. Also, the participant sample was predominantly female and no information was given about the participants' cultural background. One final yet important limitation was the subjectivity of the study, given all of the results were based on self-report questionnaires.

Nonetheless, this study did identify important associations and brought more attention to the important role that social hopelessness has in the college student population.

While Heisel et al. (2003) focused on social hopelessness, Van Orden et al. (2008) focused solely on the mediating role of belongingness in connection to how suicidal ideation varies for college students across semesters. Joiner stated, "the interpersonal-psychological theory of suicidal behavior proposes that the need to belong is so fundamental that when it is met it can prevent suicide but when thwarted, it substantially increases risk for suicide" (as cited in Van Orden et al, 2008, p. 427). Several previous studies have also suggested that thwarted belongingness may be expressed as intense feelings of loneliness (Bonner & Rich, 1987; Stravynski & Boyer, 2001). Van Orden et al. were particularly interested in whether changes in belongingness are found helpful in predicting suicide. Van Orden et al. believed that shared experience and increased community, in the form of student support services and peer companionship, may decrease suicide rates through increased belongingness. Prior to the study, the authors hypothesized that college student suicide would vary across academic semesters and more specifically would increase during the summer semester.

Participants for the study included 309 undergraduate students in an introductory psychology course at a large southern university, with a female majority of 223 students and 86 male students. The mean age of the sample was 19 with a range from 17 to 51. A

total of 147 students participated in the fall semester, 100 students participated in the spring semester, and 62 participated in the summer semester. All participants completed a self-report questionnaire packet including the Interpersonal Needs Questionnaire (INQ) and the Beck Scale for Suicide Ideation (BSSI). Responses to items related to suicide were screened by experimenters for severe and imminent risk and all participants were debriefed and given resources within the community. Data was collected in each semester: fall, spring, and summer.

A series of regression equations were constructed to test the hypotheses. Regarding suicidal ideation, an important finding included a difference for suicidal ideation for summer versus spring was theoretically, clinically, and statistically significant. This finding indicates that suicidal ideation was higher in the summer compared to the spring. The difference between summer and fall was also significant and indicates higher suicidal ideation in the summer as compared to the fall. Both of these results were consistent with the authors' hypothesis. Regarding the levels of belongingness, an important finding was that the lowest level of belongingness occurred in the summer, followed by the fall and then the spring. However, levels of belongingness did not differ significantly between the summer and fall but the difference between summer and spring was found to be significant. The final conclusions reached in the study indicate that when all three factors: academic semester, level of belongingness, and suicidal ideation were combined into a regression, only belongingness significantly predicted suicidal ideation. The effect of academic semester was reduced and became nonsignificant and indicated mediation. Therefore, belongingness was found to

significantly mediate the relationship between suicidal ideation and academic semester (Van Orden et al, 2008).

This study did have various strengths such as the findings can contribute to an understanding of suicidal college students and have implications for treatment and prevention. Further, the findings are consistent with the interpersonal-psychological theory that one source of desire for suicide is thwarted belongingness. While there were limitations such as an overwhelming majority of female participants as well as a low number of participants overall, other limitations also exist. For example, a cross-sectional method was used to assess suicidal ideation and belongingness, which carries the assumption that dependent variable does not cause the independent variable or mediator. Further, the inability to include other moderators such as gender or age to determine a stronger or weaker relationship of belongingness for different ages or genders is another limitation of the study (Van Orden et al., 2008). An important implication provided by this study is that suicide prevention efforts on college campuses may consider targeting the summer months as well as early fall months. Efforts of prevention could aim to increase connectedness and community during these months that traditionally see a decrease in population.

Konick and Gutierrez (2005) examined what they thought to be three common risk factors that predicted suicide ideation within the college student population. The risk factors they focused on were negative life events, hopelessness, and depressive symptoms. Through surveys of college students, Bonner and Rich (1988) had previously found that as many as 50% experienced some degree of suicide ideation over a one year time period and between 8-15% acted in some way on their suicidal thoughts. Konick and

Gutierrez (2005) claimed that the relations among the variables can and have previously been conceptualized in various ways. For their study they chose to use a cognitive vulnerability-stress model. Within this model, negative life events contribute to negative or distorted assessment of oneself and future events. This can result in hopelessness, which can result in depression, which could potentially result in suicide ideation and behavior. This model was chosen because of the belief that there is a lower prevalence of pathology and higher fluctuations in regards to hopelessness and depressive symptoms in the college student population (Konick & Gutierrez, 2005).

The participant sample consisted of 345 undergraduate students who were between the ages of 18-40, with an average age of 19. The participants were all enrolled in psychology classes at a large Midwestern university. Partial class credit was given in return for participating in the study. The sample was made up of 231 (67%) females and 114 (33%) males. Freshman made up approximately 62% of the sample. The racial make up of the participants was 65.2% Caucasian, 18.3% African American, 6.1% Asian American, 6.1% Hispanic and 4.3% other or not reported.

The following four different instruments were used to gather the data: (a) Life Experiences Survey (LES), a self-report measure that allows respondents to rate events they have experienced over the last year; (b) Beck Hopelessness Scale (BHS), a true-false self-report questionnaire that measures an individual's negative anticipations about the future; (c) Beck Depression Inventory-II (BDI-II), questionnaire designed to assess the severity of depressive symptoms; and (d) Adult Suicidal Ideation Questionnaire (ASIQ), a self-report instrument that measures an individual's suicidal thoughts within one month.

All participants provided demographic information and completed the four study measures in a random order to avoid order effects.

Konick and Gutierrez (2005) found depressive symptoms and suicide ideation among the sample were reported as relatively low. The majority (74%) of the participants displayed minimal depressive symptoms while 14% displayed mild, 8% moderate and 4% severe symptoms. In addition, low to moderate statistically significant correlations were also found among the measures of the study, with the most significant between suicide ideation and depressive symptoms followed by hopelessness and then negative life events. Regression analyses were used to look at the data within the applied model. Significant effects were found for both hopelessness and depressive symptoms but negative life events were not shown to be a direct significant predictor for suicide ideation. Furthermore, the authors suggested that depressive symptoms have a significant bearing on the relationship between negative life events and hopelessness (Konick & Gutierrez, 2005). Overall, support was found for negative life events, hopelessness and depressive symptoms as significant predictors of suicide ideation in college students. However, negative life events were found to have indirect effects on suicide ideation when both hopelessness and depressive symptoms were present. Despite the authors' conclusion that negative life events, hopelessness and depressive symptoms could be viewed as the three core elements of suicide risk, they also agreed that there are other factors than can qualify as significant risk factors for suicide ideation.

Although Konick and Gutierrez (2005) found significant and important results with their study, there were important limitations. First, the participants were enticed to participate in the study by receiving partial credit for psychology classes in which they

were currently enrolled. This could have allowed for participation to be based on personal gain rather than interest as well as effected how honest the participants were within the self-report measures. Second, the sample consisted of significantly more Caucasian females with low scores of risk for suicide ideation. This fact significantly lowers the generalizability to the greater college student population. More research is necessary in order to better understand risk factors and all of the possible interrelationships among the factors within the college student population. It was also suggested that future research looks at the impact of age, gender, and culture (Konick & Gutierrez, 2005).

Many of the researchers who have looked at suicide in college students have attempted to focus on a couple of factors they hypothesized to be important (Dixon, 1991; Heisel, 2003; Weber, 1997). Furr et al. (2001) focused on the relationship between depression and suicide. The authors researched the same issues in 1987 and found 81% of their participants experienced depression during college, 32% experienced some degree of suicide ideation, and 1% reported an attempt at suicide. Furr et al. (2001) replicated their study a decade later to compare results to the research of Heppner et al. (1994) that found an increase in the severity of presenting problems among college students.

Furr et al. (2001) included 1,455 college students, a significant increase from their previous study. Enhancing the diversity of the sample, participants were recruited from a research university in the Midwest, a state university in the southeast, a community college in the southeast, and a small, private college in the southeast. Approximately 35% of the sample was male and 65% female. The majority of the participants, 82%, were between the ages of 18 and 24, what the authors considered to be the traditional age range for the majority of college students. All grade levels were included in the population as

follows: 32% freshman, 25% sophomores, 22% juniors, 16% seniors and 5% graduate students.

To obtain the thoughts and opinions of the college student, Furr et al. (2001) gave a brief questionnaire to students in an academic class and asked them to complete it. The questionnaire contained many questions that were related to the following issues: (a) any experience of depression since starting college and their reason for why; (b) any suicidal thoughts/ideations or suicide attempts since starting college, and why; (c) experience with counseling if were depressed or suicidal and if helpful; and (d) how their institution could handle similar problems with greater effect and outcome. The definition of depression was open to an operational definition made by the participants. If the participants had experienced depression, they were asked to mark what they felt were contributing factors from a given list. A similar question and list was presented for those who had experienced suicidal thoughts and attempts. Over half of the participants, 53%, reported having experience with what they defined as depression since starting college; 9% of all participants reported having thoughts about suicide since starting college. About 1% reported having attempted suicide since starting college. The factor most frequently reported for cause of depression was grade problems followed by loneliness and money problems. For suicide ideation, hopelessness was the most frequently reported contributing factor, followed by loneliness and helplessness. About 17% of those who experienced depression reported seeking help in the form counseling as helpful to them. Of those who experienced suicide ideation, 20% reported seeking help through counseling and only 48% reported counseling as helpful. Participants who reported suicide ideation and attempts indicated hopelessness and helplessness much more than

those who reported depression alone, suggesting that hopelessness and helplessness are important risk factors for suicide (Furr et al., 2001).

Although there were significant differences found between those students who were depressed, had suicidal ideations or suicide attempts, there were also some limitations to the study. First, the sample was consisted of 35% male and 65% female. It has been shown that males are generally more successful at completing suicide while females generally have a higher percentage of attempts (National Mental Health Association & The Jed Foundation, 2002). This gender difference could have impacted the results of the study and should also be considered in the interpretation of the results as the majority of the results represent a female view. Another limitation is there is no information on the racial background of the participants, which also could have impacted the findings.

Although depression is often seen as the most important contributing factor of suicide ideation, the importance of hopelessness as a contributing factor of suicide ideation is increasing. Williams, Galanter, Dermatis and Schwartz (2008) examined the role of hopelessness in presenting concerns, diagnosis, and psychopharmacologic treatment in a sample of college students seeking treatment at a university counseling center. The authors believe that while hopelessness has been looked at specifically in relation to depression as well as suicidality, hopelessness has not yet been examined in sole relation to suicidality in a university sample seeking counseling services. This, in combination with the findings of Joiner et al. (1996) that showed hopelessness to be a strong predictor of suicidal ideation and Beck et al. as cited in Williams et al. (2008) that

showed hopelessness was more important for explaining suicidal ideation than depression, motivated the authors to explore further in the current study.

The study was conducted at the counseling center of a large urban university and participants consisted of a subset of students drawn at random from admissions to the university counseling center during October through December of 2003. The total number of participants was 180, with 95 undergraduate students and 85 graduate students. The mean age was 23.5 and 69.2% identified as female and 30.8 as male. International students comprised 11.5% of the sample, Caucasians made up 52.8%, Asians 15%, Hispanic 12.2% African American 9.4% and Biracial/Other 6.1%. The majority of the sample, 77.8%, was self referred. Each participant completed a standard intake form and the Beck Hopelessness Scale (BHS). The most commonly identified presenting problems were anxiety (65%), stress (63.3%) and depression (62.2%). A total of 6.7% reported suicidal concerns. About 82% of the participants were given a DSM IV diagnosis at the counseling center with the most common being Dysthymia, Adjustment Disorder with Depressed Mood, Generalized Anxiety Disorder and Major Depressive Disorder. About 10% were already taking psychiatric medications prior to their visit to the counseling center and a total of 22% were started on psychiatric medications at the counseling center (Williams et al., 2008).

The mean BHS score was 5.5 with a Standard Deviation of 4.6. Hopelessness was not found to be significantly associated with any of the demographic variables such as age, gender, student status or ethnicity. Level of hopelessness was found to be significantly and positively associated with various self-reported presenting concerns including depression ($t = 4.77$), anxiety ($t = 4.7$), and self-esteem ($t = 4.01$). Overall, a

mental health diagnosis was also found significantly and positively associated with level of hopelessness ($F = 4.45$). Further, Tukey post hoc tests indicated the level of hopelessness was higher for those who had been dually diagnosed with anxiety and depression related disorders. There was no significant finding regarding level of hopelessness and being on medication at presentation. However, there was a significant positive association between level of hopelessness and being started on a psychiatric medication (Williams et al., 2008).

Along with significant findings, there are also important limitations to this study. First, the sample used was drawn at random from a very large, ethnically diverse, urban university and the results may not be generalizable to all university sample populations. Also, a cross-sectional analysis of data was utilized and the relationship between variables was correlational and does not imply cause and effect (Williams et al., 2008). Further the Beck Hopelessness Scale utilized in the study is only one measure of hopelessness and has a focus on pessimism about the future. However, the definition of hopelessness is not that simple. Hopelessness is a multidimensional construct and other issues such as social hopelessness may be as important to assess (Williams et al., 2008).

There are a variety of possible factors such as stress and depression that can potentially lead college students to experience suicide ideation. College students today are faced with increasing levels of stress and competition in their journeys toward success. However, stress and the negative effects of stress are not new problems seen by college students, but rather problems that are growing in both the amount and the severity of the stress (Dixon et al., 1991; Mathiasen, 1998). Almost two decades ago, Bonner and Rich (1988) investigated the role that stress played in suicide and suicide ideation and

found that an individual was in fact more vulnerable to suicidal thoughts and behaviors when in a current stressful situation. Empirical data has identified some critical risk factors for suicide ideation among college students including depression, loneliness, hopelessness and stress (Furr et al., 2001; Weber et al., 1997). There seems to be a consensus among researchers around the critical risk factors for suicide ideation in college students. The emotional distress in combination with depressive symptoms can contribute to suicidal thoughts and behaviors in college students at higher rates than expected.

Prevalence of Suicide Ideation among College Students

While many researchers have focused on the risk factors that can lead to suicide ideation in college students, not much research has been done on the prevalence of suicide ideation among college students across the nation. Brener, Barrios, and Hassan (1999) were the first to use nationally representative data in order to assess the prevalence of suicide ideation in the college student population in the United States. The National College Health Risk Behavior Survey (NCHRBS) was conducted in 1995 and produced a nationally representative sample of 4,609 undergraduate college students who were 18 years and older and enrolled in 2- and 4- year public and private colleges and universities in the United States. The NCHRBS questionnaire was developed by a collaborative effort of the Centers for Disease Control, university representatives, national organizations and federal agencies. It was made up of 96 multiple choice questions with the main questions of interest to Brener et al. (1999) regarding any considerations, serious thoughts, plans, and attempts of suicide.

The majority of the students were between 18-24 years, 56% female and 44% male. The participants consisted of mostly Caucasian (73%), followed by Black (10%), Hispanic (7%), and other racial background (10%). The questionnaire was mailed to the potential respondents to be filled out. The respondents were told the responses were voluntary and confidential. Brener et al. (1999) reported they edited the data from the questionnaire for inconsistent responses as well as applied a weighting factor so all results were based on weighted data.

The results from the questionnaire showed about 1 in 10 students, or 10%, had seriously considered attempting suicide during the 12-month period prior to the survey. Approximately 7% of students reported having made a suicide plan, 2% had attempted suicide at least once, and 0.4% had made a suicide attempt that required medical attention. Due to the low prevalence of suicide planning and attempts, the authors focused on the 10% who reported suicide ideation. It was found that the prevalence of suicide ideation did not vary by gender, but did in fact vary by other demographic factors. Students 18 to 24 were more likely than students 25 or older to experience suicide ideation. Freshman (14%) and sophomores (12%) were more likely than seniors (6%) to have had thoughts of suicide. In regards to racial background, students who identified with being Asian, Pacific Islander, American Indian, or Alaskan Native (15%) were more likely than Caucasian students (10%) to have considered suicide. Another result showed that students who lived alone, with roommates, friends or parents were more likely than students who lived with a spouse or partner to have had suicidal thoughts. Furthermore, it was found that living with a spouse or partner was a protective factor against suicide

ideation. Also, students who were involved in a fraternity or sorority were less likely than those not involved to have considered thoughts of suicide (Brener et al. 1999).

Although the findings of Brener et al. (1999) were both significant and important for professionals working with college students as well as college students themselves to know, there were limitations to the study. First, the study was limited by the small number of questions, 5 out of 96, directly related to suicidal thoughts and behaviors on the questionnaire. No questions were asked in regards to frequency or severity of any present thoughts or behaviors, which could have led to more detailed results. Also, because the study was based upon self-report, there is a chance for the validity to be affected by how the participant was feeling at the time of the study. For example, if a participant was feeling depressed while responding to the questionnaire, their thoughts of suicide may be different from when they were not feeling depressed. Nonetheless, Brener et al. (1999) did find important statistics that supported their hypothesis that suicide ideation is in fact a problem among college students. The authors also expressed their opinion that suicide prevention programs need to be established or improved in colleges and universities in the United States, but also admitted to not having sufficient information to recommend any one strategy to do so.

Kisch, Leino, and Silverman (2005) explored the results of the Spring 2000 National College Health Assessment Survey (NCHA) and attempted to utilize the data in order to report the findings. The authors noted that there is limited epidemiological data on the actual rates of suicide on university campuses into the 21st century. The NCHA survey was sponsored by the American College Health Association and measured depression, suicidal ideation and suicide attempts among college students in the academic

year 1999-2000. This study provides a replication of the CDC's NCHRBS, while supplementing the frequency of college students who seriously considered attempting suicide or attempted suicide in the last academic year (Kisch et al., 2005).

The NCHA was comprised of approximately 58 items, some with up to 15 different components that covered the following areas: health, health education and safety; alcohol, tobacco, and drugs; sex perceptions, behavior, and contraception; weight, nutrition, and exercise; mental and physical health; impediments to academic performance; and demographics. Only institutions that used a random sampling technique were included in the analysis for this study. The total number of college students assessed was 15,997 students from 28 different campuses. Eight of these campuses were private colleges or universities and 20 were public. All but 1 was four year institutions and school size varied with a range from less than 2,500 students to over 20,000 students. Geographic locations were also varied as well as campus settings which included suburban, urban and rural. The ACHA had a contract with the Core Institute at Southern Illinois University to design the survey as well as to enter the data via scanning process. This current study utilized 35 questions of the original study of 300 questions which pertained to demographics, mental health, and possible suicidal feelings and/or behaviors (Kisch et al., 2005). The sample of 15,997 students was 38.2% male and 61.8% female. Caucasians comprised of 68.5% of the sample, Asians 10.8%, Hispanics 8.8%, and African Americans 7%. Sixty-two percent of the sample was under 22 years of age and freshman and sophomores combined comprised of 41.3%, while juniors and seniors 40.4%, fifth year students 6.9% and graduate students 10.4%. Fifty-four percent reported being single and 34.1 reported being in a committed relationship (Kisch et al., 2005)

In comparing the results of the NCHA with the NCHRBS, Kisch et al. (2005) stated, "The overall findings of these two surveys, however, sampled five ears apart, are surprisingly consistent and disconcertingly high" (p. 7). Similar to the NCHRBS, the NCHA found that 1.5% of students reported attempting suicide. The NCHA questions stated the time period as "within the last school year" while the NCHRBS "during the last 12 months" (Kisch et al., 2005). A marginal difference was seen in the percentage of students who reported that they had seriously considered suicide with NCHA finding 10% and NCHRBS finding 9.5%. More than half of the respondents reported feeling hopeless at least once during the last school year and 33.4% reported experiencing hopelessness three or more times during the last school year and this finding occurred more with females. Further, 44.5% students reported they had experienced being so depressed it was difficult to function and 22.1% reported this on three or more occasions. While 1.5% reported having attempted suicide, 9.5% reported having seriously considered attempting suicide (Kisch et al., 2005). These results indicate that emotional distress, partially linked to depressive symptoms, among college students contributes to suicidal thoughts and behaviors at rates that are higher than expected. However, it is important to note that college itself is not a risk factor (Kisch et al., 2005) and suicide rates are higher among non-college matched cohorts (Silverman et al., 1997). The implication of these results is more needs to be done to better identify students at risk and provide necessary services (Kisch et al., 2005).

Kisch et al. (2005) were also interested in the risk factors for suicide ideation, suicide attempts, and their interrelationship among the college student population. The risk factor of feeling so depressed it was difficult to function was reported less frequently

than hopelessness but was more often linked to suicidal thoughts and actions. Further, the authors noted that not all students who reported depressive symptoms had considered suicide, but those who had reported suicidal thoughts or suicide attempts almost always also reported depressive symptoms. The results showed that 78.3% of those who seriously considered suicide also reported feeling so depressed they could not function on three or more occasions. Furthermore, 92.8% of the students who reported an attempted suicide also reported having felt so depressed it was difficult to function. Therefore, feeling so depressed that it is difficult to function in the last 12 months was a warning sign for suicidal ideation. Results of the study also indicated that there were a low number of college students who are seeking or receiving help with their problems. Out of the 1,464 students who reported seriously considering attempting suicide, 13.4% reported being in therapy, while only 19% of the students who reported attempted suicide also reported being in therapy. Similar findings were seen in regards to medication. Out of the 421 students who reported being in therapy, 46.6% reported having seriously considered attempting suicide while 10.2% of those in therapy reported attempting suicide. Again, increased thoughts of suicide and attempts of suicide were seen in those students on medication for depression in comparison to those not taking medications.

Significant limitations did exist within the study. First, there was an absence of any timeline for suicidal events and initiation of any treatment. There was also an absence of a severity index for the depression. The time period given was the past school year for the events that were surveyed, which makes it difficult to determine cause and effect. Finally, there was a lack of any criteria that indicated severity of reported symptoms. The authors did recognize that the questionnaire could be simplified and

better designed in order to improve the reliability. Despite the limitations, the survey and the study did provide a glimpse into the emotional lives of college students and support the hypothesis that suicide ideation and suicide is in fact a serious and prevalent problem in colleges and universities across the United States. The implication of the results found by Kisch et al. (2005) is more needs to be done to better identify students at risk and provide necessary services.

After reviewing results from both the NCHA and the NCHRBS, Garlow et al., (2008) sought to further explore the relationship between symptoms of depression and other strong and distressing emotional states with suicide ideation in undergraduate college students. This was accomplished by analyzing data gathered during a 3-year implementation of the College Screening Project at Emory University. Two hypotheses were formulated prior to the study. First, there is a significant and direct relationship between the severity of depressive symptoms and expressions of suicidal ideation among undergraduate college students. Second, other intense emotional states such as anxiety, irritability, rage, desperation, loss of control, would be associated with suicide ideation (Garlow et al., 2008).

The College Screening Project was developed by the American Foundation for Suicide Prevention (AFSP) in conjunction with participating universities. The project is a suicide prevention outreach effort that uses the Internet to identify possible at-risk students and encourages treatment. Once each year, all undergraduate students at Emory were invited to participate through an email message. The email contained a link to a secure web server through which an automated assessment was conducted. With the use of a self assigned username and password, the student submitted the screening

questionnaire which was reviewed by the project clinician, who then posts an assessment where it may be retrieved by the student. Students are encouraged to anonymously communicate with the clinician through a specific feature of the program. Any students that indicated significant depression or potential risk of suicide are highly encouraged to attend a face-to-face evaluation. The questionnaire used in the screening was based on the PRIME-MD Patient Health Questionnaire-9 (PHQ-9) as well as questions on current suicidal ideation and past suicide attempts and deliberate self-harm, strong and distressing emotional states, alcohol use, drug use, and eating behaviors, global functioning impairment, current pharmacotherapy and psychotherapy and basic demographic characteristics (Garlow et al., 2008).

A total of 729 Emory students, 71.7% female and 28.3% male, completed the screening questionnaire during the 3 year study interval. The sample represented 8.1% of all the students who received the initial email invitation. Ethnic diversity was as follows: 67.3% Caucasian, 13.6% Asian, 9.1% African American and 10% all other groups. Student responses were automatically entered into a database and statistical analyses were conducted after all data over the 3 year period had been collected. All statistical analyses were performed by the JMP 5 statistical package implemented on the computers utilized for the project and included ANOVA, t-test, and Pearson product moment analysis. A total of 81 students, 11.1% reported current (within past 4 weeks) suicide ideation. The mean depression score for students who reported suicide ideation was significantly higher than those who did not report suicide ideation. There were no significant differences found between males and females, different ethnic groups, and those who endorsed alcohol use and those who did not, when reporting suicide ideation.

A significant association was found between several measures of psychic distress and anxiety with suicidal ideation. Specifically, anxiety, irritability, rage, desperation and feeling out of control were significantly more common in students who reported suicide ideation. A total of 120 students, 16.5%, reported a past suicide attempt or episode of deliberate self-harm. Approximately 19.2% percent of these students also endorsed current suicide ideation and 28.4% of those with current suicide ideation reported a previous self-injurious act. Similar proportions of males and females reported a past suicide attempt or deliberate self-harm. Another intriguing finding was more students with current suicidal ideation, 16.05%, were receiving psychiatric treatment than those without suicide ideation, 10.4%. However, this difference was not found to be significant. Approximately 12.35% of the students who reported suicide ideation were in psychotherapy compared to 4.5% who did not and 9.9% of those with suicidal ideation received both forms of treatment compared to only 2.6% of the students without suicidal ideation. The overall findings were fairly consistent with both the results from the NCHA results as well as the NCHRBS results (Garlow, 2008).

While this study does offer converging evidence for contributing factors to suicide ideation in the college student population as well as to alarming rates of suicide ideation, there are also important limitations. First, while the study did look at treatments that students had received including psychiatric and psychotherapy, there is no data on the nature or adequacy of the treatment received by the students and this would offer valuable information. Second, the data are from a survey that relied only on the voluntary responses of students who were invited to participate, therefore the data does not accurately represent the prevalence rates of depression or suicidal ideation in all Emory

students or college students in general. Lastly, the web-based design of the study did simplify data collection and anonymity of participants, however, information about several aspects of the students' experiences were not able to be collected. While the study did have limitations, it also resulted in significant findings. In conclusion, the study highlights the need for universities to engage more vigorously in outreach efforts to educated students as well as their families about depression, suicide risk, and available treatment services (Garlow et al., 2008).

Trends. Although there is a large amount of literature on suicide and suicide trends in the general population, there is significantly less information, either empirical data or other, regarding suicide trends in the college student population. Westefeld et al. (1990) reviewed some of the existing scholarly literature with hopes of finding more information about college and university suicide trends. The authors attempted to address the importance of the college student suicide problem among college and university campuses all over the United States. They were also interested in informing professionals who work with the population as well as the general public that suicide on college campuses is a growing problem.

Through reviewing relevant research, Westefeld et al. (1990; 2006) were able to come to several important findings. First, the data from multiple studies indicated that it is difficult to obtain accurate information about suicidal attempts and completions on college campuses for various reasons. A possible reason for this problem was that there are not effective operational record-keeping systems at most universities and many of the institutions did not make attempts to monitor incidents such as suicides systematically. Second, much of the data on suicides was found to be inconsistent. One reason for the

inconsistencies was that some schools are motivated to either mislabel or underreport suicide activity in order to prevent negative publicity of their institution. Further, because of various factors such as the make-up of the student population, the location of an institution, or the atmosphere on a particular campus, different institutions will have different rates of suicide. Although accurate and consistent data was shown as being difficult to obtain, the authors still believed that college campus suicide was a problem that needed more attention to enhance preventative efforts.

Although the authors were reviewing previous studies, there were still limitations that should be noted. One limitation was the lack of any data on non-students. It could have been helpful to compare the available statistics of college students to statistics about non-college students who were of the same age range and developmental stage. It would have been useful to discuss any similarities and differences between the two groups and try to understand what makes one group more susceptible to suicide. Also, while the article did mention that many universities try to stay away from publicizing information about suicide and crises for fear of negative publicity, there was not a discussion about any other possible impacts of publicizing the problem of suicide on college campuses. A final limitation was that the study did not investigate any of the possible legal issues that may arise within the institution when a student is suicidal or commits suicide.

Following the lead of Westefeld et al. (1990), Haas et al. (2003) also reviewed findings of major studies of college suicide. The National Survey of Counseling Center Directors reported increases in students seeking counseling services, with approximately 85% of directors noting an increased demand in services. This was a dramatic increase from the previously reported 50% of directors when the question was first presented

almost a decade earlier. The authors found one contributing factor to be an increasing number of students entering college with a history of psychiatric treatment. Further, the authors noted that the Americans with Disabilities Act, passed in 1990, also urged colleges and universities to become more accessible to students with mental disabilities. As a result, colleges and universities are faced with dealing with increasing numbers of students with serious psychological problems. Furthermore, the National Survey of Counseling Center Directors also found that 30% of 274 polled campuses reported at least one student suicide during the 1999-2000 academic year coming to a total of 80 reported suicides nationwide. However, because there was not comparable suicide data from earlier surveys, it was difficult to determine significance from the recent finding (Haas et al, 2003).

Most recently, Drum, Brownson, Denmark and Smith (2009) stated that national attention to the problem of college student suicide has been growing steadily over the last 25 years. More specifically, it is stated that suicide is the third leading cause of death for youths between 15 and 24 years of age, following only accidental injury and homicide. Further, because the rate of homicide among the college student population in particular, suicide is believed to be the second leading cause of death for college students (Centers for Diseases Control and Prevention, 2007; Suicide Prevention Resource Center, 2004). There is a small range of estimation for the number of college student suicides per year of between 6.5 and 7.5 per 100,000. While this number reportedly is about half that of the nonstudent matched cohort, the authors and others suggest that nearly all of the reduction in suicide completions may be attributable to the reduced access to firearms on college campuses (Schwartz, 2006; Silverman, 1997). Due to this possibility, Drum et al. (2009)

have drawn the conclusion that campus prevention efforts are either nonexistent or ineffective, especially when it has been reported that nearly 80% of students who die by suicide never engage in treatment such as counseling services (Kisch, Leino, & Silverman, 2005).

The National Research Consortium of Counseling Centers in Higher Education was founded in 1991 and brings together counseling centers from around the United States. The purpose of the consortium is to study various college mental health topics. Drum et al. (2009) developed a Web-based survey with questionnaire items that were reviewed by the directors from each campus counseling center in the consortium as well as by two experts in suicidology. The purpose of their study was to provide comprehensive information about college student mental health as well as to uniquely contribute current knowledge of students' suicidal experiences. A stratified random sample that consisted of 26,451 students was selected from 70 participating U.S. 4-year colleges and universities. The sample represented 15,010 undergraduate students and 11,441 graduate students. About 60% of both undergraduate and graduate students in the sample identified as female and about 40% as male. The majority of the sample for both undergraduate and graduate students were Caucasian, 79% and 72% respectively, followed by Asian, 6% and 4% respectively, Hispanic/Latino, 5%, Multiracial, 4%, African American, 4% International Students, 2%, American Indian, less than 1%. Participating institution size ranged from 820 students to 58, 156 students with a mean of 17,752 students. Approximately 62% of the institutions were public and 38% private. Geographical diversity was also achieved with 20% of the institutions located in the Northeast, 20% in the West, 30% in the Midwest and 30% in the South.

An important finding from the students' self-reports was that suicidal thinking is significantly more common than has been previously recognized. Drum et al. (2009) found that over half of college students reported a form of suicidal thinking in their lives and 18% of undergraduates and 15% graduates endorsed the item "ever seriously considered attempting suicide". Among those students, 47% of undergraduates and 43% of graduates reported having three or more periods of suicide ideation and this would suggest that if and when a suicidal crisis occurs in college, many of the students are likely to have had significant previous experience with suicidality. Additionally, 8% of undergraduates and 5% of graduates also reported having attempted suicide at least once during their lives. As Joiner et al. (2005) suggested, the clearest predictor for future attempting or completing suicide is a previous attempt; thus making it concerning that so many college students have already made one or more attempts. Regarding suicide ideation within the last 12 months, 6% of undergraduates and 4% of graduate students reported this to be true for them. While other studies such as the NCHA and NCHRBS each found this number to be about 10%, the authors suggest that this difference may be due to the fact their survey explored a continuum of suicidality rather than a single crisis point. They believe that having the students answer six previous questions related to possible suicidal thoughts may have prompted students to think more deeply about their experiences and their answers. Another important finding was that thoughts of attempting suicide rarely occur without thoughts about methods for the attempt. Approximately 92% of undergraduates and 90% of graduate students who reported having contemplated suicide in the last 12 months also considered some ways of killing themselves or had specific plans. The most common method considered by those who reported suicide

ideation was a drug or alcohol overdose. This method was considered by 51% of undergraduates and 37% of graduate students who had a specific plan. Further, among those who had contemplated suicide in the last 12 months, 37% of undergraduates and 28% of graduate students had made at least some preparations for killing themselves that ranged from gathering materials, writing a suicide note, doing a practice run, or beginning an attempt and then changing their mind. Lastly, 14% of undergraduates and 8% of graduate students who considered suicide actually attempted suicide in the last 12 months. The majority of these attempters made only one attempt, with 9% of undergraduate and graduate students reporting three or more attempts. Among those students who attempted, 19% of undergraduates and 28% of graduate students made an attempt that required medical attention and the most commonly used method was a drug overdose. It is suggested that one of the most distressing findings was that 23% of undergraduates and 27% of graduate students who attempted suicide within the past 12 months reported that they were currently considering making another suicide attempt (Drum et al., 2009).

Summary. There has been significant speculation that suicide ideation and suicide are increasing severe problems seen on college and university campuses throughout the nation. Kisch et al. (2005) noted that the number of college students in distress who report seriously considering suicide is surprisingly frequent. While there is a large amount of subjective, non-empirical data to support the hypothesis, there is a significant lack of empirically grounded data that supports the claims. More empirical research has been started but needs to continue to come to a clear consensus about the truth of suicide

on university campuses. This research needs to take place at the institutional, state and national levels.

University and College Counseling Centers

University and college counseling centers are often the front-line mental health services for students pursuing higher education. While the scope of services provided will vary by institution, counseling centers across the nation play a vital role in the health and well being of their student population and often the entire campus community including faculty and staff. Due to the increasing role of college and university counseling centers in the promotion, education and treatment of mental health, more research has begun to investigate college counseling centers and the services they provide. The following section is focused on several areas regarding college and university counseling centers including possible increasing severity in presenting problems, common trends and recommendations, ethical and legal issues among others.

Increase in presenting problem severity. In 1997, Sharkin looked at the increase in the severity of problems presented by college students in university counseling centers. The author noted that some counseling center practitioners have been reporting a sense of urgency regarding the rise in the number of students seeking help as well as the severity of the problems the students present with. It became apparent to Sharkin (1997) that there was a need to separate presenting problems that are primarily related to developmental struggles such as identity and intimacy and more serious psychological problems such as suicide ideation. However, this differentiation can be complex due to various factors such as the counselor's theoretical framework and the fact that sometimes developmental

struggles and pathology are not always exclusive and can both be present at the same time.

Sharkin (1997) suggested that the term psychopathology for college students should be limited to cases of psychological dysfunction that significantly disrupts the ability of the student to function within the university setting or requires mental health care outside of the resources offered by the average college counseling center. By reviewing existing research, it was found that few studies had directly examined whether or not the level of psychopathology had actually increased during the past several years. Most of the support for the stated increase was based on surveys of directors and mental health professionals who worked in college counseling centers who were asked to give their perceptions about any changes they may have witnessed in presenting symptoms of their clients. After reviewing the available research, Sharkin (1997) concluded that there is only a perception among counseling center administrators and practitioners that there has been an increase in the severity of presenting problems of college students. There continues to be a need for empirical research to be done in order to confirm or deny the perceptions that have been made.

More specifically, Benton, Robertson, Tweng, Newton, and Benton (2003) also tried to investigate the claim of changes in client problems in college counseling centers over the past 13 years by reviewing previous studies. One finding of Gallagher, Gill, and Sysco (2000), who completed a survey of counseling center directors, was 77.1% indicated increases in number of students presenting with severe psychological problems and that the growing trend was a concern for their center. It is noted by the author that the findings were subjective and depended on the director's recall of case severity over a

specified period of time. The author also cautioned that the accuracy of the director's recollections could be biased by various factors. The author found that other studies (Cornish, Kominars, Riva, McIntosh & Henderson, 2000) that were more objective found higher levels of distress, but no changes in the levels of distress over time.

Through the use of the Case Descriptor List (CDL), an instrument that measures client developmental problems, relational problems and more severe problems, the authors obtained information from 13, 257 student-clients who had sought help from a college counseling center on a large Midwestern university campus. The data collection was archival and spanned over 13 years. Overall, the authors found that students who were seen in counseling services more recently and more frequently had problems including average college student problems such as developmental and relational problems as well as more severe problems including depression and suicide ideation. It was reported that the number of students seen each year doubled over the 13 year time span and the number of suicidal students tripled. Benton et al. (2003) suggested hiring mental health professionals that have more experience working with more severe populations and providing effective support to suicidal students such as working with family, residence hall staff, academic departments, psychiatrists and other student services. Although the authors displayed their findings and made appropriate suggestions, there are limitations to their study. The study was conducted at one university and although there was a large amount of data, it all came from the same university counseling center and thus is very difficult to generalize to the larger college student population. Further, a point of consideration is that the data was obtained through records

written by staff psychologists who worked in the counseling center about their clients; thus, all of the data used was subjective information.

Common issues and recommendations. In 2006, Bishop reviewed research on various questions that college and university counseling centers continue to struggle with as new demands, legal and ethical issues and concerns about training programs have emerged. Bishop stated that it is clear that the individuals who work in college and university counseling centers are in a professional field that continues to evolve and change. Further, he stated that both internal and external influences are contributing factors in determining what will be of significance to the future of college counseling. While it seems that all college counseling centers are struggling with similar questions, the responses that may be most helpful to one center may not be appropriate for another center. It is important to remember that college counseling centers differ in many ways such as the size and type of the home institution, geographic location, historical mission, financial status, sources of funding, and the demographics of the student body (Bishop, 2006).

One question asked in Bishop's study was, "Are the problems of college students increasing in severity, and, if so, who is concerned about such a development?" (Bishop, 2006, p. 7). Bishop cited the work of Gallagher (1984, 2004) and Gallagher, Bruner & Weaver-Graham (1994) to show that over the past 20 years, the percentage of counseling center directors that report a significant increase in severity has risen from 53% in 1994 and to 84% in 2004. However, it has also become evident that several of the efforts made to determine if there is an increase in severity in presentation have not met all of the rigorous standards for research that would provide more definite answers.

Specifically, Bishop (2006) found that while 86% of directors reported increased severity, only 50% of those had data to support that belief. The conclusion is then drawn that the need to improve the quality of research data on the severity of the problems presented by students is very high. More specifically, Bishop (2006) suggested that future studies take the time and effort required to improve the research design that focuses on this question, use common operational definitions and terminologies, collect empirical data, address standardization and reliability, and assess for longitudinal changes. There are few examples of studies that have looked at the mental health of college students in a longitudinal manner such as Benton et al. (2003) who explored over a 13 year period and found students experienced more complex problems in recent years. These problems included developmental issues such as relationship and academic skill concerns to stress, anxiety, depression, suicidal ideation, personality disorders and victims of assault. However, Benton et al. (2003) found that issues such as substance abuse, eating disorders, legal problems and chronic illness appeared to remain stable of the 13 time period of the study. It is critically important that counseling centers have data to support any efforts to deal with the demands for their services as it is more likely that actions of decision makers in higher education institutions will be influenced by data rather than by affective arguments (Bishop, 2006).

