

THE RELATIONSHIP BETWEEN EXPERIENCE WITH SUICIDE AND SUICIDE
ASSESSMENT IN UNIVERSITY COUNSELING CENTERS

by

LACY KRISTEN CURRIE

(Under the Direction of Linda Campbell)

ABSTRACT

Given the alarming prevalence of college student suicides and the detrimental effects to the campus climate, recent literature has focused on preparing mental health professionals working within university counseling centers for detecting risks and adequately assessing for suicidality. Yet, very little, if any, attention has been given to exploring the relationship between a clinician's previous experiences with suicide and their engagement in suicide assessment behaviors when working with suicidal clients. Thus, the primary purpose of the current study was to explore the relationship between clinicians' previous experiences with suicide (i.e. suicide training, clinical experiences with suicide, and personal experiences with suicide) and their engagement in four core suicide assessment behaviors (i.e. completing a lethality screening, utilizing direct language, engaging in narrative dialogues related to suicide, and conducting routine re-assessments of risk).

Data was obtained from 107 mental health professionals working in university counseling centers. All participants completed a survey assessing their previous experiences with suicide and engagement in suicide assessment behaviors. Frequencies of

suicide experiences and suicide assessment behaviors were examined. In addition, a canonical correlation analysis was conducted to examine the relationship between suicide experiences and suicide assessment behaviors. The results indicated a significant relationship between previous experiences with suicide and suicide assessment behaviors, with personal experience being the most significant contributor and suicide training, acting as a minor, secondary contributor. Specifically, results revealed that individuals with more personal experience with suicide more often completed a lethality screening and engaged in narrative dialogues related to suicide, and less often used direct language. Results also revealed that individuals with more suicide training utilized direct language when discussing suicide more often, but completed lethality screenings and engaged in narrative dialogues about suicide with clients less often. Implications for clinical practice, education and training, and future research are discussed.

INDEX WORDS: Suicide, university counseling center, suicide assessment, suicide experiences, personal experience with suicide, clinical experience with suicide, suicide training, suicide assessment behaviors, canonical correlation analysis.

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DEDICATION

This dissertation is dedicated to the countless individuals impacted by suicide. Above all, it is my hope that this research helps to break the silence. This work is also dedicated to my amazing God, who provides me purpose and laid a path for my life that led me to this passion.

“For I know the plans I have for you,” declares the Lord, “plans to prosper you and not to harm you, plans to give you hope and a future.”

Jeremiah 29:11

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CHAPTER 1

INTRODUCTION

Despite decades of research and continued exploration, suicide remains a phenomenon that plagues both researchers and survivors with countless questions and few answers. While the literature regarding suicide is vast and varied, one consensus is generally accepted: the results of a death by suicide are devastating and widespread. In fact, The American Association of Suicidology (AAS; 2009) estimates that each act of suicide directly affects at least six other individuals. With suicide ranked as the tenth leading cause of death nationally and death rates reported at 787,761 in the United States between 1984 and 2009, the result is at least 4.73 million Americans affected by the hurt and confusion that inevitably follows the taking of one's life (AAS, 2009). The results are particularly devastating within the tightly connected community of colleges and universities, where the effects of suicide often move quickly across campus (Paladino & Minton, 2008).

Due to the alarming prevalence of college student suicides compounded with their detrimental effects to the campus climate, the epidemic of suicide has gained considerable attention within the academic literature, media, and on university campuses nationwide in recent years (Drum, Brownson, Denmark, & Smith, 2009). Much of this attention has focused on the mental health professionals providing treatment to these individuals within university counseling centers (e.g., Klepsies, Penk, & Forsyth, 1993; Trimble, 1990). As a result, a considerable amount of time, energy, and resources have

been devoted to preparing these clinicians to detect risks and adequately assess for suicidality. For example, researchers have created multiple suicide assessment instruments and identified the risk and protective factors inherent on college campuses in order to help clinicians better detect students at risk (e.g., Granello, 2010; Stephenson, Belesis, & Balliet, 2005). Most significant to the current study, researchers have also articulated appropriate suicide assessment behaviors that are essential to a comprehensive risk assessment. Such behaviors include: completing a thorough screening of lethality (i.e. a series of questions that assess suicidal intent, plans, means, previous attempts, and protective factors), using direct language when discussing suicide, engaging in narrative dialogues related to suicide, and conducting routine re-assessments of level of risk (Bongar & Stolberg, 2009; O'Connor, Warby, Raphael, & Vassallo, 2004; Toth, Schwartz, & Kurka, 2007). Yet, very little, if any, attention has been given to discovering what factors actually make a mental health professional engage in these suicide assessment behaviors when necessary. Without this knowledge, advances in assessment instruments and formalized plans for comprehensive assessment may, in fact, be useless. In essence, even the most well-intentioned comprehensive assessment plan holds little value if a clinician does not use it.

