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Exposure to Suicide Within College Students: A Replication Study

A thesis

presented to

the faculty of the Department of Counseling and Human Services
of East Tennessee State University

In partial fulfillment

of the requirements for the degree

Master of Arts in Counseling, concentration in Clinical Mental Health

by

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May 2019

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Keywords: suicide, exposure, college students, intervention

ABSTRACT

Exposure to Suicide Within College Students: A Replication Study

by

Ryan Woodzell

Suicide is a leading cause of death in the United States. College students have increased exposure to suicidal ideation and deaths by suicide and may experience suicidal ideation as a means of escape from emotional pain or from severe psychopathology. There are a number of risk factors that are present which make a person more susceptible to dying by suicide. One of those risk factors is past exposure to suicide. The present study is an analysis of the exposure to suicide that is present on a college campus. This report includes an in-depth review of the literature on suicide exposure, the methodology of the current study, and descriptive statistics of the results and a discussion of the likelihood that an individual would intervene with a friend who may be suicidal. The report concludes with a discussion about the study findings, limitations of the research, and implications for future research.

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CHAPTER 1

INTRODUCTION

Suicide claimed the lives of nearly 47,000 people in the United States (U.S.) in 2017 and was the tenth leading cause of death for people in general (Drapeau & McIntosh, 2018). More specifically, suicide was the second leading cause of death for the adolescent population and claimed over 6,000 young adults in 2017 (Drapeau & McIntosh, 2018). Overall, the number of suicides for the younger populations are increasing (Drapeau & McIntosh, 2018). Due to the disturbing trend of increasing national suicides since 1999, there have been recent explorations on exposure to suicide across the lifespan. Some individuals can go the majority of their lives without having to experience the loss from a suicide. Older studies have described that for each suicide, six people are affected (Cerel et al., 2018) Meanwhile, current research reveals the number to be much higher (Cerel et al., 2018). With the links of exposure to suicide being a precursor or predictor to suicide, it is imperative to take a deeper look into all facets of this phenomena. Exposure to suicide takes on many forms, ranging from simply having an acquaintance who died by suicide to having a direct relative doing so (Cerel et al., 2018). Over the years, suicide exposure has been found to be a risk factor and predictor of future suicidal ideation and behavior (Cerel, 2017). With that being said, in conjunction with the normal stresses and new experiences of college, students are at a much higher risk of attempting and completing suicide than other populations (Schwartz, 2017).

Since the number of suicides among young adults is so high, it is essential that interventions are established on college campuses across the country. Although numerous colleges and universities have established campus-based intervention and prevention efforts, many institutions of higher education still lack these essential services (Schwartz, 2017). If

proper resources and prevention protocols are administered and explained to the student population, they may become more capable of helping others who are experiencing their own suicidal ideations (Shwartz, 2017). In 2013, Cerel, Chandler Bolin, and Moore conducted a study at the University of Kentucky (UK) to learn more about college students' attitudes and experiences with suicide and those affected by it, and to determine students' attitudes about suicide prevention and knowledge of intervention resources at UK. This study provided insights into prevalence and experience of "Suicide Survivors" and the continued need for campus services to support those impacted by suicide. This study was limited to enrolled UK students, which merits replication study at other colleges and universities to ascertain similarities and differences that can further inform targeted prevention and intervention efforts.

Therefore, the current study is a replication study of Cerel et al. (2013). The purpose of the current study is to learn about college students' attitudes, experiences, knowledge of suicide, and knowledge of resources, with the added purpose of learning the likelihood of future intervention. If a better understanding can be found, then proper outreach programs can be created to help teach and intervene with those who may be struggling before they have the opportunity to resort to the decision that can end their own life as well as affect many of those around them.

Definition of Terms

Suicide research involves a number of terms that are not common knowledge outside the field of study. This section will seek to further define and explain some of the terms that are relevant to this study. The terms that will be discovered include: suicide exposure, suicide survivor, suicide loss survivor, suicide contagion, and survivorship. In terms of this particular research, suicide exposure is the identifying or recognition of a particular suicide. For instance,

someone who just had acquaintances or distant knowledge of someone else's suicide may have low exposure to suicide whereas someone with a close relative or friend may have higher levels of exposure. This level of exposure could affect the overall comfort of someone who could intervene. However, exposure can mean a variety of different things from knowing someone who has died by suicide, to a distant relative, to someone to whom you feel extremely close.

Suicide survivor, suicide loss survivor, and survivorship all go hand-in-hand and requires a deeper discussion. The current nomenclature defines a suicide survivor as someone who is deeply affected by someone's suicide (Cerel, 2017). However, this could be a misleading and dishonorable mistreatment of someone's experience. Calling a mother who lost a child to suicide a survivor differs greatly from a person who has attempted to kill themselves in the past. These two people alone need different types of treatment from professionals and require a different level of care. Consequently, one of the underlying goals of this research was to challenge the wording from being a suicide survivor to a suicide loss survivor. One of the items presented in the previous study asked participants if they considered themselves to be suicide survivors while the current study asked if they considered themselves suicide loss survivors. Modern obituaries use the wordage, "this person is survived by his wife and children." When it comes to other types of death it seems fitting. However, saying that a child is a survivor of suicide because they lost their father potentially brings an unsettling feeling to the discussion based on the fact that someone could interpret this as the son attempting to take his own life.

Another common term in suicidology is that of suicide contagion. Suicide contagion is the documented phenomenon that occurs when there is an increase in suicidal behavior after a peer dies by suicide (Zimmerman, Rees, Posick, & Zimmerman, 2016). Following the media publicizing suicides and praising the life of the one that was lost, other suicides may occur in the

same geographical area (Zimmerman et al., 2016). In other words, it is the increased likelihood that others will attempt or complete suicide after others in a community or area have already done so in an imitative type manner when the publicity and hurt has been experienced by a group of people (Bohanna, 2013). Due to the new age of social media and other media coverages, it is important to understand contagion in order to prevent it as much as possible in the event of someone's suicide.

Organization of Report

The following report will provide an in-depth analysis of emerging and established literature of the topic of suicide on a number of different fronts. After discussing many of the individual facets of this research, there will be a description of the methodology of the current study, followed by the results and an in-depth discussion as to why those results matter. This discussion will include important connections between the aforementioned research, limitations, and future research that can be done including and separate from this study.

CHAPTER 2

LITERATURE REVIEW

There is an abundance of scholarly literature on the topic of suicide. This study narrows the focus to suicide risk factors, predictors, aftermath, and ramifications to add to the depth, rather than breadth, of literature. This chapter begins with a look at the large scale numbers of suicide and the role that it plays across the country. Next is a review of the exposure to suicide. The chapter describes suicide intervention, prevention, and college campus impacts, including an analysis of what college counseling centers can do to improve suicide intervention and prevention efforts. It concludes with an overview of the gap in the literature pertinent to the present study.

Suicide Across the United States

According to the 2017 data released by the American Association of Suicidology (AAS)(2018), a person between the ages of 15 and 24 died by suicide every hour and twenty-four minutes. In looking at the broader picture and including all of those who died by suicide in that same year, one person died by suicide every 11.1 minutes (Drapeau & McIntosh, 2018). In the adolescent population (age 15-19 years), 2,491 suicides were completed, and the young adult population (age 20-24 years) suffered a loss of 3,761 deaths by suicide (Drapeau & McIntosh, 2018). Death by suicide ranked second to accidental death in adolescents and young adults in the US during that time period (Drapeau & McIntosh, 2018).