Another question asked by Bishop (2006) was, "What strategies are available to counseling centers in meeting the emerging demands for services?" (p. 10). Murphy and Martin (2004) have come up with several strategies on how counseling centers can attempt to deal with the increasing demands they face in providing adequate mental health services. Some of their recommendations included: (a) utilizing brief models of

therapy, (b) managing waiting lists in a new way, (c) improving efficiency of scheduling clients to reduce missed appointments (d) increasing frequency of group therapy treatment, (e) instituting automatic termination policies, (f) implementing emergency procedures that are not part of the traditional intake system, and (g) providing training for staff regarding effective assessment and referral procedures. Cornish et al. (2004) also focused on the importance of having referral sources outside of the institution for students who may require extensive or specific treatment that is not offered by the counseling center. Increasing resources for the counseling center always seems to be included in this list. While the majority, 85% of counseling center directors believe that campus administrators were aware of problems associated with increased demands for counseling services and complexity of presenting problems, only a small percentage, 30%, of those had reported receiving any additional resources and a smaller percentage, 15%, optimistically hoped that more resources would eventually be provided. However, about 40% of surveyed directors reported that while they believed there was an understanding of the problem, high-level administrators did not have the financial flexibility to provide any help, and 5% believed that the administration did not place a high priority of counseling services in general. Only a surprising 5% of counseling center directors reported their current resources as adequate for their counseling centers (Bishop, 2006).

Smith et al. (2007) further explored current issues in college counseling. The purpose of their study was to provide information about counselors' current work experiences in college and university counseling centers with respect to several of the most pressing issues in the college counseling profession. For the study, surveys were

mailed to a randomly selected subset of 450 professional members of the American College Counseling Association (ACCA). Student members, retired members and those with addresses outside of the U.S. were excluded. A total of 133 individuals responded to the survey and the participants consisted of 86 women (65%) and 47 men (35%). The average age of participants was 48.4 with a range of 26 to 66. The majority of the participants were European American (88%), 5% Hispanic/Latino American, and less than 2% each of African American, Asian American or multicultural. Most participants (58%) were master's level professionals with 40% being doctoral level and 2% being bachelor's level. Approximately 45% of the participants had some administrative component to their employment position such as counseling center director, associate director, clinical director, etc. The survey consisted of several questions regarding demographic information, professional employment, accompanying responsibilities, and opinions about the pressing professional issues related to college counseling. Seven questions required open-ended responses addressing pressing issues such as multicultural competence, crisis planning and disaster mental health. Responses to these answers were analyzed using standard content analysis procedures.

Two specific questions within the survey requested participants to estimate the percentage of their clients who experienced severe distress such as suicidal ideation, panic attacks, etc., and who experienced mental health conditions that were so debilitating that they would be unable to remain enrolled as a student without ongoing counseling services. It was found that caseloads consisted of an average of 36% of clients experiencing severe distress. Half of the clients reported by participants had conditions so severe they were unlikely to remain in school without mental health counseling. It is

noted that these findings are limited because they are based on counselors' perceptions rather than on reliable measurements of symptom severity.

Participants reported spending an average of 62% of their work time providing direct services to clients with an average 24.1 hours being spent in providing individual and group counseling. When direct and indirect services were combined, participants reported spending 81% of their total time providing services to clients. Counseling center administrators in the survey reported spending 62% of their time providing direct and indirect services for clients and the remaining 38% of time on administrative activities. Therefore, the difference between counselors and administrators in time devoted to providing service versus administrative activities was 18% in this participant sample. Participants' ratings of their job satisfaction were high, with an average of 7.7 on a 9 point scale. All but 15% rated their satisfaction at a 7 or above. This finding indicates that despite challenges and pressures that college counselors face, they generally enjoy their work (Smith et al., 2007).

Smith et al. (2007) also evaluated the frequency of collaboration between counselors and personnel from other campus offices and departments as this has been shown to be increasingly important (Cooper as cited in Smith et al., 2007). Equal contact was reported with professors/instructors, college/university administrators, and academic advisors with the average frequency as bimonthly. Equal contact was also reported with personnel from multicultural student services, disability services, and health/medical services with the average frequency reported as monthly. A significantly lower frequency of contact was seen with the international student services with the average reported as quarterly.

In response to the open-ended question of strategies to meet increasing demands, only 4% responded that the caseload demand was not an issue. 26% responded that the center needed more employees and while this might be the simple answer, most colleges and universities do not have the resources to do so at this time. Other suggestions included using waiting lists (17%), imposing session limits (16%), refer clients to other resources (10%), and use group counseling more often (9%). Approximately 14% of the participants indicated taking on additional caseload without making any adaptations in the center's policies or practices and 4% reported their centers allowed individual counselors to determine how to handle their caseload. In response to the question of administrative support, 33% stated that they met with administrative committees to inform them about their current issues and needs. Approximately 23% reported gathering data, shared research articles and provided formal reports regarding counseling center activities. While many seem to network with school administrators, 30% indicated taking no actions to increase administrators' support for counseling services. This finding shows the importance of advocating with school officials and to continuously demonstrate the utility of the counseling center on campus. Regarding the question about multicultural competency, the most commonly used strategy to increase the multicultural competence of services was providing workshops or in-service training for counseling center employees (44%). Others indicated the recruitment of a racial/ethnic minority staff member or intern or hiring a particular staff member with expertise in multicultural issues (22%). Some participants (22%) reported they worked regularly with the multicultural/international student office within the university and 11% provided outreach program targeting the multicultural students on campus. One single participant

reported the counseling center had changed many policies and practices to better meet the needs of multicultural students on campus. In response to the question on crisis counseling and disaster mental health response, 33% of the participants stated that although preliminary steps had been taken, nothing formal was created or existed. Approximately 26% indicated that their center had implemented a clearly defined crisis/disaster response plan and had systems in place to handle a crisis on campus. Nearly 19% reported that counseling center employees received specialized training to handle crisis situations and 7% reported the counseling center had no involvement in crisis/disaster planning due to other offices handling all emergencies on campus. In response to what the participants most desired to improve about the counseling center in which they worked, the most frequent answers were simple: increase the amount of resources (30%) and the number of staff (28%). Approximately 20% suggested the center needed to establish better relationships with other institutions, the students and with the community while 11% desired improved professionalism and collegiality among the counselors in the center and 9% for improved quality of the services provided. Three percent indicated they would like to have more time for individual counseling sessions. Overall, Smith et al. (2007) stated the answers, specifically the answers to the open-ended questions, did not indicate major crises in the workplace.

Several limitations need to be considered for this study. First, the data presented may not accurately represent the experiences of all college counselors whose primary affiliation is not with the counseling profession. Although the participants were randomly selected ACCA members, there was only about a 30% return rate and the respondents may differ from the general population of college counselors. Further, the data did not

evaluate differences across institutional size or type. The research could also be ruled unreliable because of possible biases among respondents in evaluating their own work environment and possible inaccuracy of retrospective recall. Lastly, the survey did not address issues such as including the work of practicum students and interns with clients, counselor-in-residence and residential halls, substance abuse counseling or spiritual counseling. However, the study has underscored the claim that the profession will need broadly experienced counselors to develop specialized skills to keep up with global trends on campuses. It is critical that counseling center staff is skilled in dealing with clients with severe pathology and with those from multicultural backgrounds. There is also a need to effectively plan for and manage crisis and disasters that may occur on campus. Further, there is a constant need to actively consult with health and medical personnel as with a number of other professionals and departments across campus. Lastly, there is a need to provide a variety of effective interventions besides individual counseling and by engaging in all of these suggestions, counseling center would demonstrate the utility of college counseling services to the campus community.

After reviewing and summarizing literature on college students and mental illness including barriers to receiving services, Mowbray et al. (2006) presented several recommendations for campus mental health services and their respective institutions based on well-accepted services principles. First, it was suggested that colleges and their counseling centers help in dispelling myths such as college is a new beginning and the assumption made by students and their families that past psychological struggles will disappear. This can be done through education about early warning signs or symptoms as well as the resources available on campus and how to access them. This education should

be presented in orientations as well in written materials distributed to all students and their families. A second recommendation made was that all faculty and staff should be knowledgeable of the early warning signs of mental illness, especially concerning severe depression and suicide risk. Further, they should also be knowledgeable about how and when to refer students to counseling services or other campus resources as well as the confidentiality and legal issues that may arise in these types of situations. The counseling center can facilitate this process by either assisting in educating/training and by establishing and maintaining solid, working relationships with various departments around their campuses as well as close relationships with specific targeted departments (Smith et al., 2006).

A third recommendation made is that colleges and universities should assign to a specific component of student services on campus, such as the counseling center, the responsibility for providing outreach to the college campus to help students, faculty and staff be able to identify symptoms and warning signs of psychiatric illness. Further, it is stated that curriculum infusion, outreach programming and web-based education would all be considered effective ways to educate the campus community about psychological issues. Another recommendation presented is there needs to be easy access and “no wrong door” to entry for assessment and treatment of any mental health struggles. This should help overcome barriers presented by prevailing attitudes toward mental illness and difficulties coping when struggling with psychological issues. It is important that entry to services through any portals such as counseling services, disability services, health centers, emergency services, resident hall advisors, etc. should lead to the same outcome of the student receiving comprehensive and accurate diagnostic, psychosocial and

functional assessments as well as entry to necessary and appropriate treatments. A recommendation also exists that referred to the accessibility of on-campus mental health services, stating counseling centers should be maximally accessible to all students regarding their physical location and information about function and procedures. It is noted that sometimes reaching students who are non-traditional in any way may require aggressive outreach efforts as well as a willingness to make the services more convenient or accessible. A few suggestions were also listed on how to make services more accessible or convenient and include having services in locations that do not publicly expose individuals accessing the services; having a mission statement that clearly states the intention to serve student mental health needs as well as the limits to services; widespread provision notification of services and short written guides that are distributed to students, faculty and staff through multiple channels; and providing services on evenings and weekends (Smith et al., 2006).

Specifically regarding counseling centers, it was recommended that all students entering mental health services have a complete diagnostic, psychosocial and functional assessment. Further, there needs to be a well-developed and comprehensive system to prevent psychiatric crises and to respond to crises when they occur. It was also suggested that counseling centers make policy decisions about the extent and nature of mental health problems they can serve on campus and this should be done in conjunction with institution administrators. There should also be a referral procedure and follow-up arrangements created for those students whose type or extent of mental health problems is outside of the identified university policies. Established procedures should also be in place regarding notification of parents or other related third parties following any type of

crisis involving a student. While institutions of higher education and their respective counseling centers may have a responsibility to address the needs of their students, they do not have all of the responsibility. There is emerging knowledge of how to better address the needs and serve college students and this knowledge can help to build successful models that are responsive to specific needs of their student body (Smith et al., 2006).

Ethical and legal issues. Bishop (2006) also posed the question of, “How will counseling centers reconcile with the new provisions of FERPA, recent judicial rulings and Professional Codes of Ethics?” (p. 13). While there is a Code of Ethics that is followed by professionals employed in college and university counseling centers, legal dimensions of confidentiality may vary from state to state, and often, ethical questions are subject to differing perspectives and situational contexts. A recent amendment to FERPA effectively permits personal information from an educational record to be disclosed to appropriate parties if the information is necessary to protect the health and safety of the student or other individuals. As a result of this, it is becoming increasingly common for parental notification to be used as part of an institution’s information sharing policies, specifically in regard to judicial cases involving alcohol and drugs or hospitalizations. While records kept by other recognized professionals such as a physician or psychologist are not available to anyone and are not considered to be educational records, institutions are becoming increasingly concerned about potential liabilities that may be associated with policies that prevent them from sharing information with third parties (Bishop, 2006).

According to Gallagher (2004), 47% of directors believed it was legally permissible to notify the chief student affairs officer when a family-dependent client was hospitalized and that 54% would notify the parents. One year earlier, in 2003, only 22% of directors indicated they would have notified parents in such a situation (Gallagher, 2003). Additionally, 68% of directors reported that they would seek permission from students who were assessed to be a risk for suicide but appropriate for on-campus treatment. Interestingly, 95% of directors who made attempts to obtain permission before notifying a third party were either moderately or very successful in doing so. However, 42% believed that they had the legal right to notify the parents without the student's consent. Fortunately, 73% of directors indicated they had developed specific guidelines for notifying parents about high-risk students. Bishop (2006) suggested that because it may be possible to share confidential information within the context of a code of ethics such as the American Psychological Association Code of Ethics or the American Counseling Association Code of Ethics, does not mean that it should be shared due to the well established importance of the confidential nature of a counseling relationship. He further warns that upper level administrators should carefully think before developing institutional policies and procedures that may result in invasions of confidentiality of mental health services or intrusions on the privacy rights of students if they want the value of a campus counseling center to be maximized (Bishop, 2006). Finally, the following is suggested:

All counseling services should develop an informed consent statement that accurately describes whatever limits to counseling and confidentiality exists on that particular campus. It appears that such policies will vary from institution to

institution and, in all likelihood, be tied to the legal advice, input of risk management officials, and administrative philosophies that are in play. (Bishop, 2006, p. 15)

Ethics and legal issues become even more complex when working with college students who are experiencing suicide ideation or displaying suicidal behaviors. There is currently limited information available on the prevalence of formal policies regarding suicidal students on college and university campuses (Francis, 2003). While there is a need for policies and procedures in this area, the need is unfortunately only highlighted by local and national media when a suicide occurs (Farrell, 2002). While schools are under such scrutiny, it is difficult for campus mental health personnel and administrators to provide clear and adequate explanations to the public and the families and friends involved. Francis (2003) attempted to inform college counselors and counseling center administrators of relevant ethical and professional issues as they work to plan, prepare, and implement suicide prevention and reporting policies and procedures at their institution.

Overall, Francis (2003) emphasized the importance of legal and ethical issues being explicitly considered as institutional policies and procedures are developed. Beneficence and autonomy are two ethical principles of primary importance to also be considered in this process as they reflect the profession's responsibility to keep the student's best interest ahead of policy and decision making efforts. Further, these two principles reflect that the college experience is not just learning about facts and figures, but it is also about learning to take responsibility for one's life (Farrell as cited in Francis, 2003). Confidentiality is another component that needs to be specifically addressed. For a

counselor in a college setting, when a student presents with suicidal ideation or has attempted suicide, the counselor is obligated to take action that will help ensure the student's safety. The majority of the time, this means informing necessary people such as the dean of students, residence hall director, and possibly family members to help ensure student safety. However, it is clear that confidentiality is not an absolute right in the case of danger to self or others and it is also true that clients' information is not open for all to see. Generally, ethical guidelines call for minimal disclosure of information to persons with an essential need to know and these individuals must be clearly defined in the policy and procedures as well as clearly stated in the initial contact with any student who seeks or is referred to counseling services. It is also important of how the information regarding confidentiality is given to clients receiving counseling services. Francis (2003) stated that care should be taken so that there is not so much of a focus on the limitations of confidentiality that could cause the student to decide against disclosing their struggle with suicide ideation, while being sure to share sufficient information so that the student does not feel betrayed when the material they disclose necessitates a breach in confidentiality.

Francis (2003) also suggested that when creating a policy for working with suicidal students, it is critical to consider the ways in which the goals of the students, the college or university, and the counseling center converge or conflict with one another. Further, each of these goals needs to be balanced with the others in order to minimize conflicts and have the ability to address the needs and limitations of each group. This is done to ensure that each party, student, college, and counseling center is working together in order to provide the most reasonable and competent services to the student body. Finally, it is also necessary to consider federal and state laws governing the actions of

counselors, psychologists and social workers employed in educational settings when creating formal policies and procedures. If the policies and procedures for working with suicidal students violate state or federal laws, the staff of the counseling center can be put at risk for legal action. While many colleges and universities have attorneys on a retainer who can be consulted with when creating such policies, caution needs to be used as their expertise may not include areas of mental health law and may depend on counseling center staff for recommendations. In these types of situations, it may be prudent to seek consultation with an attorney who is well versed in mental health laws (Francis, 2003).

Impact of suicidal clients on training and staff. Bishop (2006) posed the question, "Are academic programs producing psychologists who are fully equipped to meet the needs of a contemporary counseling service?" (p. 15). Bishop states that many doctoral programs have been going through a change in their academic structure and training models, with the field of psychology currently producing more clinical psychologists than counseling psychologists, with 4 times the number of doctoral degrees per year. Cornish and Riva (2005) noted the importance for counseling center staff to have skills in supervision, knowledge of developmental theories and training in outreach and consultation as well as career counseling and group counseling. Concerns have been raised that training programs may not consider the multiple missions of college counseling centers; therefore leaving deficits that need to be filled after students leave their academic programs. Webb, Widseth and John (1997) suggested that college mental health is a specialized field that requires practitioners to understand the psychological development of the traditional college-age student as well as the unique institutional setting in which counseling is done. Further, they suggest that mental health workers who

do not have such a background will likely overemphasize student psychopathology or underestimate their level of stress. In support of this idea, Dean and Meadows (1995) stated, “college counseling as a professional identity that requires practitioners to be both counselors and student development specialists” (p. 141). In conclusion, on most college or university campuses, counseling center employees are expected to engage in the following seven main counseling center functions: clinical work, outreach and consultation, training, crisis intervention professional development, research and administration, while also work cooperatively with those who are providing career development and student development programs and services. Due to these expectations, academic programs to purport to prepare students to do internships or work in college and university counseling centers need to provide the students with at least some basic exposure to the related theory and practice as well as have multicultural, research, and evaluation competencies.

Counseling psychologists and other mental health professionals often found in college counseling centers, play an important part in understanding and looking at suicide on college campuses. Counseling psychologists are often the people who have one on one contact with students who are receiving counseling services for things such as suicidal thoughts or behaviors. McAdams and Foster (2000) estimated over 20% of counseling psychology trainees will have exposure to clinical situations that involve suicide during their training and education. Rogers et al. (2001) showed that 71% of their counselor sample had a minimum of one client who had attempted suicide and 28% had experienced the loss of a client to suicide.

Schwartz and Rogers (2004) gathered information about suicide and suicide prevention by reviewing previous literature in hopes of helping counseling psychologists become more aware and able to intervene with the growing number of suicidal clients. While the authors addressed the importance of proper and detailed assessments and possible interventions, they also addressed specific ideas for counseling psychologists to consider in order to be more aware of the problem and what they could do outside of sessions to help with the problem. The importance of knowing common myths about suicide was mentioned. Some of the common myths that are prevalent among college and university campuses include discussing suicide with a person will cause one to think about it, students who threaten suicide do not actually act on those threats, suicide is an irrational act or students who are suicidal are insane, and suicide is an impulsive act. By knowing and working to dispel the myths, counseling psychologists could have an increased chance at remaining open and objective in assessments and treatments. Further, counseling psychologists would also be able to help in areas of education/outreach throughout the college or university, which would allow more people to become properly informed. Schwartz and Rogers (2004) concluded that it is important for counseling psychologists to remain updated with the current statistics of suicide, especially within their own population, and the literature related to suicide and trends among the college student population. The authors believe that counseling psychologists can increase their effectiveness with deliberate forethought and planning, which will also help to reduce their own fears and anxiety experienced when working with suicide on college campuses.

In an attempt to better educate people on the possible factors that contribute to and protect against suicide, Sanchez (2001) proposed an integrated model for an accurate

assessment and effective intervention for suicidal clients. He expressed the need to categorize risk factors as acute or chronic and the protective factors as temporary or permanent to improve the process of assessment by being focused on short or long term risk. Sanchez also expressed the importance of continuing to reassess both risk and protective factors throughout treatment, not just in the initial assessment or treatment plan. One relevant limitation was the author seemed to be promoting an integrative approach to assessment and intervention, but there was much more information and detail given on the risk factors over the protective factors. Furthermore, it may have been beneficial to address the protective factors more because the readers are less familiar with the protective factors, especially because the protective factors lower the risk for suicide. The main limitation was that the model presented had not been thoroughly tested and therefore was more theoretical than empirical.

In an article about assessment and treatment in a university counseling center for suicidal clients, Jobes, Jacoby, Cimboric, and Hustead (1997) performed two studies. The first examined psychometric properties of a new suicide risk assessment instrument and the second study investigated the application of the instrument to a suicide student sample. The authors noted that little amount of empirical scholarly literature existed that addressed how a counseling center clinician should assess and treat a suicidal student. Further, they noted that lack of empirical attention to the population of suicidal college students.

In the first study, the reliability and validity of the Suicide Status Form (SSF) was tested. Participants included 106 student-clients and their clinicians at a mid-Atlantic university counseling center. The sample consisted of suicidal student-clients seen at the

counseling center between the years of 1992-1996. The sample had 42 men and 64 women, ranging in age from 17-55. The majority were Caucasian (79%), followed by African American (5%), Latino (4%), Asian (4%), Hispanic (2%), international (2%), and Native American (2%). The clinicians included 18 men and 88 women. Ninety eight percent of the staff was Caucasian and 2% African American. The final sample was 73, including 55 who met operational criteria for resolution or acute resolvers and 18 who did not meet resolution criteria or chronic nonresolvers. There were 33 suicidal participants that had incomplete data, dropped out of treatment, or were hospitalized and therefore not part of the final sample.

Each individual participant completed the SSF. It was comprised of six self-report and clinician report items that measured a client's initial presentation of suicidal symptomatology. The six items were pain, pressure or stress, perturbation, relationship between hopelessness and suicide, attitude toward the self, and overall assessment of suicide risk. The form included the ratings of five theoretically based items, theoretically based, that were thought to underlie suicide and a sixth item for rating overall risk. Through convergent validity and reliability studies including the Hopkins Symptom Checklist (HSCL-90), the Pressure Inventory, the Hopelessness Scale, the Osgood Semantic Differential, and the Reasons for Living Inventory and factor analysis, preliminary support was found for both the reliability and the validity of all six SSF items. It was found that the SSF represented a brief, coherent, theoretically conceived and clinically practical suicide assessment tool.

Following the first study, Jobes et al. (1997) wanted to further investigate suicide risk assessment and general treatment outcomes among suicidal clients who remained in

outpatient counseling. The authors noted that clinicians treating suicidal clients in continuous psychotherapy are required to only rely on suicide-treatment literature that is typically case based and anecdotal.

In the second study, participants completed the SSF and the HSCL-90. All of the participants completed a demographic form before being seen at the counseling center and the HSCL-90 upon intake and at termination of counseling. The SSF was administered to any client who presented any current suicidal thoughts, feelings, or behaviors. The clinician completed the first page of the SSF and both the clinician and client independently rated the six SSF items. The client was then put on "suicide status" which required the clinician to monitor client's suicidality in session through direct verbal questions. Written updates were completed by the clinician and given to an administrative "tracker" after each session and this was continued until the client resolved their suicidality, which was defined as three consecutive sessions of client reporting no suicidal thoughts, feelings, or behaviors. During the resolution session, the client and clinician complete ratings of the six SSF items as a resolution measure. Following the above procedure, the clients who remained in treatment over the each academic year were divided into two treatment outcome groups. Those who met the resolution criteria were acute resolvers and those who did not were called chronic nonresolvers. The acute resolvers reached resolution in an average of 6.5 sessions and the chronic nonresolvers were continuously suicidal throughout the academic year with an average of 17 sessions.

The results of the study suggested there were significant differences between the way in which clients and clinicians perceived and rated the client's suicidality. Furthermore, it was demonstrated that clinician ratings of pain were higher than the client

ratings. This suggested that clinicians may misperceive specific aspects of client suicidality, specifically in regards to client self-report of psychological pain. However, these results could reflect the clients' denial of pain or clinicians' failure to recognize pain in clients. Overall, the acute resolvers rated agitation and hopelessness more highly than the chronic nonresolvers while the chronic nonresolvers tended to rate press, self-regard and overall risk higher than the acute resolvers.

From the results, the authors concluded that client pre-treatment SSF ratings could be used to correctly classify clients into unique treatment-outcome groups, but clinician SSF ratings could not. Jobes et al. (1997) reported that from a treatment-planning perspective, being able to identify the potential typologies of different suicide treatment outcomes would be critical because different types of suicidal conditions often require different types of treatments. It appeared that general outpatient counseling was helpful for many suicidal students (approximately 52% of the sample), but a concerning number either remained suicidal or left outpatient treatment.

Some caution must be taken with these results and conclusions. The samples used in the studies were homogeneous and therefore the generalizability is limited. In the second study, neither the diagnostic information about clients nor any specific information about what clinicians did with the clients beyond general counseling was made available. Therefore, the results were general as well as preliminary. Nonetheless, data with clinical and training relevance was obtained which could prompt additional research in the area of assessment and treatment of suicidal clients.

Knox, Burkard, Jackson, Schaack, and Hess (2006) recognized that client suicide is often an extraordinarily painful process for clinicians, but notes this can be especially

difficult for those still in training and can also affect supervision. However, Dexter-Mazz and Freeman (2003) suggested that training of graduate students in psychology regarding the assessment and management of suicidal clients in both academic and internship settings remains limited. In addition, there is a significant lack of research that exists to inform those involved in training in academic and internship settings about how to most effectively attend to trainees' emotional and professional needs following a client suicide. The purpose of this study was to investigate therapists'-in-training experiences of a client suicide, focusing on the experience and on the role of supervision in coping.

This study used a qualitative methodology, Consensual Qualitative Research (CQR). Four counseling psychology researchers completed telephone interviews and served as judges on the primary team. Two were assistant professors and two were doctoral students at a private Midwestern university. Another assistant professor from a public, mid-Atlantic university was the auditor. Potential participants were recruited through various listservs and upon receipt of interest, the individual was mailed a packet that included a cover letter fully describing the study, consent and demographic forms which were asked to be returned, the interview protocol and a post card through which the participants could request study results. The total participants included 13 supervisees, 8 female and 5 male with the mean age 33. The majority of the participants were Caucasian, the majority of the supervisees (12) were from a Clinical Psychology program, and the placements included Community Mental Health Agencies, Hospitals, University Counseling Centers, and Independent Practice. Interviews were then scheduled with participants. The semi-structured interview protocol consisted of three major sections, each that included a variety of questions. The first section explored

overall thoughts about suicide, the second looked at specific experience of having a client commit suicide, and the third asked about the participants why they chose to be part of the study and what the experiences was like for them. A follow up interview, for the purpose of confirming any areas of confusion or incompleteness in the first interview, occurred 2 weeks after the interview and before data analysis started. All interviews were then transcribed with all identifying information removed. Data was analyzed according to CQR methods.

Most of the participants reported having received little training about suicide as part of their graduate program, with only a few reporting they considered suicide to have been well addressed. Further, ethical/liability concerns regarding suicide were occasionally discussed and reportedly received attention in a reactive manner than proactive (Knox et al., 2006). Due to results that suggested the majority of participants described their relationship with the client as tenuous, Knox et al. (2006) wondered what the effect may have been if the therapists and supervisors focused in therapy as much on building the relationship as they did on clients' presenting concerns. However, the authors also note that if the presenting concerns were so urgent, there may not have been enough time to work on building a relationship. Results also showed that supervisees most often learned of the client suicide from their supervisors and this makes sense as supervisors ultimately have the responsibility for the supervisee's clinical cases. The supervisees reported both positive and negative reactions to how they were told with equal frequency. Positive responses reflected supervisees' sense of their supervisors' gentleness and respectfulness in delivering such information whereas negative responses arose when supervisees felt that their supervisors were callous or uncaring in telling them

of the client's death. An example of a negative response was when a supervisor left the news of the client suicide on the supervisee's voicemail. After receiving news of a client suicide, participants reported experiencing a range of reactions including anger and sadness, and also questioned their clinical skills. All participants indicated that support received from others including family, friends, peers, and personal resources) was helpful in coping. Further, more than half of participants indicated the lack of such support as not helping them cope with the suicide. In many cases, these non-supportive individuals were perceived as callous and sometimes included leaving the supervisee out of debriefings offered to full time staff or graduate student peers attacking supervisee for what they may have done wrong. These instances can lead to the supervisee to feel alone and fend for themselves in processing their client's death. Suicide was also reported as taking a toll on the supervisee's clinical work in the short and long term. Supervisees reported increased vigilance in assessing for suicide and sensitivity to the responsibilities of working with suicidal clients (Knox et al., 2006).

Most of the participants reported having felt they had a good relationship with their supervisor involved in the case and all participants stated their supervisor's support was helpful in the aftermath. This support ranged from the supervisor sharing her or his own experiences with client suicide, providing a safe environment to express feelings, and reassuring supervisees that they were not responsible. A few of the participants did find the way their supervisors told them of the suicide (e.g. in the mailroom between sessions), the circumstances in which supervisees were encourage to process their feelings (e.g. being put on the spot in the middle of a staff meeting), or their supervisors apparent unresponsiveness to the suicide (e.g. "if you are going to work with addicts,

you're going to take a lot of hits"; Knox et al., 2006). The authors suggested that supervisors need to attend first, if possible, to the needs of the supervisee and then to the needs of the clinical situation, which also models appropriate professionalism and self-care in crisis situations. According the supervisee participants, the need for supervisors to provide a safe place in which supervisees could process their experiences and have feelings normalized was the most important action a supervisor could provide (Knox et al., 2006).

Due to the utilized methodology of CQR, the participant total for this study was only 13, therefore, findings may not reflect the experiences of those who received an invitation but chose not to participate or those from nonclinical psychology training backgrounds. Another limitation of this study is the data was collected retrospectively and is therefore possible that participants' memory of events may have changed over time. Lastly, there are only the supervisees' experiences explored and not the perspective of the supervisor about the supervisory processes that occurred regarding the client suicide (Knox et al., 2006). However, there are several implications and recommendations given for training, supervision and research. Regarding training, a proactive intervention suggested in developing protocols and related supervisor training regarding how to respond most effectively to client suicide when the treated therapist is in training and this would include items such as how best to tell trainees of the events, the normative responses to client suicide, how supervisors and colleagues can respond most helpfully and how the suicide can be best be processed and debriefed. A reactive intervention suggested allowing supervisees to control when, where, how and with whom they process the client suicide as well as ensuring adequate resources such as supervision,

consultation, therapy referrals, and case coverage. Regarding supervisors and supervision, it is suggested that whenever possible, tell supervisees of a client suicide privately and at a place that allows the supervisee to begin to react and process the death in a supportive atmosphere and continue to provide a supportive time and place for supervisees to work through the event and have feelings normalized. It is also suggested that supervisors attend to both affective results such as anger and sadness as well as impact on their clinical work such as questioning their competence or clinical skills. Regarding future research, the authors suggest that more is explored in areas such as how clinicians' beliefs about suicide affect their response to and recovery from a client suicide, how a therapist's clinical work is affected after a client suicide, and if clinicians whose clients complete versus almost complete a suicide attempt experience the event differently.

Student perception. Until recent years, the mental health of college students has been fairly overlooked, which may have contributed to its recent increase and prevalence. Within the area of mental health, suicide on college campuses is a topic that seems to be discussed much less than it should because it can be a difficult and uncomfortable topic for many people. After an American Psychological Association (APA) public education campaign about availability and value of psychological services was researched and developed for the general public, some researchers thought about possible applications to various subgroups including college students. Turner and Quinn (1999) attempted to apply some elements from the APA campaign to get perceptions of college students on the value of psychological services. Counseling center staff went through a selection process in which they chose relevant questions from the original survey used by the APA

and attempted to replicate what the APA had found with the general public within the population of college students.

The selected sample consisted of 346 college students who were all enrolled at a moderate-size, western state university in the 1996-1997 academic year. The sample was 48% male and 53% female. Eighty three percent of the sample was Caucasian and 17% was ethnic minority. Eighty percent of the sample was the traditional age of college students, 18-24 years of age. The sample was made up of all class levels but was heavily weighted with freshman, which made up 32% of the sample. The instrument used was developed from the original questions used by the APA to assess the perceptions of the public and named "Student Perceptions of Values of Counseling and Psychological Services on Campus". All of the participants completed the survey in paper and pencil form. Freshman filled out the survey while attending a campus resource fair while the rest of the sample filled out the surveys during outreach presentations in either classrooms or residence halls or when utilizing Student Health Services.

The responses the authors received from the students indicated strong beliefs that good psychological health is important in maintaining good overall health. Further, the responses indicated beliefs that spending time doing things to improve mental and emotional health was important to college students. Almost all of the students (97%) felt access to mental health care was important. However, about only half of the students suggested they would seek professional help when they have a problem they were unsure of how to resolve. Responses showed that 6 out of 10 students did feel capable of recognizing signs of a mental problem in another person, but only 43% had an interest in better understanding when the help of a mental health professional would be appropriate.

More specifically, the majority of the students responded with a willingness to meet with mental health professionals for a serious mental illness (96%) and suicide ideation (90%).

Overall, the students seemed to have an awareness of the importance of mental health, as well as the relationships between stress and illness, both physical and mental (Turner & Quinn, 1999). The authors also came to the conclusion that college administrators who make decisions about healthcare services on their campuses need to be aware that students want and expect access to mental health services while they are at the institution. It was also suggested that campuses wellness programs work towards the development of programs to make the most of the expressed willingness of students to improve their mental and emotional health. Despite the useful information found in this article, there are limitations to the study. One limitation was that the study was conducted at only one university over a one year period. The results of the study would have been more generalizable if the authors conducted the study at various universities throughout the nation, including various locations, sizes, and cultural make-ups of the student population. Another limitation of the study was the survey was developed from questions that were previously asked to the general public. The results would have had more meaning if the questions were aimed specifically at the college student population vs. the general public.

Summary. College and university counseling centers are the front-line mental health services for many students pursuing higher education. While college and university counseling centers fulfill many roles including but not limited to training, workshops, outreach presentations, and consultation, more time is spent on providing direct counseling services to clients than on any other single activity (Minami, 2009). It is

also important to remember all of the different roles that professional mental health staff who work in these centers have on a daily basis including being committee members, consultants, sometimes adjunct faculty, sometimes advisors for various organizations, etc. Further, these professionals must also keep up with the latest best practices for the variety of clinical issues seen in a college counseling center. Finally, mental health professionals who work in college counseling centers also need to continually adapt to trends in higher education as well as in social science research. Many employees of college and university counseling centers and well as individuals who research college counseling center services and practices would likely agree with Lamberg (2006) who stated,

Colleges and universities need a best practices model for dealing with suicidal students, with clear policies for adequately and fully informing students about the limits of confidentiality and possible consequences of revealing suicidal thoughts. Ideally, the institution would promote help-seeking behavior, and provide genuine options for help on and off campus. The least controversial thing a university can do often is the least discussed and least pursued option. It's providing adequate mental health services. (p. 502)

Recent Prevention Efforts

Given the alarming rates of college students who experience suicide ideation, attempt suicide, and complete suicide, it is imperative that colleges and universities across the nation have a plan of action to address this issue. While there is an overall lack of guidance for suicide prevention programming as well as empirical data regarding suicide prevention, there are some programs that have been developed as well as studies

that have looked empirically at prevention efforts. This section will look at recent efforts of college student suicide prevention including programs, interventions, student perceptions and the financial impact.

Programs. In an attempt to educate colleges and universities throughout the country, the National Mental Health Association (NMHA) and the Jed Foundation (2002) presented a thorough prevention plan to safeguard college students against suicide. According to the plan, there are numerous essential services for addressing suicidal clients on university campuses including screening program(s): targeted educational programs for faculty, coaches, clergy, and student advisors; broad campus-wide public education; on-site counseling center services with appropriately trained personnel; on-site medical services; stress-reduction programs; off-campus referrals; emergency services; and medical leave policies. This report stated that the mental health of college campuses is dependent on coordinated and collaborative efforts and services. This report outlined services that college administrators could implement to establish a comprehensive and collaborative program aimed at the prevention and reduction of suicide on university campuses.

One of the suggestions was the development of a screening system for sociality including specific, highly sensitive, and brief questionnaires. A lack of sociality or a lack of ability to be social has been identified as a possible contributing factor for suicide in the college student population. Screening systems would probe for the presence of signs, symptoms, and behaviors that would pertain to establishing a diagnosis or assessing the risk of suicidal thoughts and behaviors. The results of screening can be both earlier detection and improved treatment. However, the authors noted that screening on its own

does not provide an assessment or diagnosis and needs to be followed by referrals to mental health services with a complete evaluation by a qualified mental health professional. The importance of broad campus-wide public education was also addressed as a critical service in the attempt to prevent and treat suicide. Through public education, the stigma often connected to mental health disorders could be addressed. More specifically, suggestions such as enlisting support of high-profile people such as musicians, athletes, actors, etc. to come share their experiences with anxiety, depression, and suicide were also made. Further, students could be educated in general about signs and symptoms of mental health problems and specific signs and symptoms for suicidal thoughts and behaviors. This is critical because students are often better at initial screening of their peers than mental health professionals (NMHA & the Jed Foundation, 2002).

Other services suggested by NMHA and the Jed Foundation (2002) were targeted educational programs for faculty, coaches, clergy, and student advisors as well as stress-reduction programs. The authors believed that coordinated efforts needed to be made to educate and train the people who have daily contact with the student population. Once signs or symptoms have been recognized, these personnel need to know how to access services and support for the students. They need to be informed about the programs, services and support that exist in the campus and community for the students. Stress reduction programs is also seen by the authors as an important service to offer because college life can be extremely stressful. Students need to have a resource to help them manage and reduce stressors, so that they do not build up and become unmanageable. Stress-reduction programs can be specifically targeted for students who are at risk for

suicide and suicidal thoughts and behaviors. However, they can also be targeted to the general student population by offering study skills workshops, loss and bereavement groups, and international student support groups (NMHA & the Jed Foundation, 2002).

The NMHA and the Jed Foundation (2002) stated that at the very minimum, the campus mental health center must have appropriately trained and skilled mental health professionals who can assess and treat students who come seeking help. It would be ideal for the centers to also have an emergency unit with an attending psychiatrist and even ready access to a psychiatric inpatient unit. However, the authors noted that a student counseling center cannot be the only resource or the last resource for students; there must be a broader base and additional support from resources within the bigger community. Due to increasing use of pharmacological treatment of mental health disorders, the authors also stressed the importance of on-site medical services. Gallagher (2001) found that 37% of colleges did not offer psychiatric services on campus for their student body. It is crucial that medical personnel with the authority to prescribe medications be available on campuses.

Other services believed to be an important part in the prevention and treatment of suicidal clients on university campuses are off-campus referrals and emergency services. Regarding referrals, the authors believed it important that there be a list of therapists in the community in the event that a student prefers to seek off-campus assistance. It was also noted that the list of therapists be ethnically diverse. The authors stressed the importance of having 24-hour access to services available. If these services are not available, it was suggested to make it known which hospital or community center is on call to handle campus emergencies. Phone numbers for hotlines, community crisis

intervention services and mobile support services must be made known and displayed publicly (NMHA & the Jed Foundation, 2002). Through the understanding and the implementation of the above programs, university campuses can better continue their fight against suicide. While the program illustrated is comprehensive in nature, there are limitations. First, it is not feasible to think that every higher education institution will be able to take this program and simply implement it due to factors such as lack of financial and other resources, structure and organization of the institution and departments within the institution, size, type and location of the institution, and beliefs and mission statements of the institution. In some cases, it may be feasible to implement one or more suggestions put forth by the program, but in doing so, the effectiveness may not equal the effectiveness of implementation of the program as a whole.