In order to best prepare mental health professionals working in university counseling centers, the literature must go beyond identifying appropriate suicide assessment behaviors, to understanding what variables impact a clinician's willingness to engage in them when necessary. The current literature indicates that three variables may be at the heart of what makes a mental health professional act: suicide training, clinical experience, and personal experience (Gibbons & Studer, 2008; Indelicato, Mirsu-Paun, &

Griffin, 2011; Palmieri, et. al., 2008). Thus, the current study aims to explore the relationship between each of these variables and mental health professionals' engagement in suicide assessment behaviors in university counseling centers.

Statement of the Problem

To understand the importance of the current study it is necessary to first understand the epidemic of suicide within college counseling centers. This chapter will address this concerning phenomenon utilizing a broad to narrow approach; specifically, by first addressing suicide at a national level, then examining the concern of suicide on the university campus and within the campus counseling center, and finally as it relates to mental health professionals working in university counseling centers.

Suicide as a National Problem

According to the Centers for Disease Control and Prevention (2010), suicide can be defined as, "death caused by self-directed injurious behavior with any intent to die as a result of the behaviors." The most recent data released from the American Association of Suicidology (AAS) in 2010, reports that suicide is the tenth leading cause of death in the United States, with approximately 12.4 self-inflicted deaths per 100,000 U.S. citizens (AAS, 2010). That is, 38,364 of all deaths in 2010 were self-inflicted. This translates to a shocking 105.1 completed suicides daily, with an average of one death every 13.7 minutes (AAS, 2010). Although the rate of self-inflicted deaths has seen a steady increase in the last ten years, the epidemic of suicide is far from a new concern. The World Health Organization (WHO; 2011) reports that since 1955 the rate of deaths by suicide has remained between 10.2 and 12.7 per 100,000 U.S. citizens.

The national problem of suicide is not limited to those lives lost each year. Countless other individuals, communities, and systems are impacted by suicidal thoughts, plans, and attempts each year. According to data released from the Centers for Disease Control and Prevention (CDC) for the 2008-2009 year, an estimated 8.3 million (3.7% of the U.S. population) adults age 18 and over reported having suicidal thoughts, 2.2 million (1.0%) reported making plans to complete suicide, and 1.0 million (0.5%) reported attempting suicide in the last year. That same year, the CDC reported nearly 200,000 hospitalizations and over 300,000 emergency room visits resulting from attempts at self-inflicted fatalities (CDC, 2010). Although suicidal thoughts and attempts are far more difficult to accurately report, conservative estimates suggest approximately 25 attempts for every one completed suicide (AAS, 2009). This translates to one individual who attempts to take his or her own life every 34 seconds in the United States (AAS, 2009).

Suicide on College Campuses

The suicide rates within adolescents and young adults are as disconcerting as national trends. Preliminary national vital statistics reports released by the CDC indicate 4,559 deaths by suicide in 2010 for individuals ages 15-24; making self-inflicted fatalities the third leading cause of death within this population (CDC, 2010). Although suicide mortality rates have historically remained relatively consistent among the general population, the number of deaths within the youth population has increased more than 300 percent since the 1950s (King, Strunk, & Sorter, 2011). Currently, it is reported that suicide accounts for 12.2% of all deaths annually among individuals ages 15-24 (CDC, 2010), with an average of one young person killing him or herself every two hours (AAS, 2009; King, et. al., 2011). Moreover, the CDC reports approximately 100-200 suicide

attempts for every completed suicide within the youth population, as opposed to the 25:1 attempt ratio present within the general population (CDC, 2010).

Suicide is currently the second leading cause of death on college campuses, with an estimated 6.5 to 7.5 self-inflicted deaths per 100,000 university students (Paladino & Minton, 2008; Drum, et. al, 2009). A thorough review of the world's literature on college suicide conducted in 1990 revealed that suicide rates varied from 5 to 50 per 100,000 college students (Lipschitz, 1990). More recently, The Big Ten Student Suicide Study concluded that the average suicide rate was 7.5 per 100,000 students (Silverman, Meyer, Sloane, Raffel, & Pratt, 1997). Although suicide rates of university students are lower than their non-college counterparts, suicidality on college campuses remains at the forefront of recent academic literature and campus-wide planning programs (Haas, Hendin, & Mann, 2003). This continued attention is likely attributed to the devastating and widespread impact that a self-inflicted death has on the closed, often tight-knit, community of a college campus; an impact that is often scrutinized in the media and leaves one questioning who is to blame and what could have been done to prevent these tragedies. As a result, recent research efforts have focused on examining the overall mental health of college students nationwide (e.g. Drum, et. al., 2009; Voelker, 2007).