Statistics on suicide are available at the national, regional, and state levels. The present study was conducted at a public university in Tennessee, therefore data on suicide rates in Tennessee is presented here. The state of Tennessee is twenty-second out of fifty for prevalence of suicide, totaling 1,166 deaths in 2017 (Drapeau & McIntosh, 2018). Tennessee is considered

to be the within the Southern region and the east south-central division of the U.S., which are third and second respectively in terms of rate of suicide (Drapeau & McIntosh, 2018). This information illuminates the necessity to better understand suicide and its prevalence in Tennessee.

There are significantly fewer studies that deepen the understanding of suicide on college campuses, beyond reporting annual statistics. Wilcox et al. (2010) found that 12% of the college population reported suicidal ideation, 2.6% reported persistent ideation, and 0.9% reported having a plan or attempt during their four years in college. Haas, Hendin, and Mann (2003) reported that 22% felt so depressed that they were unable to function. In addition to depression being a risk factor for suicide, inability to function could result in social withdrawal, lost days at work or school, and elicit feelings of failure, all of which are also risk factors for suicide. According to a study of over 25,000 students from a variety of institutions, over half of them reported having suicidal thinking at some point during their lives (Drum, Brownson, Burton, & Smith, 2009). Due to the alarming statistics on the prime age range of college students, there have been recent efforts to educate college youth about suicide. Unfortunately, statistics alone are inadequate for identifying and implementing effective prevention and intervention strategies for the affected population. Colleges and universities should not wait until more individuals die by suicide to start making changes. It is imperative that they gain a better understanding of suicide, exposure, and other important components before they can cater to the needs of their students.

Exposure to Suicide

It is important to recognize that particular people have more exposure to suicide than others. Dr. Julie Cerel, President of the AAS, has pioneered much of the research conducted on

suicide exposure and its role on a number of different fronts. According to Cerel (2017), knowing someone or identifying with someone who died by suicide can be considered exposure. The former belief was that each suicide left behind six people that can be considered exposed (Drapeau & McIntosh, 2018); however, there is some evidence that demonstrates that number as being very understated. One study showed that there are actually 135 people exposed in the wake of most suicides (Cerel et al., 2018). Based on the rising population in the US as well as the number of suicides, a conclusion can be drawn that at least 5.5 million people experience a suicide in their lives each year (Cerel et al., 2018). This number can be cause for concern since this makes the number of college students who are exposed to suicide even higher in a given year. One study showed that 65% of a college population knew at least one person who had attempted suicide or died by suicide (Cerel et al., 2013). All of these numbers continue to expand the pool of individuals who are at an increased risk for suicidal ideation.

The most common relationship of exposure based on one research study were friend (43%) and acquaintance (28%) followed by a much smaller breakdown of many different titles (e.g., sibling, parent, co-worker) (Cerel, Maple, Aldrich, & van de Venne, 2013). An element of exposure to suicide is the title of survivorship which will be discussed later. There are a variety of beliefs that support that exposure to suicide can last for many years and have far-reaching effects. One of the reasons that understanding exposure to suicide is so important is the fact that those who are exposed to suicide are more likely to suffer from depression and anxiety and may have their own suicidal struggle (Cerel, 2017). Suicide-exposed individuals were twice as likely than suicide-unexposed individuals to have diagnosable depression, almost twice as likely to have diagnosable anxiety, and more likely to have suicidal ideation (Cerel et al., 2016). These statistics are notably general. There is limited research that explains the likelihood of specific

groups of people (e.g., mothers, siblings, friends) to die by suicide after being exposed during their lifetime.

Given the fact that college is another time when individuals are found to have an increase in these psychopathologies, having prior exposure to suicide can exacerbate these issues for individuals and bring forth a number of other problems (Cerel et al., 2016). There have also been a few studies that analyzed if prior exposure affects whether or not someone will intervene in someone else's suicidal ideation, which will be discussed later (Aldrich, 2018). In one study, 36% of individuals who had prior exposure to suicide were more likely to intervene on behalf of someone else's suicidal struggle (Aldrich, 2018). This same study also shows that 69% of college students had some type of exposure to suicide (Aldrich, 2018). Wolford-Clevenger, Kuhlman, Elledge, Smith, and Stuart, (2018) showed that there were a number of different methods of exposure including exposure to suicide communication, direct exposure to suicide deaths and attempts, and indirect exposure to suicide deaths and attempts such as through the media. Suicide communication includes seeing stories on the news as well as articles and forums that discuss recent suicide events that may happen in a community. Direct exposure to suicide deaths and attempts is having personal connection with the person who died by suicide. Meanwhile, an example of indirect exposure via social media is reading about the story on a social media platform and reading about the sympathy and admiration for the deceased (Wolford-Clevenger et al., 2018).

Given that social media has become such an integral part of the culture of the US, exposure to suicide through social media is increasingly common. The past news modalities that delayed the discovery or details of one's death have been overtaken by internet communications such as Instagram, Facebook, and Twitter. It is currently unknown how affected someone may be

by the exposure to suicide through social media channels. However, it is understood that social media alone is going to make details about and connectedness to suicides more accessible and attainable by the US population. Finding who killed themselves and how they do it is just a few taps away on a smartphone. For example, Chester Bennington was the lead singer of popular rock band Linkin Park who died by suicide. According to a recent search on Instagram; there have been over 700,000 uses of #chesterbennington or some variation following his suicide in 2017 including #chesterbenningtonrip, #chesterbenningtontribute, and #chesterbenningtonsuicide. In the event that a student kills themselves on a college campus, there is possible immediate exposure to thousands of people in a matter of hours, depending on the size of the university. Understanding the complexities of suicide will help school personnel to understand who might need more direct assistance as a result of a suicide.

Suicide Survivors

Along the same lines of exposure to suicide is one's identification as a suicide survivor. While some may initially believe that being a suicide survivor is the surviving of a suicide attempt, this term also refers to people who are "bereaved by suicide," which can include those who are left behind to grieve and make sense of the recent loss (Cerel et al., 2013). Jordan and McIntosh (2011) created a definition to attribute to the suicide survivor as "someone who experiences a high level of self-perceived psychological, physical, and/or social distress for a considerable length of time after exposure to the suicide of another person" (p.7). This includes individuals, such as friends and cousins, who otherwise may not initially be thought of as suicide survivors. Someone does not have to be direct family in order to feel the distress of losing someone to suicide. The average number of individuals who deeply feel the pain of each suicide death was previously estimated to be six, with more recent estimations as high as 135 impacted

individuals per suicide death (Cerel et al., 2013). One proposed merger of these reported numbers suggests that at least six people on average are significantly impacted by each suicide death, with many more people impacted enough to be deemed exposed (or, survivors). Regardless of whether it is six or more, the number of people who are seriously impacted by a suicide is significant enough to acknowledge. However, a number of people may not consider themselves survivors of suicide as a result of the death (Cerel et al., 2013). A significant portion of this fact is left up to the perception of individuals after the death.