Haas et al. (2003) also looked closely into suicide prevention programs on college and university campus when reviewing literature on college students and suicide. They found that many colleges made relatively little effort to seek out students at risk who do not come forward for help on their own because they are often presented with more clients than they are able to handle. They also found that most suicide prevention programs that were implemented on campuses tended to be educational and aimed to inform students about stress, self-destructive behavior and suicide. Some programs were found to focus on suicide prevention, but this was typically seen following a campus suicide or suicide attempt, and was generally aimed towards those students who had previously attempted suicide. It was found that very little was being done on college campuses to systematically identify at-risk students prior to suicidal thoughts and behaviors and to get the students the help needed.

The authors reported being involved in the development of an outreach effort named the College Screening Project: A Program to Identify and Help Students with Significant Psychological Problems. The program was pilot tested at a university in the spring of 2002 and was going through revisions before being implemented to the full undergraduate student body. The project itself follows a suicide risk model that considers risk to be greatest in those with psychiatric disorders that reduce an individual's ability to respond to stresses of college life and precipitate any additional stressors. Haas et al. (2003) presented a program that takes a broad population based approach and uses the Internet to identify and encourage treatment to those students in need of help. Students were contacted by e-mail and invited to complete a screening questionnaire from a secure web site developed by the project. The questionnaire included questions relating to depression, past suicide thoughts and behaviors, anxiety, alcohol and drug abuse, eating disorders, and stress. Students were able to access the screening questionnaire using a self-assigned log-in ID and password. One or more clinically trained counselors or therapists evaluated returned questionnaires for significant psychopathology. Based on the students' responses, they were then placed in one of three groups, mild, moderate, or severe. A personalized Counselor's Assessment was then sent to the students' log-in ID where only the student can access it. Students in the severe or moderate groups were urged to come to the counseling center for a clinical evaluation and discussion of treatment options. Additionally, the web site also contains a dialog feature that allowed students to communicate with counselors to discuss any concerns they may have. Also, the students in the severe grouping were sent frequent follow-up messages if they did not initially respond. The results from the pilot test seemed quite promising. Feedback from

students was mostly positive about the intent of the project. Not only does the project help to identify and treat those in need of help, but it also appeared to increase awareness of depression, suicide, and related problems while decreasing the stigma often associated with these problems by bringing the information into the open. The authors hoped that the program will eventually be implemented in numerous colleges and universities throughout the United States and will help bring attention to the problem of campus suicides as well as help to decrease the number of attempted and completed suicides by college students every year.

Joffe (2007) suggested that the task of preventing suicide is largely dependent on identifying risk factors and translating them into effective interventions. While there has been a steady increase in the number of known risk factors of suicide, there has not been a corresponding increase in the number or in the intensity of efforts for prevention. He also stated that while institutions of higher education may seem an unlikely setting in which to commit suicide, they do represent an ideal setting in which to prevent suicide. Further, Whitaker (as cited in Joffe, 2007) stated that colleges and universities function at the front of progressive attitudes toward community involvement and the use of psychotherapy. Their close knit social structure and the amount of high quality therapeutic resources, colleges and universities provide ideal settings in which to experiment with systematic efforts to reduce rates of suicide. His article focused on a suicide prevention program implemented at University of Illinois, a large university with a reported 39,599 enrolled students in 2004 with 39,288 undergraduate students and 10,311 graduate and professional students.

In 1984, after the University of Illinois had implemented a program of invite-and-encourage with minimal success, the program was abandoned and an administrative policy was created as an extension of the psychiatric withdrawal policy to take its place. This new policy mandated any student who made a suicide threat or attempt to receive four sessions of mental health assessment. The program was named The Suicide Prevention Program and is run from the Dean of Students Office. Further, the term “mandated assessment” was used as opposed to “mandated therapy” due to the perspective that one cannot mandate treatment. The first of these sessions needs to occur within a week of the incident or release from the hospital while the remaining sessions occurred weekly. If students fail to comply with the mandate, the result could be a variety of sanctions including academic encumbrance, disciplinary suspension or involuntary psychiatric withdrawal (Joffe, 2007). This specific program gave a distinction between imminent and ongoing risk. Imminent risk was referred to as risk posed by current suicidal intent associated with ready access to means of self harm. Ongoing risk was referred to as the increased risk of suicide associate with displays of a wide range of suicidal intent in the years following that display. The Suicide Prevention Program specifically addressed ongoing risk by providing leverage for intervention in the months that followed a display of suicidal intent (Joffe, 2007). A specific team was created and named the Suicide Prevention Team. The purpose of the team was to administer the program’s policy and consisted of four members including three mental health professionals and an administrative specialist. The four members met together every other week for approximately 1 hour, mainly to review compliance. Outside of the meetings, the team also maintained close contact via phone and email (Joffe, 2007).

A Suicide Incident Report Form is the form completed when one of four possible thresholds has been crossed. The first threshold is the student alarms and/or disturbs an observer about their intent to kill themselves, referred to as a threat. The second threshold is the student engaging in actions to prepare for eventual suicide such as purchasing pills for the purpose of suicide or visits a potential jump site, referred to as a preparatory effort. The third threshold is the student taking action with the intent of committing suicide, such as ingesting pills or making cuts to parts of their body, referred to as an attempt. The fourth threshold is the student reporting significant suicidal ideation such as persisting thoughts, obsessive preoccupation with suicide or command voice, referred to as significant ideation. Self-harm such as cutting that does not include suicidal intent does not require a Suicide Incident Report Form. Further, University staff is encouraged to err on the side of caution when filing these forms and if with further investigation, the Suicide Prevention Team determines the incident does not cross one of the four thresholds, the report is then deactivated. Students do have the right to contest the accuracy of the information detailed in the report and if this happens, the team would conduct an investigation and determine if a threshold has been crossed by a simple majority vote of the three mental health professionals on the team. If students are unsatisfied with the decision, they may appeal the decision and then the decision is made by the Dean and that decision is considered to be final. Professionals who are eligible to carry out the mandated assessments include licensed clinical personal counselors, social workers, and psychologists. While meetings with psychiatrists may be suggested and encouraged, they are not required and nor do they count towards the 4 required sessions. The students are given the option of satisfying the 4 session evaluation by meeting with

private therapists within the larger community at their own expense if they sign a release that authorizes the Suicide Prevention Team to debrief the therapist on the suicidal incident as well as monitor compliance. The professional that does perform the assessment sessions is expected, at minimum, to assess the student's current ideation, intent and access to means. Secondly, the assessor works collaboratively with the student to reconstruct the circumstances, thoughts and feelings experienced and that precipitated the original event. Third, the assessor collects a lifetime history of the student's suicidal intent, various meanings, and origins. Lastly, the assessor shares information regarding the university's standard of self-welfare and the consequences for failing to adhere to it. Each area is addressed during each of the four sessions and after all areas are addressed, the student is free to use the remaining time to explore any issues that may have contributed to the incident or any other issue the student may choose (Joffe, 2007).

As a result of the implementation of The Suicide Prevention Program, there was an increase in the percentage of students who make meaningful contact with a social worker or psychologist following a suicide threat or attempt. Before the program was implemented, an estimated 5% of students met the standard of four sessions to an estimate of 90 to 95% after the implementation of the program. In the 21 years the program has existed, 2,017 Suicide Incident Report Forms have been filed and 29 deaths to suicide have been reported. This statistic was further broken down to average 96 incident forms filed per year with 1.38 deaths by suicide per year. Joffe (2007) did note that all of the 29 students who did commit suicide did so "out of the blue" and postmortem reviews showed no evidence of publicly displayed preexisting suicidal intent for most instances. However, there were a few instances in which public knowledge of

preexisting suicidal intent did not result in the generation of a Suicide Incident Report Form. Most important to note is that none of the students that made up the 2,017 incident reports have committed suicide during their enrollment and there is no information to suggest that any committed suicide following their graduation from the University. Further, the rate of suicide for all enrolled students throughout the program of mandated assessment was calculated at 3.78 per 100,000 enrolled students. In comparison with the rate of suicide for the 8 year period before the program implementation from 1976-1983 which was 6.91 per 100,000, this represents a reduction of 45.3%. This reduction was shown to be greater among female students, 78.2% as well as undergraduate students, 72.2%.

While there was a significant reduction in suicide seen after the program implementation, the possibility does exist that the reduction occurred as the result of other factors. The only way to rule out possible extraneous trends or factors is to employ a control group and because that is not feasible for this study, a comparison was made to 11 similarly sized universities with equivalent mental health services who did not have a suicide prevention program at the time for a time period of 10 years. As a result, a reduction rate of suicide at the University of Illinois was reported being 74.7 in comparison with the other institutions. A 22.8% increase was seen in the 11 comparison institutions. An important finding of the study was regarding graduate students as the program showed not to be effective in reducing suicides in this population. The rate of suicide for this group was 94.6% higher during the 21 year program period. While this was a disturbing statistic, on the basis of their older age and that they would generally be more private regarding their intent, the statistic is not completely shocking. During the

2000-2001 academic year, graduate and professional students comprised 25.4% of the student enrollment and 6% of suicide incident reports. During this same year, the Suicide Prevention Team worked together with the Dean of the Graduate School in writing and mailing letters to all graduate and professional students and all graduate faculty informing them of the increased risk of suicide posed by this population and encouraged to look out for and submit reports of threats and attempts (Joffe, 2007).

Some difficulties that other colleges or universities may face in implementing a similar program do exist. One of these difficulties would be getting mental health professionals to give up the privilege of their discretionary judgment and instead be required to meet with students in a mandated format. The author noted that counseling centers are likely to be opposed to mandated treatment and engaging in any type of power struggle necessary to make contact and help suicidal students. While the monetary costs are not significant in comparison with other programs, the annual cost of the program is \$10,000 a year for training and administration and \$40,000 a year for treatment. When the cost is divided among 37,000 students, it average per student comes to \$1.35. Lastly, this type of program is more likely to have positive outcomes within highly competitive institutions as students will be more willing to comply while it is possible at a less competitive or large urban setting where students have an option of attending other institutions, institutions could have a more difficult time finding the necessary leverage. In conclusion, Joffe (2007) noted that any effort to prevent college students from committing suicide will have to face six specific realities and stated,

First, the majority of students who commit suicide have a history of previously expressed intent. Second, the presence of suicidal intent is not a passive

proposition but is typically hardened against the appeals of family, friends, and mental health professionals. Third, the majority of individuals who carry out their suicidal careers, from initial intent to death, do so without ever entering a therapist's office. Fourth, students who harbor suicidal intent are more often than not vehemently opposed to engaging in meaningful interventions that might challenge that intent. Sixth, the intervention of choice, short-term assessment by a licensed social worker or psychologist, will seldom occur naturally but has to be bolstered by administrative controls on both participants. (p. 98-99)

These listed realities seem to represent what those working with the Suicide Prevention Program at the University of Illinois have learned throughout the development, implementation and success of their program in hopes to help all those working towards college student suicide prevention.

Tompkins and Witt (2009) sought to evaluate the short-term effects of a gatekeeper training program on Resident Advisors' (RAs) knowledge, appraisals of their ability to perform key gatekeeper behaviors, and self-reported identification and referral of at-risk students within the college setting. Question, Persuade, and Refer (QPR), a gatekeeper training program, is the specific program examined in this study. Gatekeeper training is a prevention strategy that improves detection and referral of at-risk individuals. The authors stated clearly that while there are limited evaluations of effectiveness for gatekeeper training programs, the initial evidence is encouraging and suggests that gatekeeper programs do improve both knowledge and attitudes toward suicide prevention (Tompkins & Witt, 2009). QPR was developed by Paul Quinnet with the QPR Institute established in 2006. This gatekeeper training program that is dedicated

to teaching individuals in close contact with at-risk populations how to recognize various warning signs of suicide, offer hope to a suicidal individual, and refer for help. QPR follows a public health model and the hope is that it will become as widely known and used as Cardio Pulmonary Resuscitation (CPR) to enhance early detection of suicidal risk, prevent suicide attempts and completions, and as a result, alleviate the need for more intensive intervention.

Participants for this study included 240 college student Resident Advisors from six private colleges located in the Pacific Northwest in both rural and urban settings with the average size of the colleges being approximately 2300 students. Participating colleges were recruited through letter, emails and phone calls to the resident directors at the respective schools. The majority (83%) were Caucasian as well as female (59%). The mean age of participants was 20 and 37% of participants were sophomores and 37% were juniors. As a side note, 46% of the participants reported having had a friend relative, parent, sibling or other close individual who had attempted or completed suicide. The survey utilized was adapted from similar gatekeeper evaluation studies such as Research Services (2002) and Wyman et al. (2008). The survey inquired about demographics and a variety of other domains including knowledge, appraisals, and self-reported gatekeeper behaviors. Participants were also asked to evaluate the training program and additionally, participants' beliefs toward suicide and suicide prevention with various questions rated on a 5 point Likert scale. The study utilized a quasi-experimental non-equivalent control group design and had the administrators at two schools self-selecting the RAs to receive the training, three opting to only complete the surveys (control groups) and one school choosing to serve as a waitlist control group (with training provided after follow-up

assessment; Tompkins & Witt, 2009). The one hour training, given only to the QPR groups, was taught by a QPR certified trainer who discussed the prevalence of suicide among college students, risk factors for depression and suicidality, appropriate ways to ask if a student is considering suicide and reviewed the steps that should be taken during intervention and referral. Both the control and QPR groups completed paper and pencil baseline surveys, but only the experimental group were given a post-test immediately following the training. Lastly, approximately five months after participating in the study, both the control and QPR groups were asked to complete a follow-up measure assessing the same domains of knowledge, appraisals, and behaviors (Tompkins & Witt, 2009).

The baseline survey suggested that while there were no differences regarding demographics of self-reported gatekeeper behaviors, there did appear to be differences in participants' appraisals of knowledge of resources with the control group having higher baseline levels of knowledge of resources. An increase in general knowledge and efficacy from pre- to post-test was seen in the control group. This suggests that while the effects were limited to appraisals about knowledge and gatekeeper efficacy, just answering questions about suicide and suicide prevention may contribute to small change self-appraisals. At baseline, 65% agreed or strongly agreed that suicide among people their age was a major issue, 88% believed that their college should be active in suicide prevention and 81% believed that suicide is preventable in most situations. Further, 75% reported they believed RAs should be responsible for discussing suicide with students while on 55% believed they had sufficient training and 60% felt comfortable discussing suicide with students. However, when given the hypothetical situation of dealing with a student who shows signs of suicide, only 36% reported they would only be "a little

likely” to raise the question of suicide with them. Fortunately, the majority of students (68%) suggested they would be “very likely” to encourage the student to get help and 48% report they would accompany the student to do so. Results also showed that there were sustained prevention training gains in RA’s appraisals of their preparation, efficacy, knowledge or resources, and intention to intervene with suicidal students, there were no significant gains in QPR Quiz Scores or QPR Behaviors and because the control also showed gains in some domains, the impact of training versus raising awareness among a trained group of RAs was questioned. Among the QPR group, 96% rated the program favorably and positively with 88% indicating it would be of use when helping someone who is suicidal (Tompkins & Witt, 2009).

As one of the first evaluative studies of QPR, the study did provide valuable information and suggest promise of QPR and its potential impact on the college campuses who adopt it as a prevention method. While Tompkins and Witt (2009) did come across interesting results between the QPR and control groups, there were limitations within the study. First, the study used a quasi-experimental design which does not afford the same degree of experimental control as randomized clinical trials and cannot eliminate several confounds; however, the authors justify this design as it allowed some degree of choice rather than random assignment which resulted in a larger sample. Another limitation is it may have been beneficial to obtain data beyond self-report that included observational data, multiple informants, and services use data to help determine if there had been a significant difference between the QPR and control group in the number of referrals made and types of conversations RAs had with students following the QPR training. Second, because 41% were unsure of their college’s plans for helping

those who are suicidal and 27% reported being unfamiliar with their college's policies regarding suicide, it would be extremely helpful to add education regarding these important aspects of suicide prevention. Further, because much of suicide prevention efforts come from college counseling centers, it may be helpful to have a counseling center staff member assist in the training to help inform about the college's current policies and procedures regarding suicidal students. It is suggested that future research extend evaluation efforts in order to determine if gains are sustained for extended periods of time and whether changes in knowledge, attitudes and beliefs translate into effective intervention. Also, studies that require more rigorous designs that evaluate attitudes, beliefs and knowledge of gatekeeper training participants across time are also needed. Lastly, it would be beneficial to gather counseling center data to help determine if these positive changes in cognitions lead to increased referral and service use on campus. The authors do note that while QPR can be a valuable tool in suicide prevention efforts, the training only provides one component of suicide prevention and should be used along with other strategies as a comprehensive and multi-pronged approach for preventing suicide (Tompkins & Witt, 2009).

Interventions. Much of the previous research on suicide prevention has been focused on action-based strategies, but has not included specific interventions to address the emotional pain that is connected to thoughts and feelings of suicide. Rosenberg (1999) did not agree that the well-known strategies, including risk factor assessment and direct interventions including hospitalization to ensure client safety, were enough. She believed the emotional component also needed to be addressed and treated for optimum safety and care. Rosenberg reviewed the literature on suicide interventions with the

purpose of proposing a clinical training approach that differed from the common approaches to interventions for suicide prevention. Her training approach was systematic and focused on addressing basic assessment skills more than interviewing and counseling skills. The main difference of her approach was that intervention strategies based on feeling or affect were highlighted and supplemented the more common action-based interventions.

Rosenberg (1999) made the point that by only using action-based interventions, other various responses that are available to the mental health professional seem to go unnoticed or ignored. She believed more abstract interventions based more on affect might build a longer term solution to a suicidal crisis. The types of intervention focused more directly on the client's emotional distress and pain and targeted the thoughts and feelings that are usually found beneath the experience of suicidal thoughts. She presented several affectively based interventions including joining, addressing the turning of anger and rage inward, addressing ambivalent feelings about dying, cognitive reframing meaning of feeling suicidal, and confronting cognitive rigidity and inflexibility. One limitation of this discussion was although action-based interventions were mentioned; they were not validated for ensuring client safety. Rosenberg's training model involved instruction in (a) completing a comprehensive intake interview, (b) assessing symptoms of depression, suicidal ideation, and risk factors related to an increase risk of suicide, and (c) using both action-based and affective based interventions for suicide prevention. The presented model provided beginning trainees as well as experienced clinicians a conceptual plan and an all-inclusive strategy for responding effectively to suicidal thoughts and behaviors.

In an article about psychological and psychosocial interventions for suicide, Hepp et al. (2004) explored different intervention strategies. The authors noted that although intervention strategies have been investigated, ranging from minimal interventions to problem solving therapy and psychodynamic oriented or cognitive behavioral approaches, there remained uncertainty about the effectiveness of preventative strategies. By reviewing the existing research, Hepp et al. (2004) found problem-solving approaches resulted in an improvement of both depression and hopelessness and concluded that problem-solving approaches would be favorable in terms of improvement of suicide ideation as well as treatment attendance. The authors also found that none of the interventions examined were completely successful alone in significantly reducing the incidence of suicide, but stated that the therapeutic relationship was a central element.

Hepp et al. (2004) concluded that suicidality probably cannot be cured. Therefore, intervention efforts could be aimed at enhancing the clients' resilience and providing ways to cope with psychological stress and possible future suicidal thoughts, behaviors, and crises. The authors suggested that what clients who are in suicidal crisis need is not necessarily extensive therapy, but rather a "lifeline" or "anchor" that is provided by some interventions.

The no-suicide contract is one of various possible treatment interventions to use with a suicidal client. It has also been referred to as a no-suicide agreement, no-harm contract or a suicide prevention contract. It is essentially an agreement in which the therapist obtains a promise from the client that if suicidal ideas or impulses are experienced, the client will take action such as informing the therapist, a health care provider, friend or family member instead of engaging in any self-harm behavior.

However, like any intervention, its use has both pros and cons. By reviewing previous studies on the use of no-suicide contracts, Weiss (2001) found approximately equal numbers of studies that were supportive of the intervention as well as against the intervention. More specifically, there was disagreement in regards to the value of the intervention in the mental health field due to an absence of empirical support and data and a lack of guidelines and training for its use. Much of the debate over the use and effectiveness of the no-suicide contract has to do with the intentions of the mental health professional, training and proper implementation of the no-suicide contract, and the content of the actual contract. Conclusions from previous studies suggested that the majority of psychologists and psychiatrists do in fact use no-suicide contracts as one of the tools in their intervention with suicidal clients. Weiss listed some possible benefits and cautions for use. Possible benefits of the no-suicide contract included the client's willingness to engage in the creation of an agreement, providing a holding environment that will allow the client can safely participate in therapeutic exploration, an opportunity for the therapist to express genuine concern and commitment towards the client, and an emphasis on a shared goal and connection between therapist and client which can foster the therapeutic relationship and having a calming effect on the client. Possible problems with the no-suicide contract included the therapist substituting the contract for a complete suicidal assessment, the belief that the contract will guarantee the prevention of a suicide, and the client seeing the contract as a legal document protecting the therapist rather than a therapeutic agreement protecting the client. Weiss (2001) suggested that this tool should not be used instead of a proper training and assessment of the suicidal client. The

point was also made that an individual who is not knowledgeable or trained in its implementation should not use the no-suicide contract.

Buelow and Range (2001) examined the use of no-suicide contracts as an intervention tool for suicidal clients among the specific population of college students. No-suicide contracts can be in a variety of forms, but typically contain a specific statement of no harm, a specific period of time, contingencies if client becomes unable to maintain the agreement and a copy for client. It was noted that research on no-suicide contracts is limited due to both the ethical and practical restrictions in treating suicidal clients. Despite possible conflicts of opinions among mental health professionals about no-suicide contracts, the purpose of their study was to further investigate the opinions of the clients and potential clients about no-suicide contracts.

This study included 112 participants who were all undergraduate college students from a mid-sized university in the southeast. Within the sample there were 80 females, 26 males, and 6 who did not report their sex. The sample consisted of 65 (58%) European Americans, 44 (39%) African American and 3 from other ethnic backgrounds or did not report. The average age of the respondents was 24.38 (SD=8.34) and the majority (75%) was not married. Among the sample, 45 (40%) of the participants reported having contemplated suicide in the past with an average of 3.5 years ago. The participants completed a packet of surveys. The demographic survey asked about previous counseling experience, whether and if participants had contemplated, considered, or attempted suicide, if they had any experience with a no-suicide agreement and if they recommend that type of an agreement. Following the demographic survey, the participants were presented with three no-suicide contracts, ranging from simple to moderate to complex,

and they were asked if they believed the individual contracts would be effective in stopping suicidal thoughts, communicating care from the therapist, increasing resistance to suicide, decreasing depression, giving hope for the future, encouraging cooperation within therapy, and giving control. Additionally, three questions were asked about each of the three contracts presented to determine if they were too complicated, too short, or unrealistic. Lastly, the participants were asked to rank order the three no-suicide contracts from best worst.

The results indicated the responses to the three contracts were significantly different. Overall, participants responded neutral to a little negative about the effectiveness of the simple no-suicide contract, neutral about the moderate no-suicide contract, and neutral to slightly positive about the complex no-suicide contract. Similar results were found with participants responding that the simple contract was too short and unrealistic while the complex contract was not too complicated. The complex contract was also ranked best followed by the moderate as second best and the simple as the worst. Interestingly, the students who had reported any contemplation of suicide in the past were not significantly different from those who reported never having contemplation of suicide. There were no significant differences found between males and females, European or African Americans, those with or without counseling experience in the ratings of the three no-suicide contracts. Ironically, 83% of the student sample replied yes to a question asking if they would recommend a no-suicide contract for others having suicide ideation.

The results of this study indicated the college student participants viewed the no-suicide contract as valuable and slightly positive if the contracts were detailed and

specific. There was a clear preference for a more complex contract rather than a simple contract among the sample. This study contributes an important aspect of a potential client's opinion to the field of existing research on no-suicide contracts and treatments in general for suicide.

Despite the specific findings of this study, caution should be taken in regards to a few elements. First, the result that there were no differences in the ratings between those who reported ever being suicidal and those who reported never being suicidal, could have been due to the fact that those who reported any suicidal ideation experienced it an average of 3.5 years earlier. Additionally, when respondents were asked about experiences of counseling, the type of counseling was not specified. Another concern is the sample had a large majority of females over males and this could have influenced some of the results. Lastly, when the contracts were presented to the participants, the simple contract was always presented first, followed by the moderate and then the complex. Because of the order of presentation, there is a possibility the participants may have acquired a more positive outlook as they completed the questionnaire. Nonetheless, this study did have important findings and concluded that no-suicide contracts that are detailed can be an effective tool to use collaboratively in intervention for suicide, at least within the college student population.

In a related study, Descant and Range (1997) also attempted to explore college students' perceptions of no-suicide agreements. The authors had a sample of 145 introductory psychology undergraduates from a southern university that included 95 women, 49 men and 1 not reporting gender. The average of the participants was 20.5. The majority of the sample was Caucasian (73.1%) followed by African American

(24.1%) and other ethnic backgrounds (2.8%). Also, 29 of the participants reported previous therapy experience. An 11-item questionnaire that inquired about attitudes toward no-suicide agreements was distributed to voluntary students in a classroom setting. Through univariate analysis, results were found that the sample was positive toward no-suicide agreements regardless of their past experience with therapy. However, a limitation of the study could be that the authors failed to ask whether students had been suicidal. Despite that limitation, Descant and Range concluded that the no-suicide agreement would be an appropriate intervention for college students, whether or not they have a past experience with therapy.

The ideas and methods sometimes used to prevent suicide can be complex. Dixon et al. (1991) attempted to simplify the idea and focus more on techniques that college students could easily understand and do on their own. The authors stated,

Interventions for suicide prevention may need not only to focus on alleviating stressors but also to include attention to problem solving and perhaps problem solving training. . . . such training may need to focus on client's perceptions of their problem solving ability as well as actual problem solving skills. (p. 8)

The authors believed that working by giving college student skills and tasks that they can implement into their lives would assist them in handling difficult situations and stress that if not managed could contribute to future risk of suicide ideation. Effective interventions are extremely important for those who work one on one with students to know and be able to implement. However, for a comprehensive suicide prevention program, it is critical to understand how students view the problem of suicide and educate students on

the important role that they can play in suicide prevention efforts within their campus community.

Student perception. Westefeld, Homaifar, Spotts, and Furr (2005) felt it was important to explore the view of college students' perceptions in regard to college student suicide. Total participants consisted of 1,865 students from four large universities located in the upper Midwest, the Ohio Valley, the Southeast, and the South Central part of the U.S. It is noted that there are no apparent discrepancies in suicide rates/risk across the four institutions. Approximately 68% of the sample was male and 32% female. Seventy-two percent of the sample was Caucasian, 22% African American, 2% Asian American, 1% Latino, and the remainder Native American, Middle Eastern, multiracial or unknown. The range in age was from 16 to 59 with the median 19. First year students comprised 43% of the sample followed by 27% sophomores, 15% juniors, and 11% seniors and the remainder was classified as special status students. Questionnaires were distributed in a variety of classes in 2002-2003 and students were asked about the following issues: (a) degree to which they thought suicide was a problem for college students in general and on their particular campus; (b) their own experience with suicide; (c) reasons why they attempted suicide if they had attempted while in college; (d) their knowledge concerning campus resources to deal with the problem of suicide; (e) open-ended questions about how colleges could more effectively deal with the issues of suicide as well as knowledge of campus resources. The questionnaire was similar to one used in two previous studies with minor adjustments and took approximately 20 minutes to complete (Westefeld et al., 2005).

Approximately 7% of the sample strongly agreed that suicide was a problem for college students, 35% agreed, 39% neutral, 17% disagreed and 2% strongly disagreed. Approximately 2% of the sample strongly agreed suicide was a problem on their particular campus, 8% agreed, 50% neutral, 30% disagreed, and 10% strongly disagreed. Therefore, while 42% of the sample believed suicide to be a problem on a general level for college students, only 10% believed this about their respective campus. A total of 40% of the sample had known someone who had attempted suicide; 28% had known someone who had completed suicide; 24% had thought about attempting suicide; 9% had made a suicide threat; and 5% had attempted suicide. In response to the open-ended question that asked about knowledge of campus resources, the most frequently listed resource, given by 19% of the sample, was counseling services. When asked how their schools could more effectively deal with the problem, the following responses were given: provide didactic information on suicide (14%); provide treatment opportunities (12%); provide literature about the topic (12%); create a more open atmosphere about the topic (12%); have support groups (7%); have crisis lines (6%; Westefeld et al., 2005).

An important implication from the findings in this study is that therapists as well as other student affairs staff need to make students aware of campus services that are available. Having only 26% of the sample indicated they were aware of services available to help with suicide is an alarming statistic. The sample also indicated that didactic information as well as psychotherapy was viewed as important in dealing with college student suicide. This supports the need for emphasis on outreach within the college community. A limitation of the study was that the participants in this study may not be

completely representative of the participating universities nor representative of all college students across the U.S.

King, Vidourek, and Strader (2008) also believed that students can and do play a vital role in suicide prevention of college students. Their study employed Bandura's self-efficacy model and was conducted to examine college students' perceived self-efficacy in identifying friends at risk for suicide and helping suicidal friends find campus intervention resources. Students in general education courses (n=51) at three Midwestern universities comprised the participant sample. A total of 1,036 surveys were distributed and there was a 98% return rate which resulted in a total of 1,109 students. The sample was fairly equally divided among genders, 54 % female and 46% male, and grade levels, 19% freshman, 22% sophomore, 26% juniors, 27% seniors and 5% graduate students. The majority of the sample were Caucasian (73%) followed by African American (17%), Asian (6%), Hispanic (1%), and other (2%). The ages of participants ranged from 17 to 56 with a mean of 21. The instrument utilized was a three page survey that was developed to examine the students' perceived self-efficacy regarding suicide and this was assessed through the use of three subscales: efficacy expectations, outcome expectations and outcome values (King et al., 2008).

Approximately half of the sampled students reported having some education in high school regarding suicide while 36% reported receiving some education in college. Approximately 14% reported they had seriously considered attempting suicide, 5% had considered this within the last 12 months and 5% had attempted at least once in their life. Another distressing finding was that most students (71%) reported they were not aware of on-campus resources to help suicidal students. Regarding efficacy, 11% strongly believed

they could recognize a friend who was at risk for suicide and 17% strongly believed they could ask a friend if they were feeling suicidal. Approximately 25% strongly believed that they could help a friend who was at risk to see a counselor or other mental health professional or offer support (24%) or talk to in order to further determine if the friend was at risk (23%). Through a series of MANOVAs, it was shown that students who received suicide education in high school felt significantly more confident that students who had not received suicide education in high school in recognizing a friend at risk, asking if a friend was suicidal, talking to others to determine if a friend was at risk, and offering support to a friend at risk. Similarly, students who had a family member or friend express suicidal thoughts to them, attempt or complete a suicide, felt more confident than the students who had not had any of those experiences. Close to 25% of participants believed if they could help a friend at risk to see a mental health professional, could recognize a friend at risk, or effectively offer support it would reduce the chances of their friend committing suicide. Ten percent believed that by asking a friend if he or she was suicidal, the chances for suicide would decrease. The majority of the students in the study strongly believed it to be valuable to prevent a friend at risk from committing suicide (77%; King et al., 2008).

These findings present several implications. First, it is important to remember that most individuals contemplating suicide show warning signs and that during college, much of a student's time is spent in the presence of peers. Further, many students with problems will turn to a peer for help or show signs that indicate a need for help. Thus, it is critical that peers feel confident in identifying the warning signs and risk factors for suicide so that early intervention is not missed (King et al., 2008). Also, due to the

finding that 71% of students were not aware of campus resources available to help suicidal students, it is highly suggested that college health professionals work toward increasing student awareness of campus mental health resources. The authors also suggested campus-based suicide prevention education that focuses on warning signs, action steps to take with a student or friend and identification of campus resources. Other recommendations made by the authors include advocating for suicide prevention campaigns on college and university campuses and using media and other efforts to reduce the stigma associated with suicide, mental health disorders, and mental health treatment. Limitations of this study were also noted. First, because the sample was from three Midwestern universities, the results may not be generalizable to all universities and students. Second, the self-reported and sensitive nature of the survey could have led students to respond in a more socially desirable manner. Lastly, the study measured the students' perceived ability and not their real ability to identify risk factors and help friends or students who may be at risk for suicide. It has been demonstrated that student perceptions are important to address when working towards prevention programming for suicide. However, in order to pursue effective methods of outreach, education and training that will help in changing or modifying student perceptions, the critical issue of lack of resources, especially financial resources, needs to also be considered.

Financial impact. Sari, de Castro, Newman and Mills (2007) investigated if investments should be made for suicide prevention programs at colleges and universities. Specifically, two types of suicide prevention program aiming to target college students are discussed. The first program is a general suicide education program and the second program is a peer support group program that is designed to foster peer relationships,

competency development and social skills. General suicide education programs provide students with facts about suicide, alert about warning signs for suicide, and provide information about how to seek help for themselves as well as for others. Programs like this often incorporate activities related to self-esteem or social competency. The hope of such programs is that the more students know about suicide warning signs and sources of help, the more likely they will be to ask for help themselves or refer others. Peer support programs are a fairly new development as prevention programs, especially prevention programs for suicide. Since peers and educators are likely the first to detect suicidal behaviors, these individuals are most likely to be the rescuers for students planning or contemplating suicide. The goals of peer programs is to provide a setting where students who may be at risk for suicide can receive the support of their peers and develop interpersonal and coping skills. These programs allow students to increase their use of regular social support networks in order to improve their academic performance, while also helping reduce antisocial behavior, substance abuse and other factors associated with suicide (Sari et al., 2007). The authors stated that while the suicide rate among young adults continues to rise, so does the economic burden imposed on society due to loss of life. Further, it was suggested that investment decisions for prevention programs should depend on the impacts of programs in preventing death or suicide attempts compared to the costs of the programs.

Suicide has both direct and indirect costs to the individual as well as to society. Direct costs can include ambulance services and autopsy services. Indirect costs, while not directly associated with the event, can represent the lost value of a productive member of society, potential earning lost due to premature death, and productivity loss of

immediate family members (Sari et al., 2007). The American Ambulance Association (as cited in Sari et al., 2007) reported their fee schedule and listed the ground rate for service level Advanced Life Support, Level 2 in 2000 as \$468.99 allowable by Medicare. The average charge for autopsies for the age group 18-24 years of age was \$3,637 in the year 2002 (Agency for Health Care Administration, as cited in Sari et al., 2007). However, the estimate can be even higher when accounting for additional services required for suicide autopsies such as transportation of medical examiners to the scene, doctors' time in collecting and reviewing data, and investigator and morgue technician expenses and their time. All of this information implies that there is an underestimation of the actual direct cost associated with suicide.

Sari et al. (2007) used a cost-benefit analysis to assess if investments should be made in suicide prevention programs. The authors stated that although costs of prevention programs can be straightforward to calculate, benefits can be much more difficult. The authors estimated that the total cost of implementing a suicide prevention program in 119 college campuses in Florida would be \$17.49 million in the year 2000. In regards to the peer support program, the cost savings were substantial since peer services are directed by peer rather than by paid professionals. The estimated cost for the peer support group implementation would be \$84,760 in the year 2000 or \$10.9 million for 119 colleges in Florida. Looking at the total benefits, the authors assumed an average age of 21 at the time of suicide and an average educational level of less than 4 years in college, the lost earnings would have amounted to a present value of \$.96 million. This suggests that each prevention program increases the social welfare by \$.96 million for each life saved (Sari et al., 2007). However, it is also noted that programs are not 100%

effective in preventing suicide. De Castro et al. (2004) stated that effect rates of general education and peer support programs are 57% and 60% respectively. Sari et al. (2007) reported that the statistics show that 37 and 39 students respectively would have been saved if the general education and peer support programs were available on each of the 119 campuses in Florida. Therefore, the net benefit for general suicide prevention programs would be \$18.07 million and for the peer support programs would be \$27.34 million. The benefit cost ratio for the general suicide prevention program is 2.03 while the benefit cost ration for the peer support program is 3.71, which suggests that the benefit to the society is \$3.71 for each dollar invested.

It is critical to understand that the cost benefit ratios found in this study are based upon numerous estimates. One of the important limitations is the conjecture of the underreporting of suicide, which can range from 10-20%. Further research in this area is needed and should be directed at colleges and universities with focus on data refinement that will support the cost-benefit analysis of suicide prevention programs. Another idea for future research is to contact families of those who committed suicide in order to fully understand the added cost to family members in terms of coping strategies, time away from work or school among others. Future research could also focus on the differences in costs due to gender and differences in socio-economic status. Lastly, future research may include replicating the study and expanding to states where suicide is reportedly higher such as Oregon and Vermont as well as areas with high concentration of colleges and universities (Sari et al., 2007).

Summary. In sum, there are various methods to approach prevention of suicide, suicide behavior and suicide ideation. Due to the many variables to consider when

creating and evaluating prevention programs and intervention techniques, research becomes difficult. Further, the process of obtaining and generalizing reliable and valid results can also be problematic. This creates difficulty in not only doing the research, but also in obtaining and generalizing conclusions from reliable and valid results. Therefore, it seems important that colleges have the autonomy to build a program that fits their particular institution and student population and do not try to implement other programs that may not be generalizable to their institution. There seems to be a consensus among researchers in this area that far more empirical research is needed in the area of prevention and intervention of suicide, especially within the college student population (Jobes et al., 1997).

Summary of the Literature

College students have a wide range of experiences that tend to be unique to each individual; however, one experience that seems universal to all college students is the experience of stress (Mathiasen, 1998; Dixon et al., 1991). The stress experienced can vary in degrees, can manifest differently and can potentially lead to diagnosable mental health conditions such as depression and anxiety (Haas et al., 2003). Risk factors for suicide ideation in college students have been empirically identified and include depression, loneliness, hopelessness and stress (Furr et al., 2001; Weber et al., 1997). Since the above risk factors have been found to be growing concerns on college campuses, suicide ideation itself is also of growing concern for the college student population (Benton et al., 2003; Brener et al., 1999). However, there remains a lack of empirical data about the actual rates of both suicide ideation and suicide among the college student population across the nation.

More and more young adults are enrolling in higher education at the same time as significant increases in the prevalence and severity of mental health issues are being seen (Haas et al., 2003). Estimates of the suicide death rate among college students range from 5.6 to 7.5 per 100,000 while the rate of suicide attempts range from 1% to 4% and the rates of suicide ideation range from 9% to 32% (Westefeld, 2006; Furr et al., 2001; Silverman, 1997; Lipschitz, 1995). Despite the variance from unrepresentative samples with large variations, the empirical data does show significant increases in suicidal activities. This data has renewed attention to and efforts towards finding appropriate and effective prevention for college students (Haas et al., 2003).