Currently, reports prepared by various organizations, including the US Department of Health and Human Services, and various professional journals for higher education report increasing psychopathology among university students (e.g., Goode, 2003; Kitzrow, 2003; Suicide Prevention Resource Center, 2004). For example, survey data from approximately 30,000 college students collected by the American College Health Association (2011) indicated that 61.1% of college students reported feeling very

sad at some time during the last twelve months, 45.1% reported feeling that things were hopeless, 31.1% felt so depressed that it was difficult to function, 6.4% had seriously considered suicide, and 1.1% had attempted suicide. Similarly, Drum and his colleagues (2009) reported that over half of college students endorsed some form of suicidal thinking in their lives, with eight percent of undergraduates and five percent of graduates reported having attempted suicide at least once during their lifetime. More alarmingly, they found that during the last year six percent of undergraduates and four percent of graduate students had seriously considered attempting suicide, and 0.85% of undergraduates and 0.3% of graduate students had attempted suicide (Drum, et. al, 2009).

Reports of Suicide and University Counseling Centers

A similar sentiment of rising psychopathology among college students has been reported within university counseling centers (Gallagher, 2011). During the 2010-2011 school year, approximately 10% of all college students sought individual/group counseling, with an additional 30% of students engaging in other services offered by university counseling centers. More telling, the 2011 National Survey of Counseling Center Directors (NSCCD) indicated that 91% of university counseling center directors endorsed a recent trend toward a greater number of college students presenting with severe psychological problems (Gallagher, 2011). Specifically, directors indicated that over one third of counseling center clients had severe psychological problems, with 5.9% of those so severe that they could not remain in school without extensive psychological/psychiatric help. Directors reported hospitalizing an average of 9.4 students annually for psychological reasons; an average that has tripled since 1994. In addition, 78% of directors noted an increase in crises requiring immediate response and

42% noted an increase in self-injury concerns in the last five years. Most significantly, the NSCCD reported 87 known deaths by suicide in the participating 288 schools during the last academic year. Approximately 20% of those individuals were current or former university counseling center clients (Gallagher, 2011).

The Impact of Suicide on Mental Health Professionals

Considering the high prevalence of suicidal ideation and behaviors in the general public, it is not surprising that the vast majority of helping professionals will treat at least one client that engages in some type of suicidal behavior during their career. In fact, recent research indicates that up to two-thirds of individuals who die by suicide had contact with a health-care professional in the month before their death (Kutcher & Chelil, 2007). This is particularly true for mental health professionals, who are typically working with individuals presenting with increased risk factors and during times of emotional distress (Ting, Jacobson, & Sanders, 2011; Schwartz, 2006). It is estimated that of the more than 30,000 suicides in the United States annually, approximately one-third received mental health counseling in the year preceding their death; one-fifth in the month prior (Luoma, Martin, & Pearson, 2002). Numerous research articles have supported this assertion with startling, and almost disheartening, statistics regarding the numbers of mental health professionals working with suicidal clients. In a survey of pre-doctoral psychology interns, 96.9% of participants reported working with a client with some form of suicidal ideation or behavior during their training years, with 25% managing a client suicide attempt and one in nine losing a client to suicide (Kleespies, et. al., 1993). Rogers and colleagues (2001) found that approximately 71% of psychotherapists have managed at least one client suicide attempt, while 28% have lost a

client to suicide. Similarly, Chemtob and his colleagues (1988a; 1988b) found that 22% of practicing psychologists and 51% of psychiatrists reported having a client complete suicide while under their care. Menninger's (1991) study of approximately one hundred psychotherapists revealed that 39% reported having worked with a client who completed suicide. McAdams and Foster (2000) conducted a national survey of professional counselors and found that 23.7% of the respondents reported having worked with a client who died by suicide. Finally, Feldman and Freedenthal (2006) report that 87% of social workers have worked with a suicidal patient in the last year.

Given the frequency of client suicides within the mental health disciplines, considerable research has been dedicated to examining and understanding the impact of a client death on the treating clinician (e.g. Chemtob, et. al., 1988a; Collins, 2003; Ellis & Patel, 2012; Kleepsies, 1993; McAdams & Foster, 2000; Reeves & Nelson, 2006; and Ruskin, Sakinofsky, Bagby, Dickens, & Sousa, 2004). Interestingly, the death of a client is often reported as more devastating among mental health professionals than those in the field of medicine (Collins, 2003). This has been attributed to the differing lenses through which these professionals often view death: as an inevitable and unfortunate consequence of illness by those in the medical profession and as a therapeutic failure to those in the field of mental health (Menninger, 1991). Across the various mental health professions (e.g. psychology, psychiatry, counseling, and social work), clinicians commonly report universal negative reactions to the loss of a client by suicide. Specifically, clinicians report feelings of shock, anger, shame, numbness, inadequacy, and guilt; along with a loss of self-esteem and intrusive thoughts and intensified dreams (Collins, 2003; Ellis & Patel, 2012; McAdams & Foster, 2000; Ruskin, et. al, 2004). In fact, Chemtob and

colleagues (1988b) indicated that nearly half of psychologists reported symptoms of stress in the weeks following a client's death that were comparable to post trauma symptoms in clinical groups and those seeking treatment for parental loss. The following passage portrays the experience of a therapist following a client suicide,

She was my patient for almost 2 years. The tears started, I sobbed, and just as suddenly, stopped. I hung up the telephone and went to the bathroom and vomited... The details of the days and weeks following are a blur, but the intensity of emotions, grief, and pain has remained vivid... Grief, guilt, shame, anger, and feelings of betrayal replaced my initial shock. Intrusive thoughts and hypervigilance plagued me and made sleep difficult. At times I was certain I was going crazy. My confidence was shaken. I doubted my professional competence and felt more judged by what was unspoken than what was ever stated. I feared a lawsuit. I feared that another patient would die (Collins, 2003, p.161).