Cerel et al. (2013) found that about 20% of a random sample considered themselves to be survivors of a suicide. There were over 27 different relationships that were found in this particular study for the survivors ranging from first degree relatives such as siblings or parents to more distant relationships such as acquaintances and neighbors (Cerel et al., 2013). Related to this finding, results of this exact study showed that those who felt impacted by a suicide death were more likely than members of the general public to feel that suicide is a problem and has impacted their social life (Cerel et al., 2013). Another study completed by Honeycutt and Praetorius (2016) showed 41 different relationships between the survivors and the deceased.

Something that needs to be considered is the misleading wording that is currently used in the world of suicide. As described earlier, a survivor of suicide is commonly described as someone who is significantly emotionally impacted by someone's suicide. The logic behind this decision is similar to an obituary within a local paper. If someone is "survived by their children and grandchildren," those people are the ones that are left in the wake of that death. The trouble attributing that to suicide is that calling someone a suicide survivor is more commonly thought of as someone who has survived a suicide attempt. This complication calls for a change in the

nomenclature of suicide and an attempt better identify those who are significantly impacted by a suicide death. A more appropriate wording could be “suicide loss survivor”.

Those who identify as suicide survivors, much like those who are exposed to suicide in general are at an increased risk for their own psychopathology and suicidal ideation (Honeycutt & Praetorius, 2016). Cerel (2017) even asserted that “we must expand the reach of services to others outside of the kinship boundaries who may be greatly affected by the suicide” (p. 12). These need to be considered when thinking about the well-being of not just college students, but all people in general. The AAS stated that the number of suicide survivors grew by more than 283,000 people in 2017 alone (Drapeau & McIntosh, 2018). This number uses the baseline of six survivors per suicide discussed above. Consequently, the number could be much higher depending on the individual who ended their life. High profile people such as Robin Williams were more connected than the average person, so his suicide could have a deep effect on more celebrities as well as his fans, friends, and family. Each of those survivors has a different experience which raises the possibility that they could experience psychopathology after the suicide. However, it may manifest itself in a number of different ways. Men are also less likely to identify themselves as survivors out of concerns about that identification such as weakness or vulnerability, which could make the number of people who are considered survivors even greater (Cerel et al., 2013). Students can get the proper help that they need if there is an understanding that the college population is a vulnerable group and is more susceptible to issues with exposure and survivorship with suicide.

College Students and Suicide

As discussed earlier, suicide is the second leading cause of death in individuals ages 15 to 24, which happens to contain the typical ages for attending college (Haas et al., 2003). Haas et

al., (2003) showed that 30.2% of full-time students felt overwhelmed by what they had to do in college while a more recent study showed that 76% felt overwhelmed. Additionally, 22% were so depressed that they could not function. Due to the rise in mental health treatment over the past few decades, the number of individuals who need psychological treatment has also increased on campuses across the country. In a landmark study conducted by Westefeld et al. (2005), they found that over 40% of college students agreed that suicide was a problem on their campus. They also showed that 24% have thought about attempting suicide, nine percent made a suicidal threat, and five percent had attempted suicide. The reasons behind their issues were listed to be depression, trouble with relationships, stress, hopelessness, family trouble, anxiety, and social isolation.

In a more recent study conducted in 2015, 20% of students who sought help reported suicidal concerns as their reason for coming in (Schwartz, 2017). They also had 33.8% of people contribute their issues to stress, and 16.2% contributed it to anxiety; concurrently 10.5% of undergraduate students reported serious thoughts of suicide and 1.6% reported a suicide attempt in the year prior (Schwartz, 2017). There is a lack of literature on the current rate of suicide among college students in the US. Most of the literature on actual rates are related to the general age ranges, as opposed to identifying suicides by enrolled students. The American College Health Association assessed over 26,000 students in 2008 of over 40 institutions and found that in the 12 months prior 1.3% of college students attempted suicide and 6.4% seriously considered suicide at least once (Wilcox et al., 2010). Another recent study by the National College Health Assessment found that there has been a national increase of serious suicidal ideation from 8.1 to 11.3 since 2013 (Brody, 2018).

College students can be considered a vulnerable population for a number of reasons. Many of them are on their own for the first time in their lives and do not have a parent watching them or keeping a close eye on what they are doing. As a result, they may be more likely to make rash decisions that can have long-term ramifications. At the same time, they may have trouble branching out, meeting new people, and finding their niche at their university. This can lead to social isolation which eventually becomes depression and a thought they would be better off if they were not around (Van Orden et al., 2010). This can also be called thwarted belongingness, which can be better explained by someone feeling as though they are not socially connected with anyone or anything (Van Orden et al., 2010). Another aspect is perceived burdensomeness, which is when someone feels as though they are a burden to those around them or their loved ones (Van Orden et al., 2010). Over time these things fester and ruminate in the mind of the student and are capable of becoming detrimental to their well-being.

Campus Counseling Centers

In order to ensure that college students are being given the best possible care for these serious issues of suicidal ideation and other psychopathologies, campus counseling centers were created. While it seems logical that all schools should have a counseling center, not all institutions have one, and those who do are very limited in the types of services they are able to administer to the student population. In a study completed in the early 2000s, 38% of counseling centers did not provide psychiatric services (Haas et al., 2003). Many centers are limited in providing quality services to the students due to a lack of training, space, and resources for the staff (Watkins, Hunt, and Eisenberg, 2012). A tragic and highly publicized case was that of Candy Wei, who was a student at the University of Michigan. She sought help from the counseling center and was told that it would be at least a week before she was able to see a

counselor. She then proceeded to the university's emergency room and was not admitted. She returned to school at the start of the new semester and was unable to find a psychiatrist to properly assist her. Once she did find one, her first appointment was given to another person and she killed herself shortly thereafter (Haas et al., 2010).

Regardless of failures and needed improvements, the counseling centers of colleges and universities are designed to provide help and assistance for their students and give them the resources they need. Wilcox et al. (2010) asserted that "campuses should place a greater emphasis on ensuring easy access to quality mental health services at this critical period of young adult development" (p. 9). Over time, schools have found ways and procedures to bring awareness to the serious issue of suicide in order to prevent it as best as they can. One school administrator said, "having psychiatric services on campus [has allowed us] to become a lot more helpful to students experiencing suicidal thinking, and a greater acceptance and tolerance that this is part of the risk you carry working with young adults" (Watkins et al., 2012, p. 10). Another stated, "continuing to be able to do what we can to help meet their needs and in some cases, both helping them not engage in self-injurious behaviors or not act on suicidal thoughts so they can both be safe and then also be functioning well enough to stay in school" (Watkins et al., 2012, p 11). Over time, the counseling centers develop their own reputation on campus as to whether or not they are effective and helpful to their students.

Understanding flexibility and fluidity is an ongoing need for counseling centers. Each year, new trends emerge and different phenomena come to the forefront, requiring the counseling centers to adjust and adapt. Counseling centers are seeking assistance for issues such as sexual assault prevention and awareness, LGBTQ+ rights, disability management, and other expanding fields. Suicide is no different. Understanding the effects that suicide has on students and the role

that contagion plays on campuses are taken into consideration when developing and implementing quality prevention and post intervention programs.

One of the ways schools and counseling centers are attempting to combat suicide is using the prevention model. Rather than waiting to have a student end their life and treat the wound, there is an attempt to educate and find the students that need the most help before they get to a point of no return. One institution is using seven key strategies to attempt to prevent suicide in their student body which includes: enhance student connectedness and engagement, suicide awareness, gatekeeper training, collaborative identification and treatment of depression, specialized training in assessment and treatment of suicide, increased accessibility to counseling services for at risk students, and enhanced crisis management (Washburn & Mandrusiak, 2010). Each of these strategies deals with the students in a different way to ensure both they and the university is ready when something significant may occur that could require help. With this comes an understanding that the students are unable to handle this difficult time on their own (Washburn & Mandrusiak, 2010). Once these strategies are put into place, they can also affect other portions of outreach and intervention on campus to provide a comfortable and open environment for the students.