Due to the reported increasing rates of suicide ideation and suicide, it has become increasingly important for colleges and universities across the nation to be aware and knowledgeable of how to support, teach, and guide their students in the many aspects that make up the college experience. With this awareness and knowledge, institutions of higher education will have a greater chance of effectively guiding, supporting, and producing well-rounded graduates. Westefeld et al. (2006, 1990) stated strongly their belief that college campus suicide was a problem that needed more attention to enhance preventative efforts. A positive result of increased attention to college student suicide is that federal legislation, such as the Garrett Lee Smith Memorial Act of 2004 was passed to fund campus suicide prevention programs. Over 50 higher education institutions have been significantly helped by \$83 million in grants to help fund suicide prevention programs over a 3 year period. In 2007, an additional \$4.5 million was made available to another 17 institutions. While there are many different forms of prevention and intervention tools to help college students who may be on a path to suicide, there is a lack

of consensus among mental health professionals regarding their use and effectiveness (Hepp et al., 2004). Through many reviews of literature and some empirical data, researchers have attempted to promote the idea of colleges and universities creating and implementing institutional approaches that could be used to address the problem of college student suicide (Joffe, 2008; Westefeld et al., 2006). College students hold similar beliefs, agreeing with researchers that the institutions could play an important role in both preventing suicidal thoughts and behaviors and also helping effected students after a suicidal incident. Only 26% of college students are aware of their campus's mental health resources (Westefeld et al., 1990; 2006), indicating a need for resources to be more publicized and visible on campuses. It also appears important to implement prevention programs that focus on identification of and response to at-risk students before suicide ideation becomes expressed publicly or suicidal behaviors emerge (Haas et al., 2003; Mueller & Waas, 2002). Prevention programs may be more effective when incorporating activities and information that is designed to increase empathic responding from other college students (Mueller, & Waas, 2002).

How to help college students who may be on a path towards or experiencing suicide ideation is complex. Due to the many variables that can contribute to suicide, it is difficult to label a specific intervention or prevention method as better or worse than another. However, it is hopeful that with further systematic research, more answers will become available on the use, benefits, and pitfalls of the current and future prevention and intervention methods and programs. As a result of future implementation and maintenance of suicide prevention programs, suicide within the college student population would ideally decrease. Further, the topic of suicide itself will become more

exposed and there would be a potential for more open discussion and less stigmatization surrounding the topic, which would also contribute to decreasing the rate of student suicides.

Purpose of Study

This study addressed the dearth of research examining the intersection of college students and suicide ideation, suicide on university campuses and suicide prevention. The purpose of this study was to identify the critical components of a suicide prevention program for colleges and universities. The primary goal was to find consensus among the expert panel of full time counseling center staff in a college or university counseling center with expertise in suicide prevention on what the critical components of a suicide prevention program are. The Delphi method was used to collect and analyze the data. This method will be described in detail in the following chapter. The critical elements found may serve as a foundation from which any college or university may build their own suicide prevention program in order to best serve their respective college student population and overall campus community.

CHAPTER III

METHOD

A mixed methods approach termed the Delphi method or Delphi poll, which consists of both qualitative and quantitative elements, was used for this study. Originally, the Delphi method was developed in 1953 by Norman Dalkey of the RAND Corporation and Olaf Helmer of the Institute for the Future. Its development was aimed at a systematic method for both gathering and organizing expert opinions about a complex problem or issue (Vazquez-Ramos, Leahy, & Hernandez, 2007; Dawson & Brucker, 2001; Clayton, 1997). As stated by Clayton (1997), “The Delphi is a technique for collecting judgments that attempts to overcome the weaknesses implicit in relying on a single expert, a one-shot group average, or round-table discussion” (p. 374). The method is based upon the communication of the participants and their expressions of opinions anonymously with the researcher via email, mail, or other means. Throughout the process, the participants will give their thoughts, receive anonymous feedback from other participants, access other participants’ views, and then offer their views again. The anonymity factor reduces any behavior based on social or emotional feelings as well as lessening potential group dynamics while allowing the focus to remain on the task (Clayton, 1997).

Why the Delphi Method?

The Delphi method seemed well suited for this study for many reasons. First, many studies that have attempted to answer important questions and have focused on

future directions in a particular area have successfully utilized this method. Some research includes the assessment of future cross-cultural counseling (Heath, Neimeyer & Pederson, 1988), operationalizing multicultural training in doctoral programs and internships (Speight, Thomas, Kennel & Anderson, 1995), the future of psychotherapy (Norcross, Hedges & Prochaska, 2002), components for substance abuse counselor education curriculum (Klutschkowski & Troth, 1995), and exploring practitioner views on chronic anorexia nervosa (Tierney & Fox, 2009). Specifically, the Delphi method was chosen over a more common qualitative method such as Consensual Qualitative Research (CQR) for several reasons. The main reason for the utilization of the Delphi method was to bring together the opinions and expertise of professionals in university counseling centers who work with suicide prevention. The expert opinions given by these professionals contributed to the study as the field is highly connected to college student suicide.

Another reason was the nature of the Delphi method allows the panelists to view the statistics of how the panel as a group has rated each item. Panelists are also able to view comments and feedback left by individual panelists as to why they chose to rate a particular item the way they did. This gave the panelists more insight into how other panelists are rating items and why. Also, the panelists could further contemplate and understand their own thoughts, opinions and ratings. Further and most importantly, this process allowed for richer data and results and consensus. As my purpose is to obtain consensus among a panel of experts on what the critical elements of a suicide prevention program are for colleges and universities, the use of the Delphi method was appropriate. Finally, Delphi polls are said to be economical, time-efficient, and an accurate means of

gathering opinions of a group of experts. Research has shown that results of Delphi polls usually provide the most accurate answer to difficult questions when compared to other prognostication techniques (Borinson, 1980).

Criteria for the Use of the Delphi Method

Three questions have been identified by Linstone and Turoff (1975) that are recommended for consideration before a Delphi study is done. First, the researcher must be able to identify an alternative communication process appropriate for their study and then justify the use of the Delphi over alternatives. The reason why the Delphi method was chosen over CQR is discussed above. Second, the researcher must be able to identify experts within the respective fields and also be able to access these individuals. I solicited nominations of experts from highly respected individuals in the fields of psychology and counseling. The nominees were then contacted via telephone or email. Lastly, the researcher needs to identify the type of results they may obtain from the utilization of the expert panel through the Delphi method.

As suggested by Dalkey & Helmer (as cited in Clayton, 1997), the decision to utilize the Delphi method should be determined by the objective of a research study. The use of the Delphi method is appropriate if the objective is to obtain the most reliable consensus of identification of content by opinions from a group of experts. Regarding the current study, the goal was for consensus among the panel to be reached and the outcome of the consensus to result in the identification of critical elements around which a successful suicide prevention program could be constructed. While an ideal outcome would be consensus reached by the entire panel of experts, there is potential for consensus not to be reached. Investigating and understanding why consensus may not

have been reached can promote new ideas and open new paths for future research that will be able to further contribute to the development of suicide prevention programs.

Linstone and Turoff (1975) also stated that researchers who use the Delphi method should address additional criteria before undertaking the study. The first criterion is that the area of study could benefit from subjective judgment on a collective basis. This study fits this criterion as I believe there cannot be one suicide prevention program that will be effective for every college and university in the country. Due to factors such as size, geographic location, affiliations, etc., every institution would benefit from creating a program that works best for their community, institution, and students. I intend for the results to provide guidance in the form of critical elements that could serve as a foundation for institutions to build their suicide prevention program. The elements added on top of that foundation would then address the specificities of each individual institution. The second criterion is the panelists who contribute to the examination of the complex problem in the Delphi poll do not have consistent communication with each other. I instructed panelists to refrain from discussing their participation with others until the study is completed. Additionally, the panelists should also represent diverse backgrounds with respect to experience. The diversity of experience was also addressed by investigating the practice of each nominated individual. The last criterion is that anonymity is assured. I assured anonymity by assigning all panelists pseudonyms for the entirety of the study and by maintaining confidentiality.

Panel Selection and Participants

The panelists in this study consisted of professionals from one sample: full time clinical staff in a college or university counseling center who were considered to have

expertise in suicide prevention. An additional panel of experts consisting of college student suicide and prevention researchers was considered prior to the commencement of the study. However, due to low response rates to recruitment efforts, the decision was made to focus solely on the perspective of clinical staff of college and university counseling centers with expertise in college student suicide prevention. Effort was made to obtain racial and geographical diversity within the panel of experts; however, randomization was not utilized because the purposeful selection of participants is a critical element to the Delphi method, as the validity of the study is directly related to the process of selecting participants (Clayton, 1997). Nominations of experts were made by the researcher as well as by members of target groups within the fields of psychology and counseling through the utilization of professional organizations, listservs, professional contacts, and web searches. Following nominations, potential panelists were contacted via email and sent a recruitment letter (Appendix A) and asked for their willingness and agreement to participate. If the potential panelists agreed to participate in the study, the Informed Consent (Appendix B) was then sent via email and once returned, the individual was considered as a participant in the study.

The total number of panelists at the beginning and throughout the study was 29. Current theory on Delphi panel size varies with panels ranging in size from 15 to 300 people. There is a general rule that with a homogeneous population, 15-30 panelists is acceptable and the majority of Delphi panels employ sample sizes of fifteen to twenty (Delbecq et al., 1975; Clayton, 1997; Ludwig, 1997). Once all potential panelists who had agreed to participate returned the Informed Consent, the panel was considered complete. In addition to the researcher and the panel of experts, an auditor--the

researcher's advisor (also a counseling psychologist)--was also involved throughout the study. The role of the auditor was to ensure that all questionnaires did not include ambiguity or repetition and also ensured that no items contained more than one idea or other problems that may impede comprehension.

All 29 panelists completed all of the rounds of the study and met the following inclusion criteria: (a) minimum of 2 years experience with college student suicide prevention program development, implementation or maintenance, (b) advance degree (minimum of a masters degree) in counseling, psychology, social work or other closely related field, (c) individual treatment with a minimum of 50 college students experiencing suicide ideation or behavior, (d) current employment in a 4 year college or university counseling center in the U.S., and (e) current job responsibilities include work related to suicide and/or crisis prevention. The panel consisted of 18 females (62%) and 11 males (38%). The majority of the panelists identified as Caucasian (86%) followed by Hispanic (7%), Asian (3%) and African American (3%). The mean age of the panelists was 43 with the range in age from 29 years of age to 64 years of age. Twenty-seven out of the 29 panelists have doctoral degrees with 70% in counseling psychology and 30% in clinical psychology. Two panelists' highest degrees were masters degrees, one in counseling and one in clinical psychology. Regarding experience in college student suicide prevention program development, implementation and maintenance, the range of years of experience among panelists was from 3 years to 30 years. More specifically, 30% reported having 3-5 years of experience, 41% reported 6-10 years, 15% reported 10-15 years, 7% reported 15-20 years, and 7% reported more than 20 years. The percentage of panelists' job responsibility related to suicide prevention and/or crisis management

ranged from 5% to 100%. More specifically, 52% reported 5-25% of their job responsibilities related specifically to suicide prevention, 28% reported 26- 50%, 10% reported 51-75% and 10% reported more than 76%. All panelists reported never having been issued a citation for unethical practice. The current study allowed individuals separated geographically and representative of over 20 states to communicate their views expediently.

Overview of the Delphi Method Process

After the panel was confirmed, all of panelists received and responded to a series of sequential questionnaires (called rounds). Generally, there are between three and four rounds. Prior to the beginning of the study, the researcher decided to conduct a minimum of three rounds in order to reach consensus and a maximum of four rounds in the event that consensus is not reached. The development and administration of questionnaires are interconnected in the rounds of Delphi method. All rounds consisted of questionnaires sent to panelists via email. Prior to the first round, a letter was sent to all panelists informing them of when the questionnaire for the first round would be distributed via email. This letter also served to stimulate the panelists and requested that each panelist takes a personal interest in the study. The first round questionnaire sent to the panelists was a short series of open-ended questions which was analyzed through content analysis and used to construct the second round questionnaire. The second round questionnaire asked the panelists to review and rate on a Likert-type scale, and rank the items that had been identified through the first round questionnaire. The ratings, rankings and statistical summaries prepared after the second and future rounds were then used to develop the next round of questions. Also in this round, the panelists were encouraged to comment on

the rationale of their rating, add items, or edit existing items for clarity. In the third round, the respondents rerated each item on the questionnaire. Starting in the third round, participants were provided with the following: (a) statistical feedback related to their own rating and ranking on each item; (b) a description of how the panel of experts rated and ranked each item; and (c) a summary of the comments given by each participant (Vazquez-Ramos, Leahy, and Hernandez, 2007). The rounds continued until consensus was reached and no new information was gained. Throughout the process of analyzing, especially after round 1, the researcher consulted with appropriate professionals in order to eliminate the potential for researcher bias and ensure integrity. A summary of the phases is seen in table below originally presented by Vazquez-Ramos et al. (2007).

Table 1. Summary Table of the Steps, Phases, and Activities Involved in the Execution of a Delphi Method with Three Rounds

Steps	Phases	Activities
Step 1	Selection	<ul style="list-style-type: none"> a. Identification of potential experts b. Invitation to participate c. Recruitment of panelists d. Constitution of the panel of experts
Step 2	Exploration (Round 2)	<ul style="list-style-type: none"> a. Distribution of Delphi Round 1 (Questionnaire usually involves an open-ended approach to elicit items or themes from panelists.) b. Follow-up of Delphi Questionnaire 1 c. Collect Delphi Questionnaire 1 d. Collation and categorization of results (content analysis) e. Construction of Delphi Questionnaire 2 (first generation of potential items)
Step 3	Evaluation (Round 2)	<ul style="list-style-type: none"> a. Distribution of Delphi Round 2 b. Follow-up of Delphi Questionnaire 2 c. Collect Delphi Questionnaire 2 d. Collation and categorization of results (Assessment of these items uses a Likert-type scale. Results are provided in terms of central tendency and measures of dispersion of participants' responses.)

Table 1 cont.

Steps	Phases	Activities
Step 3 cont.		e. Construction of Delphi Questionnaire 3
Step 4	Reevaluation (Round 3)	a. Distribution of Delphi Round 3 (Participants are provided with summary statistics from the previous round and are encouraged to reevaluate their answers based on their individual answers and group responses.) b. Follow-up of Delphi Questionnaire 3 c. Collect Delphi Questionnaire 3 d. Re-collation and categorization of results (Assessment of these items uses a Likert-type scale. Results are provided in terms of central tendency and measures of dispersion of participants' responses.) e. Calculation of summary statistics.
Step 5	Final Consensus	a. Identification of potential items of which consensus was obtained. b. Summary of the results c. Development of instrument prototype based on experts' consensus

(Vazquez-Ramos, Leahy, & Hernandez, 2007)

Round 1. The first round consisted of the distribution and responses, via email, to the Round 1 Questionnaire. This initial questionnaire was included in a packet of information that was made up of multiple sections including the following: the purpose and rationale; general demographic form; the instructions required to complete the Delphi poll effectively and efficiently; the directions for the attached questionnaire; and five open-ended questions that directly relate to college student suicide prevention. The six questions that comprised the Round 1 Questionnaire are listed in Table 2 below.

Table 2. Questions from the Round 1 Questionnaire

1.	How would you like to see higher education institutions address the problem of college student suicide?
2.	What seems to be particularly important when working with college students and suicide prevention?

Table 2 cont.

-
3. What elements make up an all-encompassing suicide prevention program for college students?
 4. What would you like to see done in regards to college suicide and its prevention?
 5. What barriers exist to implementing and maintaining suicide prevention programs on college campuses?
 6. Is there a question that is not asked here that you feel should be? If so, what is it? (This question is not required)
-

The panelists were asked to read all sections for a full understanding of the purpose of the study and then asked to fill out the attached questionnaire. The Demographics Questionnaire and Round 1 Questionnaire can be found in the Appendices. The panelists were instructed to answer the questions based on their experienced judgment. One week after the distribution, all panelists were emailed to ensure the information was received and to prompt their completion and return of the questionnaire. This process was repeated on a weekly basis until all of the responses had been received.

The responses given to this first questionnaire were then translated into general themes and further into statements about college student suicide prevention with the use of content analysis procedures (Denzin & Lincoln, 2000). After initial reading of the questions and responses, 5 tentative categories were developed and operationally defined. The categories were reviewed by the auditor before the responses were further analyzed. The responses were then tentatively developed into themes under each of the 5 defined categories. These themes were then reformulated as needed in order to more accurately reflect the meaning of the content of the responses from all panelists. The refining process with the themes was repeated several times in order to avoid discrepancies, inconsistencies, and recurring categories. The coded material was reviewed by the

auditor, who verified that the themes were conceptually meaningful and distinct, searched for additional meaning in responses that had not been covered by an existing theme and verified that the coding performed was accurate. Disagreements among the coder and auditor were resolved by discussion until consensus was reached (Denzin & Lincoln, 2000). Once clear categories and their themes had been established, each theme was translated into a statement which served as an individual item to appear in the Round 2 Questionnaire. After the statements had been written, further screening of the statements took place in effort eliminate duplications or researcher bias. Finally, the round was concluded by the synthesis of the responses into a combined listing of the statements (Vazquez-Ramos, Leahy, & Hernandez, 2007; Clayton, 1997).

Round 2. Round 2 was distributed approximately one month after I had received all responses from round 1. This second round consisted of several steps. First, I sent a set of instructions and the Round 2 Questionnaire, that was developed from the data. from the previous round, to the panelists. The panelists were asked to rate each item on importance using a five-point Likert scale, using 0 and 4 as anchor values. The following scale appeared at the beginning of each section of the questionnaire:

0	1	2	3	4
Not Important	Not Too Important	Somewhat Important	Very Important	Critical

Panelists were also asked to rank the items within each specified section according to importance with 1 being most important. An explanation for the Likert scale and the procedure for rating and ranking items was provided within the instruction page. The panelists were asked to return the responses within 3 weeks of receiving the questionnaire. The Round 2 Questionnaire can be found in the Appendices. For step 2,

the responses given from the panelists from step 1 were then summarized with a measurement of central tendency, the mean, for each item. Further, dispersion statistics including variances, standard deviations, and rating frequencies were also calculated for each item.

Round 3. The Round 3 Questionnaire was constructed using the Round 2 Questionnaire as a base, minus any items that did not meet the maintenance criteria based on low mean rating ($M < 2.5$) and high variance ($V \geq 1.0$). The panel mean for each item was added to the Round 3 Questionnaire along with the most frequent ranking for each item. Round 3 was distributed along with instructions to all panelists via email. Each panelist was then asked to reconsider their previous ratings after seeing the results of the panel and panelists were allowed to revise their ratings and/or rankings if they desired. If the new response lied outside of the central tendency, the panelist was asked to state their reasons for why they believe the rating should be higher or lower than the majority judgment of the whole panel. However, the panelists were informed that giving their reasons as to why they have given a specific rating was not mandated. Further, it was also stated that the panelists can provide comments as to why they have chosen a specific rating, even if it falls within the central tendency. After receiving the responses, I performed step 3, another summarization of the responses given. Additionally, a brief summary of the reasons given in support of extreme ratings, rankings or reconsiderations by panelists was given. This feedback process allowed panelists to be aware of the range of opinions and the underlying reasons of those opinions (Vazquez-Ramos, Leahy, & Hernandez, 2007; Clayton, 1997).

Beyond Round 3. If consensus was not reached, the researcher would send this information along with the next round questionnaire to the panel approximately one week following the responses from Round 3. Panelists are then asked again to revise their ratings on the basis of the summary of the responses given while also taking into considerations comments or arguments given by other panelists. Ideally, this process will lead to consensus or saturation, the point where no new information is gained. It may be necessary to perform a fourth round if consensus is not reached after the third round. Due to consensus being reached by the end of Round 3 in the current study, further rounds were not performed.

Summary. From the beginning of this process, the panelists identified ideas and gave opinions about what they perceived to be critical in the prevention of college student suicide. This process of identifying, rating and ranking, and re-rating and re-ranking, is a refining process, not a criterion defining process. Consensus was influenced by two measures, stability and convergence. Stability is a measure of the similarity of the responses to each item given by the participants. If the difference in the frequencies, means, or scores from one round to another is seen as not significant, the item is not included in the following round. Convergence is the degree of consensus that is present among the participants in response to individual items. If there is a significant increase in the standard deviation of the responses, there is an indication of a decreasing level of agreement or consensus in the responses given by the participants. If the size of the dispersion to each item increases beyond the established upper limit, determined by the researcher and in consensus with the auditor as a variance of ≥ 1.0 , the item will not be considered any further. However, if the dispersion lies below the upper limit, this signals

that consensus has been reached (Vazquez-Ramos, Leahy, & Hernandez, 2007; Clayton, 1997).

Strengths and Weaknesses

The Delphi poll can be an economical, time-efficient and accurate research method that allows for the gathering of opinions of a group of experts on future directions. Dawson and Brucker (2001) report that, "Cumulative research indicates that the results of Delphi polls usually provide the most accurate answers to difficult questions compared with other prognostication techniques" (p. 317). While this method is used to achieve consensus among experts within certain fields, the method simultaneously prevents an individual from influencing the views of other panelists as they are anonymous to everyone but the researcher. Further, because all of the panelists were equally involved, no one individual had the ability to dominate or become the leader. Within the process, there is communication without potential confrontation or other problems that is often associated with groups or committees. The Delphi method is unique in that it allows a high degree of anonymity for panelists, interaction with controlled feedback, statistical group response as well as expert consensus. Another main strength of the Delphi method is it allows for a diverse group of experts from various geographic locations to work together to gain consensus on the particular problem. Throughout the progression of the poll, the panelists all had the ability to see and think about their individual responses as well as view and consider the responses of the other panelists (Vazquez-Ramos, Leahy, & Hernandez, 2007).

Despite many strengths of the Delphi method, several individuals have raised concerns about the method. One main weakness that is often addressed is regression

towards the mean whereby a tendency may exist to change answers to be closer to the consensus (Stone Fish & Busby, 1996). Another concern about this method is the possible narrow view represented as a result of polling experts. Although one of the advantages of a Delphi poll is time-efficiency, the amount of time needed by panelists is large and the researcher needs to be aware and sensitive to the possibility of fatigue in the panelist. Finally, Stone Fish and Busby (1996) identified the “so what factor,” that if the initial question is not written properly, the panelists will lose interest in the process very quickly.

The current study addressed these weaknesses in the several ways. First, I encouraged the panelists in the instructions for each round to give their own unique responses throughout the process. I also allowed for bimodal distributions and did not pursue continuous rounds for the sole purpose of reaching consensus. Second, in order to address the possible narrow view of experts, I attempted to obtain the most diverse perspectives possible in the panel selection process. To reduce the possibility of fatigue among the panel participants, I included in the instructions a suggested amount of time to be spent on each response. Further, I encouraged the panelists to provide feedback to me if they began to feel overwhelmed or fatigued by this process and allowed a panelist to discontinue if they needed to do so. Finally, the “so what factor” is mitigated by the administration of a field test of the initial questions that comprise Round 1 to a small committee. This committee consisted of five Psychologists currently employed in 5 different college counseling centers in the United States. Feedback was provided on a global scale to ensure the questions were focused, clear, concise, and relevant.

CHAPTER IV

RESULTS

This chapter presents the results of the Delphi poll with respect to my primary research question on the critical components of a suicide prevention program for colleges and universities. It should be noted that of the 29 panelists who began the study, 100% of the panelists remained through the three rounds. The results are presented below by Rounds.

Round 1 Data Analysis

Content Analysis was used to analyze the data responses to questions from the Round 1 Questionnaire (Appendix D). Initially, each question was considered to be an individual category for organizational purposes under which the responses were further coded. However, upon full review of all data responses numerous times and in consensus with the opinion of the auditor, questions 1 and 4 from the original questionnaire were collapsed into one category as the responses for each question were extremely similar. Specifically, two of the panelists responded “see question #1” as their response to Question 4 on the Round 1 Questionnaire. As a result, four categories were established from the responses of the five open-ended questions from the Round 1 Questionnaire. The four categories were: (1) Higher education institutions addressing the problem of college student suicide and prevention, (2) Elements of an all-encompassing suicide prevention program for college students, (3) Barriers to implementing and maintaining suicide prevention programs on college campuses, (4) Important elements when working

with college students and suicide prevention. After the categories had been defined, all data responses were carefully and thoroughly read through by the researcher numerous times and themes were created; thus clustering the data about similar topic areas. A total of 55 themes were established, 14 themes within Category 1, 15 themes within Category 2, 13 themes within Category 3, and 13 themes within Category 4. All 645 pieces of data, or responses, were then assigned to a theme and all themes were retained. The researcher and auditor came to consensus about the created themes and the placement of all data responses. Table 3 below shows Round 1 data responses organized by category and theme. A full listing of all Round 1 data responses can be seen in Appendix E.

Table 3. Frequencies of Round 1 Panel Responses placed into Categories and Themes.

THEME	FREQUENCY
1: MORE EDUCATION/OUTREACH (e.g. campus wide education; required education for all faculty and staff; comprehensive education for the entire university community with focus on suicide prevention and anti-stigma campaigns; better programmatic support for and awareness of counseling and mental health services on campus)	34
2: TRAINING (e.g. campus wide trainings; required trainings for all employed by university re: recognizing signs of suicide as well as what to do if worried about a students; create online training modules for students, staff and faculty regarding identification or warning signs and intervention processes for nonprofessionals; well trained professional mental health staff)	34
3: COLLABORATION /TEAM WORK (e.g. increased cooperation and better relationships among campus personnel such as student life, dean of students, student health and university police; health and counseling staff working with students and student organizations to develop effective messaging regarding suicide and mental health issues; improved communication between student service personnel and health professionals on campus to better identify at-risk students and connect to proper referrals; involvement of mid and upper administrators in discussion regarding evaluation/needs assessment relative to campus safety and support)	31
4: RESOURCES (e.g. increased funding for suicide prevention; ensure adequate ration of counseling center staff to student population; increased resources-time, money, and staff- and services for mental health overall; hiring prevention specialists as permanent employees;)	40
5: STUDENT WELLNESS / ADDRESSING CONTRIBUTING FACTORS (e.g. addressing contributing factors such as alcohol and other substance use/abuse and stress; requiring "life class" that addresses topics such as stress, mental health, finances and substance use; use a wellness approach to outreach and education that is less threatening and easier to discuss among student population)	6
6: ACCESS TO CARE (e.g. have more than one counseling center on campus / satellite offices; advocate for better insurance coverage for mental health needs for students so care is not limited to emergency care; increase availability of mental health service on campus and in greater community)	4

Table 3 cont.

THEME	FREQUENCY
7: LEGISLATION / OUTSIDE SUPPORT (e.g. do effective lobbying on local laws related to better mental health care; collaboration between SAMHSA and the Department of Education to allow students to receive some financial aid if students need to take less than required units to receive a loan)	5
8: MARKETING (e.g. messaging that is developed in student friendly and accessible ways; effective utilization of technology and collaboration with student newspapers and other local media; social marketing around stigma and suicide prevention; have information on university home page and counseling center home page to direct students to appropriate resources in case of a mental health or physical health emergency;	7
9: STUDENT SERVICES (e.g. available mental health-both counseling and psychiatric services- and crisis services to students; peer and drop in counseling services; peer support and outreach programs; higher visibility of mental health services on campus; provide debriefing and postvention services for students after a suicide or other crisis occurs.	19
10: PUBLIC HEALTH MODEL (e.g. adopt a public health approach to health, wellness and suicide prevention; approach college suicide as a public health issue rather than an individual issue, increase the number of universities that have specific policies on how to assist students who are suicidal)	4
11: MORE RESEARCH (e.g. more research to determine core elements to make up an effective and population based mental health promotion program; more research in this area especially with specific groups such as international students and minorities; better data on all student deaths and deaths by suicide by all campuses)	4
12: RECOGNITION OF PROBLEM AND INTEREST IN ADDRESSING (e.g. identify suicide as an issue of concern; make suicide prevention a priority; infra-structure change especially acceptance of the need to address college student suicide as a growing problem)	4
13: POLICY AND PROTOCOL (e.g. have a well publicized and known policy and procedure in place for how to handle students in distress including if, when and how to contact parents or emergency contacts; restrict access or have no tolerance policy for weapons on campus; aggressive intervention and follow up for struggling students; help students maintain a connection to school and identity as a student in the case where student needs or chooses to take a leave of absence for treatment)	15
14: UNIVERSITY CULTURE / ATMOSPHERE (e.g. development of an atmosphere of courage, openness and transparency; have smaller sub-communities within the university that allows students to feel a sense of connection; emphasis on a culture of caring for the whole student)	4
Category 2: Elements of an All-encompassing Suicide Prevention Program for College Students	
THEME	FREQUENCY
1: SOCIAL SUPPORT (e.g. attempt to overcome isolation and lack of feeling part of a community through various programs such as smaller learning communities)	1
2: ASSESSMENT OF PROBLEM AND PROGRAM (e.g. recognition of the problem; evaluation/assessment of prevention efforts that feed back into program structure)	4
3: EDUCATION/OUTREACH (e.g. educational programming regarding normalizing stress and mental health issues, raising awareness of suicide, mental health services on campus, dispelling myths of suicide; strong outreach to undergraduate and graduate students as well as all university employees)	32

Table 3 cont.

THEME	FREQUENCY
4: STUDENT SERVICES (e.g. counseling services; psychiatric services; pharmaceutical services; after hours crisis service/crisis team; early alert or intervention/CARE team; referral process to off campus services that can support a student in distress; drop in counseling)	24
5: UNIVERSITY POLICY, PROCEDURE, AND GATEKEEPERS (e.g. establishing Task Force, Steering Committee and/or Advisory Boards; development of clear, thoughtful and sensitive protocol that is well advertised and known to all university community; parental or guardian involvement when student is assessed to be at harm to oneself or others; pay close attention to access to lethal means/high risk areas such as interior atriums, bridges, train tracks, etc.; making students the number one priority)	14
6: TRAINING (e.g. training all university community how to help students, friends, employees, etc.; training all health services staff regarding appropriate assessment and intervention; training gatekeepers who can identify and refer at-risk students to appropriate services;	26
7: MARKETING, MEDIA AND TECHNOLOGY (e.g. utilizing technology; easily accessible online screenings and basic information about mental health, suicide, resources and contact information; print materials such as brochures in various places around campus; effective social marketing)	13
8: UNIVERSITY CULTURE / ENVIRONMENT (e.g. creating a community culture of caring; creating a climate that decreases mental health stigma and promotes wellness and shared responsibility in caring for each other)	3
9: RESOURCES (e.g. adequate funding for education, outreach and trainings; trained professionals in crisis intervention and suicide risk assessment; case management services to monitor and follow up with students in distress if hospitalizations or other treatment becomes necessary; fully and adequately trained counseling center staff)	10
10: CULTURAL AWARENESS AND SENSITIVITY (e.g. culturally-informed student services and counseling staff)	2
11: ADDRESSING CONTRIBUTING FACTORS OF SUICIDE (e.g. have education programming and intervention in place for stress management, substance use, healthy relationships and social connection)	4
12: TEAM APPROACH TO PREVENTION (e.g. institutional support; involvement from all departments and levels of students, faculty, staff and administration in recognizing suicide as a public health challenge within campus community and working towards prevention; good relationships with university police, hospitals and other community services; top down approach from administration offering clear support of suicide prevention activities, de-stigmatization of mental health problems, and mental health services)	13
13: STUDENT ACCESS TO CARE (e.g. access to services all year around; adequate accessible mental health services and referrals; support for transporting students to outside referrals)	5
14: PUBLIC HEALTH MODEL (e.g. Public Health Model; JED Foundation model)	2
15: STUDENT ORGANIZATIONS / INVOLVEMENT (e.g. peer support/drop in counseling services; grass root student organizations such as Active Minds)	8

Category 3: Barriers to Implementing and Maintaining Suicide Prevention Programs on College Campuses

THEME	FREQUENCY
1: LACK OF INTEREST OR ACKNOWLEDGEMENT OF PROBLEM (e.g. lack of interest; resistance to accepting there is a problem)	10

Table 3 cont.

THEME	FREQUENCY
2: LACK OF RESEARCH (e.g. lack of empirical data; lack of research on effective prevention programs in college settings)	10
3: LACK OF RESOURCES (e.g. lack of staff, time and money; lack of permanent positions devoted exclusively to suicide prevention/crisis work; lack of continuous assessment/evaluation followed by modifications to improve a program; lack of case management services/resources)	49
4: STUDENT BELIEFS (e.g. students fear negative consequences for seeking help for self / others regarding suicide ideation such as dismissal from institution; fear of lack of confidentiality in sharing; feeling as if they should be able to handle problems on their own and shouldn't have to ask for help; shame)	10
5: LACK OF COLLABORATION / BROAD BASED INVOLVEMENT (e.g. departments not working collaboratively, especially higher level administration; lack of connection and communication with other providers such as psychiatrists or hospitals in larger community; lack of broad-based involvement; resistance to accepting that everyone in campus community may play a role in suicide prevention; prescribing medication without insisting on counseling support; decentralized nature of many campuses)	13
6: LACK OF CLEAR PROTOCOL AND POLICY (e.g. lack of clear policy or protocol to follow)	2
7: LACK OF CHANGE / ADAPTATION OR CREATIVITY (e.g. universities and counseling centers holding onto old philosophy of disconnection on campus or unwillingness to collaborate)	1
8: CULTURE / DIVERSITY (e.g. lack of cultural awareness, sensitivity and knowledge regarding specific risk factors)	3
9: APATHY (e.g. apathy for the problem after training or education has happened)	2
10: LACK OF EDUCATION / STIGMA (e.g. presence of stigma and myths regarding mental health, suicide, and help seeking behavior; level of personal discomfort with suicide and mental illness that prevents effective dialogue with students about their experiences; lack of awareness)	22
11: LACK OF TRAINING (e.g. lack of appropriate training and time for trainings; resistance to attend trainings; lack of understanding about the role of non-mental health professionals in reducing suicide; trainings not required)	9
12: UNIVERSITY ATMOSPHERE AND CULTURE (e.g. lack of care for the wellness of the whole student; conspiracy of silence; lack of institutional and individual courage; concern of public image of university; large and spread out campus population; fear of intruding in students' private matters)	15
13: MARKETING / COMMUNICATION (e.g. lack of creative approaches to reaching students in media they utilize; poor campus-wide communication)	4

Category 4: Important Elements when Working with College Students and Suicide Prevention

THEME	FREQUENCY
1: ASSESSMENT OF STUDENTS (e.g. continued assessment of suicide ideation, impulsivity, plan, intent, and lethality; assessment of contributing factors/risky behaviors)	9
2: THERAPIST SKILLS / RELATIONSHIP (e.g. create a safe environment; unconditional regard, instillation of hope, encouragement and support; honesty; normalize stress, mental illness, and suicide ideation; take threats seriously; cultural sensitivity; courage and ability to listen to gut instinct; giving appropriate coping techniques; work with resistance)	29

Table 3 cont.

THEME	FREQUENCY
3: INVOLVMENT OF OTHERS / SOCIAL SUPPORT / FAMILY / PARENTS (e.g. getting others involved such as family, friends, roommates, etc. if appropriate/with client's permission; increasing social support of students)	13
4: IDENTIFICATION OF THOSE AT RISK (e.g. awareness of risk factors and warning signs; difficulty identifying / reaching those at high risk)	3
5: DUAL-DIAGNOSIS / SUBSTANCE USE (e.g. complication of drinking culture in college setting; directly addressing co-morbid issues such as substance use and trauma)	3
6: CULTURAL AWARENESS AND SENSITIVITY / INDIVIDUATION (e.g. use of culturally appropriate prevention and intervention methods; careful consideration for all aspects of diversity and how these issues play out in various ways for individuals from different cultural backgrounds and family experiences)	7
7: EDUCATION/OUTREACH (e.g. education of resources, warning signs, stigma and myths; normalizing mental health issues; encourage help seeking behavior for self/others)	33
8: STUDENT SERVICES (e.g. information provision by peers; utilization of student focus groups to determine outreach strategies; have intervention services that are timely and accessible to students; access to counseling and psychiatric care)	13
9: MARKETING and TECHNOLOGY (e.g. utilize social networking media; pay attention to current trends in technology for reaching and communicating with students; find a message/slogan that students can identify with; reach students in modalities they use such as on-line, podcasts, etc.)	8
10: UNIVERSITY & COUNSELING CENTER POLICY AND PROCEDURES (e.g. well defined and known crisis response procedure; all clinical staff have advanced training in Recognizing and Responding to Suicidal Risk)	3
11: CONSULTATION / TEAM APPROACH (e.g. counseling center climate of mutual consultation and support; developing and maintaining collaborative relationships with residence hall staff, student leaders, Greeks, faculty, etc.; consultation with other professionals or involved parties)	11
12: CONTRACTS / EMERGENCY CONTACTS (e.g. utilizing no-suicide/no-harm contracts; create a list of contacts with client in case of emergency; utilize a verbal contract; create an action plan)	9
13: REFERRALS / COMMUNICATION WITH OTHER PROVIDERS (e.g. having timely and easy flow of information between hospital/other providers and the counseling center; having available and accessible referral sources for students if needed)	2

Within Category 1, higher education institutions addressing the problem of college student suicide and prevention, 14 themes were identified. Among the 14 themes, 4 themes had more than 30 data responses, indicating that these themes stood out as having significantly more importance to the panelists than other themes at this point in the study. Theme 1, More Education/outreach, had 34 data responses; Theme 2, Training,

also had 34 data responses; Theme 3, Collaboration / Team Work, had 31 data responses; and Theme 4, Resources, had the most data responses with 40. Theme 9, Student Services, had a total of 19 data responses closely followed by Theme 13, Policy and Protocol, had 15 data responses. The remaining themes all had less than 10 data responses each. Not surprisingly, the theme Resources seemed to be of critical importance within this category as it was assigned the highest number of data responses. It should be noted that all types of resources were included within this theme such as financial support, increase staff, increase in services offered to students, etc.

Within Category 2, elements of an all-encompassing suicide prevention program for college students, 15 themes were identified. Three themes within the category had data responses of 20 or more: Theme 3, Education/outreach, with 32; Theme 4, Student Services, with 24; and Theme 6, Training, with 26. The following themes were assigned 10 or more data responses: Theme 5, University Policy, Procedures, and Gatekeepers with 14; Theme 7, Marketing, Media, and Technology, with 13; Theme 12, Team Approach to Prevention, with 13; and Theme 9, Resources, with 10. The remainder of the themes all had less than 10 data responses each. Similar to Category 1, education, outreach and training were seen as top themes to the panelists in Category 2 as well.

Category 3, barriers to implementing and maintaining suicide prevention programs on college campuses, was organized into 13 identified themes. Two themes within the category had data responses of 20 or more: Theme 3, Lack of Resources, with 49 responses; and Theme 10, Lack of Education and Stigma with 22 responses. Overwhelmingly with 49 responses, lack of resources was considered to be one of the largest barriers to implementing and maintaining suicide prevention programs at this

point in the study. Themes with 10 or more data responses included Theme 1, Lack of Interest of Acknowledgement of Problem, with 10 responses; Theme 4 Student Beliefs, with 10 responses; Theme 5 Lack of Collaboration or Broad Based Involvement, with 13 responses; and Theme 12, University Atmosphere and Culture, with 15 responses. The remaining themes all had less than 10 data responses per theme.