This experience rings true for most mental health clinicians having experienced the loss of a client by self-inflicted death. In fact, the death of a client by suicide is the most cited cause of anxiety and often reported as the greatest fear by psychotherapists, leading researchers to deem client suicide an "occupational hazard" for practitioners in the fields of psychology and psychiatry (Chemtob, et. al., 1989; Merringer, 1991; Pope & Tabachnick, 1993).

Purpose of the Study

The phenomenon of suicide is a highly prevalent and devastating tragedy that permanently impacts the lives of countless individuals. This is especially true within university communities, where the distressing effects are felt campus-wide (Paladino &

Minton, 2008). Often times at the heart of the tragedy are the mental health professionals working with these clients in university counseling centers. Fortunately, it is these same clinicians that will continue to act as front-line treatment providers to at-risk university students and have the potential to help decrease the number of lives lost to suicide (Jobes, Jacoby, Cimboric, & Hustead, 1997). The first step in doing so is a comprehensive assessment of suicidal risk. As such, countless researchers have worked to identify the most effective means of suicide assessment in order to provide mental health professionals with the training and skills necessary to begin working with at-risk clients (e.g., Gibbons & Studer, 2008; Granello, 2010; O'Connor, et. al., 2004). The results indicate that a comprehensive risk assessment includes a clinical interview which incorporates the following four components (hereinafter referred to as "suicide assessment behaviors"): completing a thorough screening of lethality (i.e. a series of questions assessing suicidal intent, plans, means, previous attempts, and protective factors), utilizing direct language when discussing suicide, engaging in narrative dialogues related to suicide, and conducting routine re-assessments of risk level (Bongar & Stolberg, 2009; O'Connor, et. al., 2004; Toth, et. al., 2007).

In spite of efforts to produce more competent mental health professionals, little research has focused on what factors impact a clinician's engagement in the four aforementioned suicide assessment behaviors when working with clients. The limited research that does exist suggests that previous experience with suicide through training, clinical experience, and/or personal experience may provide the foundation for what makes a clinician act (Gibbons & Studer, 2008; Indelicato, et. al., 2011; Palmieri, et. al., 2008). Yet, the existing literature largely focuses on how these previous experiences

impact clinicians' self-efficacy and perceived competence in completing suicide assessments (e.g. Indelicato, et. al., 2011), forcing one to assume that increased feelings of confidence and efficacy will translate to increased engagement in suicide assessment behaviors. However, the complex, traumatic, and anxiety-provoking nature of suicide challenges one to consider that feelings of competence and efficacy may be undermined in the face of a suicidal client. With this in mind, it is the intent of this study to directly examine the relationship between one's previous experiences with suicide (as defined by training, clinical experience, and/or personal experience) and their engagement in suicide assessment behaviors (i.e. completing a thorough screening of lethality, using direct language, engaging in narrative dialogues related to suicide, and conducting routine re-assessments of level of risk). It is the hope of the researcher that doing so will enhance current suicide risk assessments and begin to shed light on the factors necessary for mental health professionals to start openly dialoging with clients about suicide. The purpose of doing so is two-fold: first, to better prepare clinicians in working with suicidal clients, and second, to ultimately reduce the immeasurable pain of suicide by decreasing its number of victims.

Definitions and Operational Terms

The following are definitions for key terms that will be used throughout the course of this study.

Suicide: Death caused by self-directed injurious behavior with any intent to die as a result of the behavior (CDC, 2012). For the purposes of this study, this term is synonymous with self-inflicted death.

Suicidal Ideation: Thinking about, considering, or planning for suicide (CDC, 2012).

Suicidal Intent: An individual's level of commitment to taking his or her own life (Halgin & Whitbourne, 2010). More specifically, it is defined as a subjective measure of how certain an individual is that suicide will make things better for themselves (Bongar & Stolberg, 2009).

Suicide Attempt: A non-fatal self-directed potentially injurious behavior with any intent to die as a result of the behavior. A suicide attempt may or may not result in injury (CDC, 2012).

Screening of Lethality: A series of questions designed to assess an individual's suicidal intent, plan, means, previous attempts, and protective factors.