Another aspect of this issue of suicide is what the school does after the fact and how it reacts when a student does die by suicide. Cimini, Rivero, Taub, and Robertson (2013) created an in-depth analysis of what types of response systems need to be in place in order to best help the students. They discussed having a crisis response team at the ready which includes representatives from all over campus—such as counselors, officers, and ministers—who can assist during the difficult event (Cimini et al., 2013). These teams are designed to be in place for any crisis that may occur on campus to attempt to protect the well-being of the student body.

One of the leading groups of student suicide prevention in the US is the Jed Foundation. They created a model that has been shown to reduce the rates of suicide, homicide, domestic violence, and accidental death among service members of the U.S. Air Force (Schwartz, 2017). This improvement is being made through the addressing of prevention, early identification and intervention for those at risk, clinical care/crisis management/postvention, and restricting access to means of self-harm while also supporting life skills and enhancing connectedness (Schwartz, 2017).

A number of resources and studies that have been created in light of this issue all have the same basic premise. Most, if not all of them, emphasize the need for early intervention, identifying the at-risk students, and providing appropriate resources and services to assist them with their issues and psychopathology which commonly includes suicidal ideation (Brown, 2014). If institutions are able to find an opening into the students' lives, they are more likely to support and prevent them from making devastating decisions. One of the key components of intervention as stated above is education. King, Vidourek, and Strader, (2008) reported that only 11% of students believed that they could recognize if a friend was suicidal and 17% believed that they could talk to that friend about being suicidal or offer them helpful support. In extension, over 71% of students were unaware of the resources available on campus to help individuals who may be struggling (King et al., 2008). Westefeld (2005) found that only 25% of students could identify suicide prevention resources on their campus. These articles emphasized that institutions much reach out and educate their students in order to provide as much help as they can.

Gap in the Literature

Cerel et al. (2013) is the basis of exploration for this particular study. The bulk of what was done is a replication of questions that were asked to students at the University of Kentucky

(UK). However, there is a notable gap in the literature. Other similar studies have not had an effective all-encompassing analysis of attitudes, experiences, knowledge of suicide and knowledge of resources. Most other studies had bits and pieces of each facet but not all of them connected together to understand the likelihood of intervening. There has been no research similar to the UK study found for the state of Tennessee, so this study is essential to understanding how students at a university in Tennessee are in relation to the issues at hand. The present study also sought to add to the information on attitudes and exposure to suicide and bring to the subject to a more well-rounded understanding.

Conclusion

Suicide has become an epidemic across the United States in recent decades. Fortunately, help is becoming more readily available for those who need it. Suicide impacts more than people realize and can have wide reaching effects depending on the situation. This review of the literature showed the prevalence of suicide in the US, in the state of Tennessee, and within the college student population. This prevalence could be connected to the exposure and experience college students have with suicide, whether that be within their own family, friend groups, or selves. This illuminates the need for discussion about suicide loss survivorship. It also shows that those who are bereaved by someone's suicide can affect their future intervention with someone else who may be having suicidal ideation. As a result of a constant struggle to handle and prevent suicide, college counseling centers have to be supported more by the institutions in hopes that suicide prevention can become an integral part of the foundation and structure of student affairs. Once there is a better understanding of students' knowledge about suicide and resources, attitudes about suicide, and experiences with suicide, then they can begin to craft and formulate plans for giving these struggling students the proper help and support they so desperately need.

Chapter three presents the methodology for the current quantitative study that addresses students' knowledge of suicide and resources, attitudes toward suicide, and experiences with suicide. This design aims to gain a better understanding of the landscape of Tennessee's role in the national suicide epidemic. This will be followed by a discussion of the results of the present study and what the results could mean for the field of suicide research.

CHAPTER 3

METHODOLOGY

This was a descriptive study with a qualitative component that was optional for the participant. Of the questions provided, there were only a handful of qualitative responses that emerged based on the results. It was designed to utilize the input of participants in order to gain a better understanding of their exposure to suicide. The design and methodology of the study was approved by the proper authorities affiliated with the university in order to ensure the protection of any subjects participating. Only after I was approved by my thesis committee and the IRB did I proceed with the study to better understand this phenomenon.

The purpose of the research was both to replicate the UK study and also understand how each participants' experience, knowledge of suicide, knowledge of resources, and attitudes toward suicide contributed to their likelihood to intervene. Consequently, the research question was how do college students' attitudes, experiences, knowledge of suicide, and knowledge of resources impact the likelihood of future intervention with students who are suicidal. The main hypothesis is that those who are exposed to suicide are more likely to intervene with someone who may be suicidal. At the conclusion of the survey, there was a list of local mental health resources that participants could use if they were triggered at all by the questions. Those resources included phone numbers, addresses, hours, and other pertinent information should they be needed as a result of thinking about a sensitive topic like suicide.

Participants

This study targeted a randomized sample of college students aged 18 to 24 from a higher learning institution in Eastern Tennessee. Of the 56 respondents for this particular survey, 67.9% (n=38) identified as female, 27.8% being male (n=15), and 3.5% (n=2) being transgender. The

age was very diverse, the largest being 20% (n=11) of the sample being 19 years of age, while the smallest was 10.9 % (n=6) for the ages of 18, 20, and 23. One of the original hopes of the study was to gain a diverse population despite the majority of Tennessee residents being white. However, 85.7% (n=48) of the present sample was Caucasian. When it comes to sexual orientation, 67.9% (n=38) of the sample identified as heterosexual while the next largest group was bisexual at 19.6% (n=11). There was diversity in some sections of the results but not in others. The goal was to utilize a randomized sample with as many participants as possible to support its generalizability to the entire population. There was also hope to obtain a diverse sample despite the fact that Tennessee is a primarily Caucasian state.

Measures

The research team utilized items from multiple versions of the University of Kentucky Awareness of Suicide Survey (UKASS), which was originally conducted in 2013 (Cerel, 2013). I obtained the questions directly from the original researcher. The modified version of the survey is attached in Appendix A. The research team categorized the items from the UKASS into different sections as well as the additional items were categorized into four areas: (1) knowledge of suicide, (2) attitudes about suicide, (3) knowledge of resources, (4) and experience. There was a total number of 48 items which included Likert-Scale and yes/no type questions probing about the participants' knowledge of the topic of suicide, their knowledge of available suicide intervention resources, their likelihood to intervene if a friend was suicidal, personal experience with suicide, and their identification as a survivor. The research team rearranged the questions to fit the four categories in order to understand the interactions as well as determine the likelihood to intervene. A two-item section was included at the end of the measure to assess their likelihood to intervene. If they stated that they were not likely to intervene, an open-ended question was

included to understand what the university could do differently to change that. A few of the other questions were merely altered to fit with the university of the study. There are no validity and reliability statistics found on the UKASS nor for the survey used in this study.