Thirteen themes were identified within Category 4, important elements when working with college students and suicide prevention. Theme 2, Therapist Skills and Relationship, and Theme 7, Education/outreach, were the two themes within this category that had more than 20 data responses with 29 and 33 respectively. This makes sense as this category represents work directly with the college students and indicated that a combination of clinical services with education/outreach may be an effective approach when working directly with students. Themes with 10 or more data responses include Theme 3, Involvement of Others / Social Support / Family and Parents, with 13 responses; Theme 8, Student Services with 13 responses; and Theme 11, Consultation / Team Approach, with 11 responses. While many of the themes across all four categories are very similar and at times may seem redundant, this was expected as all identified categories have to do with the overall topic of college student suicide prevention. A theme identified as “Education” under one category and another theme identified as “Education” under another category are considered separate as they were created under different categories.

After all data responses had been assigned to appropriate themes, the data responses were once again read through carefully and numerous times in order ensure data responses had been place under the most appropriate theme. The themes developed

by the researcher were further scrutinized by the auditor, followed by consensus between the researcher and auditor. All themes were then made into statements which served as the items for the Round 2 and Round 3 Questionnaires after finalizing content and wording. The items were broken up by the 4 defined categories which were labeled as Section 1, Section 2, Section 3, and Section 4 on the Round 2 and 3 Questionnaire. All items were agreed upon by both the researcher and auditor. These items can be seen in Appendix F and H.

Round 2 Data Analysis

After all Round 2 Questionnaires were returned to the researcher, descriptive statistics including means, variances and standard deviations were calculated for each of the 55 items. An a priori decision was made based on guidelines presented for the Delphi method (Delbecq et al., 1975; Gustafson, 1975; Murray & Hammons, 1995) and previous Delphi research (Vazquez-Ramos et al., 2007) to establish the criterion for determining item importance. Items were required to have a mean of 2.5 or higher along with a variance of ≤ 1.0 to be considered as having moderate importance and to remain as an item in the Round 3 Questionnaire. The variance is a critical component of this decision as the variance represents the level of agreement between panelists' ratings of each item. It is possible that while some panelists regard an item as critical, others may rate the same item as not important and this would result in a higher variance. Therefore, the variance identifies which factors had the least and greatest consensus, which can be as equally important to know as the mean rating of an item. Further, items with a mean of ≥ 3.5 and a variance of no more than 1.0 were considered to be the most highly critical factors. Items with means of 3.0 to 3.49 with a variance of no more than 1.0 were considered to

be very important while items with means of 2.5 to 2.99 were considered to be important. Depending upon the actual mean, an item with a mean less than 2.5 was either considered to be somewhat important or not important. Only one item fell into this category with a mean of 2.368. Having only one item mean fall under 2.5 does make sense as the panelists who were rating these items according to importance were also the individuals who generated the items that made up the questionnaire. The assumption was made that items would not have been mentioned in the Round 1 Questionnaire if panelists did not think they had importance.

After completing calculations for each item, the researcher reviewed all items to ensure that the panel mean for each item was at least 2.5 and had a variance of no more than 1.0. All comments made by panelists about the questionnaire and the process from Round 2 can be seen in Appendix G. Item 2 in Section 3 on the Round 2 Questionnaire was the only item that did not meet these criteria with a panel mean of 2.368 and a variance of 0.658. As a result, this item was not included on the Round 3 Questionnaire. Therefore, the modifications made to create the Round 3 Questionnaire from the Round 2 Questionnaire were: the deletion of Section 3 – Item 2, the addition of the panel means for each item in red, and the most frequent ranking of each item, also in red and an example can be seen in Appendix H.

Round 3 Data Analysis

The Round 3 Questionnaire allowed the panel to review their ratings and rankings from Round 2 while also seeing the panel mean for each item, the most frequent ranking of each item, as well as comments made by panelists about the questionnaire and the process. All comments from Round 3 can be seen in Appendix I. The panelists were

given the opportunity to change either or both item rating or ranking after viewing this additional information and thinking about their previous responses, but were not encouraged or required to do so. While the majority of the panel did not make changes to either their ratings or rankings of any items, there were panelists that did make some modifications. Of the changes made, most were changes to item rankings while some modifications were made of item ratings. A few of the changes made had a significant impact on the results. Specifically, Item 6 in Section 1 (student access to care should be addressed by higher education institutions regarding student suicide and prevention) experienced a change in the mean from 3.474 in Round 2 to 3.517 in Round 3 while the variance remained the same, which moved the item from being categorized as Very Important to being categorized as Critical. Also, Item 4 in Section 3 (some student beliefs are barriers to suicide prevention programming) experienced a change in the mean from 3.316 and variance of 0.29 in Round 2 to a mean of 3.793 and variance of 0.240 in Round 2 which also moved the item from being categorized as Very Important to being categorized as Critical. The decrease in variance also suggests this change also increased consensus. Item 9 in Section 3 also experienced a change in categorization from Important to Very Important due to a change in the mean from 2.947 in Round 2 to 3.0 in Round 3, even though the variance did not decrease but did remain less than 1.0. These 3 items were the only items out of 54 that experienced significant statistical difference, as defined by a movement to a different category of importance.

The items with mean ratings of 2.5 to 2.99 and variances of less than 1.0 after the completion of Round 3 are listed below in Table 4. While these items are thought to be Important factors in suicide prevention programming for college students, they were not

considered by the panel to be Very Important or Critical. Overall, the items that fell within this category have higher variances than items that were considered more important. This could imply that some of these items may or may not have more or less importance depending on a specific institution, but would not be considered critical items that would be necessary for any institution to employ.

Table 4. Round 3 Items Considered Important with Mean Ratings of 2.5 to 2.99.

SECTION 1: Higher Education Institutions Addressing the Problem of College Student Suicide and Suicide Prevention		
ITEM	MEAN RATING	VARIANCE
10. Public health model should be looked at as guidance by higher education institutions regarding student suicide and prevention. (e.g. public health approach to design overall programs for mental health awareness and training; population based interventions to improve overall student well being; not approaching suicide as an individual issue)	2.842	0.448
11. More research should be supported by higher education institutions regarding student suicide and prevention. (e.g. better data on all student deaths and deaths by suicide on all campuses; more research to determine core elements of an effective program; population based mental health promotion program; more research regarding certain groups like international and minority students)	2.789	0.327
SECTION 2: Elements of an All-Encompassing Suicide Prevention Program for College Students		
ITEM	MEAN RATING	VARIANCE
14. A public health model is an important element to an all-encompassing suicide prevention program.	2.737	0.418
15. Student organizations / involvement are important elements to an all-encompassing suicide prevention program. (e.g. peer counseling / support programs; drop in counseling services; grass roots organizations such as Active Minds, etc.)	2.684	0.504
SECTION 3: Barriers to Implementing and Maintaining Suicide Prevention Programs on College Campuses		
ITEM	MEAN RATING	VARIANCE
1. Lack of acknowledgement of suicide as a problem or lack of interest in addressing the problem of suicide is a current barrier to suicide prevention programming.(e.g. people don't want to get involved)	2.579	0.666
7. Unwillingness to change / adapt / be creative in approach is a barrier to suicide prevention programming. (e.g. wanting to hold onto older philosophies of disconnection on campus; holding onto programming that has been used for years and is not known to be effective)	2.684	0.659
13. Lack of marketing / communication is a barrier to suicide prevention programming. (e.g. lack of creative approaches in reaching mass students; poor campus wide communication; lack of materials and resources easily accessible by students)	2.684	0.218

The items listed in Table 5 below all had mean ratings of between 3.0 and 3.49 with variances less than 1.0 after the completion of Round 3. These items are considered to be Very Important, but not Critical. This category of importance seems to have the highest range of item variances, ranging from 0.177 up to 0.733. The lower the variance, the more consensus there seemed to be among the panel that an item truly was Very Important. Items with higher variances indicate that these may be factors that some specific institutions may benefit from, but not all.

Table 5. Round 3 Items Considered Very Important with Mean Ratings of 3.0 to 3.49.

SECTION 1: Higher Education Institutions Addressing the Problem of College Student Suicide and Suicide Prevention		
ITEM	MEAN RATING	VARIANCE
5. Overall student wellness and contributing factors to suicide should be addressed by higher education institutions regarding student suicide and prevention. (e.g. addressing and educating about substance use and abuse {particularly alcohol}, stress, etc.; offering and perhaps requiring a "life class" or "health class" that addresses various contributing factors to suicide and other life problems); a wellness approach to outreach and education so that topics appear less threatening to students)	3.211	0.327
7. Legislation and support outside of the university community should be sought regarding student suicide and prevention. (e.g. legislation for better mental health care for students; effective lobbying on local laws related to mental health and suicide; collaboration between SAMHSA and Dept. of Education regarding students ability to maintain some financial aid if need to take less than required number of credits)	3.0	0.50
8. More effective marketing overall should be sought after by higher education institutions regarding student suicide and prevention. (e.g. messaging that is developed in student friendly and accessible ways; having information online directing students to information and resources related to emergency physical and mental health care; work with media to appropriately report and inform about suicide issues)	3.105	0.421
12. Higher education institutions need to recognize and take interest in the problem of student suicide and prevention. (e.g. identify student suicide as a growing problem and make prevention a priority; infrastructure change to address the problem of suicide; identify risk groups specific to their campus, etc.)	3.31	0.360
14. University culture/atmosphere should be addressed by higher education institutions regarding student suicide and prevention. (e.g. develop a culture/atmosphere of courage, openness and transparency; smaller sub-communities in university to foster a sense of connection; culture of caring for whole student)	3.421	0.308
SECTION 2: Elements of an All-Encompassing Suicide Prevention Program for College Students		
ITEM	MEAN RATING	VARIANCE
1. Social support is an important element of an all-encompassing suicide prevention program. (e.g. creating smaller communities within the larger institution; overcoming isolation and feeling a part of the community)	3.211	0.399
2. Assessment of the problem of suicide and any programs related to suicide prevention is an important element of an all-encompassing suicide prevention program. (e.g. recognizing student suicide is a growing problem; evaluating/assessing current prevention efforts that feedback into program structure)	3.069	0.567

Table 5 cont.

ITEM	MEAN RATING	VARIANCE
5. University policy, procedures, and gatekeepers are important elements of an all-encompassing suicide prevention program. (e.g. policy regarding when and if to contact parent/guardian; no tolerance for weapons on campus; making students and their well-beings number one priority; establishing a Task Force, Steering Committee and Advisory Boards related to mental health and suicide; clear protocol to follow regarding helping distressed students)	3.263	0.275
7. Marketing, media, and technology are important elements in an all-encompassing suicide prevention program. (e.g. utilization of technology with online resources, screenings, and trainings; effective social marketing regarding stigma, suicide prevention and mental health)	3.158	0.234
8. University culture/atmosphere is an important element in an all-encompassing suicide prevention program. (e.g. community culture of caring for each other; climate that decreases mental health stigma and promotes health and wellness)	3.474	0.384
10. Cultural awareness/sensitivity is an important element in an all-encompassing suicide prevention program. (e.g. culturally-informed student service and counseling staff; cultural competence of employees within the institution)	3.368	0.515
11. Addressing contributing factors of suicide is an important element to an all-encompassing suicide prevention program. (e.g. addressing/educating students regarding substance use and abuse, healthy relationships and stress management; promotion of general health, mental health and life skills)	3.421	0.308

SECTION 3: Barriers to Implementing and Maintaining Suicide Prevention Programs on College Campuses

ITEM	MEAN RATING	VARIANCE
5. Lack of collaboration / broad based involvement / team approach to prevention is a barrier to suicide prevention programming. (e.g. lack of collaboration from various departments, especially Dean of Students and other higher level administrative offices; lack of involvement of faculty; lack of communication / relationships with university and community police, health services and counseling services)	3.158	0.733
6. Lack of clear protocol and policy to be followed is a barrier to suicide prevention programming. (e.g. lack of protocol for students, faculty and staff to follow for helping a distressed student in crisis; lack of policy regarding students in crisis during and post intervention)	3.241	0.704
8. Lack of cultural awareness / sensitivity is a barrier to suicide prevention programming. (e.g. lack of awareness of various cultures and implications this can have on education and programming; lack of education regarding cultural differences and sensitivity)	3.0	0.571
9. Apathy is a barrier to suicide prevention programming. (e.g. lack of concern regarding student suicide)	3.0	0.714
10. Lack of education/outreach is a barrier to suicide prevention programming. (e.g. educating students, faculty and staff about suicide, mental health and wellness, substance use, help seeking behavior, etc.)	3.421	0.38
11. Lack of training is a barrier to suicide prevention programming. (e.g. training students, faculty and staff about warning signs, myths of suicide, etc.)	3.263	0.319
12. University atmosphere / culture is a barrier to suicide prevention programming. (e.g. large student population; concern of public image; fear of addressing mental health issues such as suicide; conspiracy of silence; lack of care for "whole student")	3.263	0.346

SECTION 4: Important Elements When Working with College Students and Suicide Prevention

ITEM	MEAN RATING	VARIANCE
6. Cultural awareness / sensitivity / identity is particularly important when working with college students and suicide prevention.(e.g. culturally appropriate prevention and intervention methods)	3.444	0.302

Table 5 cont.

ITEM	MEAN RATING	VARIANCE
9. Marketing / technology is important when working with college students and suicide prevention. (e.g. providing accurate information online; appropriately utilize innovative technology that meets students where they are at in their own use/comfort with technology; pay attention to current trends in technology for reaching and communicating with students; having programs and messages that students can identify with)	3.055	0.177
12. Contracts / emergency contacts are important when working with college students and suicide prevention. (e.g. verbal no-harm contracts; making an action plan to use in emergency / crisis; making a contact list in case of crisis / emergency)	3.167	0.732

Table 6 below displays the items that with mean ratings of 3.5 and higher with variances of less than 1.0 after the completion of Round 3, thus being the Critical Items. A total of 25 items were noted as critical. Not only were the rating means greater than 3.5, but overall the variances of the items within this category are clearly lower than the items that were grouped under Important or Very Important. The range of item variances within the Critical Items is 0.0 to 0.379. The smaller range of variances implies that the panel exhibited high agreement that these items were the Critical Items for suicide prevention programming for colleges and universities. Surprisingly, only 2 items from Section 3, Barriers to Implementing and Maintaining Suicide Prevention Programs on College Campuses, are included in this category. However, both items are extremely inclusive. Specifically, Item 3 which states a lack of resources as a barrier refers to several resources refers to several different resources including money, staff, time, training and evaluation. Also, Item 4, which refers to student beliefs as a barrier, also refers to various beliefs that can be held by students that could include fear of consequences for seeking help, feeling that they should be able to handle life on their own, fear of losing financial aid, stigma attached to mental health and help seeking behavior, etc.

Table 6. Round 3 Items Considered Critical with Mean Ratings of 3.5 and Higher.

SECTION 1: Higher Education Institutions Addressing the Problem of College Student Suicide and Suicide Prevention		
ITEM	MEAN RATING	VARIANCE
1. More education/outreach should be done within higher education institutions regarding student suicide prevention. (e.g. campus wide education focused on specific target groups; raising awareness about suicide, mental health, stigma, and resources on campus and in community)	3.579	0.166
2. More training should be done in higher education institutions regarding student suicide and prevention. (e.g. campus wide trainings such as QPR; training campus media on crisis/suicide reporting; advanced training to target groups with professional "duty" related to potentially suicidal students; online training modules)	3.684	0.218
3. More collaboration/team work should be seen within higher education institutions regarding student suicide and prevention. (e.g. increased cooperation among campus personnel; better working relationships with offices such as Student Life, Dean of Students, Student Health and University Police; more support from President/administrative staff)	3.526	0.312
4. More resources should be available within higher education institutions regarding student suicide and prevention. (e.g. increase funding for programming and staffing; increase student services overall; adequate ratio of counseling staff to students; permanent job for prevention specialist)	3.68	0.148
6. Student access to care should be addressed by higher education institutions regarding student suicide and prevention. (e.g. students should have insurance for mental health needs not limited to emergency care; increase mental health services/locations on campus)	3.517	0.240
9. Quantity and quality of student services should be addressed by higher education institutions regarding student suicide and prevention. (e.g. trauma, grief de-briefing and postvention services; access to psychiatric services; drop in and satellite counseling offices; peer support/counseling organization; high visibility of counseling services on campus; frequent screening days; more student discussion and focus groups, etc.)	3.579	0.166
13. Clear policies and protocols need to be created and maintained by higher education institutions regarding student suicide and prevention. (e.g. have a clear protocol to be followed by everyone within the university to help a student in distress/crisis; consider suicide prevention and intervention part of a broader campus wide risk management plan and develop appropriate guidelines and procedures; a process to mandate a mental health evaluation; restricting access to lethal means; help students maintain a connection to school if need to take a leave of absence; help students lower academic credits in order to seek help/treatment without losing financial aid or other positions)	3.526	0.312
SECTION 2: Elements of an All-Encompassing Suicide Prevention Program for College Students		
ITEM	MEAN RATING	VARIANCE
3. Education/Outreach is an important element of an all-encompassing suicide prevention program. (e.g. educating and raising awareness to students, faculty and staff about suicide, mental health, common struggles/stressors of college students and resources/student services; normalizing stress and feeling down among student population)	3.828	0.090
4. Student services are an important element of an all-encompassing suicide prevention program. (e.g. counseling services; psychiatric/pharmaceutical services; health services; after-hours crisis line; early alert/intervention team; drop in counseling; peer group counseling)	3.842	0.090
6. Training is an important element in an all-encompassing suicide prevention program. (e.g. training students, faculty and staff to recognize distressed students and signs of suicide as well as what to do to help; training gatekeepers to identify and refer at-risk students)	3.842	0.090
9. Resources are an important element in an all-encompassing suicide prevention program. (e.g. adequate funding for education/outreach, trainings, and staff; adequately staffed counseling center; case management services to monitor and follow up with students)	3.759	0.155

Table 6 cont.

ITEM	MEAN RATING	VARIANCE
12. A team approach is an important element to an all-encompassing suicide prevention program. (e.g. administrative/institutional support; interdepartmental cooperation and collaboration for the common goal of the best interest of the student; good communication and relationships between institution, police services, hospitals and other community services)	3.737	0.203
13. Student access to care is an important element to an all-encompassing suicide prevention program. (e.g. student services accessible all year around; adequate mental health services on campus and referrals to off campus care; available transportation when necessary to outside care)	3.579	0.379

SECTION 3: Barriers to Implementing and Maintaining Suicide Prevention Programs on College Campuses

ITEM	MEAN RATING	VARIANCE
3. Lack of resources is a current barrier to suicide prevention programming. (e.g. staff-general and specific to prevention and crisis; money; time; training; program implementation and evaluation)	3.552	0.309
4. Some student beliefs are barriers to suicide prevention programming. (e.g. afraid of negative consequences-dismissal from institution or financial aid taken away; feeling they should be able to handle their own problems/shouldn't have to ask for help)	3.793	0.240

SECTION 4: Important Elements When Working with College Students and Suicide Prevention

ITEM	MEAN RATING	VARIANCE
1. Assessment is particularly important when working with college students and suicide prevention. (e.g. continued assessment of lethality, impulsiveness, ideation, risky behaviors and intent; use of assessment instruments such as BDI, BHI, PAI, etc.)	3.772	0.129
2. Therapist skills/relationship are particularly important when working with college students and suicide prevention. (e.g. instillation of hope; creation of safe environment/support; normalizing stress, mental illness and suicide ideation; holding suicidal wish without reinforcement or punishment; work with ambivalence and resistance; following gut instinct regarding client safety)	3.944	0.034
3. Involvement of others/social support/family and parents is particularly important when working with college students and suicide prevention. (e.g. involving roommates, parents/family, friends, and sororities/fraternities; increasing social support; recognizing who college students talk to and maximizing programs that connect to this)	3.62	0.158
4. Identification of those at risk is particularly important when working with college students and suicide prevention. (e.g. awareness and knowledge of risk factors including substance abuse and other warning signs of serious distress and suicide ideation)	3.777	0.183
5. Dual diagnosis issues/substance use is particularly important when working with college students and suicide prevention. (e.g. directly addressing co-morbid issues such as substance use and trauma; treating the underlying causes such as depression, anxiety, eating disorder, substance use, etc.)	3.666	0.215
7. Education/outreach is particularly important when working with college students and suicide prevention. (e.g. education about warning signs, myths of suicide, and available resources, de-stigmatizing mental health and normalizing mental health issues; informing about contributing risk factors; encouraging help seeking behavior and social contacts)	3.833	0.090
8. Student services are important when working with college students and suicide prevention. (e.g. counseling and psychiatric services; drop in/crisis counseling; peer support counseling; decreasing barriers to accessing appropriate clinical services on campus;)	4.0	0.0
10. University and counseling center policy and procedures are important when working with college students and suicide prevention. (e.g. counseling center staff should have advanced training in recognizing and responding to suicidal risk; acquiring competencies of suicide risk assessment and management; prepared crisis response plan)	3.777	0.111

Table 6 cont.

ITEM	MEAN RATING	VARIANCE
11. Consultation/team approach is important when working with college students and suicide prevention. (e.g. consultation with other staff within a counseling center; having working relationships with faculty and other campus staff)	3.666	0.215
13. Referrals/communication with others providing treatment are important when working with college students and suicide prevention. (e.g. timely and easy flow in information between those treating a student including counseling center staff, psychiatrists, hospitals, etc.; availability of referral sources for longer-term treatment, specified treatment or other treatment required but not offered by university)	3.667	0.215

It should be noted that Section 4, Important Elements When Working with College Students and Suicide Prevention, had the highest number of items with means \geq 3.5 and was the only section that did not have any items with means less than 3.0. Therefore, all items within the section are at least considered to be Very Important with 77% of the items (n=10) considered to be Critical. The only item among all 55 original items that had a mean rating of 4.0 with 0.0 variance was Item 8 in Section 4. This item suggests that student services such as counseling and psychiatric services, drop-in / crisis counseling, and decreasing barriers to accessing appropriate services, is of the most critical importance related to suicide prevention programming.

Because the Delphi method allows for the potential of regression to the mean, it is important to assess if regression to the mean took place between Round 2 and Round 3 of the current study. Table 7 below displays the number of panelists who changed any of their ratings between the two rounds, the questionnaire section and item number, the Round 2 rating, the panel mean from Round 2, the Round 3 rating as well as it the change in rating resulted in a change in item importance.

Table 7. Data Indicating Little to No Regression to the Mean between Round 2 and 3

Number of Panelists that Changed Item Rating Between Round 2 and Round 3	Questionnaire Section Number and Item Number	Round 2 Rating	Panel Mean from Round 2	Round 3 Rating	Change Resulted in Item Importance (Very Important to Critical?)
1	Section 1, Question 4	3	3.632	4	NO
1	Section 1, Question 6	3	3.474	4	YES Very Important to Critical
1	Section 1, Question 12	2	3.263	3	NO
1	Section 2, Question 2	3	3.053	4	NO
1	Section 2, Question 3	3	3.789	4	NO
1	Section 2, Question 9	3	3.737	4	NO
1	Section 3, Question 3	3	3.526	4	NO
1	Section 3, Question 4	2	3.316	4	YES Very Important to Critical
1	Section 3, Question 6	3	3.211	4	NO
1	Section 3, Question 9	3	2.947	4	YES Important to Very Important
1	Section 4, Question 3	3	3.555	4	NO

The Round 3 Questionnaire also gave the all panelists the option of commenting on individual items when filling out the Round 3 Questionnaire and as stated above, all of these comments can be seen in Appendix I. Some of the panelists were able to capture an item’s critical importance through their words alone. For example, one panelist who commented on education/outreach after slightly changing their ranking stated,

I’m changing my ranking slightly, based on the fact that education/outreach is likely to impact a greater proportion of students who are considering suicide than increasing access to counseling. While access to counseling is very important,

absent education/outreach, students are not likely to make use of available resources.

Two panelists illustrated his/her opinions about collaboration. One stated, “The public health/education and clinical/professional resources are not an ‘either/or’, but need to work in conjunction with each other.” The second panelist indicated the importance of collaboration among multiple departments on a campus by stating, “Suicide prevention cannot be seen as the ‘job’ of the counseling center, but an initiative embraced by individuals and groups throughout the college campus community.” One last example of the power of panelists’ comments came from a panelist, who like many of the panelists, felt that it is unacceptable for such high expectations of service to be placed upon centers that are not fully equipped with proper resources including staff, time, and money. They commented,

It is crucial that campuses adequately staff their counseling centers! All the suicide awareness and gatekeeper training is for naught if the professionals are not well trained, following best practices, and not so overloaded they either ‘miss’ something or don’t take the time to consult, or become burned out so that they are not able to establish the therapeutic relationship.

Both the Round 2 and Round 3 Questionnaires also asked the panelists to rank the items within each section from the most important to the least important with 1 being the most important. During Round 3, a small number of participants did change some of their rankings after seeing the most frequent ranking for each item based on the data from Round 2. The purpose in asking the panelists to provide a ranking for the items was to investigate if there were one or a couple of items per section that seemed to be ranked as

the most important or least important among the panel. The researcher, with agreement from the auditor, made the decision that if an item ranking had a frequency of ≥ 10 , which would be 1/3 of the panel, it would be considered significant. In total, nine of the 54 items after the Round 3 Questionnaire met this criterion. The items can be seen below in Table 8.

Table 8. Items after Round 3 Completion Considered Significant due to Panel Ranking

SECTION 1: Higher Education Institutions Addressing the Problem of College Student Suicide and Suicide Prevention		
ITEM	RANKING	FREQUENCY
1. More education/outreach should be done within higher education institutions regarding student suicide prevention. (e.g. campus wide education with focus on specific target groups; raising awareness about suicide, mental health, stigma, and available resources on campus and within the larger community)	2	12
2. More training should be done in higher education institutions regarding student suicide and prevention. (e.g. campus wide trainings such as QPR; training campus media on crisis/suicide reporting; advanced training to target groups with professional "duty" related to potentially suicidal students; online training modules)	1	12
10. Public health model should be looked at as guidance by higher education institutions regarding student suicide and prevention. (e.g. public health approach to design overall programs for mental health awareness and training; population based interventions to improve overall student well being; not approaching suicide as an individual issue)	13	10
SECTION 2: Elements of an All-Encompassing Suicide Prevention Program for College Students		
ITEM	RANKING	FREQUENCY
4. Student services are an important element of an all-encompassing suicide prevention program. (e.g. counseling services; psychiatric/pharmaceutical services; health services; after-hours crisis line; early alert/intervention team; drop in counseling; peer group counseling)	3	10
7. Marketing, media, and technology are important elements in an all-encompassing suicide prevention program. (e.g. utilization of technology with online resources, screenings, and trainings; effective social marketing regarding stigma, suicide prevention and mental health)	15 (last)	10
SECTION 3: Barriers to Implementing and Maintaining Suicide Prevention Programs on College Campuses		
ITEM	RANKING	FREQUENCY
2. Lack of research is a barrier to suicide prevention programming. (e.g. lack of empirical research On effective programs in college settings)	13 (last)	11
3. Lack of resources is a current barrier to suicide prevention programming. (e.g. staff-general and specific to prevention and crisis; money; time; training; program implementation and evaluation)	1	12

Table 8 cont.

SECTION 4: Important Elements When Working with College Students and Suicide Prevention		
ITEM	RANKING	FREQUENCY
3. Involvement of others/social support/family and parents is particularly important when working with college students and suicide prevention. (e.g. involving roommates, parents/family, friends, and sororities/fraternities; increasing social support; recognizing who college students talk to and	2	10
9. Marketing / technology is important when working with college students and suicide prevention. (e.g. providing accurate information online; appropriately utilize innovative technology that meets students where they are at in their own use/comfort with technology; pay attention to current trends in technology for reaching and communicating with students; having programs and messages that students can identify with)	13 (last)	13

Within Section 1, Higher Education Institutions Addressing the Problem of College Student Suicide and Suicide Prevention, Items 1 and 2 were ranked the most important with 12 of the 29 total panelists ranking Item 2 as the most important and 12 panelists ranking Item 1 as the 2nd most important. Having these two items ranked so high in importance among the items really emphasizes how important the panel thought the components of education, outreach and training are to a suicide prevention program for college and universities. Not surprisingly, both of these items also were rated as Critical according to the panel means and variances. Item 10 in Section 1 was ranked 13th out of 14 items, thus implying it was not considered important in relation to other items within this section. This seems to be in agreement with the panel rating mean and variance for this item as well with 2.842 and 0.448 respectively. This implies that the public health model should not necessarily be looked at as guidance in building and implementing suicide prevention programming for colleges and universities.

Within Section 2, Elements of an All-Encompassing Suicide Prevention Program for College Students, 10 panelists ranked Item 4 as the third most important item. This item was also categorized as Critical using the panel mean and variance which were 3.842 and 0.090 respectively. Together, this evidence suggests that student services, such

as counseling and psychiatric services, health services, crisis service, peer counseling, etc., are critical components of an all-encompassing suicide prevention program for college students. However, Item 7 that suggests marketing, media and technology as important elements for an all-encompassing suicide prevention program, was ranked 15th or last among all items in Section 2 by 10 of the panelists. However, the panel mean for this item was 3.158 with a variance of 0.234. While there is a slight discrepancy between its rating and ranking, both measurements suggest that the item is not considered a critical component to suicide prevention programming for college students.

Item 3 in Section 3, Barriers to Implementing and Maintaining Suicide Prevention Programs on College Campuses, was ranked 1st or most important among all items within this section by 12 out of the total 20 panelists. This item was also categorized as Critical by using its panel mean and variance, which were 3.552 and 0.309 respectively. These measurements indicate that the panel clearly believes that a lack of resources, including staff, money, time, training, etc., is a significant barrier to implementing and maintaining suicide prevention programs on college and university campuses. Further, Item 2 was ranked 13th or last among all of the items by 11 panelists within this section. This ranking is consistent with the item's panel mean and variance, 2.368 and 0.658. This item was also the only item of the original 55 that was not included in the Round 3 Questionnaire as its panel mean and variance did not meet the criteria to remain as an item after its poor performance in the Round 2 Questionnaire. Therefore, it appears the panel agrees that a lack of research is not necessarily a barrier to suicide prevention programming. However, comments made throughout the Delphi poll process indicate that research is needed.

Therefore, while a lack of research may not be seen as a barrier, it is likely that further research would be beneficial.

Item 3 in Section 4, Important Elements When Working with College Students and Suicide Prevention, was ranked as 2nd most important item in the section by 10 of the 29 total panelists. Similarly, the item's panel mean and variance, 3.62 and 0.158, also indicate the importance of this item. It is clear that the panel is in agreement that the involvement of others including social support, family, friends, etc., is critically important when working with college students and suicide prevention. Item 9 was ranked 13th or last among items in this section by 13 of 29 panelists. However, it should be noted that although the item was ranked last in its section, the item was still considered to be Very Important with a panel mean of 3.055 and a variance of 0.177. The discrepancy between it's ranking and it's categorization as Very Important is caused by the fact that no item from Section 4 had a mean of less than 3.0, so all items within the category were considered at least Very Important, if not Critical. The low ranking does indicated that among all of the Very Important or Critical Items within Section 4, Item 9 is considered to be of least importance. Thus, marketing and technology is not considered to be as important as many other items regarding to working with college students and suicide prevention.

Critical and Core Critical Components

In order to provide a more meaningful delineation of the most critical components identified by the panel, a post-hoc decision was made by the researcher in agreement with the auditor that the components with panel means of ≥ 3.70 were ascertained and labeled as *core critical components* while the components with means between 3.5 and 3.69

continued their identification as *critical components*. Therefore, the critical components include the following: student access to care, social support, dual diagnosis, consultation, and referrals. Components that will be referred to as core critical components from this point forward are the following: education/outreach, student beliefs, training, therapist skills, resources, student services, assessment, risk identification, policies / protocols, and collaboration. The identification of the core critical components offers a better definition of the findings overall and also creates a category for the items with the highest of the high mean ratings with high degrees of consensus. The core critical components will be further discussed in the next chapter.

CHAPTER V

DISCUSSION

This study was designed with the purpose of identifying the critical factors of a suicide prevention program for colleges and universities. The Delphi method, which consists of both qualitative and quantitative aspects, was used in order to draw from the knowledge and experience of experts that work in this area with college students. The qualitative aspect of the study yielded an extensive collection of elements that were thought by the panelists to be critical in suicide prevention programming for colleges and universities (Appendix E). The results presented represent each panelist's best judgment and expertise. Nevertheless, the very extensive list of elements is reflective of the extraordinary amount of experience and knowledge of the panel of experts utilized for this study as well as the complexity of suicide prevention programming.

Throughout the study, the panelists were rating and ranking the importance of items that were created from their knowledge and experience. Many of the listed responses given from the Round 1 Questionnaire (which consisted of open ended questions) have been fairly and consistently covered in current professional literature such as the importance of education/outreach, training, resources, collaboration, therapist skills and high risk identification. However, many of the panelists' responses have not been consistently covered in current professional literature such as quantity and quality of student services, specific policies and protocols, and student beliefs. This section will address the importance of the more well-known core critical elements as well as the core

critical elements that are not as well known or researched, all which were generated by the panel. The following discussion is organized by core critical components; however it should be noted that due to the organization of the Round 2 and 3 Questionnaires, several of the critical components are relevant to more than one section. Each of these components will be presented in light of other appropriate literature and findings, and final sections will discuss future research directions, limitations of the study, implications, and a brief conclusion.

Core Critical Components of a Suicide Prevention Program for Colleges

Education/outreach and Student Beliefs

The identification of education/outreach as well as addressing student beliefs as core critical components is indeed consistent with the current professional literature. However, the terms and ideas of education/outreach are broad and can be interpreted differently by various institutions or individuals. For example, some of the responses from the Round 1 Questionnaire that contributed to education/outreach becoming an item included educating students, faculty and staff on mental health, common struggles, stressors, normalizing stress and feeling down, available resources, and awareness about suicide, myths of suicide, and warning signs.. It is clear that there is a lot of information that the campus community needs to be educated about and the panel seems to agree that outreach is one of the best ways to approach this. Findings of King et al. (2008) support this viewpoint with 71% of surveyed students reported not being aware of campus resources available to help suicidal students, indicating the importance of college health professionals working toward increasing student awareness of campus mental health resources.

The importance of education and outreach found in this study echoes the findings of several studies. For example, many studies have focused on the important role of stress and lack of coping skills as contributing factors that may lead to suicide ideation (Bonner & Rich, 1988; Dixon et al., 1991; Konick & Gutierrez, 2005; Monk, 2004; Silverman & Felner, 1995) and therefore would be an important topic of education/outreach which is agreed upon by the panel. It seems as though college students are experiencing a larger number of stressors in their lives while also being less prepared to deal with negative life events as well as daily stress experienced as college students. While there may be numerous hypotheses as to why this is happening, the result is that there is a need for more education/outreach to help students cope with the stress in their lives. Education on overall mental health including depression, anxiety, and hopelessness would also be important and is consistent with several studies that have found high correlations between these presenting problems and suicidal thinking and behaviors (Furr et al., 2001; Garlow et al., 2008; Heisel et al., 2003; Heppner et al., 1997; Joiner, 1996; Weber et al., 1997; Williams et al., 2008). The relationship between presenting problems such as depression and hopelessness to suicide is an important relationship that needs to be publicized and talked about more openly on college campuses.

Many campuses do make great efforts to educate their campus communities about depression and its prevalence among college students, but there is often not much stated about the potential relationship to suicidal thoughts or behaviors. Therefore, efforts to include information about suicide and suicide prevention when addressing more common mental health problems would be beneficial. For example, increasing awareness and educating about college student suicide and related statistics is another aspect of

education/outreach. Westefeld et al. (2005) surveyed 1865 college students from four different universities and found that while 42% believed suicide to be a problem on a general level for college students, only 10% believed this to be true about their respective campus, indicating the importance for campuses to educate that college student suicide is a problem that exists on all campuses, including their own. Numerous studies have been done to find the prevalence rates of suicidal ideation, suicide attempts and suicide completions among the college student population. While some findings may be slightly different, the majority of the findings are very consistent. Statistics such as one in 10 students, or 10%, seriously consider suicide; 7% of students reported having made a suicide plan; 2% had attempted suicide at least once; 0.4% had made a suicide attempt that required medical attention (Brenner et al., 1999; Kisch et al., 2005) are not well known but need to be. Because many students who struggle with a variety of problems, especially suicidal ideation often feel that they are alone and that no one else suffers in the same way, it is critical to present information that validates that they are in fact not alone. A statistic such as over half of college students reported a form of suicidal thinking in their lives and 18% of undergraduate students and 15% of graduate students have seriously considered attempting suicide (Drum et al., 2009) could be presented in an educational and awareness raising way that will also help students to feel that they are not alone and can be helped.

Clearly, there is a need for a significant amount of education/outreach to be done in order to reach everyone within a campus community. This raises the question, upon whom or what departments will these tasks fall? Smith et al. (2006) recommended that colleges and universities should assign a specific component of student services, such as

the counseling center, the specific responsibility for providing outreach to the college campus to help students, faculty and staff be able to identify symptoms and warning signs of mental illness. It is also suggested that curriculum infusion, outreach programming and web-based education would all be considered effective ways to educate the campus community about psychological issues. While this recommendation seems promising, there are potential problems. The main problem, supported by the panelists of this study as well as recent research, is the increase in responsibilities and tasks given to one component of student services and in this case, the counseling center. It does make sense to have one specific department take the lead on certain tasks, but it is unreasonable for counseling centers to be expected to do all outreach for the campus community themselves and continue with all other needed services at the same time. As a result, the panelists have also ranked collaboration as a critical component, which is discussed below.

Collaboration

In support of the panelists identifying collaboration as a core critical component, recent professional research has had similar findings. Some of the examples of collaboration given by participants in the Round 1 Questionnaire included better administrative/institutional support; better collaboration, cooperation and working relationships with other departments such as Dean of Students, Student Life, Student Health and University Police; good communication and relationships between institution, police services, hospitals and other community services; and increased cooperation among campus personnel. Research has also supported the need for campus counseling centers to establish and maintain solid, working relationships with various departments

around their campuses as well as close relationships with specific targeted departments (NMHA & Jed Foundation, 2002; Smith et al., 2006; Westefeld, 2006).

Approaching suicide prevention from more than one model can also be considered is another example of collaboration. More importantly, it was one specific way identified by panel responses that collaboration should take place. In building a comprehensive program, it is important to allow view points, knowledge, and experiences from a broad spectrum and not constrict the building of a program to only high level administration or licensed staff who work in the counseling center. More specifically, a comprehensive program would include elements from a variety of professional areas that such as counseling, psychology, administration, education, medicine, among many others. By bringing together ideas from various positions and fields, institutions will have a greater chance of success in their mission to build a prevention program suitable for their campus.

Training and Therapist Skills

The two components, training and therapist skills, were also found to be core critical components in congruence with current literature. Similar to education/outreach, training is also an extremely broad term that can be interpreted very differently. For the purpose of this study, training was approached in a broad manner and not broken down further into who should be trained or types of training. Various aspects of the importance of training have been mentioned in current literature in regards to college student suicide prevention. Aspects of training that the panelists were referring to when rating and ranking training so highly included training students, faculty and staff to recognize distressed students, signs of suicide, and what to do; training gatekeepers to identify at-

risk students; formal trainings such as Question, Persuade, and Refer (QPR); offering online training modules; and requiring advanced trainings for employees/professionals that work directly with students. After reviewing and summarizing literature on college students and mental illness, Mowbray et al. (2006) made a few recommendations, one of which was that all faculty and staff should be knowledgeable of the early signs of mental illness, especially concerning depression and suicide risk. However, there has not been much consensus in the field about the best practices for training students and employees such as faculty and staff. Tompkins and Witt (2009) evaluated short-term effects of QPR, a gatekeeper training program, which has become more common in recent years. Overall, the study suggested that QPR does have potential impact as a prevention method, but note that while QPR can be a valuable tool in suicide prevention efforts, the training only provides one component of suicide prevention efforts and should be used along with other strategies for best results. Further, it is also noted that when offering trainings to groups on a campus, it would be helpful to have a staff from the counseling center present to assist in trainings and inform the group on current policies and procedures regarding suicidal students. While many current QPR trainings are given by individuals who have gone through a weekend or training seminar, it is evident that is not optimal.