Suicide Assessment Behaviors: Encompasses all behaviors completed by a clinician with the purpose of assessing a client's level of suicidality. As taken from the existing literature, the four suicide assessment behaviors measured in this study will include: completing a screening of lethality, using direct language, engaging in narrative dialogues related to suicide, and conducting routine re-assessments of suicidality.

Suicide Training: Includes all didactic training related to suicide received prior to, during, and after completion of graduate work. In the current study, training includes all conferences, lectures, workshops and/or training seminars, classroom lectures, and continuing education sessions.

Personal Experiences: All knowledge and experience of family members and/or friends who have engaged in suicidal thoughts, attempts, and/or completion of suicide.

Clinical Experiences: All knowledge and experience of individual and/or group psychotherapy clients who have engaged in suicidal thoughts, attempts, and/or completion of suicide.

Previous Suicide Experiences: Includes an individual's previous suicide training, personal experiences, and/or clinical experiences with suicide.

Research Questions

Considerable advances have been made in assessing students at-risk for suicide in order to best prepare mental health clinicians working in university counseling centers. Specifically, researchers have identified four behaviors essential to a comprehensive suicide assessment, including: 1) completing a thorough screening of lethality, 2) using direct language when discussing suicide, 3) engaging in narrative dialogues related to suicide, and 4) conducting routine re-assessments of risk. Although the existing literature suggests that a clinician's previous experience with suicide (e.g. training, personal experience, and/or clinical experience) impacts their future clinical work, the prevailing literature continues to focus on clinicians' self-efficacy and level of comfort as measures of success (e.g. Indelicato, et. al., 2011). Doing so requires one to assume that increases in comfort and efficacy will lead a mental health professional to engage in appropriate suicide assessment behaviors. However, the anxiety-provoking and often traumatic nature of suicide is likely to undermine feelings of efficacy and comfort. Therefore, the primary purpose of the current study is to directly examine the relationship between an individual's previous experiences with suicide and their engagement in suicide assessment behaviors through the following research questions.

Research Question 1

Is there a relationship between the variable set that includes all previous experiences with suicide (i.e. suicide training, clinical experiences and/or personal experiences) and the variable set that includes the four suicide assessment behaviors (i.e. completing a

screening of lethality, utilizing direct language when discussing suicide, engaging in narrative dialogues related to suicide, and conducting routine re-assessments of risk)?

Research Question 2

Is there a relationship between suicide training (i.e. all didactic training related to suicide received prior to, during, and after completion of graduate work) and counseling center clinicians' engagement in suicide assessment behaviors (i.e. completing a screening of lethality, utilizing direct language when discussing suicide, engaging in narrative dialogues related to suicide, and conducting routine re-assessments of risk)?

Research Question 3

Is there a relationship between previous clinical experiences with suicide (i.e. all knowledge and experience of individual and/or group psychotherapy clients who have engaged in suicidal thoughts, attempts, and/or completion of suicide) and counseling center clinicians' engagement in suicide assessment behaviors (i.e. completing a screening of lethality, utilizing direct language when discussing suicide, engaging in narrative dialogues related to suicide, and conducting routine re-assessments of risk)?

Research Question 4

Is there a relationship between previous personal experiences with suicide (i.e. all knowledge and experience of family members and/or friends who have engaged in suicidal thoughts, attempts, and/or completion of suicide) and counseling center clinicians' engagement in suicide assessment behaviors (i.e. completing a screening of lethality, utilizing direct language when discussing suicide, engaging in narrative dialogues related to suicide, and conducting routine re-assessments of risk)?

CHAPTER 2

REVIEW OF RELEVANT LITERATURE

Introduction

This chapter presents a review of the relevant literature to highlight the importance of the current study. The first section examines the literature related to suicide assessment with particular focus given to the four suicide assessment behaviors included in the first variable set in the current study (i.e. completing a thorough screening of lethality, using direct language, engaging in narrative dialogues related to suicide, and conducting routine re-assessments of risk). The next section examines the literature related to the three previous suicide experience variables (i.e. suicide training, personal experiences, and clinical experiences) included in the second variable set, with particular focus given to the existing literature regarding the impact of these variables on clinical work. The chapter will conclude with a summary of the relevant research and implications for the current study.

Suicide Assessment

Appropriately evaluating and responding to suicidal thoughts and behaviors is frequently a cause of extraordinary stress for mental health clinicians (Pope & Vasquez, 2007). In fact, it has been suggested that suicide assessment is the most challenging clinical endeavor that a mental health clinician will face in his or her career (Toth, et. al., 2007). Engaging in a suicide assessment undoubtedly raises questions of liability and fears of ‘getting it wrong’ (Reeves & Nelson, 2006). Pope and Vasquez (2007) suggest

that this is likely because the outcome can potentially be fatal. Consequently, a large emphasis has been placed on identifying the most effective suicide assessment tools and behaviors. Historically, the assessment process was largely categorical; looking at factors such as demographics to determine an individual's level of risk (Range & Knott, 1997). However, contemporary researchers recognize that suicide risk assessment is complex and challenging, and each person is unique (Granello, 2010). As a result, researchers have highlighted the importance of utilizing a comprehensive approach, which most frequently includes empirically supported assessment instruments in conjunction with a thorough clinical interview (Juhnke, 1994; Jobes, et. al., 1997).