Procedure

I first collected demographic information on the participants in hopes of gaining a diverse sample to have a well-rounded understanding of how suicide exposure affects the student population at the university. Demographic information included questions on gender, age, race, sexual orientation, religion, class standing, and residence status. Chairs of academic departments were contacted and asked to send an email including the link to the survey to their departments' list of student emails. I also contacted the university's SONA system for undergraduate psychology students to participate and fill requirements for their coursework. The link led the participants to a SurveyMonkey survey into which I programmed all of the questions. The participants first read and clicked the "I agree" box of the informed consent to represent their understanding of the purpose of the study as well as the risks that could be involved, although they were minimal. The survey was estimated to take about 15 minutes to complete. There was a follow-up email sent a few weeks after the original to ensure that as many participants as possible had an opportunity to complete the survey. If the initial question was answered with "I do not wish to take this survey" then the participant was sent directly to the final slide which included local mental health resources with contact numbers, addresses, and hours in case they felt distress as a result of taking the survey. This same list was provided for all participants at some point during the survey. No names or IP addresses were collected or saved which protected the confidentiality of the participants. The data was saved on a password protected flash drive and there were no identifiers connecting respondents to their answers.

Data Analysis

The original purpose of the research was twofold: first, to replicate the UK study by attempting to learn more about college students' attitudes and experiences with suicide and those affected by it, and to determine students' attitudes about suicide prevention and knowledge of intervention resources. Second, via multiple regression analyses, to understand how each participant's experience, knowledge of suicide, knowledge of resources, and attitudes toward suicide contributed to their likelihood to intervene. Ultimately, due to the low number of responses, we were unable to perform the secondary part of the study, resulting in the data analysis being a descriptive study that mostly replicated the UK study. We were also unable to utilize most of the qualitative responses due to few and brief responses. I used SPSS software to look at percentages of each question to see how they were paralleled to data from the previous study as well as other related research. I also looked at the frequencies of responses in order find trends and other patterns that could be clinically crucial even with a small sample size.

CHAPTER 4
RESULTS

Due to the small number of responses, the running of a multiple regression was not possible. It also made it difficult to answer the original research questions. The small number of responses yielded by the survey resulted in the research team running descriptive statistics for each question and looking at the small number of responses for their likelihood to intervene. Individual means were calculated for the different independent variables of knowledge of resources, knowledge of suicide, attitudes, and experience. However, instead of looking at the contribution to the variance between each of the attitudes toward suicide, knowledge of suicide and knowledge of suicide resources, and one's experience with suicide and how they interacted with someone's likelihood to intervene, we instead looked at the frequencies and responses to the different items of the survey.

Knowledge and Knowledge of Suicide Resources

Despite the fact that almost 52% (n=29) of the sample reported no teaching from the university or university outreach regarding suicide prevention, the sample seemed to have knowledge of risk factors, prevalence of suicidal ideation, and personal influence of intervention. When asked about knowing the risk factors for suicide, 80.4% (n=45) indicated that they did know what those factors were. Over 90% (n=51) either disagreed or strongly disagreed that most people never think about suicide which is shown in Figure 1. Meanwhile, almost 93% (n=52) either disagreed or strongly disagreed that they could not change the mind of someone who maybe suicidal (Figure 2).

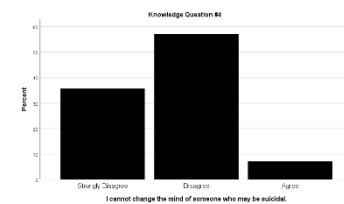
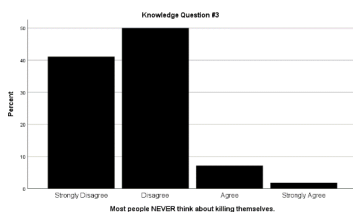


Figure 1: Most people never think about killing themselves 28

Figure 2: I cannot change the mind of someone who may be suicidal

With regard to knowledge of suicide resources, the majority of individuals answered that they did know about the different resources used in questions in the survey such as the university helpline, the National Suicide Prevention Helpline. Over 65% of participants knew about resources around campus as well as resources on a national level such as the National Suicide Prevention Helpline (Figures 3 through 7). Most of them also agreed or strongly agreed that there were a number of places on campus that they could go for a friend who may be suicidal.

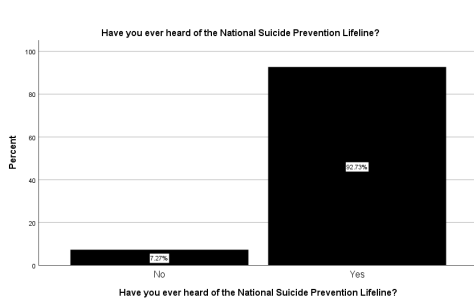


Figure 3: Knowledge of resources q1

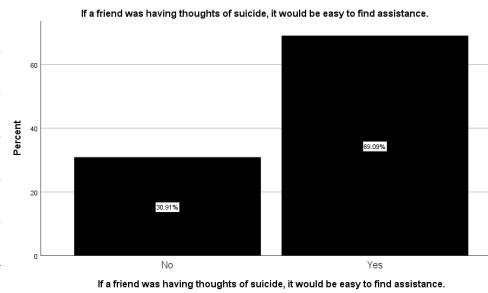


Figure 4: Knowledge of resources

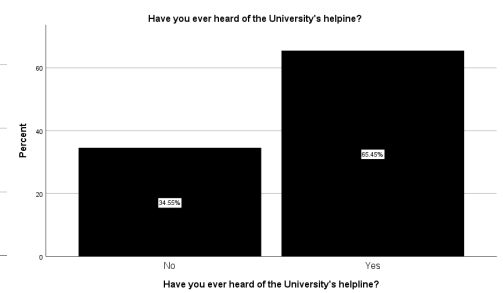


Figure 5: Knowledge of resources

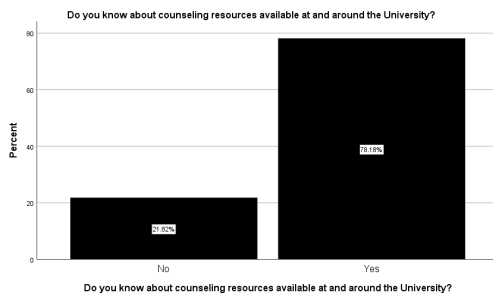


Figure 6: Knowledge of resources

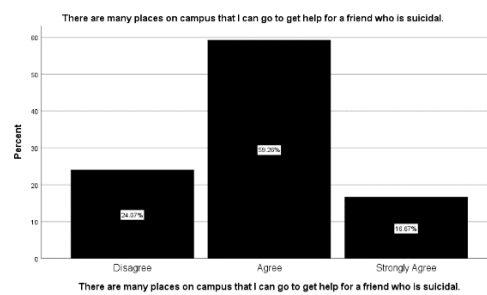


Figure 7: Knowledge of resources

Attitudes

The students that participated were not dismissive of the topic of suicide. Almost the entire sample (96.4%) stated that they believed knowing about suicide warning signs is important. At the same time, 98.2% stated that those who are experiencing suicidal ideation should seek help. Students in this sample seemed to have a sense of agency when it came to dealing with friends or family members, due to about 80% of participants indicating that they would feel confident in seeking help for a friend. Around 75% also stated that they would know where to find information for a family member.