Another aspect of training suggested by the panel as important as well as supported by the literature as important is directly related to those who work one on one with the students. Having staff in counseling centers fully trained on suicide prevention and intervention is of utmost importance as they are often dealing directly with the students struggling and also likely involved in any campus wide or group targeted trainings. Therapist skills, another component found to be critical, fit into this aspect of

training. Unfortunately, the training of graduate students in psychology, who eventually work as staff in college counseling centers, regarding the assessment and management of suicidal clients in both academic and internship settings remains limited (Dexter-Mazz & Freeman, 2003; Knox et al., 2006). One possible reason for this is there is a lack of research that exists to inform individuals involved in training in both academic and internship settings about the most effective methods to attend to trainees' clinical skills and emotional and professional needs when dealing with a potential suicidal or suicidal client as well as following a client suicide. One panelist commented on the importance of the therapeutic relationship in regards to suicide prevention by simply stating, “. . . establish a good therapeutic relationship, which is THE KEY to getting someone through the suicidal crisis.” While it can be easy to take this important element for granted in attempts to focus on more advanced training, this foundational skill needs to be continuously emphasized and assessed when training new mental health professionals. There have also been concerns that academic training programs may not consider the multiple missions of college students as well as the severity of problems often seen in college and university counseling centers across the country. Panelists, like the findings of recent research, suggest that college mental health is a specialized field and requires practitioners are at least basically trained in several specific areas including crisis prevention and intervention (Dean & Meadows, 1995; Webb et al., 1997).

Resources and Student Services

The fact that resources and student services were factors that consistently rated and ranked highly with little variance was not a surprise. Main examples of resources that panelists referred to included increases in staff for both general services and specific

to prevention and crisis, money, time, training, case management services, and student services. It has been known that a lack of resources has been an issue for college and university counseling centers for many years and the current state of the economy and related budget cuts has increased the severity of this problem. While there is understanding that there are limited budgets of higher education institutions, it is clear from those on the panel who work in campus counseling centers that they feel that counseling centers overall do not have adequate resources in order to efficiently or effectively serve the large student bodies they have the responsibility to serve. Benton et al. (2003) echoed the results of the current study. The Benton et al. study found that the number of students seen each year in a counseling center doubled over the 13 year time span of their study and the number of suicidal students tripled. Clearly, the same number of staff and other resources would not be adequate to handle such an increase. Therefore, one suggestion made was for the hiring of mental health professionals that have more experience working with more severe populations. This would not be a replacement of current staff, but an addition.

The lack of resources, primarily staff, time and money, is a significant barrier reported by the panel and supported by research. Bishop (2006) surveyed counseling center directors and found 85% of his sample believed campus administrators were aware of problems associated with increase demand and complexity of problems, but only 30% of those reported receiving any additional resources. A smaller percentage, 15%, optimistically hoped that more resources would be provided while 40% believed that while higher administration had an understanding of the problem, they did not have the financial ability to provide any help. Five percent of those surveyed believed that the

administration did not place a high priority on counseling services in general.

Alarming, only 5% of counseling center directors reported their current resources as adequate for their counseling center. While it may seem like too simple of an idea to some, the lack of availability of resources is a crucial problem faced by college counseling centers and other campus departments involved in developing, implementing and maintaining suicide prevention programs.

Many counseling center staff may feel tired of asking or pleading for more resources, but research shows that it is important for counseling centers to continue fighting for more resources to better serve their campus community. Only 33% of surveyed counselors by Smith et al. (2007) reported they had met with administrative committees to inform about their current issues and need for more resources while 23% reported gathering data, shared research articles and provided formal reports regarding counseling center activities. Many reported having networked with school administrators, but 30% reported taking no actions to increase administrator's support for increased resources. These findings support the importance of continuing advocacy with school officials and demonstrating the utility of the counseling center on campus. Further, Bishop (2006) suggested that counseling centers have significant data to support any efforts to deal with the demands for their services as it is more likely that actions of decision makers in administrative positions will be influenced by data rather than by effective arguments. In recognizing that demands on counseling centers are increasing, several ways in which counseling centers can attempt to deal with increasing demands have been suggested, including increasing the frequency of group therapy, instituting automatic termination policies and training for staff regarding effective assessment and

referral procedures among others (Murphy & Martin, 2004; Smith et al., 2007). Some of the suggestions made may be feasible and effective for some campuses, but not all, which leaves many campuses still struggling for ideas on how to serve the students the best they can with the resources they have. For example, while group therapy can be effective, many campuses can struggle with getting groups up and running due to several possible reasons including conflicting schedules, willingness of students to be in a group context among others.

Assessment and High Risk Identification

Assessment and high risk identification were also found to be core critical components according to the panel. Consistent with the findings from the panel, NMHA and the Jed Foundation (2002) set forth a safeguard plan against suicide for college students and among their suggestions was the development of a screening system for sociality. This system would probe for the presence of signs, symptoms and behaviors that pertain to establishing a diagnosis or assessing the risk of suicidal thoughts and behavior. Along similar ideas, Haas et al. (2003) reported being involved in an outreach project entitled. The College Screening Project: A Program to Identify and Help Students with Significant Psychological Problems. This project followed a suicide risk model that considers risk to be greatest in those with psychiatric disorders that reduce an individual's ability to respond to stresses of college life and precipitate any additional stressors. The project took place online and students had an individual log-in ID and password. Student responses to questions were evaluated by clinically trained counselors or therapists and students were placed in either a mild, moderate or severe category; students were able to view this in their personal profile. Those identified as severe were urged to come to the

counseling center to explore treatment options and others were given resources and able to participate in a dialogue feature that allowed communication with counselors. Overall, the project seemed useful in identifying and treating students in need of help. Further, it also appeared to increase awareness of mental health struggles and decrease stigma. However, most current research regarding high risk identification does make the important point that while identification systems are helpful, they cannot take the place of a full evaluation by a mental health professional.

One program that has been acknowledged in current literature that can be classified as identification program that also incorporates a comprehensive evaluation by a mental health professional was created by Joffe (2007) who believed the task of preventing suicide is dependent on identifying risk factors and translating them into effective interventions. Within his program, any student who made a suicide threat or attempt was mandated to receive four sessions of mental health assessment. The program specifically addressed ongoing risk by providing leverage for intervention in the months following a display of suicidal intent. Overall, this program has been evaluated and it has been found that there has been an increase in the percentage of students who make meaningful contact with a social worker or psychologist following a suicide threat or attempt. Further, since the program has been implemented, an overall 45.3% reduction rate in student suicide has been observed. Despite the fact that all programs have pros and cons, this risk identification and assessment program has proved to be effective and incorporates the various aspects consistently endorsed by the panel such as identifying signs of serious distress, continued assessment of lethality and impulsiveness, possible use of assessment instruments, and assessment of risky behaviors and intent. While

current literature and many of the panelists believe high risk identification to be of critical importance, one panelist had an insightful comment: “. . . focus on ‘risk identification’ runs the risk of increasing stigma, and thus ultimately reducing the possibility that people will get the help they need.” While this is one panelist’s view, it does raise an interesting potential effect of having any type of an identification system in place within an institution of higher education. Either for this reason or others such as a lack of resources, researchers such as Haas et al. (2003) found many colleges and universities have made relatively little effort to seek out students at risk who do not come forward for help on their own.

Policies and Protocols

The component of policies and protocols was found to be a core critical component by the panel. The need for having clear and thorough policies and procedures was not unexpected given it’s recent increase in professional literature in very recent years as well as in public media as more high profiled events have occurred at colleges and universities across the country. Because several of these events have been made very public via the media, many institutions of higher education have taken steps to develop and implement policies and protocols for a variety of possible crises that could occur within their campus communities. It is only now becoming more common practice to develop and implement clear policies and protocols in preparation for possible crises rather than in response to crises, which has been the pattern in the recent past. In regards to policy and protocol, the panel endorsed this item with an understanding it included the counseling center as well as the institution overall having a prepared crisis response plan, having counseling center staff acquire competencies of suicide risk assessment and

management, addressing legal and ethical issues, having a process to mandate mental health evaluations, restricting access to lethal means, and assisting students in maintaining a connection to school and financial support if a leave of absence is needed. Researchers such as Smith et al. (2007) found that only 26% of surveyed counseling centers indicated that their center had implemented a clearly defined crisis/disaster response plan and had systems in place to handle a crisis on campus. While it is possible and likely that work has been and is being done by many institutions that would raise this statistic, it remains a worrisome statistic. In the same study it was found that 19% of counseling centers reported having employees that received specialized training to handle crisis situations and 7% reported that the center had no involvement in crisis/disaster planning due to other offices handling all emergencies on campus. Findings such as these demonstrate why the panel rated the need for policies and protocols to be addressed.

In support of needing implementation of policy and protocol, Smith et al. (2006) suggested that counseling centers in particular have a well-developed and comprehensive system to prevent psychiatric crises and to respond to crises when they occur as well as having a policy about making decisions about the extent and nature of problems the center is equipped to serve on campus and how to make the decision about where and when to make referrals to outside services and how to follow up with a student involved in a crisis. Another recommendation made was having a clear policy and procedure in place regarding the notification of parents or other related third parties following any type of crisis with a student. Important points that are made include decisions of this nature need to be done in conjunction with institution administrators, which displays need for collaboration in the formation and implementation policy and protocol as well and while

the institution and counseling center have a responsibility to address the needs of their students, they do not have all the responsibility and this needs to be remembered when making such important decisions regarding policy and protocol. Due to the need for counseling centers to give informed consent before serving a student, Bishop (2006) made an important point that also supports the need for collaboration in the making of policies and protocols. He warned that upper level administrators should carefully think before developing institutional policies and procedures that may result in invasions of confidentiality or mental health services or intrusions of the privacy rights of students if they want the value of a campus counseling center to be maximized.

Ethical and legal issues are yet another important aspect in regards to policies and protocols, an aspect that was also endorsed by the panel and is consistently supported by current literature. Francis (2003) emphasizes that both ethical and legal issues be explicitly considered as institutional policies and procedures are created. It is highly suggested that two ethical principles, beneficence and autonomy, be primarily considered in the process as they reflect the profession of psychology's responsibility to keep the students' best interest ahead of policy and decision making efforts. Also important, according to Francis (2003) and the panel is how the information regarding confidentiality is give to clients who are receiving services from the counseling center. For example, how careful does counseling center staff need to be when discussing the limitations of confidentiality? A balance between not having too much of a focus on limitations, which could cause the student to not want services, and sharing sufficient information so that the student is not surprised or betrayed when a breach in confidentiality is warranted. Federal and state laws can often complicate the process of

creating well intentioned policies within institutions of higher education, especially when the counseling center is involved and can in some scenarios be put at risk for legal action. Francis (2003) suggested that in order to protect the institution as well as the counseling center and its staff that caution is taken when consulting lawyers who may be on retainer while their expertise may not include areas such as mental health law. Consulting with the center staff as well as lawyers well versed in mental health law would be beneficial. Another suggestion when creating policies and protocols is considering the ways in which the goals of the students, the institution, and the counseling center may converge or conflict with one another. Caution is needed in order for all of the goals to be balanced in order to minimize conflicts and have the ability to address the needs as well as the limitations of each group and this can be accomplished by having clear policies and protocols with ethical and legal considerations that are developed in a collaborative way.

Future Research Directions

Future research in this area of college student suicide prevention is highly encouraged. There are numerous directions in which research continues to be needed as there are several different angles from which the problem of college student suicide could be approached. Some specific ideas are further discussed below.

Follow-up studies could further break down many of the items, both critical and not critical, to achieve a more detailed outcome of the components. For example, education/outreach is a considerably broad area, so what exactly do experts believe should be included within this component? Is it more or less effective to educate the student body, the faculty and staff, or the entire campus community? Is it more or less effective to educate about contributing factors that may lead to suicide, or how to respond

to an individual experiencing suicide ideation? Investigating the most effective, either relating to financially effective or outcome, would be a beneficial follow up to the current study. Many institutions may want to incorporate an identified critical component such as training but may wonder if it is best to train the faculty and staff or the student body or which training program would be best to employ on their particular campus.

Future studies might also look into why specific items did not receive high enough panel means and low enough variances to be considered critical components to a suicide prevention program. Further, it may be investigated as to why certain items had higher variances than similar items. Future studies could also look at what are the differences in necessary components between small and large institutions or public and private institutions.

Teenage suicide is also becoming more problematic and contributing factors are often similar among high school and college students. Therefore, the investigation into the possible use of the identified critical components found in this study to the high school student population would also be a valuable research study. Further, research done on the high school student population might also inform future research for the college student population.

Limitations

Despite important findings of the current study, there are also several limitations. One limitation of this study is a direct result of the utilization of the Delphi method. The panel of experts used for this study was not chosen at random, but rather selected. Each panelist needed to meet specific criteria in order to be part of the study and these can be seen in the recruitment letter in Appendix A. Further, because the purpose of the current

study was to use the expertise of those currently employed in a college or university counseling center (this was one of the inclusion criteria for a panelist), all of the information and perspectives given throughout this process was from college counseling center staff. No other departments and their staff that may be involved with suicide prevention efforts at their institution were utilized from this study and therefore, it should be noted that other departments or staff may have differing thoughts and opinions. Finally, in regards to the expert panel, due to the nature of panel selection, the panel did lack in ethnic diversity with 86% of the panel identifying as Caucasian, which is not representative of all college counseling center employees. Also, while the study was open to individuals who are currently employed in a college or university counseling center, the majority, 27 of the 29 panelists, reported having a doctoral degree with 70% of these in counseling psychology and 30% in clinical psychology. While many employees within the profession of college counseling center work do have doctoral degrees, many do not, thus this panel is not necessarily representative of all counseling center employees. However, it should be noted that diversity regarding gender, age and geographic location of the panelists' affiliated institution was seen within the panel.

It should also be noted that the results of the current study only represent the expert opinions of the selected panel. They do not necessarily represent the views of all professionals and experts that work for colleges and university counseling centers and suicide prevention programming. It is possible that other items may be identified as critical with the use of a different panel of experts or a different method.

A common limitation that is directly related to the use of the Delphi method is a tendency for regression towards the mean (Stone Fish & Busby, 1996). Regression

towards the mean is a tendency that may exist wherein participants change answers in order to be closer to the consensus of the panel means. The researcher did encourage the panelists to give their personal and unique responses throughout the process in order to lessen the potential for regression to the mean. Further, Table 7 displays data that indicates that regression to the mean was very minor and possibly did not occur at all.

Another possible limitation of the current study is the use of a five point Likert scale for the Round 2 and Round 3 Questionnaires. It is possible that the use of a seven point or 10 point Likert scale may have allowed for finer discriminations in item ratings. This may have led to the need for additional rounds in order for the panelists to reach consensus or may have led to more or less items being identified as core critical components.

A final limitation to the current study is that the study did not investigate or ask the panelists about components that they feel do not work or are not important for suicide prevention programs. The panelists were only asked to use their expertise to identify and rate components that were critical for a prevention program. By asking the panel to also identify components that were not important could have shed light on components that may not be helpful and may even lead to a waste of resources that could be better directed and utilized.

Implications

The expert panelists who participated in this study have provided a list of specific factors and their relative importance in regard to suicide prevention programs for colleges and universities. Within the identified factors, there are several that have been identified as core critical components for a suicide prevention program. Not only will these

identified components be instrumental for those institutions who are thinking about or in the process of developing a suicide prevention program for their campus, but they will also spark further discussion, debate, and research in various related directions. Because the panel used in this study consisted of only practitioners, there is the potential for critiques, especially from researchers or organizations that may have done similar research projects and have found results that either support or contradict the results of the current study. Due to the importance of suicide prevention work, any critiques would be welcomed. By furthering discussion and debate over this most important topic could result in a more comprehensive approach and better understanding.

By the identification of core components such as education/outreach, training, collaboration, etc., steps can now be taken on how to improve the quality of these components. For example, knowing the importance of education/outreach in suicide prevention program, more attention can be paid by academic training programs and well established mental health organizations to these components. Now, the focus can turn to how to incorporate more of the identified critical components into existent trainings and programming, rather than wondering what components need to be incorporated or not. Organizations such as the newly founded Higher Education Mental Health Alliance (HEMHA) may be able to use the identified components found in this study to further promote their mission of mental health and suicide prevention. Also, student-run organizations, such as Active Minds, which focuses on education, outreach, and decreasing stigma surrounding college student mental health, could also use the results of this study to support their mission and increase their visibility and services to college campuses across the country.

The Delphi method utilized in this study allowed the panelists to rate and rank the importance of each item from not too important to critical. Throughout the process, the panel was able to come to consensus that 25 items or factors were of utmost importance in suicide prevention programming for colleges and universities. While the purpose of the study was to find these critical factors for all colleges and universities to have within a suicide prevention program, the process also allowed for insight into factors that may be extremely important to some colleges and universities, but not all. Due to the fact that institutions of higher education vary across many aspects such as size, geographic location, religious affiliation, public or private, make up of the student body, mission statements or history, etc., it is possible and was demonstrated through this study that there are elements of a suicide prevention program that may be of critical importance to one institution while not being important at all at another institution. Therefore, when an institution of higher education has made the decision to take action to develop and implement any type of suicide prevention program, the critical components found in this study should be considered first and foremost. However, other items that were found to have higher variances or lower panel means should not be ignored. They too should be reviewed to determine whether or not they may be a beneficial component for that specific campus or institution. An item not found to be critical by the panel in the current study simply means it was not an item that was seen as critically important for all institutions.

A panelist commented on the Round 2 Questionnaire, specifically Section 1, "All 14 items in this section are important and should be integrated in a well-rounded approach to an institutional response to suicide assessment and prevention. It is a

frustrating experience to prioritize these elements. I guess I'm glad I'm not a budget administrator!" Another panelist commented, "To make a 'true' #1 ranking, I would need to combine the top several items." Clearly these panelist and others feel passionately that all of the elements are important but also are aware of the reality that it may not be possible, for financial reason or otherwise, to have everything. Future research will hopefully continue to address gaps in the literature.

Conclusions

In conclusion, the current study has found core critical components of a suicide prevention program for colleges and universities that can serve as a foundation from which to build a comprehensive program that best suits the institution's mission, campus community and students. The current study has demonstrated the absolute need for institutions of higher education to have or be developing a suicide prevention program. It is hoped that this study and its findings will serve as a starting point in which institutions of higher education can begin and/or continue their efforts towards preventing the growing problem of college student suicide. While not all of the critical components found will fit with every institution, at least they will offer some guidance as institutions push forward with this very important work.

Appendix A
Panelist Recruitment Letter

**Recruitment Letter for College Counseling Center Employees with Expertise in
Suicide Prevention Programming**

Approved by the Institutional Review Board University of North Dakota. Approval expires November 28, 2009. Project Number: IRB-2008-08-019.

Dear Potential Panelist,

College student suicide is a tragedy that has a vast impact on family, friends, classmates, the college community and higher education. The increasing rates of college student suicide over the last fifteen years is well documented and has sparked national attention around prevention and intervention programs for colleges and universities. However, there is a lack of research and guidance regarding how to develop, implement, and maintain such programs. The identification of critical components of suicide prevention programs for college students would assist higher education institutions in their work towards suicide prevention.

My name is Colleen Johnson and my current dissertation research, sanctioned by the University of North Dakota is an attempt to find the critical components of suicide prevention programs for college students by utilizing the Delphi method. The primary goal is to work towards consensus with experts in college counseling centers with expertise in working with the college student population and the development and implementation of suicide prevention programs on what constitutes essential components of successful college suicide prevention programs. Possible critical elements found may potentially serve as a small foundation from which any college may build their own suicide prevention program in order to best serve their respective college student population. However, there is also the potential of a lack of consensus that could inspire further future research and discussion surrounding the complications that come along with college student suicide and prevention efforts.

For the study, I will have one expert panel of college counseling center employees with expertise in suicide prevention programming. The criteria for a college counseling center employee with expertise in suicide prevention programming are:

- Minimum of 2 years experience with college student suicide prevention program development, implementation, or maintenance
- Advanced degree, minimum Masters Degree in Counseling, Psychology, Social Work or other closely related field.
- Individual treatment with a minimum of 50 college students experiencing suicide ideation or behavior
- Currently working in a 4 year college or university counseling center in the United States

- Current job responsibilities include work related to suicide and/or crisis prevention

I am writing you today to ask for your participation as one of the college counseling center employees with expertise in suicide prevention programming for my study and/or to nominate others you feel would meet the criteria. If you agree to participate and share your expertise, it would greatly enhance my study. The study will be conducted in 3-4 phases and require about 20-30 minutes to complete each phase. The length of the study will range from 3-4 months. The results of the study will be made available to all expert panelists.

Would you please consider being a panelist or nominating others for my study? Thank you in advance.

Colleen Johnson, MS
(701) 330-3391
collegestudentdelphi@gmail.com
University of North Dakota
Department of Counseling

Chair: Dr. Janie Pinterits, PhD
(701) 777-6234
janie.pinterits@gmail.com
University of North Dakota
Department of Counseling

IF WILLING TO BE A PANELIST, PLEASE PROVIDE THE FOLLOWING INFORMATION:

Name:

Affiliation:

Email:

Phone:

CAN YOU NOMINATE OTHERS WHO MIGHT ALSO MEET CRITERIA AND SERVE AS PANELISTS? IF SO, PLEASE PROVIDE THE FOLLOWING FOR EACH NOMINEE.

Name:

Affiliation:

Email:

Phone:

Appendix B
Informed Consent

INFORMED CONSENT

**CRITICAL COMPONENTS OF SUICIDE PREVENTION PROGRAMS FOR
COLLEGE STUDENTS: A DELPHI STUDY**

COLLEEN JOHNSON
(701)-330-3391
collegestudentdelphi@gmail.com
DEPARTMENT OF COUNSELING
UNIVERSITY OF NORTH DAKOTA

STATEMENT OF RESEARCH

A person who is to participate in the research must give his or her informed consent to such participation. This consent must be based on an understanding of the nature and risks of the research. This document provides information that is important for this understanding. Research projects include only subjects who choose to take part. Please take your time in making your decision as to whether to participate. If you have any questions at any time, please ask.

PURPOSE OF THE STUDY

The purpose of this study is to identify the critical elements of an effective suicide prevention program for college students. The primary goal is to work towards consensus with experts in university counseling center employees with expertise in the development and implementation of suicide prevention programs on what constitutes essential components of successful college suicide prevention programs. Possible critical elements found may potentially serve as a small foundation from which any college may build their own suicide prevention program in order to best serve their respective college student population. However, there is also the potential of a lack of consensus that could inspire further future research and discussion surrounding the complications that come along with college student suicide and prevention efforts. The Delphi method will be used to collect and analyze the data.

PROCEDURES

The data gathering for the study should take no more than two hours of your time over a 3-4 month period. The data will be limited largely to your opinions based upon your expertise and experiences. All data gathering will be done via email or through forms via the internet. However, arrangements for regular post mail can be made if needed. The

data provided by the participants will be such that your anonymity will be protected. If you decide to participate in this study, you will be asked to participate in the following:

- **Round 1 (open-ended questions): survey opens June 15, 2009 and responses are due July 15, 2009.**
- **Round 2 (rating of data): survey opens August 1, 2009 and responses are due August 15, 2009.**
- **Round 3 (final comments and observations): survey opens September 1, 2009 and responses are due September 15, 2009.**

HOW MANY PEOPLE WILL PARTICIPATE

Approximately 20 people will take place in this study; 20 expert panelists representing expertise in college counseling center suicide prevention programming.

POTENTIAL RISKS OF THE STUDY

It is possible that you may experience frustration that is often experienced when completing surveys. Some questions may be of a sensitive nature depending on personal experiences of the participant, and you may therefore become upset as a result. Due to the nature of the study, It is possible that you may experience fatigue as the study will take between 3-6 months to complete. However, such risks are not viewed as being in excess of “minimal risk”.

If, however, you become upset by questions, you may stop at any time or choose not to answer a question. If you would like to talk to someone about your feelings about this study, you are encouraged to contact a helping professional or the researcher who can facilitate a referral to a helping professional. Participants who choose to pursue services will need to do so at their own monetary expense.

POTENTIAL BENEFITS TO PARTICIPANTS AND/OR TO SOCIETY

Participants will receive a summary of the research findings at the conclusion of the study. Potentially, the results of the study will offer guidance and information especially to colleges, universities and their students regarding suicide prevention programs and how to build a program that is appropriate for their institution. Hopefully, higher education institutions, their employees, students and larger communities will gain a better understanding of the importance of suicide prevention, specifically as it pertains to college students.

COSTS TO PARTICIPATE

There are not costs for participating in this research study.

PAYMENT FOR PARTICIPATION

There will be no payment for participation in this research study.

FUNDING THE STUDY

The University of North Dakota and the researcher are receiving no payments from other agencies, organizations, or companies to conduct this study.

CONFIDENTIALITY

The records of this study will be kept private to the extent permitted by law. In any report about this study that might be published, you will not be identified. Your study record may be reviewed by Government agencies, and the University of North Dakota Institutional Review Board. Any information that is obtained in this study and that can be identified with you will remain confidential and will be disclosed only with your permission or as required by law. Confidentiality will be maintained by means of coding your data with an assigned pseudonym (Example: Expert 1). Identifiable data will be stored on a password-protected computer only accessed by the researcher or locked in a filing cabinet in the Department of Counseling at the University of North Dakota accessible by the researcher or her faculty advisor. All materials will be destroyed via shredding three years after the completion of the study.

PARTICIPATION AND WITHDRAWAL

Your participation is voluntary. You may choose not to participate or you may discontinue your participation at any time without consequences of any kind. If you do decide to leave the study early, please contact the researcher to inform her of your withdrawal. Your decision whether or not to participate will not affect your current or future relations with the University of North Dakota. The researcher may withdraw you from this research if circumstances arise which warrant doing so.

CONTACTS AND QUESTIONS

The researcher conducting this study is Colleen Johnson, MS. You may ask any questions you have now. If you later have questions, concerns, or complaints about the research, please contact Colleen Johnson at (701) 330-3391 or email: collegestudentdelphi@gmail.com. Her faculty advisor is Dr. Janie Pinterits, and she can be reached at (701) 777-6234 or email: janie.pinterits@gmail.com.

If you have questions regarding your rights as a research subject, or if you have any concerns or complaints about the research, you may contact the University of North Dakota Institutional Review Board at (701) 777-4279. Please call this number if you cannot reach research staff, or you wish to talk to someone else.

Your signature indicates that this research study has been explained to you, that your questions have been answered, and that you agree to take part in this study. You will receive a copy of this form.

Subjects Name:

Signature of Subject

Date

Appendix C
Demographic Form

AGE: Please check one

25 – 30 years old

30 – 35 years

35 – 40 years

40 – 45 years

45 – 50 years

50 – 55 years

55 – 60 years

61 years and above

GENDER: please check one

Female

Male

Other (Please Specify) _____

RACE / ETHNICITY: please check one or more

American Indian or Alaskan Native

Asian

Black or African American

Native Hawaiian / Other Pacific Islander

White or European American

Hispanic or Latino

Other (Please Specify) _____

HIGHEST EDUCATIONAL DEGREE: please check one

- Doctorate
- Masters
- Education Specialist
- Specialized Certificate or Credentials
- Other (Please Specify) _____

IN WHAT FIELD: please check one

- Clinical Psychology
- Counseling/Counseling Psychology
- Education/Educational Psychology
- School Psychology
- Organization/Business
- Public Health
- Social Work
- Other (Please Specify) _____

PLEASE ANSWER THE FOLLOWING:

1. How many years of experience do you have with college student suicide prevention program development, implementation or maintenance?
2. Please estimate the number of clients you have worked with that were experiencing suicide ideation or behavior?
3. Are you currently working part or full time in a 4 year college or university counseling center in the United States?
4. In terms of percentage, how much of your current job responsibility is related to suicide prevention and crisis management?
5. Have you ever been issued a citation for unethical practice?

Appendix D
Round 1 Questionnaire

Instructions: Please respond to the following questions. If you have more than five answers, please DO list them all. However, if you have less, please DO NOT add more just to fill in the space. Responses are due back by July 7th, 2009; if possible, sooner would be appreciated. If you need assistance or have questions, please contact Colleen Johnson at collegestudentdelphi@gmail.com.

1. How would you like to see higher education institutions address the problem of college student suicide?
 - a)
 - b)
 - c)
 - d)
 - e)

2. What seems to be particularly important when working with college students and suicide prevention?
 - a)
 - b)
 - c)
 - d)
 - e)

3. What elements make up an all-encompassing suicide prevention program for college students?
 - a)
 - b)
 - c)
 - d)
 - e)

4. What would you like to see done in regards to college suicide and its prevention?
 - a)
 - b)
 - c)
 - d)
 - e)

5. What barriers exist to implementing and maintaining suicide prevention programs on college campuses?
- a)
 - b)
 - c)
 - d)
 - e)

6. Is there a question that is not asked here that you feel should be? If so, what is it?
(This question is not required)

7. Overall comments:
(This question is not required)

Appendix E

Round 1 Responses Organized by Categories and Themes

Category 1: Higher Education Institutions Addressing the Problem of College Student Suicide and Prevention

THEME 1: MORE EDUCATION/OUTREACH

- Campus wide education
- More education for residence life employees
- More campus-wide education about prevention and response
- Increased awareness throughout campus regarding the problem of suicide
- Raising awareness of suicide and educating students about mental health services on campus
- Integration of suicide awareness and prevention outreach in first-year orientation activities as part of the de-stigmatizing of mental illness among the students
- Recommend/require education about it to faculty & staff
- Increased depression awareness
- Increased awareness of campus mental health resources for students
- Comprehensive education for the entire university community with focus on suicide prevention
- Increase education with people who are not mental health providers that emphasized not only "risk identification and referral" but also the contributions that all can make to prevention of suicide and support for mental health issues
- Schools addressing suicide prevention as part of orientation, first year experience programs, etc
- More outreach to campus community
- Increased awareness
- Include suicide awareness and prevention as part of a first year seminar for all students
- Especially target grad students...they are themselves at higher risk, and if they are on assistantship may have a more informal contact with undergrads than the faculty does.
- Strong educational outreach efforts to undergrad and grad students
- Anti-stigma campaigns
- Increased awareness and knowledge of stats., myths, warning signs, available services.
- Education to all students faculty and staff about signs of suicide....possibly requiring this education and training in some form
- Increase awareness of symptoms by front line staff
- More overall health and wellness programs
- Programming in the student halls
- More anti-stigma campaigns for mental health overall
- Education campus wide
- More education about mental health and suicide to all within university
- Wide spread education to all students (possibly required modules online)
- Required education for all employed on campus
- Counseling Center Directors should re-evaluate mission statements and ask "are we doing enough prevention"? College Counseling Centers need to be active with 100% of the student population in the form of programming, mental health education and skill development
- Develop prevention programs to address issues that can contribute to a suicidal crisis (i.e. mental health awareness, stress management, etc.)
- Better programmatic support for and awareness of counseling and mental health services on campus
- Reduce or eliminate pathogenic elements of campus culture
- Be courageous enough to be transparent about the issue
- It needs to start with education before college. Mental Health Promotion in high schools, communities, places of worship, at the pediatrician's office, in the media, on the iPhone, attached to computer games, in the workplace, etc. Increased student and family education about mental health issues, financially and culturally congruent resources, decreased stigma about seeking help for mental health care, normalization of mental health care.

THEME 2: TRAINING

- Campus wide trainings (i.e. QPR program, trainings)
- Training gatekeepers who can identify and refer at-risk students to student mental health services
- Training mental health services staff and health staff regarding appropriate interventions
- Training campus media on suicide reporting

- Provide QPR training for all faculty, staff & students
- QPR training for all
- Increased buy-in by faculty and staff to suicide prevention trainings
- Require training of all residence hall staff
- More interest in college faculty, staff to attend trainings on the issue
- Require training for all individuals employed by university regarding recognizing signs of suicide as well as what to do if worried about a student
- Training of students who are in leadership roles (i.e. RA's, Fraternity/Sorority leaders, student group officers, etc) on how to help others that could be struggling around them
- Training for all faculty and staff within the university regarding education about suicide signs
- Required training for residence hall directors and advisors
- More prevention through training faculty, staff, and students in recognizing the risk factors and warning signs associated with suicidal behavior
- Train as many faculty, staff and students to recognize signs of potential suicide risk & how to respond and refer (We've been using the QPR model since 2004.)
- Provide appropriate level of advanced training (best practices in assessment & treatment) to target groups with professional "duty" related to potentially suicidal students...counseling staff, emergency personnel, university police, health service professionals, etc.
- Increased involvement by faculty, staff, and students
- Required or strongly endorsed gatekeeper training for faculty and staff
- Mandatory attendance of gatekeeper suicide prevention training for ALL employees
- University-wide commitment to Gatekeeper philosophy, training and responsibility in addressing this issue
- Provide suicide prevention training to relevant staff (e.g., residence life, advisors, faculty) such as QPR
- Staff/intern training on assessment and treatment of suicidal clients
- Coaching of support staff for how to better identify a student under severe distress
- Train front line staff for effective referral
- Train student peers to refer their friends when concerned
- Expectation/requirement of gatekeeper training as professional development for all faculty and staff
- On-line peer gatekeeper training
- Create online training modules for students, staff and faculty regarding identification or warning signs and intervention processes for nonprofessionals
- Require education/training modules for all faculty and staff about warning signs for distressed possibly suicidal students
- Well trained professional mental health staff
- Training in recognizing and assisting troubled students for all faculty and staff
- Required training for all employed on campus
- Provide increased training for higher-level administrators.
- Institute mandated training for all faculty.

THEME 3: COLLABORATION /TEAM WORK

- Increased cooperation among campus personnel
- Work towards cooperative efforts between Counseling Center, University Police, Housing, Student Affairs & President's Office
- Coordination of suicide prevention activities through consortia of sister institutions within a local area
- Health and counseling staff working with students and student organizations to develop effective messaging regarding suicide and mental health issues.
- Improved communication between student service personnel and health professionals on campus so that at-risk students are identified and referred for services
- Every campus should involve mid and upper administrators (not just counseling/health) in a discussion/evaluation/needs assessment relative to campus safety and support. Familiarize and use JED foundation model.
- Better working relationships with offices such as student life, dean of students, student health, university police
- Better working relationships with services in community such as mental health, hospitals, police, etc.
- More support from Pres./administrative staff overseeing universities
- Get senior administration on-board from the get-go, if at all possible, to develop/give input (or at least understand the need for a broad, public health approach) on the broader vision of what is needed, and to support a task-force to develop and support implementation & outcome evaluation of mental health & suicide/violence prevention goals
- Have a specific crisis response team (We have a larger group made up of representatives from all imaginable offices/departments that deal with ALL campus crisis situations, including suicide crises, and a smaller subset of that group forms a "case-management" team for specific situations.)
- Develop working relationships and procedures with local law enforcement, mental health agencies & professionals, and hospitals for better coordination and communication so that working relationships & contacts are already in place when crises occur
- Support for community (not just the campus) mental health needs (I hear that my state is 49th in the nation in its support of public mental health!)
- Top down approach from administration-clear support of suicide prevention activities, de-stigmatization of mental health problems, and mental health services
- Better relationships between involved departments within campus as well as outside/community resources (i.e. hospitals, etc)

- Close partnering with counseling center and student health, possibly with team approach
- Sharing responsibility for prevention throughout all of the employees of the university.
- Counseling centers and/or dean of students office being available to discuss students that have concerns about another student that may be suicidal.
- Work collaboratively with faculty and teaching assistants to facilitate identifying students in distress
- Work collaboratively across academic & student affairs units to develop working "student of concern" committees.
- Upper administration support – if the University President sees this as a priority, people will take note
- Create strong liaison relationships with inpatient psychiatric units discharging patients back into the university community
- Improved relationships among high level administrative departments and those who are on the front lines of prevention and intervention
- Team approach or collaborative work between health and counseling centers
- President, VP, Provost, etc. make suicide prevention a priority and publicly endorse
- More interest and dedication to suicide prevention by high level administration
- Mid to upper level administrators should become more aware of the nature of student mental health distress in general and suicidal behavior in particular. (Read "College of the Overwhelmed")
- Address culture of response to mental health issues on campus, with emphasis on understanding mental health issues and providing help, rather than fear and risk management
- Admin would support campus wide depression awareness/screening day
- Identification and coordination of stakeholders
- Increased awareness on the part of top level university administrators on the needs that front line counseling center staff have as a result of regularly working with suicidal students and campus crises. (time off allowances that are separate from personal vacation days, pay that reflects the work we do, expert debriefing from non-university counseling center peers, funding for counselors to receive additional training on the latest research re. suicide and treatment issues) Counselor burn-out is a real concern – esp. at universities where the ratio of counselors to students is not adequate. (I forget what the ratio is but I think it's established by the Assoc. for university and college counseling center directors (AUCCCD). *However, this ratio may not fully take into consideration a campus where the counselor-student ratio is within their recommendations, but a high % of students access services or have more severe concerns that contribute to professional burn-out.

THEME 4: RESOURCES

- Increased funding for suicide prevention
- Funding for positions such as "Wellness Coordinator" or Outreach Coordinator" associated with the counseling center to provide leadership and management of prevention programming
- Ensure adequate ratio of counseling center staff to student population
- More counseling center staff
- More money for prevention
- Increase resources and services for mental health overall
- Allocate appropriate resources (financial, personnel, time, etc.) to raising awareness of the issue in a formal way
- Allocate appropriate resources (financial, staffing, etc) to provide adequate and timely mental health treatment services to the campus community.
- Financial resources to provide not only prevention, but also intervention services to students in distress
- More resources, including staff and money for counseling centers
- More resources for counseling center agencies to adequately service students with depression, alcohol and other substance issues, and suicidal ideation (This may help in avoiding a wait list situation where those seeking help are delayed or referred elsewhere.)
- Increased resources
- Hire more clinical staff
- More funds given to centers to deal with increasing their staff and programs
- Provide support for a counseling and mental health service that has enough trained staff to provide the basic assessment and treatment needed
- Increase funds to put towards more programs/outreach to campus Community
- More funding...campuses are in the economic squeeze, and although the Garrett Lee Smith grants are wonderful, there's just not enough to go around!
- Fully staffed and supported (financially) counseling center
- Hiring Prevention Specialists
- Resources coming from within Universities, not just state & federal grants for S.P. programs, jobs, etc...
- Permanent job positions-Prevention Specialists
- More staff and other resources within counseling center
- Better funding for counseling center staff to attend prevention conferences and to become certified in suicide prevention.
- Provide for adequate mental health resources
- Actively fund counseling centers to allow for necessary staff and mental health resources on campus
- Actively fund campus outreach and suicide prevention programs
- Adequate funding for college counseling and student health centers
- Better support for counseling centers providing services
- More staff on campus counseling centers to be available for crisis students when they come in
- Increase availability of direct clinical services, including psychiatry

- Increase counseling and psychological services resources necessary to place adequate emphasis upon outreach and education (note: the more effective your outreach, the higher your student utilization)
- Increase mental health resources
- More resources for counseling centers
- Adequate resources dedicated to suicide prevention
- Coordination with any psychiatric treatment with talk therapy
- Provide more resources to the counseling centers that are earmarked specifically for student treatment (not new programs or training initiatives)
- Money, money, money!
- Hire sufficient number of staff per student population to address needs
- Increase in support on campuses for provision of mental health services by college counseling centers
- Increased support for front line staff in order for them to continue to care for the campus community.