According to the existing literature, a thorough clinical interview incorporates four components, referred to as behaviors in the current study, including: completing a screening of lethality, using direct language, engaging in narrative dialogues related to suicide, and conducting routine re-assessments of risk (Center for Substance Abuse Treatment, 2009; Shea, 2002; Toth, et. al., 2007). At the heart of the clinical interview is a thorough screening of lethality commonly called a "crisis interview," which includes a series of questions to assess suicidal ideation, intent, plan, means, previous attempts, and protective factors (Paladino & Minton, 2008; Shea, 2002). Conducting a screening of lethality allows the clinician to gain a clearer picture of a client's level of risk. It also, "minimizes guesswork, reduces confusion, provides a basis for service plans, and decreases the clinician's own level of anxiety" (Paladino & Minton, 2008, p. 645). In order to avoid miscommunication, the lethality screening should be conducted utilizing direct language and straightforward questions (Granello, 2010). A comprehensive assessment should also include narrative dialogues beyond intent, means, and plans.

Specifically, a clinician must go beyond collecting data surrounding lethality to understanding the individual meaning of suicide and exploring the narrative story of a suicidal client (Toth, et. al., 2007). Finally, the existing literature emphasizes that a comprehensive suicide assessment is an ongoing process rather than a singular event; therefore, suicidality should be re-assessed at regular intervals over the course of working with a client (Granello, 2010). Given the stated importance of completing a screening of lethality, utilizing direct language, engaging in narrative dialogues related to suicide, and conducting routine re-assessments of risk, each of these suicide assessment behaviors is discussed in detail in the following subsections.

Screening of Lethality

According to the existing literature, most suicide assessments begin with a “gatekeeper” question to determine the presence of suicidal ideation (Bongar & Stolberg, 2009). An example may include, “Have you ever felt suicidal?” Although this provides an opening for clients to share their experiences with suicidal thoughts and behaviors, researchers suggest that a gatekeeper question alone is insufficient (Granello, 2010). In fact, nearly 44 percent of individuals with suicidal histories initially denied any previous thoughts and/or behaviors when asked a similar gatekeeper question (Barber, Marzuk, Leon, & Portera, 2001). As a result, it is necessary for clinicians to seek collateral information through the use of several questions, often referred to as a screening of lethality (Greenstone & Levinton, 2002; Jacobs & Brewer, 2004). A thorough screening of lethality consists of a series of questions designed to measure suicidal intent, plan, means, previous suicide attempts, and protective factors (Greenstone & Levinton, 2002).

Suicidal Intent

When a client indicates that he or she is experiencing thoughts of suicide (i.e. suicidal ideation), it is necessary for the clinician to assess the individual's level of intent (Paladino & Minton, 2008). Intent can be determined by assessing an individual's level of commitment to following through with any plans to take their own life. Stated differently, suicidal intent is a subjective measure of how certain a client is that suicide will make things better for them (Bongar & Stolberg, 2009). According to Paladino and Minton (2008), a traditional question designed to determine intent might be, "Do you plan to take your life today?"

Suicide Plan

Another component of the lethality screening is consideration of a suicide plan, or proposed way to end their life (Toth, et. al., 2007). The presence of a plan increases an individual's level of risk (Pope & Vasquez, 2007). According to Kutcher and Chehil (2007), the more detailed, specific, lethal, and feasible the plan, the greater the risk. Bongar (2002) also asserts that it is important to determine if the client has taken any actions to prepare for the event. Assessing for a suicide plan should include questions such as, "Have you thought about how you would kill yourself?" Shea (2002) also encourages the use of specific questions, including: "Have you thought about overdosing on your medication?" and/or "Have you considered using a gun to take your life?"

Means

Upon client endorsement of a plan, a mental health professional should elicit further details regarding the plan (Bongar & Stolberg, 2009). Specifically, a clinician should assess if the client has access to means to complete the plan (Toth, et. al., 2007;

Paladino & Minton, 2008). For example, if an individual indicates a plan to kill himself with a handgun, the clinician should assess the client's accessibility to guns.

Previous Suicide Attempts

Arguably the most critical component of the lethality screening is information related to previous suicide attempts. Numerous researchers have indicated that one of the most powerful predictors of suicide is a history of previous attempts (e.g., Bongar & Stolberg, 2009; Jobes, 2006; Maris, Berman, & Silvermann, 2000; Rogers & Soyka, 2004). In fact, the literature indicates that almost one percent of individuals who attempt suicide die within a year, and approximately ten percent eventually die by suicide (Hawton & Catalan, 1987). Thus, determining if a client has a history of previous suicide attempts is critical.