Experience and Likelihood

The current study found roughly 69% of participants knew at least one individual who attempted or died by suicide. Of the relationships involved, over 50% of those connections were listed as friends. There were two sections of questions asking if the participant knew someone who attempted or died by suicide. The sections were almost identical and allowed for someone to describe their experience with more than one suicide if possible. The first section of questions was intended for individuals who knew one person who attempted or died by suicide. The second was exactly the same, which allowed for someone who knew more than one person to provide that additional information. There were 39 people who answered questions related to knowing an individual who attempted/died by suicide. For the first set of questions, 56.4% (n=22) of the known individuals died by suicide while the other 17 did not. Of those 39 people, 62% stated that they believed they were close or very close with the individual who died/attempted.

Twenty-five participants reported that they knew more than one person who attempted/died by suicide. Eleven (44%) of these known individuals died by suicide. For those who knew more than one, 13 felt they were close or very close with the attempter/deceased. For the entire sample, 12.5% (n=7) knew three or more individuals who attempted or died by suicide. In the midst of those responses, there were 19 different types of relationships listed for individuals who lost or almost lost someone to suicide. These relationships ranged from acquaintance to mother. Roughly 69% of students in this sample listed having some type of effect from suicide in their life (either a little, a moderate amount, or a great deal).

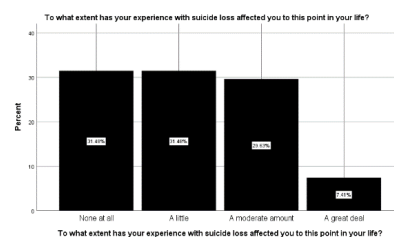


Figure 8: Suicide effect

For this sample, 18.52% (n=10) of those who participated considered themselves to be suicide loss survivors. Thirty-nine students (70.9%) either disagreed or strongly disagreed that suicide was not a problem on their campus. Of the 56 respondents, 90.7% (n=49) stated that they would either be likely or very likely to intervene with someone who may be suicidal. Only five stated that they would be unlikely to intervene, and two did not respond to the question.

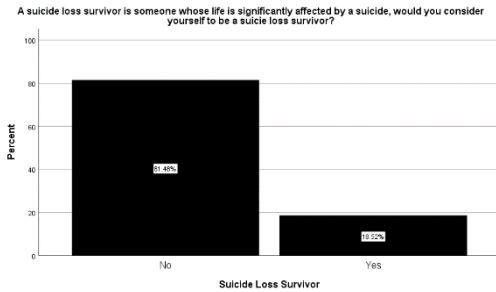


Figure 9: Suicide loss survivor

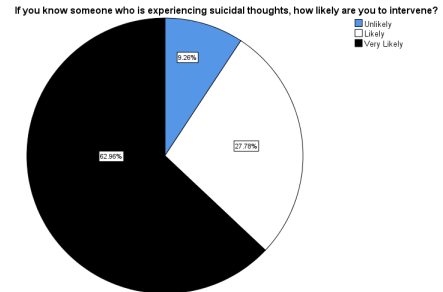


Figure 10: Likelihood to intervene

CHAPTER 5

DISCUSSION

The present research was designed to both replicate and expand on the Cerel et al. (2013) study. I attempted to look into the contribution to the variance by the concepts of knowledge, knowledge of resources, experience, and attitudes of suicide and how they affect someone's likelihood to intervene. There was some overlap between the original study and the current, but the low number of responses for both studies made it difficult to delineate major applicability between the two. In the discussion of the study findings; I will analyze the parallels between the previous study and the current, discuss how the results are connected to the previously reviewed literature, and provide the significance, limitations, and conclusions of the current study.

Although a low sample size limits the depth and breadth of the findings, some connections can be made between the data obtained from this study and what was previously discussed in the literature review. Cerel et al. (2013) yielded a 65% response for individuals who knew at least one person who attempted or died by suicide. The current study found roughly 69% of participants knew at least one individual, roughly on par with the previous study. Previous studies showed that 43% of exposures to suicide were friends (Cerel et al., 2013). This sample yielded over 50% of those connections being friends. Sixty-nine percent of students in this sample listed having some type of effect from suicide in their life (either a little, a moderate amount, or a great deal). This finding is roughly similar to the 65% listed earlier when it comes to the number of individuals who had exposure to suicide. Two questions from the survey related to knowledge about suicide that could be deeply connected to someone's likelihood to intervene were "most people NEVER think about killing themselves" and "I cannot change the mind of someone who may be suicidal." If individuals understand that most people do contemplate

suicide and acknowledge that they could change their mind in the midst of intervening, then they can understand the power and influence that they have when assisting someone who may be suicidal. Knowing about what suicide resources are and how they are available is crucial for intervention. If someone does not know where they can go to get help, they may suffer from the bystander effect thinking that someone else who knows more would intervene. At the same time if they know who they can contact and what services a provider may have, then they may be more likely to reach out on behalf of someone else. We were unable to look deeply at this phenomenon based on the limited responses.

When it comes to the concept of survivorship, there were a few findings that connect to their earlier discussion. In this sample, there were 19 different types of relationships listed for individuals who lost someone to suicide. These relationships ranged from acquaintance to mother. For this sample, 18.52% of those who participated considered themselves to be suicide loss survivors, which roughly on par with previously found statistics of 20% who identified as survivors (Cerel et al., 2013). This difference in specificity of the “suicide loss survivor” relationship rather than a “survivor of suicide” does not challenge the popularly used language. The small sample makes it difficult to see significant changes in the word-usage.

Another key finding of this study is the number of students who at least disagreed that suicide was not a problem at their university. A previously mentioned study discussed that 40% of students thought that suicide was not a problem on their campus (Westefeld, 2005). However, this is lower than the 89% of students who at least disagreed that it was not a problem on the campus of the current study. Even more alarming is the fact that 2/3 of this small sample stated that they had thoughts of ending their own life. This is more than double the amount found by

Westefeld and his team in 2005. This could reiterate the earlier point that the number of people who struggle with suicidal thoughts is rising.

Knowledge and Knowledge of Suicide Resources

Knowledge about suicide and knowledge of different suicide resources could be key components on someone's likelihood to intervene with someone who may be suicidal. If an individual knows about foundational aspects of suicide such as risk factors and influence, they may be more likely to intervene or be more likely to know when to intervene. As stated earlier, King, Vidourek, and Strader, (2008) reported that only 11% of students believed that they could recognize if a friend was suicidal and 17% believed that they could talk to that friend about being suicidal or offer them helpful support. The results of the current study show much higher results. However, this change could be influenced by the knowledge of suicide resources. Having an understanding of what local providers can do for someone who may be suicidal and knowing how to reach out to them could give an individual the inspiration and motivation they need to reach out on behalf of someone else. The basic statement of "I would not know how to reach out to a provider for someone who may be suicidal" could place them in the mindset that they should not attempt something they know little about. The combination of knowledge and knowledge of resources reiterates the old saying that "knowledge is power." Having knowledge about suicide could start people in the right direction of intervening.

Attitudes

In discussing attitudes toward suicide from an individual, we may be able to understand that positive attitudes lead to higher likelihood to intervene. For example, if someone thinks that knowing about suicide warning signs is unimportant, then they may be less likely to intervene with someone who may be suicidal. If they have an attitude that minimizes someone else's

suffering, then they may be unlikely to help. Conversely, having attitudes that highlight how relevant suicide is and how important it is for people to seek help could allow for an acknowledgement and inspiration to intervene. In the landmark study conducted by Westefeld et al. (2005), over 40% of college students agreed that suicide was a problem on their campus. For the UK study, they found that 35% of students strongly disagreed or disagreed that suicide was not a problem on their campus (Cerel, 2013). The fact that 89% indicated that they either disagreed or strongly disagreed is not a problem on their campus could be something to look into with more depth. The fact that the participants of this study have attitudes that acknowledge the magnitude of suicide could positively lead to more interventions.