THEME 5: STUDENT WELLNESS / ADDRESSING CONTRIBUTING FACTORS TO SUICIDE

- Address contributing factors such as reducing alcohol use
- Addressing contributing factors such as alcohol, stress, etc.
- Required "life class" that addresses issues such as stress, mental health, finances, substance use/abuse...and other factors that can lead to suicide. This would have to be completed within first year on campus, even for transfer students.
- Mental Health Promotion campaigns, not just suicide prevention
- Require all students to take seminar/class on HEALTH that includes many contributing factors to suicide ideation
- A wellness approach to outreach and education so it less threatening and easier to discuss among students.

THEME 6: ACCESS TO CARE

- Have more than one counseling center on campus
- Push for students to have insurance coverage for mental health needs, not limited to emergency care
- Increase in mental health service availability
- Greater parity for insurance coverage for mental health treatment, both inpatient and outpatient

THEME 7: LEGISLATION / OUTSIDE SUPPORT

1. Legislation for better mental health care for everyone
- Most counseling centers cannot provide longer-term counseling when it is needed. Universities need to help lobby for broader access to insurance with adequate mental health coverage...my preference would be to have a good policy as part of the tuition package...even if a student is carried on their parents' insurance, they often refuse to access it for mental health needs
 - Do effective lobbying on local laws related to this issue
 - Collaboration between SAMHSA and the Dept. of Education re. allowing students to receive some financial aid if students need to take less than the current minimum number of required units to receive a loan.
 - The U.S. Health & Human Services, Substance Abuse and Mental Health Services Administration (SAMHSA) has an excellent understanding of College Student Suicide Prevention issues and is doing stellar work re. campus suicide prevention. What if they could educate and collaborate with the U.S. Dept. of Education who finance student loans! Many students who need to reduce course loads are unable to because they will lose all of their financial aid if they go below the minimum course load requirement.

THEME 8: MARKETING

- Messaging that is developed in student friendly and accessible ways
- Work with student newspapers & other local media to appropriately report and inform about suicide issues (AAS Guidelines for the media are a help, plus developing good relationships w/ media BEFORE a crisis occurs!)
- Effective social marketing around stigma, suicide prevention, and marketing for mental health services
- Have information on the counseling center website that directs students in case of a mental health emergency
- Have information on the university home page directing students for emergency physical and mental health care
- Effective use of technology
- Social marketing

THEME 9: STUDENT SERVICES

- Available student mental health services and crisis services
- Higher visibility of counseling services on campus. Some schools 'bury' the counseling center within another office or use euphemisms to downplay the presence of mental illness on campus
- On campuses, develop early alert or intervention teams to help identify students in distress, help them get needed services, and provide case management until crisis is resolved
- Trauma and grief de-briefing with friends and family members of those who complete or attempt suicide
- Provide crisis debriefing and postvention for those affected by a suicide threat, attempt, or completion
- Access to psychiatric services for students
- Have a peer counseling organization
- Have a drop in/crisis counseling center and phone line combined
- Have information on the university home page directing students for emergency physical and mental health care
- Provide adequate counseling services for responsive treatment
- Debriefing and postvention for those affected by a suicide

- Create/support peer outreach programs.
- Screenings
- Mental health services, psychological and psychiatric
- Crisis management
- More peer support groups
- Formation of drop in / crisis counseling satellite offices
- Increase campus presence of peer-focused organizations such as the Jed Foundation
- More student discussion groups that deal with the problem of suicide

THEME 10: PUBLIC HEALTH MODEL

- We need to adopt a public health approach to designing overall programs for mental health awareness training and population based interventions to improve overall student well being
- Adopting Public Health approaches to health, wellness & suicide prevention
- Approaching college suicide as a public health issue, not an individual issue
- Increase the number of universities that have specific policies on how to assist students who are suicidal. Then post these policies on the university's website - include them in the student handbook/conduct code, etc. We know from the National Research Consortium of Counseling Centers in Higher Education studies that approx. 10% or more of college students experience suicidality. If a university can articulate a policy (or a potential avenue of academic options), it will assist students and their support systems to seek help and understand that they do have options available. Many students seem to not seek help b/c they do not know their university can assist them when they have mental health issues. Or some students, particularly those who feel stigmatized by seeking psychological help, will seek academic assistance but not psychological.

THEME 11: MORE RESEARCH

- More research to determine core elements which would make up an effective, population based mental health promotion program
- More research in general
- More research in this area especially with certain groups like international students and minorities
- Better data on all student deaths and deaths by suicide by all campuses

THEME 12: RECOGNITION OF PROBLEM AND INTEREST IN ADDRESSING

- Identify it as an issue of concern
- Identify suicide as a growing problem and make a priority to be dealt with
- Infra Structure Change, namely acceptance (campus-wide, country-wide) of the need to address this problem
- Identify risk groups specific to their campus

THEME 13: POLICY AND PROTOCOL

- Have a policy in place for how to handle students in distress
- Have an agreement that must be opted out for contacting parents or emergency contact in potentially difficult situations
- Have a protocol to follow that is publicized to all on university that is to be followed for students in distress
- Consider suicide (and violence) prevention and intervention part of a broader campus-wide risk management plan and develop appropriate guidelines & procedures
- A process to mandate a mental health evaluation should be in place.
- Require # of sessions for all students receiving mental health medication from the university health center
- Restrict access to lethal means
- No guns allowed on campus
- No tolerance policy for weapons on campus
- Schools including suicide prevention efforts in a formal ongoing way
- Aggressive intervention and follow up for struggling students
- The establishment of some cross-institutional standards of service for mental health needs
- Help make it possible for students who need to reduce their academic course loads, in order to seek treatment for mental health or other concerns, to do so without losing financial aid or other things such as internships/positions.
- Help maintain a connection to school and their identity as a student if the student chooses/needs to take an leave of absence for a semester (We know from research that there is a protective factor about being a college student. Universities can assist students by allowing them to remain a part-time student if they can handle the work when the course load is lighter.)
- For example, debriefing services provided by external experts for counseling center staff who work with students who died by suicide or who intended to suicide. (Counseling centers are usually called on to provide students, staff, faculty with crisis debriefing and counseling; however, counseling center staff are not provided with the same services. In my decade of working within university counseling centers, I have only seen this type of external debriefing for counseling staff only when there is an extreme campus crisis involving multiple deaths. Counseling center staff are regularly exposed to secondary trauma when working with suicidal students, yet do not receive as much support from the university when they have been exposed to suicide. It's an issue of valuing university staff equally, advocating for staff needs, and promoting a culture of self-care within a counseling center in order to continue providing mental health services to the campus community.)

THEME 14: UNIVERSITY CULTURE / ATMOSPHERE (collapse into education/outreach?)

- Development of an atmosphere or culture of courage, openness and transparency, this would naturally lead to all other things I would like to see happen
- Address transportation issues
- Smaller sub-communities within the university that allow student to feel a sense of connection
- Emphasis on a culture of caring for *the whole student*. In my experience, when key stakeholders at a university share the same philosophy that student mental health is pivotal in student learning, there is a trickle-down effect in creating an atmosphere that cares for students emotionally as well as intellectually, physically, etc.

Category 2: Elements of an All-encompassing Suicide Prevention Program for College Students

THEME 1: SOCIAL SUPPORT

- Try to overcome isolation and lack of feeling part of a community through various programs such as smaller learning communities.

THEME 2: ASSESSMENT OF PROBLEM AND PROGRAM

- Importance and imminence of plan, means, intent
- Recognition / acknowledgement of the problem
- recognition of the problem
- Evaluation/assessment of prevention efforts that feed back into program structure

THEME 3: EDUCATION/OUTREACH

- Normalizing stress and feeling down
- Educating students about mental health services on campus
- Raising awareness of suicide
- Educational Programming
- Active mental health awareness on campus. (prevention)
- Educational information (posters, brochures, website info, etc.)
- Faculty, staff who are educated about the topic and campus resources
- Raising awareness and education for mental health and suicide
- Talking about suicide and not pretending it does not exist
- Mandated education re mental health and other health topics for ALL students
- Education on the role and availability of professional mental health services
- Recognizing that a program needs to help educate everyone in a campus community, not just the students. It should also include faculty, staff, and administration
- Acknowledging the problem
- Presentations to increase awareness
- Do outreach to target populations on campus where you can reach groups of students
- Dispel myths re: suicide
- Education with mental health issues typical for students (substance abuse, depression, anxiety, eating disorders etc.)
- In terms of content for specific training about suicide and suicide prevention, I would include educating about college student suicide stats, myths and facts about suicide, signs that someone may be suicidal, the huge role of depression and substance abuse in suicide, knowledge about when & how to refer and what the resources are.
- Strong educational outreach efforts to undergrad and grad students
- Outreach
- Education
- Anti-stigma campaigns
- Mandated education re: mental health and other health issues for students
- Education through orientation to the university as to mental health services.
- Awareness campaigns
- Addressing the problem through programming
- Strong educational campaigns targeted towards staff and faculty
- Awareness/educational campaigns
- Education for all affiliated with the university regarding suicide
- Education campus wide
- Mandated education for students, faculty and staff
- Education for all faculty, staff and students

THEME 4: STUDENT SERVICES

- Counseling Services
- Psychiatric Services
- Pharmaceutical Services
- After-hours crisis service
- Support for early identification and intervention with students in distress. It's called "CARE Team" on our campus; administrators with high student contact meeting weekly to discuss and strategize regarding student concerns

- Increased services including counseling and psychiatric services on campus and make more than one location on larger campuses
- Available and accessible mental health services
- Early alert or intervention team that can learn about a student who could be struggling and reach out to them in an assisting vs. punitive way
- Psychological/psychiatric services that are quickly and easily accessible to students
- Counseling and other help resources that are highly visible
- Offer campus resources that can support a student in distress
- A campus-based helpline/hotline is great, but rarely do they occur these days, and if they do, sometimes it's hard to get the support they need to function effectively!
- Available counseling and other services on campus
- Crisis team consisted of students, both undergrad and grad, faculty, staff, and administrators who coordinate program
- Access to mental health services as well as psychiatric services
- If the counseling center handles after-hours mental health emergency phone calls, these calls should be included in the meeting mentioned above
- Adequate clinical resources
- University counseling center.
- Screenings on line and days in person
- Screenings
- Crisis management
- Mental health services, psychological and psychiatric
- Drop in counseling
- Crisis team

THEME 5: UNIVERSITY POLICY, PROCEDURE, AND GATEKEEPERS

- Recognition of the role of parents in recognizing signs and risk factors and enlisting them as allies for referrals to the counseling center or other health professionals
- No tolerance policy for weapons on campus
- Required contact with parents or guardians upon crisis situation or suicidal thinking/behaving
- Making students the number one priority
- Clear protocol that is followed by any employee
- Pay attention to access to lethal means and possible "high risk" areas or opportunities that have a higher risk potential for suicide attempts (physical plant "opportunities" such as interior atriums or open building top "jump points," bridges, train tracks, even access to guns, just to name a few.)
- Establishing Task Force, Steering Committee and/or Advisory Boards
- Parental/guardian involvement when student is assessed to be at harm to oneself or others
- Supportive administrative policy from top
- No weapons on campus
- Restrict access to lethal means
- Policy and procedures to follow that are well thought out, advertised and known
- Parental involvement of distressed students
- Clear, thoughtful, sensitive protocol

THEME 6: TRAINING

- Training others how to help friends, employees, residences
- Training mental health services staff and health staff regarding appropriate interventions
- Identification and coordination of stakeholders
- Training gatekeepers who can identify and refer at-risk students to student mental health services
- Training campus media on suicide reporting
- Regular, updated awareness and prevention trainings of faculty and staff
- Active gatekeeper training on campus which alerts key personnel on campus to recognize and effectively respond to student distress and suicidal crisis
- Mandated trainings for all employees of the institution re: how to help distressed students and signs of suicide
- Education and support for people who are not mental health professionals to effectively respond to
- Making sure student leaders receive training on how to recognize warning signs and make referrals for the students that may come to them or they may encounter
- Teach them how to know if someone is in danger of harming self or others
- Opportunities to role-play these situations or at least see demonstrations of interventions for target groups such as those mentioned in 2b plus obvious groups that should have been included in 2b such as residence hall staff, campus ministry...think outside the box!
- Encourage students, faculty, and staff to NOT think "somebody else will notice" or "it's not my job" to identify and refer and support students who seem disconnected, poorly adjusted, etc. and an easy, accessible system for doing this needs to be in place and widely known
- Required or strongly endorsed gatekeeper training for faculty and staff
- Gatekeeper and other specific S.P. training
- Mandated training for all staff of the university
- Training in suicide prevention for those staff/faculty on the front lines of student contact.
- Excellent training for the counseling center staff in suicide prevention, assessment, and treatment.
- Counseling center staff becoming certified in suicide prevention (such as QPR)

- Gatekeeper training for front line people
- Campus gatekeepers (student leaders, faculty, staff) who are trained to assist students in distress and refer them to appropriate resources (university counseling center, ER, religious counseling, etc.)
- Competent skills
- Training for all affiliated with the university regarding suicide
- Training for students, faculty and staff
- Adequately trained counseling and health center staff
- Training for all faculty, staff and students

THEME 7: MARKETING, MEDIA AND TECHNOLOGY

- Utilization of technology
- Easy access to training and messaging
- Online screenings and information about mental health, suicide, contact information for resources and hotlines
- Online resources (e.g., information, anonymous screenings)
- Print material (booklets, pamphlets, brochures)
- Effective social marketing around stigma, suicide prevention, and marketing for mental health services
- Adequate information regarding resources and contact information available for students
- Communication through the university website as to how to access resources for mental health emergencies.
- Good marketing
- Online tools and links
- Thorough online information (self-screening, psycho-educational material, information about available campus resources)
- Print and online materials
- Social marketing

THEME 8: UNIVERSITY CULTURE / ENVIRONMENT

- Community culture of caring for each other
- A willing host institution
- University culture and climate that decreases mental health stigma and promotes wellness and shared responsibility in caring for each other.

THEME 9: RESOURCES

- Adequate funding for outreach activities
- Buy-in (money, time) from residence halls and administration that the program is important
- Adequate funding for education, trainings, and outreach
- Trained professionals in crisis intervention and suicide risk assessment
- An adequately staffed and trained Counseling Center
- Case management services to monitor students in distress and follow-up with them if hospitalization becomes necessary
- Fully staffed and supported (financially) counseling center
- Adequate counseling staff resources needed to devote to outreach and education
- Resources: more clinical staff and money
- Sufficient resources

THEME 10: CULTURAL AWARENESS AND SENSITIVITY

- Culturally-informed student service and counseling staff
- Cultural competence

THEME 11: ADDRESSING CONTRIBUTING FACTORS OF SUICIDE

- Start addressing the contributing factors to suicide such as lack of social connection, substance use, stress, etc.
- Have education and intervention in place for stress management, substance abuse, and "healthy relationships." These issues often co-occur or even cause higher suicide risk, and as such are a critical component to a comprehensive suicide prevention effort.
- Mental health promotion approaches offering training/education on general health issues as well as life-skills.
- Programming aimed at contributing factors of suicide.

THEME 12: TEAM APPROACH TO PREVENTION

- Institutional support
- All levels of faculty and staff involved in recognizing suicide as a public health challenge within the campus community
- Involvement of elements of the entire campus community in suicide prevention planning efforts
- Team approach from departments of all levels within the university and working together for the common goal of the best interest of the student
- Inter-departmental cooperation and collaboration
- Top down approach from administration-clear support of suicide prevention activities, de-stigmatization of mental health problems, and mental health services
- Counseling center staff should have a venue (e.g., professional staff meeting for counseling center staff) for discussing concerning clients in the center or possibly those students that have been discussed on a Students of Concern meeting that are not clients of the counseling center.

- Credibility...follow through and being there when needed
- Excellent collaborative working relationships between academic departments, key officers within Divisions of Student Life for Student Affairs and campus psychological services units
- Departments working together towards prevention and intervention re: students in distress
- Supportive administrative policy from the top administrators
- Collaboration and team work from various departments and levels within the institution
- Good relationships with university police, hospitals, and other community services

THEME 13: STUDENT ACCESS TO CARE

- Access to services ALL YEAR around
- Adequate accessible mental health services
- Make treatment easy to access at counseling center
- Have good support to transport students to the hospital when needed (we lack that)
- Access to services: Understandably, access to mental health care is limited at university counseling centers. However, when there are low-fee, culturally appropriate, clinically appropriate referral sources in the community, and available transportation, students seem to be more willing to seek help outside of the university setting.

THEME 14: PUBLIC HEALTH MODEL

- See JED Foundation reference
- Public Health Model

THEME 15: STUDENT ORGANIZATIONS / INVOLVEMENT

- Peer counseling programs and drop in counseling services
- Peer support programs
- Grass roots student organizations – Active Minds, NAMI
- Peer support programs
- Active student of concern committee
- Peer support groups
- Peer interaction, support, and education
- Clear boundaries behaviorally anchored

Category 3: Barriers to Implementing and Maintaining Suicide Prevention Programs on College Campuses

THEME 1: LACK OF INTEREST OR ACKNOWLEDGEMENT OF PROBLEM

- People don't always want to "get involved"
- Lack of interest
- Wrong Attitude
- Not wanting to recognize that suicide is an issue on a campus
- Lack of interest in learning more about suicide prevention
- Lack of interest.
- Lack of interest among some constituency
- Resistance to accepting there's a problem
- Lack of interest
- Not recognizing this is a problem, a growing problem

THEME 2: LACK OF RESEARCH

- Not enough empirical research on effective prevention programs in college settings
- Not enough research in the area
- Not enough research in suicide prevention
- Lack of empirical data
- Lack of research in prevention programming

THEME 3: LACK OF RESOURCES

- Lack of staff
- Not enough funds
- Lack of time
- Lack of Time
- Lack of resources
- Lack of staff
- Counseling Center fears that more outreach will result in more student clients
- Current budget constraints due to economy to support new initiatives
- Money " " "

- Not enough money devoted to mental health or suicide
- Lack of staff
- Tendency to think exclusively about suicide as “risk management” and “crisis response”- and resistance to working from a truly preventative perspective
- Resources – staff time, financial, etc.
- Lack of resources to adequately address mental health needs of student population
- Lack of money
- Lack of resources
- Lack of money which means lack of adequate personnel, training, and program implementation and program assessment
- Not continuing to evaluate, and then tweak and improve the program.
- Never enough time
- Money
- No one devoted exclusively to suicide prevention
- Funding currently available through grants only
- Too few people assigned to do this work (I’m a ½ time employee with a 10 hr/wk. Grad. Assistant to provide training, outreach, education, etc... to a campus of 26,000 students, plus faculty, staff, etc...)
- Lack of trained professionals
- Lack of resources in general
- Budgetary constraints that limit or prevent attending conferences and becoming certified in suicide prevention.
- Number of staff in counseling centers to adequately address crises
- Having a dean of students or someone in this office to handle calls about students of concern (funding for the position, space for the staff person, time in the office to respond to these calls).
- Ongoing funds for on-going training
- Lack of resources
- Lack of funding; budgetary constraints
- Money
- Time
- Staff
- There is not enough TIME
- Demand exceeds supply
- Economic limitations
- Lack of money
- Lack of staff and time
- No one exclusively devoted to prevention efforts
- Financial limitations
- Lack of adequate case management resources
- Insufficiently trained staff
- Lack of sufficient staff in counseling center
- Not enough people dedicated to this issue
- Tendency to focus on intervention rather than prevention
- Lack of resources overall: time, money, staff, services
- The economy and resistance to providing additional funding for existing services (as opposed to funding for new programs or initiatives)
- the difficulty in creating programs painting with a broad brush

THEME 4: STUDENT BELIEFS

- Students being afraid that if they seek out services or tell about a friend being suicidal will result in them getting trouble
- Students worried about consequences of coming forth with suicidal ideation such as being dismissed from university or having financial aid taken
- Fear of lack of confidentiality if students come forth with suicide ideation
- Student feelings of “I need to solve my own problems”
- Students feel need to handle their problems on their own
- Fear of consequences: asked to leave school
- Students feeling that they can’t shouldn’t have to ask for help
- Fear of consequences: asked to leave school
- Fear of students to come forward because of possible consequences
- Shame of feeling suicidal that prevents students from coming forward

THEME 5: LACK OF COLLABORATION / BROAD BASED INVOLVEMENT

- Not working collaboratively with other departments, especially high level administrative
- Lack of connection and communication with other providers such as psychiatrists or hospitals in the community
- Lack of broad-based involvement (it’s tough if only one department is responsible for the entire suicide prevention/intervention program! It’s also tough if upper administration is not willing to be aware, if not involved in the problem and overall plan of action.)
- Getting faculty on board and involved and communicating with professional staff (who are usually the ones who are doing the program).

- Silos/access to faculty
- resistance to accepting that everyone may play a role in preventing a suicide
- Lack of collaboration between local hospital, police, health service and counseling services
- Physicians prescribing medication without insisting on counseling support
- Decentralized nature of many campuses (especially large research institutions); "silo effect" within divisions of academic/student affairs and across divisions
- Finding ways to reach out to faculty before crisis situations occur
- Lack of priority from upper administration
- Lack of collaboration between hospitals, police, counseling and health services and dean of students
- Lack of collaboration between departments and campus and services within the greater community

THEME 6: LACK OF CLEAR PROTOCOL AND POLICY

- Lack of clear policy or protocol to follow
- Lack of policy and protocol for all faculty and staff to follow

THEME 7: LACK OF CHANGE / ADAPTATION OR CREATIVITY

- Counseling Centers holding onto "old" philosophy of disconnection on campus. Not willing to support/participate in prevention programming.

THEME 8: CULTURE / DIVERSITY

- Cultural-specific symptoms and risk factors that are missed by staff and helpers
- Lack of cultural awareness and sensitivity
- Culture

THEME 9: APATHY

- Apathy could set in after some training has occurred.
- Apathy for the problem after training or education has happened

THEME 10: LACK OF EDUCATION / STIGMA

- Stigma associated with suicide that only "crazy people" do it.
- Lack of awareness of the role of alcohol and drugs in potentially lowering the threshold of acting on suicidal thoughts/impulses
- Stigma regarding mental illness
- Level of personal discomfort with suicide and mental illness in general which prevents effective dialogue with students about their experience
- Stigma around mental health and help seeking behavior
- Stigma of talking about suicide in fear it will do more damage
- Stigma of mental health services
- People afraid to talk about topic of suicide, because it may plant the seed for someone to be suicidal
- Discomfort with the topic of suicide and fear that discussing will escalate the problem
- Stigma of discussing suicide
- Myths about suicide
- Stigma of help-seeking behavior and counseling
- Stigma of mental health
- Lack of awareness
- Stigma
- Stigma
- Stigma and difficulty in talking about and addressing suicide and the importance of prevention and intervention
- Common myths of suicide
- Lack of awareness
- Stigma of mental health services
- Overcoming the stigma and acknowledgement that this is a significant issue for college campuses
- The slippery nature of mental health

THEME 11: LACK OF TRAINING

- Time to do the trainings/programs
- Students, faculty, staff don't think they need to know about the issue so they don't attend the trainings we offer
- Lack of understanding about the role of non-mental health professionals in reducing suicide
- Fearfulness of non-mental health professionals about engaging with students about suicide prevention, and this contributing to shame and secrecy by those who need help
- Getting faculty to attend suicide prevention training is sometimes like "herding cats!"
- resistance of some to attending training
- Lack of training

- Transition of employees of the university who have and have not been trained in suicide prevention
- Lack of appropriate training

THEME 12: UNIVERSITY ATMOSPHERE AND CULTURE

- Large campus population
- Upper level administrators wanting to keep these issues off the radar for fear that it will hurt public image
- Upper level administrators fear of looking at/talking about mental health issues and suicide
- Concern of public image of university
- Not enough focus on the wellness of the whole student
- Fear of intruding in student's private matters
- Fear of hurting university's reputation if too much of focus on suicide
- Culture of shielding campus image
- Lack of institutional and individual courage
- Insufficient value placed upon student psychological issues by top-level administrators
- Insufficient faculty buy-in
- Lack of buy in by administration
- Conspiracy of silence
- Lack of care for the "whole student"
- Lack of university administrators who are allies for student mental health wellness. I am fortunate to not have experienced this at my universities, but I know of colleagues at other schools who experience this.

THEME 13: MARKETING / COMMUNICATION

- Lack of creative approaches to reaching students in media that they like and use
- Lack of marketing or business skills in mental health professionals
- Poor campus-wide communication
- Lack of materials accessible to students such as programming, online resources, pamphlets, marketing

Category 4: Important Elements when Working with College Students and Suicide Prevention

THEME 1: ASSESSMENT OF STUDENTS

- Addressing the impulsivity
- Continuing assessment of lethality
- Continued monitoring of lethality and suicide ideation
- Continue to assess suicidal ideation/plan/intent etc. as you work with a client that has noted past and/or current suicidal ideation.
- Consider giving client an assessment instrument such as the Beck Hopelessness Scale or the Personality Assessment Inventory to better determine risk level.
- Continued assessment of ideation and lethality
- Assessment of other risky behaviors such as substance use, cutting, etc.
- Continued assessment of suicide and lethality
- Assessing their needs within the campus culture

THEME 2: THERAPIST SKILLS / RELATIONSHIP

- Instilling hope
- Honesty about suicide as a reality for young adults
- Instilling hope
- Normalizing mental illness, stress and suicide ideation
- To take all threats and risk signs seriously
- Normalizing struggle with stress and/or mental illness
- Support
- Give them quick, easy techniques to help with academic and life stressors
- Approach them with where they are developmentally (i.e. individuation)
- Encouraging help seeking behavior
- Support
- Helping students know and trust that help is available
- Keen sensitivity to hopelessness, impulsivity and loss
- Holding the suicidal wish without reinforcement or punishment
- Culturally congruent psychotherapy. Universities have diverse students from many different cultural and socioeconomic backgrounds. Plus, international students are at higher risk for isolation (and I think suicide). Students need to be able to work with counselors who understand and can work within the student's value system and framework – not expect a student to change their values (esp. during a crisis) in order to receive psychological services.
- Connectedness (with therapist and other important people to client)
- normalizing struggle
- strength of therapist to do what is beneficial for client when they don't agree
- Addressing the sense of "permanent solution to a temporary problem"

- Support from therapist
- Courage in therapist to hospitalize if necessary but against client's wishes
- Unconditional support and encouragement for client
- No fear in hospitalization
- Active engagement with the individual, without jumping into immediate action, but with listening and clarity of viable treatment options.
- Working with the resistance and ambivalence often present for the individual/population.
- Approaching everything with a light touch and frankness.
- Following gut instinct regarding if client will be safe
- Give them the opportunity to write down their distress with symptom checklists as well as ask them verbally if they are having thoughts of suicide as a routine question with the triage and intake processes.
- Creating a safe environment

THEME 3: INVOLVMENT OF OTHERS / SOCIAL SUPPORT / FAMILY and PARENTS

- Getting others involved (i.e. roommates, sororities, fraternities, parents) if appropriate
- Increasing social support of students
- Getting others involved with the solution (i.e. family, friends, spiritual leaders, etc)
- Connecting client with family or friends who care
- Increasing social contacts, particularly with those client trusts
- Try to establish contact with client's permission, with a family member.
- Social support
- Contact with parents or guardians
- Connection to social network and family if possible
- Social support
- Contact of parents or guardian or another individual trusted by client
- Focus on the role that non mental health professionals(e.g. friends, family, faculty, advisors) play, and how that integrates with mental health professionals
- Recognizing WHO college students talk to (when they talk to anyone) about their depression/suicidal ideation, and then maximizing programs that connect to this (e.g., peer programs)

THEME 4: IDENTIFICATION OF THOSE AT RISK

- Difficulty identifying and reaching those at high risk (especially because those who are not obtaining treatment are at higher risk, and because suicide is a low-probability event)
- Knowing the risk factors including substance abuse
- Awareness of the risk factors and warning signs

THEME 5: DUAL-DIAGNOSIS / SUBSTANCE USE

- Complication of drinking culture in college setting
- Directly addressing co-morbid issues such as substance use and trauma.
- In counseling, treating the underlying cause (depression, substance use, eating disorder, anxiety disorder)

THEME 6: CULTURAL AWARENESS AND SENSITIVITY / INDIVIDUATION

- Use of culturally appropriate prevention and intervention methods
- Cultural awareness and sensitivity
- Cultural sensitivity
- Cultural sensitivity
- Cultural awareness
- Cultural awareness
- Careful consideration for all aspects of diversity and how these issues play out in so many ways for folks from different cultural backgrounds and family experiences!

THEME 7: EDUCATION/OUTREACH

- Integration of accurate information regarding depression, suicide, and other mental illness into the first-year curriculum for all students. This must be culturally-informed and relevant as well
- Education of resources and warning signs
- Awareness that confronting and discussing issues of suicide does not lead to increased risk of suicidal behavior, but is very likely to help prevent suicide
- Recognizing the stigma of mental illness and suicide and addressing this when talking with diverse student groups/organizations
- De-stigmatizing help-seeking behavior
- Normalize mental health issues, decrease stigma
- Dispel myths, give students info about how common an issue this is, & educate about suicide
- Work on destigmatizing counseling and mental health issues. . . it is easier to get students to access help if they are comfortable and familiar for being able to go to the counseling center for NON-suicidal issues
- Removing the fear in talking about suicide
- Get the word out to parents that suicidal crises are not uncommon for college students...some campuses don't do this for fear of "scaring the parents."
- Assessing & reducing the stigma of help seeking if it exists
- De-mystifying the therapy/counseling process so they know what it is.

- De-stigmatizing/normalizing the seeking of mental health services. Helping students recognize that getting help before symptoms become severe is a good thing.
- Programming that attracts students so they can learn about prevention
- De-stigmatization of help seeking behavior
- Teaching warning signs (i.e. signs and symptoms of depression)
- Increasing awareness of mental health resources around campus
- Education on resources available
- Training the lay person to recognize and address signs
- Creating an image of the counseling center as a safe place to go when a student is feeling suicidal
- Need for more preventive programming as it relates to mental health concerns
- Emphasis on prevention of suicide through addressing risk associated with suicide, e.g. depression, substance abuse, isolation, hopelessness, perceived lack of access to mental health services
- Teaching students to seek out help for themselves or friends sooner than later
- Teaching them the "signs" to look out for and how to get help
- A campus climate that promotes wellness and seeking assistance for mental health care. (Less stigma on campus about accessing services at the counseling center, role models such as faculty or student leaders who de-stigmatize mental health issues.)
- Encouraging students to seek consultation when they are concerned about a friend.
- Helping students to recognize the prevalence of depression and to understand that no one is immune
- Encouraging help seeking behavior
- Education on resources and services available
- Ongoing information about professional resource availability, and barriers to access of services
- Suicide should be addressed in the context of larger mental health emphasis
- Create culture of strength to seek help
- Successfully directing students to help

THEME 8: STUDENT SERVICES

- Utilization of student focus groups to determine effective outreach strategies
- Information provision by peers- (e.g. students sharing their stories)
- Offer resources they can utilize
- Involve student leaders and students in mentoring positions (including graduate student TAs, grad student lab instructors, etc.) in suicide awareness & train them as "gatekeepers."
- Utilization of student focus groups to determine effective outreach strategies
- Having intervention services that are timely and accessible to students
- Decreasing barriers to accessing appropriate clinical services on campuses – the process needs to be easy, welcoming and relatively non-threatening. Some campuses have successfully experimented with creating drop-in satellite clinics where students can be seen for a couple of times without any formal records being open or kept on their visits
- Access to psychiatric care – either on campus or in the community at a reduced rate.
- Access to psychiatric services
- Psychiatric services possibility
- Access to psychiatric care if necessary
- Include psychiatric consultation for client.
- Having enough resources to help a person through the crisis

THEME 9: MARKETING and TECHNOLOGY

- Reach out in the social networking media
- Provide accurate easily negotiated web based information
- Appropriately using innovative technology that "meets students where they are at" in their own use/comfort with technology
- Pay attention to current trends in technology for reaching and communicating with students. Old fashioned brochures and flyers are OK, but they're no longer enough
- Finding a message that they are interested in hearing (i.e., title for an outreach program, a slogan that is catchy and not scary, etc.)
- Having a program/message that they can identify
- Messaging must be repeated and relevant to the population
- Reaching them by providing information in the modalities they use: on-line, pod casts, etc...), by training those who they are most likely to tell (peers, parents...)

THEME 10: UNIVERSITY AND COUNSELING CENTER POLICY AND PROCEDURES

- Counseling Center clinical staff should have advanced training in "Recognizing and Responding to Suicidal Risk" (American Association of Suicidology) or other appropriate training such as "Assessing and Managing Suicidal Risk" (AAS & SPRC)
- Prepare crisis response
- Acquiring competencies of suicide risk assessment and management

THEME 11: CONSULTATION / TEAM APPROACH

- Cultivating a center climate of mutual consultation and support for staff
- Consultation with other psychologists on staff re. a client's suicidality, whether or not a situation warrants contacting the student's family, etc.

- consultation with other staff
- Consultation with other staff
- Consultation with other staff within the center
- Providing effective "gatekeeper training" at several levels to include faculty/staff, administrators and especially students
- Ability to work with other campus staff (e.g., residence hall staff)
- contact faculty if necessary to assist in process
- Faculty, staff, and university administrators who are sensitive and caring about individuals who are experiencing mental health issues. (As a psychologist, I'm better able to assist a student in meeting their academic needs if we can collaborate with university staff/Deans who are compassionate rather than alarmist.)
- Developing/maintaining collaborative relationships with residence hall staff, Greeks, student leaders, etc so that the folks students are talking to feel comfortable seeking consultation if they are concerned about a student
- Team approach to care including working with faculty, psychiatrists, parents, etc.

THEME 12: CONTRACTS / EMERGENCY CONTACTS

- No suicide contracts
- Contacts in case of emergency
- Making an action plan
- No harm contracts (verbal not written)
- Verbal contract of no harm while in therapy
- No harm contracts with information of contact numbers in case of emergency
- Verbal contract
- Verbal no harm contract
- Contracting for no harm to self

THEME 13: REFERRALS / COMMUNICATION WITH OTHER PROVIDING TREATMENT

- Timely, easy flow of information between area hospital discharging students from stress care or emergency room and our center (where students are often referred for follow up)
- Availability of referral resources. Many university counseling centers work within a brief-counseling model. Students who are chronically suicidal may require more extensive, longer term psychotherapy that a university counseling center does not provide.

Appendix F
Round 2 Questionnaire

INSTRUCTIONS:

1. Please *rate* each item (by typing your chosen number in the RATING space provided underneath each item) using the Likert Scale below according to how you think about the individual item as it pertains to this section
2. After rating all items, please *rank* each item's importance (by typing your chosen number in the RANKING space provided to the right of each item) to the best of your ability.

0	1	2	3	4
Not Important	Not Too Important	Somewhat Important	Very Important	Critical

SECTION I:

HIGHER EDUCATION INSTITUTIONS ADDRESSING THE PROBLEM OF COLLEGE STUDENT SUICIDE AND SUICIDE PREVENTION

RANKING
1-14
1 is most important

1. More education/outreach should be done within higher education institutions regarding student suicide and prevention. (e.g. campus wide education with focus on specific target groups; raising awareness about suicide, mental health, stigma, and available resources on campus and within the larger community) _____

RATING: _____

2. More training should be done in higher education institutions regarding student suicide and prevention. (e.g. campus wide trainings such as QPR; training campus media on crisis/suicide reporting; advanced training to target groups with professional "duty" related to potentially suicidal students; online training modules) _____

RATING: _____

3. More collaboration/team work should be seen within higher education institutions regarding student suicide and prevention. (e.g. increased cooperation among campus personnel; better working relationships with offices such as Student Life, Dean of Students, Student Health and University Police; more support from President/administrative staff) _____

RATING: _____

4. More resources should be available within higher education institutions regarding student suicide and prevention. (e.g. increase funding for programming and staffing; increase student services overall; ensure adequate ratio of counseling center staff to student population; permanent job positions for prevention specialists) _____

RATING: _____

5. Overall student wellness and contributing factors to suicide should be addressed by higher education institutions regarding student suicide and prevention. (e.g. addressing and educating about substance use and abuse {particularly alcohol}, stress, etc.; offering and perhaps requiring a "life class" or "health class" that addresses various contributing factors to suicide and other life problems; a wellness approach to outreach and education so that topics appear less threatening to students) _____

RATING: _____

6. Student access to care should be addressed by higher education institutions regarding student suicide and prevention. (e.g. students should have insurance for mental health needs not limited to emergency care; increase mental health services/locations on campus) _____

RATING: _____

7. Legislation and support outside of the university community should be sought regarding student suicide and prevention. (e.g. legislation for better mental health care for students; effective lobbying on local laws related to mental health and suicide; collaboration between SAMHSA and Dept. of Education regarding students ability to maintain some financial aid if need to take less than required number of credits) _____

RATING: _____

8. More effective marketing overall should be sought after by higher education institutions regarding student suicide and prevention. (e.g. messaging that is developed in student friendly and accessible ways; having information online directing students to information and resources related to emergency physical and mental health care; work with media to appropriately report and inform about suicide issues) _____

RATING: _____

9. Quantity and quality of student services should be addressed by higher education institutions regarding student suicide and prevention. (e.g. trauma, grief de-briefing and postvention services; access to psychiatric services; drop in and satellite counseling offices; peer support/counseling organization; high visibility of counseling services on campus; frequent screening days; more student discussion and focus groups, etc.) _____

RATING: _____

10. Public health model should be looked at as guidance by higher education institutions regarding student suicide and prevention. (e.g. public health approach to design overall programs for mental health

awareness and training; population based interventions to improve overall student well being; not approaching suicide as an individual issue)

RATING: _____

11. More research should be supported by higher education institutions regarding student suicide and prevention. (e.g. better data on all student deaths and deaths by suicide on all campuses; more research to determine core elements of an effective program; population based mental health promotion program; more research regarding certain groups like international and minority students)

RATING: _____

12. Higher education institutions need to recognize and take interest in the problem of student suicide and prevention. (e.g. identify student suicide as a growing problem and make prevention a priority; infrastructure change to address the problem of suicide; identify risk groups specific to their campus, etc.)