Protective Factors

The final determination during the lethality screening is identifying what keeps the individual from taking his or her own life (O'Connor, et. al., 2004). In other words, what protective factors exist that conflict with the individual's desire to take his or her own life. This information can be gained via questions such as, "What stops you from killing yourself?" According to the Centers for Disease Control and Prevention (CDC), common protective factors include: family and community support, access to a variety of clinical interventions, culture and religious beliefs that discourage suicide, and effective clinical care for mental, physical, and substance use disorders (CDC, 2010). Other common protective factors include strong perceived social support, positive values and beliefs, peer group affiliation, good coping and problem-solving skills, and ability to seek help (O'Connor, et. al., 2004).

In sum, a thorough screening of lethality includes a series of questions assessing suicidal plans, intent, means, previous attempts, and protective factors. Such a screening provides the clinician with a more comprehensive understanding of the client's suicidal thoughts and behaviors.

Use of Direct Language

Another important component of a comprehensive suicide assessment is the use of direct language when talking with clients about suicide. Often times when clients are contemplating suicide, they will use vague language or speak in euphemisms, such as “they’ll be happier when I’m gone” and “they won’t have me to kick around anymore” (Granello, 2010). According to Toth, Schwartz, and Kurka (2007), it is important that mental health professionals not imitate this approach when conducting a suicide assessment with words like “harm” and “stop the pain.” Instead, clinicians should be intentional about using concrete and specific language, such as “complete suicide” and “kill yourself” (Toth, et. al., 2007). Doing so helps to clarify the message and reduces the possibility for miscommunication (Granello, 2010; Paladino & Minton, 2008). More importantly, using direct language communicates to the client that it is okay to talk about suicidal thoughts and behaviors with the clinician (Shea, 2002). In fact, Shea (2002) asserted that talking about death and suicide in a calm and forthright manner can be a relief for clients who recognize they have a safe place to share their distressing thoughts and confusion, often considered their horrible secret.

However, utilizing direct language is often difficult for mental health professionals, particularly beginning clinicians. Former director of the Yale University Psychological Services Clinic, Dr. Jesse Geller, spoke to this concern when asked to

identify therapists' pitfalls while working with potentially suicidal clients. Specifically, he responded,

When we are inexperienced, we may be very cowardly regarding the mention of suicide in our initial interviews. We passively wait for the patient to raise the subject and we may unconsciously communicate that the subject is 'taboo.' If the subject does come up, we avoid using 'hot' language such as 'murder yourself' or 'blow your brains out.' Our avoidance of clear and direct communication, our clinging to euphemisms implies to the patient that we are unable to cope with his or her destructive impulses" (Pope & Vasquez, p.17).

Despite potential discomfort, it is imperative that a clinician utilizes direct language when conducting a comprehensive suicide assessment in order to minimize any potential miscommunication and encourage client disclosures related to suicidal thoughts and/or behaviors.

Narrative Dialogue

According to the existing literature, most suicide assessments rarely go beyond asking questions of lethality (Toth, et. al., 2007). In fact, numerous researchers indicate that mental health professionals typically focus solely on collecting data surrounding lethality (i.e. suicidal ideation, intent, plan, means, etc.) instead of exploring the narrative stories of their clients (Rogers & Soyka, 2004). This is often attributed to the potential discomfort created in clinicians when discussing suicidality (Pope & Vasquez, 2007). However, research indicates that a comprehensive assessment must go beyond assessing for lethality to engaging in open, frank dialogue with clients about the personal meaning of their suicidal thoughts and behaviors within the context of their life (Michel, 2011).

Doing so helps to strengthen the therapeutic relationship and provides the clinician with a better understanding of the individual meaning of suicide and potential risk factors for future suicidal thoughts/behaviors (Michel, 2011; O'Connor, et. al., 2004).

O'Connor and his colleagues (2004) explain that most people like to tell their story. They suggest that allowing clients to discuss their personal experiences with suicidal thoughts and/or behaviors provides mental health professionals with vital information, including information about the client's background and current situation. Even more importantly, it provides the opportunity to deepen rapport and gain a better understanding of the client (O'Connor, et. al., 2004). Pope and Vasquez (2007) assert that engaging in narrative dialogues with clients about suicide allows for the opportunity to explore any fantasies the client may have about what suicide will and will not accomplish—an important step for clients trying to stay alive. With regard to engaging in narrative dialogues related to suicide, O'Connor et. al. (2004) states:

Evaluation of the person's experience is an essential task in assessing suicide risk. What is the nature and level of the person's inner distress and pain? What are the main sources of this person's distress? What is the person's understanding of their predicament? What is the meaning of recent events for them? What is motivating this person to consider suicide? Has the person lost his/her main reason for living? Does the person believe that it may be possible for their predicament to change?
(p.354)

Similarly, Dr. Nadine Kaslow suggests that, "we need to interact with suicidal people with compassion and a desire to understand why their pain feels so intolerable that they believe that suicide will offer the only form of relief (Pope & Vasquez, 2007, p.12)."