Experience and Likelihood

One of the biggest factors that was thought to contribute to intervention was someone's experience with suicide. If one has a parent die by suicide, then they may be more likely to intervene to avoid feeling the same pain then they felt before. On the other hand, a parental death could make someone less likely to intervene to avoid having any involvement with someone losing their life. Consequently, it is important to try to understand each participant's experiences with suicide. Different levels of experience could result in differing levels of intervention. The pain and struggle that can come with losing someone to suicide could be enough to inspire future intervention or completely divert someone from ever attempting to help. This is not a deficit at all, but rather something that requires more research to understand what can be done to help these individuals therapeutically as well as interventionally.

Cerel et al. (2013) did not ask about personal suicidal ideation due to institutional review board (IRB) concerns. A common myth is that talking about suicide will result in suicidal ideation or suicide risk. This myth has been thoroughly dispelled; inquiring about suicidal

ideation and providing support is an important part of suicide prevention. Further, in preparation for the Adverse Childhood Experience Study (ACES) which inquired about trauma histories such as abuse and domestic violence, the IRB was concerned about the risk of emotional triggers and requested that a counselor be available 24/7 for study participants. The ACES included over 17,000 participants and the on-call counselor was not contacted a single time during the study (R. Milner, personal communication, September 8, 2018). I believe that awareness of prevalence of personal experiences of suicidal ideation is highly relevant and critical to a nuanced understanding of suicide prevention and intervention efforts. The study done by Wilcox et al. (2010) reported that 12% of the college population disclosed suicidal ideation. Arguably the strongest point and statistic to highlight from the present study is the fact that over 2/3 of the participants stated that they had thoughts of ending their own life. One consideration is that someone's experience with their own suicidal ideation could have led them to take the survey as well as present themselves as likely or very likely to intervene. Their own struggle with suicide could help them with the knowledge of what resources are available and what suicide does to people. It could also affect their attitudes with suicide because they would see its validity and prevalence in society if they went through it themselves. Another thought is that the number of young people who struggle with suicide is going to rise more than it already has. The fact that only 56 people participated in this study could be a reflection of rising numbers of students who contemplate suicide or that the ones who had their own struggle were more likely to participate in the first place. The findings also show that this particular university could have deeper need for prevention and outreach. There needs to be more research to understand if there is truly a rise in suicidal thoughts among young people. If this finding arises, then college campuses can begin or continue to work on their outreach programs to best assist their hurting students.

Additional Key Points

One of the key reasons of doing this research was to better understand what can be done to make someone more likely to intervene. This is such an interesting phenomenon alone without looking at contributing variables. However, the question of why still applies. What about today's times makes these individuals likely to intervene with someone who may be suicidal? It could be the attempts of current culture to decrease the stigma on mental health treatment and the world of social media becoming somewhat of a support system for many who are struggling with different issues. In 2017, a popular rapper named Logic released a song discussing suicide and describing some of the feelings that individuals feel when they are suicidal. The title of the song was 1-800-273-8255, which is the number to the National Suicide Prevention Lifeline. The National Suicide Prevention Lifeline soon after released statistics that showed an increase of line usage after the release of the song (Benson, 2018).

This and other outreaches by popular figures in the world of pop culture destigmatizes mental illness and suicidal ideation. There a possibility that this could be part of the reasoning for more boldness in individuals to be willing to intervene. Many professional athletes have shared personal accounts of struggles with mental health, serving as role models for others to open up about their difficulties as well as desire to be helpful in the midst of the struggle. The world of technology has also assisted in allowing individuals to find trainings much easier. The university at which the study was conducted offers an *Ask. Listen. Refer.* training for all students who are interested in learning how to help someone who may be suicidal get connected with professional help as well as understand the warning signs. While there is no requirement to complete the training, a combination of this and other advocacy efforts could contribute to the high number of people willing to intervene.

Social Desirability

One phenomenon that could also deeply affect the outcomes of this research is that of social desirability. In a study done by Charles and Dattalo (2018), they looked into the idea of using forgiving language to help shape responses of individuals when discussing sensitive topics. If the present study were to use more language that avoided placing the participant in a negative light, then they may have been more likely to honestly respond if they have not already. For example, one of the items on the survey asked “if you know someone who is experiencing suicidal thoughts, how likely are you to intervene?”. Reading that item could be seen as a moral failure if you do not think that you would intervene with someone who is suicidal. An attempt to frame questions in a way that make them seem more normalized or natural could provide a space for more honest answer. This item or a similar item in the future could read, “intervening with someone who may be suicidal is a big responsibility that not everyone is comfortable undertaking, how comfortable would you be intervening?” This slight shift in verbiage could change the perspective from “I am a bad person for not intervening” to “I am not the only one who is uncomfortable dealing with suicide”.

Significance of the Study

This study is significant because it can assist universities and other agencies to identify individuals who may be at greater risk for suicidal thoughts and also gain a better understanding for what those agencies and universities can do to make individuals more likely to intervene with others. The number of suicide outreach programs are lacking and this research can help understand what more can be done. Another point of significance is that the nomenclature of the field has an opportunity to be challenged. As stated prior, attempting to put individuals in categories that do not belong together is an injustice to those who have almost lost their lives to

suicide as well as those who feel that they are survivors of someone's death by suicide. There is a necessary shift to clearly delineate differences in people to avoid oppressive or misconstrued language and identity.

Another significance is the fact that out of a large university of well over 10,000 students, only 56 people responded to the survey. This could be linked to the sensitivity of the topic and individuals being uncomfortable talking about their experiences with suicide. There were a number of participants who skipped questions on the survey even though they participated in the majority of it. That being said, it is possible that individuals who originally thought that they would be able to talk about their experiences with suicide would be without distress. However, they could have become uncomfortable once they were challenged with questions such as suicide method and memories of the loved one they lost to suicide.

Interestingly, and perhaps surprisingly, most people said they were likely or very likely to intervene with someone who may be suicidal. A number of participants also gave things that the university could do better such as: providing a class that explains how to intervene, creating a mobile application that students can use, continue to provide and advertise services, make resources readily available, and simply explain how intervention can be done. Many of these things are currently done at the university but are simply unknown or underutilized. The *Ask.Listen.Refer.* program mentioned earlier is readily accessible on the counseling center website and there are flyers all over campus advertising their mental health helpline that is available to all students. However, it seems that highlighting and spending significant time explaining what resources are available could continue to help the already high number of students who are already willing to intervene.

This type of research is of paramount importance. When people's lives can be saved as a result of data, then it is a necessity to obtain that data. Suicide is an unfortunately growing phenomenon. That being said, looking into that phenomenon from all angles can potentially help those who identify as suicide loss survivors as well as those who may be suffering from their own suicidal ideation. Once the topic is better understood, then we can continue to make the changes that many universities, colleges, organizations, and agencies have already attempted to start doing.