RATING: _____

13. Clear policies and protocols need to be created and maintained by higher education institutions regarding student suicide and prevention. (e.g. have a clear protocol to be followed by everyone within the university to help a student in distress/crisis; consider suicide prevention and intervention part of a broader campus wide risk management plan and develop appropriate guidelines and procedures; a process to mandate a mental health evaluation; restricting access to lethal means; help students maintain a connection to school if need to take a leave of absence; help students lower academic credits in order to seek help/treatment without losing financial aid or other positions)

RATING: _____

14. University culture/atmosphere should be addressed by higher education institutions regarding student suicide and prevention. (e.g. develop a culture/atmosphere of courage, openness and transparency; smaller sub-communities within the university to foster a sense of connection, emphasis on a culture of caring for “the whole student”)

RATING: _____

Comments and Additional Responses on Section I:

PLEASE SCROLL DOWN FOR SECTION II

INSTRUCTIONS:

1. Please *rate* each item (by typing your chosen number in the RATING space provided underneath each item) using the Likert Scale below according to how you think about the individual item as it pertains to this section
2. After rating all items, please *rank* each item's importance (by typing your chosen number in the RANKING space provided to the right of each item) to the best of your ability.

0	1	2	3	4
Not Important	Not Too Important	Somewhat Important	Very Important	Critical

SECTION II:

ELEMENTS OF AN ALL-ENCOMPASSING SUICIDE PREVENTION PROGRAM FOR COLLEGE STUDENTS

RANKING
1-15
1 is most important

1. Social support is an important element of an all-encompassing suicide prevention program. (e.g. creating smaller communities within the larger institution; overcoming isolation and feeling a part of the community)
RATING: _____
2. Assessment of the problem of suicide and any programs related to suicide prevention is an important element of an all-encompassing suicide prevention program. (e.g. recognizing student suicide is a growing problem; evaluating/assessing current prevention efforts that feed back into program structure)
RATING: _____
3. Education/Outreach is an important element of an all-encompassing suicide prevention program. (e.g. educating and raising awareness to students, faculty and staff about suicide, mental health, common struggles/stressors of college students and resources/student services; normalizing stress and feeling down among student population)
RATING: _____
4. Student services are an important element of an all-encompassing suicide prevention program. (e.g. counseling services; psychiatric/pharmaceutical services; health services; after-hours crisis Line; early alert/intervention team; drop in counseling; peer group counseling)
RATING: _____

5. University policy, procedures, and gatekeepers are important elements of an all-encompassing suicide prevention program. (e.g. policy regarding when and if to contact parent/guardian; no tolerance for weapons on campus; making students and their well-beings number one priority; establishing a Task Force, Steering Committee and Advisory Boards related to mental health and suicide; clear protocol to follow regarding helping distressed students)

RATING: _____

6. Training is an important element in an all-encompassing suicide prevention program. (e.g. training students, faculty and staff to recognize distressed students and signs of suicide as well as what to do to help; training gatekeepers to identify and refer at-risk students)

RATING: _____

7. Marketing, media, and technology are important elements in an all-encompassing suicide prevention program. (e.g. utilization of technology with online resources, screenings, and trainings; effective social marketing regarding stigma, suicide prevention and mental health)

RATING: _____

8. University culture/atmosphere is an important element in an all-encompassing suicide prevention program. (e.g. community culture of caring for each other; climate that decreases mental health stigma and promotes health and wellness)

RATING: _____

9. Resources are an important element in an all-encompassing suicide prevention program. (e.g. adequate funding for education/outreach, trainings, and staff; adequately staffed counseling center; case management services to monitor and follow up with students)

RATING: _____

10. Cultural awareness/sensitivity is an important element in an all-encompassing suicide prevention program. (e.g. culturally-informed student service and counseling staff; cultural competence of employees within the institution)

RATING: _____

11. Addressing contributing factors of suicide is an important element to an all-encompassing suicide prevention program. (e.g. addressing/educating students regarding substance use and abuse, healthy relationships and stress management; promotion of general health, mental health and life skills)

RATING: _____

12. A team approach is an important element to an all-encompassing suicide prevention program. (e.g. administrative/institutional support; interdepartmental cooperation and collaboration for the common goal of the best interest of the student; good communication and relationships between institution, police services, hospitals and other community services)

RATING: _____

13. Student access to care is an important element to an all-encompassing suicide prevention program. (e.g. student services accessible all year around; adequate mental health services on campus and referrals to off campus care; available transportation when necessary to outside care)

RATING: _____

14. A public health model is an important element to an all-encompassing suicide prevention program.

RATING: _____

15. Student organizations/involvement are important elements to an all-encompassing suicide prevention program. (e.g. peer counseling/support programs; drop in counseling services; grass roots organizations such as Active Minds, etc.)

RATING: _____

Comments and Additional Responses on Section II:

PLEASE SCROLL DOWN FOR SECTION III

INSTRUCTIONS:

1. Please *rate* each item (by typing your chosen number in the RATING space provided underneath each item) using the Likert Scale below according to how you think about the individual item as it pertains to this section
2. After rating all items, please *rank* each item's importance (by typing your chosen number in the RANKING space provided to the right of each item) to the best of your ability.

0	1	2	3	4
Not Important	Not Too Important	Somewhat Important	Very Important	Critical

SECTION III:
BARRIERS TO IMPLEMENTING AND MAINTAINING SUICIDE PREVENTION PROGRAMS ON COLLEGE CAMPUSES

RANKING
1-13
1 is most important

1. Lack of acknowledgement of suicide as a problem or lack of interest in addressing the problem of suicide is a current barrier to suicide prevention programming (e.g. people don't want to get involved, not accepting suicide is a problem, etc.)

RATING: _____

2. Lack of research is a barrier to suicide prevention programming. (e.g. lack of empirical research on effective programs in college settings)

RATING: _____

3. Lack of resources is a current barrier to suicide prevention programming. (e.g. staff-general and specific to prevention and crisis; money; time; training; program implementation and evaluation)

RATING: _____

4. Some student beliefs are barriers to suicide prevention programming. (e.g. afraid of negative consequences-dismissal from institution or financial aid taken away; feeling they should be able to handle their own problems/shouldn't have to ask for help)

RATING: _____

5. Lack of collaboration/broad based involvement/team approach to prevention is a barrier to suicide prevention programming. (e.g. lack of collaboration from various departments, especially Dean of Students and other higher level administrative offices; lack of involvement of faculty; lack of communication/relationships with university and community police, health services and counseling services)

RATING: _____

6. Lack of clear protocol and policy to be followed is a barrier to suicide prevention programming. (e.g. lack of protocol for students, faculty and staff to follow for helping a distressed student in crisis; lack of policy regarding students in crisis during and post intervention) _____

RATING: _____

7. Unwillingness to change/adapt/be creative in approach is a barrier to suicide prevention programming. (e.g. wanting to hold onto older philosophies of disconnection on campus; holding onto programming that has been used for years and is not known to be effective) _____

RATING: _____

8. Lack of cultural awareness/sensitivity is a barrier to suicide prevention programming. (e.g. lack of awareness of various cultures and implications this can have on education and programming; lack of education regarding cultural differences and sensitivity) _____

RATING: _____

9. Apathy is a barrier to suicide prevention programming. (e.g. lack of concern regarding student suicide) _____

RATING: _____

10. Lack of education/outreach is a barrier to suicide prevention programming. (e.g. educating students, faculty and staff about suicide, mental health and wellness, substance use, help seeking behavior, etc.) _____

RATING: _____

11. Lack of training is a barrier to suicide prevention programming. (e.g. training students, faculty and staff about warning signs, myths of suicide, etc.) _____

RATING: _____

12. University atmosphere/culture is a barrier to suicide prevention programming. (e.g. large student population; concern of public image; fear of addressing mental health issues such as suicide; conspiracy of silence; lack of care for “whole student”)

RATING: _____

13. Lack of marketing/communication is a barrier to suicide prevention programming. (e.g. lack of creative approaches in reaching mass students; poor campus wide communication; lack of materials and resources easily accessible by students) _____

RATING: _____

Comments and Additional Responses on Section III:

PLEASE SCROLL DOWN FOR SECTION IV

INSTRUCTIONS:

1. Please *rate* each item (by typing your chosen number in the RATING space provided underneath each item) using the Likert Scale below according to how you think about the individual item as it pertains to this section
2. After rating all items, please *rank* each item's importance (by typing your chosen number in the RANKING space provided to the right of each item) to the best of your ability.

0	1	2	3	4
Not	Not Too	Somewhat	Very	Critical
Important	Important	Important	Important	

SECTION IV:
IMPORTANT ELEMENTS WHEN WORKING WITH COLLEGE STUDENTS AND SUICIDE PREVENTION

RANKING
1-13
1 is most important

1. Assessment is particularly important when working with college students and suicide prevention. (e.g. continued assessment of lethality, impulsiveness, ideation, risky behaviors and intent; use of assessment instruments such as BDI, BHI, PAI, etc.)

RATING: _____

2. Therapist skills/relationship are particularly important when working with college students and suicide prevention. (e.g. instillation of hope; creation of safe environment/support; normalizing stress, mental illness and suicide ideation; holding suicidal wish without reinforcement or punishment; work with ambivalence and resistance; following gut instinct regarding client safety)

RATING: _____

3. Involvement of others/social support/family and parents is particularly important when working with college students and suicide prevention. (e.g. involving roommates, parents/family, friends, and sororities/fraternities; increasing social support; recognizing who college students talk to and maximizing programs that connect to this)

RATING: _____

4. Identification of those at risk is particularly important when working with college students and suicide prevention.(e.g. awareness and knowledge of risk factors including substance abuse and other warning signs of serious distress and suicide ideation)

RATING: _____

5. Dual diagnosis issues / substance use is particularly important when working with college students and suicide prevention. (e.g. directly addressing co-morbid issues such as substance use and trauma; treating the underlying causes such as depression, anxiety, eating disorder, substance use, etc.) _____

RATING: _____

6. Cultural awareness/sensitivity/identity is particularly important when working with college students and suicide prevention. (e.g. use of culturally appropriate prevention and intervention methods; careful consideration for all aspects of diversity and how these issues play out in so many ways for different cultural backgrounds and family experiences) _____

RATING: _____

7. Education/outreach is particularly important when working with college students and suicide prevention. (e.g. education about warning signs, myths of suicide, and available resources, destigmatizing mental health and normalizing mental health issues; informing about contributing risk factors; encouraging help seeking behavior and social contacts) _____

RATING: _____

8. Student services are important when working with college students and suicide prevention. (e.g. counseling and psychiatric services; drop in/crisis counseling; peer support counseling; decreasing barriers to accessing appropriate clinical services on campus;) _____

RATING: _____

9. Marketing/Technology is important when working with college students and suicide prevention. (e.g. providing accurate information online; appropriately utilize innovative technology that meets students where they are at in their own use/comfort with technology; pay attention to current trends in technology for reaching and communicating with students; having programs and messages that students can identify with) _____

RATING: _____

10. University and counseling center policy and procedures are important when working with college students and suicide prevention. (e.g. counseling center staff should have advanced training in recognizing and responding to suicidal risk; acquiring competencies of suicide risk assessment and management; prepared crisis response plan) _____

RATING: _____

11. Consultation/team approach is important when working with college students and suicide prevention. (e.g. consultation with other staff within a counseling center; having working relationships with faculty and other campus staff) _____

RATING: _____

12. Contracts/emergency contacts are important when working with college students and suicide prevention. (e.g. verbal no-harm/no suicide contracts; making an action plan to use in emergency/crisis; making contact list in case of crisis/emergency)

RATING: _____

13. Referrals/communication with others providing treatment are important when working with college students and suicide prevention. (e.g. timely and easy flow in information between those treating a student including counseling center staff, psychiatrists, hospitals, etc.; availability of referral sources for longer term treatment, specified treatment or other treatment required but not offered by university)

RATING: _____

Comments and Additional Responses on Section IV:

Appendix G
Panelists' Comments from Round 2

SECTION 1

- My responses are very contextual and largely dependent on the size, culture, inter-departmental collaboration, and demand for services at the university where I work. Because the universities I have worked at are very different, I gave average responses based on all my university experience.
- All seem important, hard to decide which ones to rank towards the bottom. Almost wish I could rank everything #1.
- My comments here will echo what I would say about all of these sections. I feel that the ranking system distorts the “degree of difference” between the 1 and 14. All 14 items in this section are important and should be integrated in a well-rounded approach to an institutional response to suicide assessment and prevention. It is a frustrating experience to prioritize these elements. I guess I’m glad I’m not a budget administrator!
- The ranking experience was like being asked “who is your favorite child”. Very difficult, particularly with the overlap and duplications between items. For example, to make a “true” #1 ranking I would need to combine the top several items.
- Overall, the most important are access to counseling services, type of services and follow up and outreach to campus community. Everyone from a student group, a dean to Student Affairs needs to be aware and trained in suicide prevention.
- My responses reflect a need for what is either NOT happening on campuses currently, or needs more resources. Some of these areas are already receiving attention or resources...so they could get more, but are already getting some.
- The public health/education and clinical/professional resources are not an “either/or”, but need to work in conjunction with each other.

SECTION 2

- Again, I feel that I am forced to create a hierarchy that has a very small increment of difference in priority.
- Really, ALL of the points mentioned would be included in a fully comprehensive suicide prevention program in the best of all worlds. I think this part of the questionnaire would have been better if the parenthetical items were listed separately...even doing the rating/ranking the same way for EACH thing listed in the parenthetical examples given in each item.
- Assessment, university policy and outreach are most important.
- The order of importance of these elements is difficult to assess because many are both critical and intertwined in that without others on the list, they won’t work in isolation (e.g. student access to care is ineffective if students don’t know about it or how it can help them, which is a public health issue).

SECTION 3

- At our university there is a greater awareness than perhaps other institutions. Resources and affordable access to care are primary concerns and then education of students and training of staff are also crucial.
- Most important barrier is financial resources. Counseling Center staff is not big enough for student body and services limited in terms of amount of sessions.

SECTION 4

- On Q1, the answer is very different for clinical work vs. outreach. Assessments (if you're focus is on "instruments" and not the act of doing an evaluation/assessment) are less important for outreach/training but critical for clinical work.
- Wow, these are all very important and hard to prioritize.
- Very difficult to rank these.
- It is crucial that campuses adequately staff their counseling centers! All the suicide awareness and gatekeeper training is for naught if the professionals are not well-trained, following best practices, and not so overloaded they either "miss" something or don't take the time to consult, or become burned out so that they are not able to establish a good therapeutic relationship, which is THE KEY to getting someone through the suicidal crisis.
- You will notice that cultural awareness and competence was ranked consistently low. That is NOT because it is unimportant, but good mental health professionals integrate this automatically into their work! The same should go for those who develop outreach/education programs...it should be automatic, and luckily new professionals are coming out of grad school with much better emphasis on this part of their training.
- Insurance issues were only briefly mentioned. This is a big problem, though I didn't rank it as high as other items. I wish good insurance was just part of the tuition package.....and was REQUIRED. Even a "waiver if you're covered on your parents' policy" is NOT adequate, because often students refuse to access their mental health coverage because they don't want their parents to know they are seeking help. Many more students are coming to college with serious existing mental health conditions, and with the economy hitting many counseling centers so hard, there is less on-campus help available, so access to and coordination with off-campus referral resources are very important.
- I think that the broader issues such as legislative support, greater federal grant availability for suicide prevention on campus, more research to guide suicide prevention efforts, and a public health model certainly have some importance, but they are not key to the in-the-trenches, day-to-day suicide prevention, intervention and postvention
- This was one of the most complicated surveys I have ever taken, and it took a tremendous amount of time since I was taking it very seriously. The overlap and complexity of items made it very difficult to answer in a way that best reflects my outlook of the topics covered for this research. My participation has taken much more than the 2 hour estimate disclosed in the informed consent.
- #12 is problematic as there is little research evidence to support the use of no-harm contracts. However, an action plan is crucial in a psychiatric emergency. So, I had a hard time ranking this one.
- Many of these items are critical—ranking differentiation was difficult

Appendix H
Sample Round 3 Questionnaire

INSTRUCTIONS:

1. Please take time to look at and compare your previous "RATING" for each item (in color black) to the group mean (in color red). If you would like to change your rating, you may do so by inserting your new rating following the Mean in red. If you would like to maintain your previous rating, you may do so by leaving the item as is. You may also add a comment as to why you did or did not change your rating in the comment space provided under each item, but this is NOT required..
2. Please take time to look at and compare your previous "RANKING" (located at the right hand of the page in black) to the most frequent ranking given by the panel (in red). If you would like to change your ranking, you may do so by inserting the new ranking following the highest frequency in red. If you would like to maintain your previous ranking, you may do so by leaving as is.

0	1	2	3	4
Not Important	Not Too Important	Somewhat Important	Very Important	Critical

SECTION I:

**HIGHER EDUCATION INSTITUTIONS ADDRESSING THE PROBLEM OF
COLLEGE STUDENT SUICIDE AND SUICIDE PREVENTION**

	RANKING
	1-14 1 is most important
1. More education/outreach should be done within higher education institutions regarding student suicide and prevention. (e.g. campus wide education with focus on specific target groups; raising awareness about suicide, mental health, stigma, and available resources on campus and within the larger community)	<u>10, 2</u>
RATING: <u>3, 3.579</u>	
2. More training should be done in higher education institutions regarding student suicide and prevention. (e.g. campus wide trainings such as QPR; training campus media on crisis/suicide reporting; advanced training to target groups with professional "duty" related to potentially suicidal students; online training modules)	<u>9, 1</u>
RATING: <u>3, 3.684</u>	

3. More collaboration/team work should be seen within higher education institutions regarding student suicide and prevention. (e.g. increased cooperation among campus personnel; better working relationships with offices such as Student Life, Dean of Students, Student Health and University Police; more support from President/administrative staff) 6, 6
- RATING: 4, 3.526**
4. More resources should be available within higher education institutions regarding student suicide and prevention. (e.g. increase funding for programming and staffing; increase student services overall; ensure adequate ratio of counseling center staff to student population; permanent job positions for prevention specialists) 3, 7
- RATING: 4, 3.632**
5. Overall student wellness and contributing factors to suicide should be addressed by higher education institutions regarding student suicide and prevention. (e.g. addressing and educating about substance use and abuse {particularly alcohol}, stress, etc.; offering and perhaps requiring a “life class” or “health class” that addresses various contributing factors to suicide and other life problems; a wellness approach to outreach and education so that topics appear less threatening to students) 11, 10
- RATING: 3, 3.211**
6. Student access to care should be addressed by higher education institutions regarding student suicide and prevention. (e.g. students should have insurance for mental health needs not limited to emergency care; increase mental health services/locations on campus) 1, 2
- RATING: 4, 3.474**
7. Legislation and support outside of the university community should be sought regarding student suicide and prevention. (e.g. legislation for better mental health care for students; effective lobbying on local laws related to mental health and suicide; collaboration between SAMHSA and Dept. of Education regarding students ability to maintain some financial aid if need to take less than required number of credits) 7, 14
- RATING: 4, 3.0**
8. More effective marketing overall should be sought after by higher education institutions regarding student suicide and prevention. (e.g. messaging that is developed in student friendly and accessible ways; having information online directing students to information and resources related to emergency physical and mental health care; work with media to appropriately report and inform about suicide issues) 12, 8
- RATING: 3, 3.105**
9. Quantity and quality of student services should be addressed by

- higher education institutions regarding student suicide and prevention. (e.g. trauma, grief de-briefing and postvention services; access to psychiatric services; drop in and satellite counseling offices; peer support/counseling organization; high visibility of counseling services on campus; frequent screening days; more student discussion and focus groups, etc.) 2, 9
- RATING: 4, 3.579**
10. Public health model should be looked at as guidance by higher education institutions regarding student suicide and prevention. (e.g. public health approach to design overall programs for mental health awareness and training; population based interventions to improve overall student well being; not approaching suicide as an individual issue) 13, 13
- RATING: 3, 2.842**
11. More research should be supported by higher education institutions regarding student suicide and prevention. (e.g. better data on all student deaths and deaths by suicide on all campuses; more research to determine core elements of an effective program; population based mental health promotion program; more research regarding certain groups like international and minority students) 14, 13
- RATING: 3, 2.789**
12. Higher education institutions need to recognize and take interest in the problem of student suicide and prevention. (e.g. identify student suicide as a growing problem and make prevention a priority; infrastructure change to address the problem of suicide; identify risk groups specific to their campus, etc.) 4, 4
- RATING: 4, 3.263**
13. Clear policies and protocols need to be created and maintained by higher education institutions regarding student suicide and prevention. (e.g. have a clear protocol to be followed by everyone within the university to help a student in distress/crisis; consider suicide prevention and intervention part of a broader campus wide risk management plan and develop appropriate guidelines and procedures; a process to mandate a mental health evaluation; restricting access to lethal means; help students maintain a connection to school if need to take a leave of absence; help students lower academic credits in order to seek help/treatment without losing financial aid or other positions) 8, 5
- RATING: 3, 3.526**
14. University culture/atmosphere should be addressed by higher education institutions regarding student suicide and prevention. (e.g. develop a culture/atmosphere of courage, openness and transparency; smaller sub-communities within the university to foster a sense of connection, emphasis on a culture of caring for “the whole student”) 5, 10

RATING: 4, 3.421

Comments and Additional Responses on Section I:

PLEASE SCROLL DOWN FOR SECTION II

INSTRUCTIONS:

1. Please take time to look at and compare your previous "RATING" for each item (in color black) to the group mean (in color red). If you would like to change your rating, you may do so by inserting your new rating following the Mean in red. If you would like to maintain your previous rating, you may do so by leaving the item as is. You may also add a comment as to why you did or did not change your rating in the comment space provided under each item, but this is NOT required..
2. Please take time to look at and compare your previous "RANKING" (located at the right hand of the page in black) to the most frequent ranking given by the panel (in red). If you would like to change your ranking, you may do so by inserting the new ranking following the highest frequency in red. If you would like to maintain your previous ranking, you may do so by leaving as is.

0	1	2	3	4
Not	Not Too	Somewhat	Very	Critical
Important	Important	Important	Important	

SECTION II:
**ELEMENTS OF AN ALL-ENCOMPASSING SUICIDE PREVENTION
PROGRAM FOR
COLLEGE STUDENTS**

	RANKING
	1-15 1 is most important
1. Social support is an important element of an all-encompassing suicide prevention program. (e.g. creating smaller communities within the larger institution; overcoming isolation and feeling a part of the community)	<u>6, 5</u>
RATING: <u>4, 3.211</u>	
2. Assessment of the problem of suicide and any programs related to suicide prevention is an important element of an all-encompassing suicide prevention program. (e.g. recognizing student suicide is a growing problem; evaluating/assessing current prevention efforts that feed back into program structure)	<u>14, 12</u>
RATING: <u>3, 3.053</u>	
3. Education/Outreach is an important element of an all-encompassing suicide prevention program. (e.g. educating and raising awareness to students, faculty and staff about suicide, mental health, common struggles/stressors of college students and resources/student services; normalizing stress and feeling down among student population)	<u>12, 2</u>
RATING: <u>3, 3.789</u>	

4. Student services are an important element of an all-encompassing suicide prevention program. (e.g. counseling services; psychiatric/pharmaceutical services; health services; after-hours crisis Line; early alert/intervention team; drop in counseling; peer group counseling) 1, 3
- RATING: 4, 3.842**
5. University policy, procedures, and gatekeepers are important elements of an all-encompassing suicide prevention program. (e.g. policy regarding when and if to contact parent/guardian; no tolerance for weapons on campus; making students and their well-beings number one priority; establishing a Task Force, Steering Committee and Advisory Boards related to mental health and suicide; clear protocol to follow regarding helping distressed students) 7, 8
- RATING: 3, 3.263**
6. Training is an important element in an all-encompassing suicide prevention program. (e.g. training students, faculty and staff to recognize distressed students and signs of suicide as well as what to do to help; training gatekeepers to identify and refer at-risk students) 8, 3
- RATING: 3, 3.842**
7. Marketing, media, and technology are important elements in an all-encompassing suicide prevention program. (e.g. utilization of technology with online resources, screenings, and trainings; effective social marketing regarding stigma, suicide prevention and mental health) 15, 15
- RATING: 3, 3.158**
8. University culture/atmosphere is an important element in an all-encompassing suicide prevention program. (e.g. community culture of caring for each other; climate that decreases mental health stigma and promotes health and wellness) 9, 9
- RATING: 3, 3.474**
9. Resources are an important element in an all-encompassing suicide prevention program. (e.g. adequate funding for education/outreach, trainings, and staff; adequately staffed counseling center; case management services to monitor and follow up with students) 2, 5
- RATING: 4, 3.737**
10. Cultural awareness/sensitivity is an important element in an all-encompassing suicide prevention program. (e.g. culturally-informed student service and counseling staff; cultural competence of employees within the institution) 3, 13
- RATING: 4, 3.368**

11. Addressing contributing factors of suicide is an important element to an all-encompassing suicide prevention program. (e.g. addressing/educating students regarding substance use and abuse, healthy relationships and stress management; promotion of general health, mental health and life skills) 11, 6
- RATING: 3, 3.421**
12. A team approach is an important element to an all-encompassing suicide prevention program. (e.g. administrative/institutional support; interdepartmental cooperation and collaboration for the common goal of the best interest of the student; good communication and relationships between institution, police services, hospitals and other community services) 5, 5
- RATING: 4, 3.737**
13. Student access to care is an important element to an all-encompassing suicide prevention program. (e.g. student services accessible all year around; adequate mental health services on campus and referrals to off campus care; available transportation when necessary to outside care) 4, 4
- RATING: 4, 3.579**
14. A public health model is an important element to an all-encompassing suicide prevention program. 10, 15
- RATING: 3, 2.737**
15. Student organizations/involvement are important elements to an all-encompassing suicide prevention program. (e.g. peer counseling/support programs; drop in counseling services; grass roots organizations such as Active Minds, etc.) 13, 14
- RATING: 3, 2.684**

Comments and Additional Responses on Section II:

PLEASE SCROLL DOWN FOR SECTION III

INSTRUCTIONS:

1. Please take time to look at and compare your previous "RATING" for each item (in color black) to the group mean (in color red). If you would like to change your rating, you may do so by inserting your new rating following the Mean in red. If you would like to maintain your previous rating, you may do so by leaving the item as is. You may also add a comment as to why you did or did not change your rating in the comment space provided under each item, but this is NOT required..
2. Please take time to look at and compare your previous "RANKING" (located at the right hand of the page in black) to the most frequent ranking given by the panel (in red). If you would like to change your ranking, you may do so by inserting the new ranking following the highest frequency in red. If you would like to maintain your previous ranking, you may do so by leaving as is.

0	1	2	3	4
Not	Not Too	Somewhat	Very	Critical
Important	Important	Important	Important	

SECTION III:
BARRIERS TO IMPLEMENTING AND MAINTAINING SUICIDE PREVENTION PROGRAMS ON COLLEGE CAMPUSES

	RANKING
	1-13 1 is most important
1. Lack of acknowledgement of suicide as a problem or lack of interest in addressing the problem of suicide is a current barrier to suicide prevention programming (e.g. people don't want to get involved, not accepting suicide is a problem, etc.)	<u>3, 7</u>
RATING: <u>3, 2.579</u>	
2. THIS ITEM HAS BEEN DELETED AS THE GROUP MEAN WAS LESS THAN 2.5 WITH A VARIANCE OF 0.65!!	
3. Lack of resources is a current barrier to suicide prevention programming. (e.g. staff-general and specific to prevention and crisis; money; time; training; program implementation and evaluation)	<u>1, 1</u>
RATING: <u>4, 3.526</u>	
4. Some student beliefs are barriers to suicide prevention programming. (e.g. afraid of negative consequences-dismissal from institution or financial aid taken away; feeling they should be able to handle their own problems/shouldn't have to ask for help)	<u>4, 4</u>
RATING: <u>3, 3.316</u>	

5. Lack of collaboration/broad based involvement/team approach to prevention is a barrier to suicide prevention programming. (e.g. lack of collaboration from various departments, especially Dean of Students and other higher level administrative offices; lack of involvement of faculty; lack of communication/relationships with university and community police, health services and counseling services) 9, 2
- RATING: 2, 3.158**
6. Lack of clear protocol and policy to be followed is a barrier to suicide prevention programming. (e.g. lack of protocol for students, faculty and staff to follow for helping a distressed student in crisis; lack of policy regarding students in crisis during and post intervention) 10, 9
- RATING: 2, 3.211**
7. Unwillingness to change/adapt/be creative in approach is a barrier to suicide prevention programming. (e.g. wanting to hold onto older philosophies of disconnection on campus; holding onto programming that has been used for years and is not known to be effective) 5, 10
- RATING: 3, 2.684**
8. Lack of cultural awareness/sensitivity is a barrier to suicide prevention programming. (e.g. lack of awareness of various cultures and implications this can have on education and programming; lack of education regarding cultural differences and sensitivity) 6, 7
- RATING: 3, 3.0**
9. Apathy is a barrier to suicide prevention programming. (e.g. lack of concern regarding student suicide) 2, 7
- RATING: 4, 2.947**
10. Lack of education/outreach is a barrier to suicide prevention programming. (e.g. educating students, faculty and staff about suicide, mental health and wellness, substance use, help seeking behavior, etc.) 11, 6
- RATING: 2, 3.421**
11. Lack of training is a barrier to suicide prevention programming. (e.g. training students, faculty and staff about warning signs, myths of suicide, etc.) 8, 3
- RATING: 3, 3.263**
12. University atmosphere/culture is a barrier to suicide prevention programming. (e.g. large student population; concern of public image; fear of addressing mental health issues such as suicide; conspiracy of silence; lack of care for "whole student") 7, 7
- RATING: 3, 3.263**

13. Lack of marketing/communication is a barrier to suicide prevention programming. (e.g. lack of creative approaches in reaching mass students; poor campus wide communication; lack of materials and resources easily accessible by students)

12, 12

RATING: 2, 2.684

Comments and Additional Responses on Section III:

PLEASE SCROLL DOWN FOR SECTION IV

INSTRUCTIONS:

1. Please take time to look at and compare your previous "RATING" for each item (in color black) to the group mean (in color red). If you would like to change your rating, you may do so by inserting your new rating following the Mean in red. If you would like to maintain your previous rating, you may do so by leaving the item as is. You may also add a comment as to why you did or did not change your rating in the comment space provided under each item, but this is NOT required..
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0	1	2	3	4
Not	Not Too	Somewhat	Very	Critical
Important	Important	Important	Important	

SECTION IV:
IMORTANT ELEMENTS WHEN WORKING WITH COLLEGE STUDENTS AND SUICIDE PREVENTION

RANKING
1-13
1 is most important

1. Assessment is particularly important when working with college students and suicide prevention. (e.g. continued assessment of lethality, impulsiveness, ideation, risky behaviors and intent; use of assessment instruments such as BDI, BHI, PAI, etc.)

1, 4

RATING: 4, 3.772

2. Therapist skills/relationship are particularly important when working with college students and suicide prevention. (e.g. instillation of hope; creation of safe environment/support; normalizing stress, mental illness and suicide ideation; holding suicidal wish without reinforcement or punishment; work with ambivalence and resistance; following gut instinct regarding client safety)

5, 4

RATING: 4, 3.944

3. Involvement of others/social support/family and parents is particularly important when working with college students and suicide prevention. (e.g. involving roommates, parents/family, friends, and sororities/fraternities; increasing social support; recognizing who college students talk to and maximizing programs that connect to this)

2, 2

RATING: 4, 3.555

4. Identification of those at risk is particularly important when working with college students and suicide prevention.(e.g. awareness and knowledge of risk factors including substance abuse and other warning signs of serious distress and suicide ideation) 11, 2
- RATING:** 4, 3.777
5. Dual diagnosis issues / substance use is particularly important when working with college students and suicide prevention. (e.g. directly addressing co-morbid issues such as substance use and trauma; treating the underlying causes such as depression, anxiety, eating disorder, substance use, etc.) 9, 10
- RATING:** 4, 3.666
6. Cultural awareness/sensitivity/identity is particularly important when working with college students and suicide prevention. (e.g. use of culturally appropriate prevention and intervention methods; careful consideration for all aspects of diversity and how these issues play out in so many ways for different cultural backgrounds and family experiences) 6, 9
- RATING:** 4, 3.444
7. Education/outreach is particularly important when working with college students and suicide prevention. (e.g. education about warning signs, myths of suicide, and available resources, de-stigmatizing mental health and normalizing mental health issues; informing about contributing risk factors; encouraging help seeking behavior and social contacts) 12, 1
- RATING:** 3, 3.833
8. Student services are important when working with college students and suicide prevention. (e.g. counseling and psychiatric services; drop in/crisis counseling; peer support counseling; decreasing barriers to accessing appropriate clinical services on campus;) 3, 2
- RATING:** 4, 4.0
9. Marketing/Technology is important when working with college students and suicide prevention. (e.g. providing accurate information online; appropriately utilize innovative technology that meets students where they are at in their own use/comfort with technology; pay attention to current trends in technology for reaching and communicating with students; having programs and messages that students can identify with) 13, 13
- RATING:** 3, 3.055

10. University and counseling center policy and procedures are important when working with college students and suicide prevention. (e.g. counseling center staff should have advanced training in recognizing and responding to suicidal risk; acquiring competencies of suicide risk assessment and management; prepared crisis response plan) 4, 7
- RATING: 4, 3.777**
11. Consultation/team approach is important when working with college students and suicide prevention. (e.g. consultation with other staff within a counseling center; having working relationships with faculty and other campus staff) 7, 7
- RATING: 3, 3.666**
12. Contracts/emergency contacts are important when working with college students and suicide prevention. (e.g. verbal no-harm/no suicide contracts; making an action plan to use in emergency/crisis; making contact list in case of crisis/emergency) 10, 13
- RATING: 4, 3.167**
13. Referrals/communication with others providing treatment are important when working with college students and suicide prevention. (e.g. timely and easy flow in information between those treating a student including counseling center staff, psychiatrists, hospitals, etc.; availability of referral sources for longer term treatment, specified treatment or other treatment required but not offered by university) 8, 7
- RATING: 4, 3.667**

Comments and Additional Responses on Section IV:

Appendix I
Panelists' Comments from Round 3

SECTION 1:

Overall:

- As noted by other raters- every one of these points are critical as interactive components of suicide prevention. While it seems that I have more of a “general health” and public health emphasis than others, the relative importance of these issues as reflected in a ranking is probably not a very accurate way to think about an overall approach.
- It would be nice if we (institutions of higher education) could build in a required course or seminar that focused on mental health or overall health with a good chunk focused on mental health. It seems that more and more students are coming to college with less and less information in regards to their physical and mental health and well-being and students need to be educated in these areas.

Item 1:

- I'm changing my ranking slightly, based on the fact that education and outreach is likely to impact a greater proportion of students who are considering suicide than increasing access to counseling. While access to counseling is very important, absent education and outreach, students are not likely to make use of available resources.
- I tend to emphasize more education about mental health in general as a suicide prevention measure. Education focusing on depression, anxiety, substance use, self harm as well as suicide help people better understand the causes and contexts of suicidal ideation.

Item 2:

- While training is important- QPR and crisis reporting focuses on those who have progressed to crisis, and don't really address prevention of crisis from happening in the first place. Exclusive focus on crisis response treats suicide as if it is an isolated issue affecting a relative few people. This is not supported in the literature (see comments related to public health model below). Exclusive focus on crisis identification and response runs the risk of increasing isolation and stigma, and does not help decrease the prevalence of crisis.

Item 4:

- Without adequate support, none of the other initiatives listed elsewhere are realistic and/or sustainable. I believe it all hinges on universities recognizing that adequate mental health resources including support for retention ultimately pay for themselves in increased student retention, engagement and overall well being.
- At my UCC, more staff would make a tremendous difference in the amt of programming we do. Right now, the outreach coordinator does almost all of it. That's not enough on a campus of 40,000.

Item 5:

- As noted in other comments, there is a significant amount of evidence that suicide does not exist in isolation, and that attention to health related issues broadly considered, suicide risk can be reduced.
- Improving overall mental health on a population level by offering “preventive” programming may be more effective than seeking out and treating individuals. Far too many college counseling centers get bogged down in trying to meet the ever increasing needs of individuals who seek their services, without paying attention to population level prevention measures.
- I think we should address the causes (lack of wellness or focus on prevention) rather than the outcome (suicidal thoughts and actions)

Item 7:

- My perspective may be different than other participants on this due to my relatively recent involvement in national efforts to address the needs in higher education mental health through legislation/federal intervention.

Item 9:

- Yes, this stands out as one of the biggest differences between myself and other participants. Frankly, I think that those in the position to set priorities programmatically and financially should be expected to address this regularly and publicly.
- Again, proper resources are essential to support prevention and treatment. Additionally though, suicide prevention cannot be seen as the “job” of the counseling center, but an initiative embraced by individuals and groups throughout the college campus community.

Item 10:

- It is notable that this average ranking is so low. While it appears I am something of an outlier (though comments suggest that all of your raters do recognize the importance of all of these approaches), I am absolutely convinced that a public health approach is the most important strategic model for reducing suicide rates. Suicide is a public health issue
 1. in the scope of the problem (18-25% students report experiencing suicidal thoughts in their life time across the most comprehensive studies, 6-9% in the past year) and
 2. in the barriers to accessing assistance (1/2 of those who experience suicidal thoughts don't tell anyone), stigma identified as significant barrier to people accessing assistance when needed and
 3. in the range of health (mental, physical and substance abuse) issues that correlate with suicide risk

While crisis response is very important, an approach that emphasizes crisis response absent corresponding public health approach treats suicide as if it is an issue that exists in isolation, and affects only a few people. Neither of these is justified by any of the evidence that currently exists.

Item 12:

- I didn't rate this as high because it just seems so straightforward; I think we're in place where most institutions do consider this a priority. It's just a matter of better

educating our institutions about the current understanding of comprehensive suicide prevention models and their effectiveness in preventing suicide and harm to others.

Item 14:

- I don't think other aspects of suicide prevention are likely to be successful if university and societal culture/atmosphere changes.

SECTION 2:

Overall:

- I would only emphasize that working directly with students and student groups may be one of the currently underemphasized areas and in light of what we know about who students turn to for help (each other), making peer support network enhancement one of the more important areas for emphasis.

Item 6:

- This rating reflects my belief that exclusive focus on "risk identification" runs the risk of increasing stigma, and thus ultimately reducing the possibility that people will get the help they need.

Item 13:

- Students on my campus have great access to services (emergency walk-in Mon-Fri and an after hours crisis services) but many who make suicide attempts never come to see us.

SECTION 3:

Overall:

- Adequate resources, training and education seem to stick out as high priorities. Seems right on.

Item 3:

- While resource availability is an issue, I am dropping the ranking of this a bit, because I think that the awareness and willingness to access resources, which relates to education and public health is a bigger issue than resource availability.

Item 5:

- I did not rate this particularly high because at my university we do work very collaboratively between offices, particularly within student life.
- I work at a UCC that has a very strong relationship with our DOS office, along with a high level of collaboration and involvement from other offices on campus, so perhaps I'm glossing over this one in my response.

Item 12:

- 12. As noted in previous comments, there is such an issue with stigma preventing identification of mental health issues and suicidal thoughts, that get perpetuated by university culture.

SECTION 4:

Item 1:

- This was tough to rate- I agree that assessment is very critical, though don't believe that necessarily includes use of assessment instruments

Item 6:

- This rating and ranking reflect the difference in risk for suicide reflected in different populations, often unrecognized

Item 7:

This ranking is not reflective of the importance of education and outreach, which as I noted above I think is critical. For those clinicians working with individual clients, it may not be the most important thing for them to attend to (though very important overall)- support for public education, perhaps by public educators supported by mental health clinicians, may be as critical

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