Limitations

This study has a number of limitations that are important to note. One limitation is the uncertainty of email responses. I sent out the recruitment email twice to ensure that as many students as possible were contacted through the department chairs. However, there is a possibility that the chairs ignored the email or the students ignored the email once it was received. It is unknown how many students were reached and why particular students elected to participate or not participate. In addition, the number of participants in both this and the previous study were low, which limited how results could be analyzed. The sample size also reduces generalizability to the larger population. The original methodological plans were unable to be tested because there was not a statistically significant number. However, this does not mean that what was found as a result of this study lacks importance or relevance.

Future Research

The limitations may have also uncovered ways in which future research could be conducted to in order to provide more nuanced understanding of the issues addressed in the study. One way is to complete the research over a longer period of time in order to allow more students to respond. Another is to gain a better understanding of social desirability within the

field of suicide research to figure out if individuals' responses are genuine or just to feel better about themselves. One of the final items of the survey was "how likely were you to intervene?". Only five participants stated that they were unlikely to intervene with someone who may be suicidal. However, that is easier said than done. Everyone would prefer to claim that they would be more likely to help a friend or family if their life was in jeopardy. However, being in the moment of those situations is very different. Another takeaway from this study is that most of the students involved would be likely to intervene in some capacity. However, we still are unsure what that intervention would look like. It could be as simple as making a phone call or as involved as escorting them to a hospital and assisting them in getting admitted. The spectrum of ways to intervene is huge and the individuals' experiences with suicide could shape that intervention very deeply.

It may be that a different research question would be more appropriate than the one for this particular research. The qualitative data showed that almost all of the participants who identified themselves as suicide loss survivors lost at least one family member. However, the relationships that are present between close friends could be stronger than parental relationships. Therefore, a more in-depth qualitative study could be done in which researchers interview individuals who have lost someone to suicide or consider themselves to be suicide loss survivors and find out more about the relationships to possibly uncover if and why they would be more likely to intervene with someone else who may be suicidal. Another concept that was mentioned in the model study was that the idea behind perceived closeness could reveal deeper understandings of identification as a survivor (Cerel, 2013). However, it could be taken a step further if the present study was replicated or modified. This could allow us to understand if perceived closeness affects likelihood of intervention. A close relationship with a friend may

yield a different result than with a distant relationship with a parent. The level of relationship and connection could drastically change the motives, plans, or comfort level of an individual who is contemplating intervening with someone who may be suicidal.

Although the current study looked into the dynamic of likelihood to intervene, a different direction may be warranted. Rather than putting someone in the position of saving someone's life depending on their likelihood to intervene, it may be more beneficial to look at their perceived effectiveness in intervening. Saying that someone does not believe that they would be effective in assisting someone who may be suicidal is different than whether or not they would intervene at all.

Conclusion

Further investigation of this study and topic of research is still very important. Despite the number of individuals in the present study stating that they would be likely or very likely to intervene, suicide is still on the rise. This is supported by the fact that 2/3 of the current sample stated that they had thoughts of taking their own life at some point in time. The results of this study could mean that there is a also rise of intervention efforts and willingness, however more research needs to be done. If additional studies can be completed to look deeper into these phenomena, then maybe we can continue to build the number of intervening individuals and effective prevention endeavors.

The four main topics covered in this study are not the only ones that could play a role in someone's struggle with suicide or their likelihood to intervene, but they seem to be important enough to warrant a deeper look. It is good to recognize that suicide is definitely not going unstudied. There have been a large number of landmark studies that contributed to what we know today and there are still many that can do the same for the future of the field. The original

UK study and the current study both had similar struggles in gaining a large participant pool which adversely impacts statistical analysis and power. However, the information garnered from the close to 200 participants between the two could have far-reaching implications if more research is done in the future.

Dealing with the lives of others is a huge undertaking and gaining a well-rounded understanding of the topic and its dynamics will not be achieved overnight. Each study can have deep and far-reaching implications as long as society as a whole starts to diminish the stigma and negative aura surrounding suicide. Those who are suicidal are desperate for help and equipping as many people as possible with the tools to intervene is crucial to saving many lives across the country and possibly the world. The true nature of the hypothesis was not able to be holistically studied, but each of the parts involved could be very enlightening to the future of the field of suicide research.

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APPENDICES

Appendix A

Modified Survey

The following is the survey obtained from the original study with the modifications made by the research team of the current study.

Demographics

1. Gender: _____
2. Age: _____
3. Race/Ethnicity: _____
4. Class Rank: _____
5. Resident Status: _____
6. Religion: _____
7. Sexual Orientation: _____

Knowledge of Suicide

Please answer all of the following questions using a scale ranging from **strongly disagree** to **strongly agree** unless otherwise specified.

8. Suicide is preventable
9. Suicide is not a problem for college aged individuals (18-24).
10. Most people who kill themselves usually show some signs or thoughts about suicide.
11. Most people NEVER think about killing themselves.
12. I cannot change the mind of someone who may be suicidal.
13. I know the risk factors for suicide.
14. Have any of your classes or orientations included information about suicide prevention?
Yes or No
15. I would know if my friend was having suicidal thoughts.
Yes or No

Attitudes About Suicide

16. Suicide is not a problem at my university.
17. None of my friends have ever thought about killing themselves.
18. If a family member is feeling suicidal, I would feel confident that I would be able to seek help for him/her.
19. If a friend was suicidal, I would feel confident in knowing where to find information to help them.
20. Do you feel that knowing about suicide warning signs is important?
Yes or No
21. Do you think that those who are experiencing suicidal ideation should seek help?
Yes or No

Knowledge of Resources

22. If a friend was having thoughts of suicide, it would be easy to find assistance.
Yes or No
23. Have you ever heard of the National Suicide Prevention Lifeline (1-800-273-TALK or 1-800-SUICIDE)?
Yes or No
24. Have you ever heard of the University's Helpline?
Yes or No
25. Do you know about counseling resources available at and around the University?
Yes or No
26. There are many places on campus that I can go to get help for a friend that is suicidal.

Experience with Suicide

27. If a friend was having thoughts about suicide, I would know how to help them find assistance?
28. Do you know someone who has attempted, or died by suicide?
Yes or No
29. Did the person die by suicide?
Yes or No
30. What was the person's relationship to you? _____
31. What age was the person when they completed suicide? _____
32. How close were you to this person?
a. Not close at all Not Close Close Very Close
33. Do you know the method of their suicide?
Yes or No
34. If yes what was it? _____

35. Do you know more than one person who has attempted/died by suicide? If no move to question 44.
Yes or No
36. Do you know someone else who has attempted, or died by suicide?
Yes or No
37. Did the person die by suicide?
Yes or No
38. What was the person's relationship to you? _____
39. What age was the person when they died by suicide? _____
40. How close were you to this person?
a. Not close at all Not Close Close Very Close
41. Do you know the method of their suicide?
Yes or No
42. If yes what was it? _____
43. If yes, how many?
44. A suicide loss survivor is someone whose life is significantly affected by a suicide, would you consider yourself a suicide loss survivor?
a. Yes or No
45. To what level has your experience with suicide loss affected you to this point in your life?
A great deal a Moderate amount a little none at all
46. Have you ever had thoughts about ending your own life?
Yes or No
47. If you know someone who is experiencing suicidal thoughts, are you going to intervene?
a. Very unlikely Unlikely Somewhat Likely Highly Likely
48. If unlikely or very unlikely, what can the university do to increase your likelihood to intervene?

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