Therefore, a comprehensive suicide assessment should include a narrative discussion of the client's life story, including information about the client's beliefs about suicide, previous and current suicidal thoughts and behaviors, and personal circumstances.

Routine Re-assessment

The final component necessary in a comprehensive suicide assessment is routine re-assessment of suicidal risk. Suicidal thoughts and behaviors are often highly unstable and changeable (O'Connor, et. al., 2004). Individuals may present with suicidality during acute crises or after long-standing feelings of hopelessness. They may initially seem calm and composed as they deny suicidality and later disclose suicidal thoughts and behaviors (Pope & Vasquez, 2007). More importantly, their suicidal thoughts, behaviors, and level of risk may fluctuate as they respond to internal events and/or live in and interact with an ever-changing environment filled with transitions, times of heightened stress, and changes in support (Berman, Jobes, & Silverman, 2006). This is perhaps especially true within the college environment, as students are routinely impacted by academic demands, interpersonal relationship difficulties, and frequently, separation from family and friends. As a result, the existing literature asserts that effective suicide risk assessment should be an ongoing process rather than a singular event (Simon, 2002). In fact, Granello (2010) asserts that there is perhaps no other type of assessment where this holds truer than the process of suicide assessment.

According to Pope and Vasquez (2007), an assessment of a client's suicidal thoughts and behaviors at regular intervals is crucial. Granello (2010) goes a step further to suggest that at least a brief check in about suicide risk should be conducted at every session. She argues that doing so allows a mental health professional to better monitor a

client's level of risk and differentiate between immediate and ongoing risk (Granello, 2010). A standard reassessment may include, "a review of what circumstances in the social environment may have changed and a reevaluation of previously detected at-risk mental states (O'Connor, et. al., 2004, p. 358)." Granello (2010) suggests that clinicians conduct routine re-assessments by asking questions such as, "Last time you said you didn't feel suicidal—has anything happened this week that changed this for you?"

Previous Experiences with Suicide

It has been estimated that at least six individuals are affected by each act of suicide, resulting in an at least 4.73 million Americans impacted by the loss of a loved one to self-inflicted death (AAS, 2009). Further, conservative estimates suggest that there are at least 25 suicide attempts for every completed suicide, leading to countless more individuals impacted by suicidal behaviors (AAS, 2009). With such high rates of suicidal thoughts, behaviors, and completions it seems reasonable to assume that most individuals will be exposed to suicidality, either personally or through loved ones, at some point in their lifetime. In fact, according to the American Foundation for Suicide Prevention (AFSP), more than 80% of individuals will lose someone to suicide in their lifetime. Given the devastating and often traumatic nature of suicidality, it also seems justifiable to assert that such an experience is likely to have a significant impact upon the individual. Mental health professionals working in college counseling centers are no exception. In fact, the Center for Substance Abuse Treatment (2009) said the following about mental health professional's experiences with suicide,

Your attitudes about suicide are strongly influenced by your life experiences with suicide and similar events. Needless to say, your responses to suicide and people

who are suicidal are highly susceptible to attitudinal influence, and these attitudes play a critical role in work with people who are suicidal (p.18).

Similarly, Dr. Nadine Kaslow, Professor and Chief Psychologist at Emory School of Medicine, said the following about the impact of previous experiences with suicide on mental health professionals when working with potentially suicidal clients,

As therapists, we will find our own countertransference reactions to be a very useful guide with regards to risk assessment, disposition planning, and the implementation of therapeutic strategies. Our own histories with suicide, whether that be our own suicidality, the loss of a loved one to suicide, or the death of a former patient to suicide, will greatly impact how we approach and respond to people who actively think about suicide, take steps to end their own life, or actually kill themselves (Pope & Vasquez, 2007, p. 12).

Despite the stated impact of suicide on the mental health professional, a thorough review of the current literature suggests that there is limited research examining the impact of clinicians' previous experiences with suicide on their current and/or future clinical work with potentially suicidal clients. However, in the minimal research that does exist, the sentiment is similar to that of Dr. Kaslow. Specifically, the existing research suggests that a relationship exists between an individual's previous experiences with suicide and their clinical interactions with potentially suicidal clients (e.g., Indelicato, et. al., 2011; McAdams & Foster, 2000). In the existing literature, three primary types of suicide experience are addressed: suicide training, clinical experiences, and personal experiences. As such, in the current study the researcher aims to better understand the relationship between each of these three types of suicide experience and clinicians'

engagement in the four behaviors essential to a comprehensive suicide assessment. The current research relevant to each of the three primary types of suicide experience is summarized in the following subsections.

Suicide Training

For the purposes of the current study, suicide training is defined as all didactic training received related to suicide prior to, during, and after completion of graduate work. Training includes all conferences, lectures, workshops and/or training seminars, classroom lectures, and continuing education sessions. However, the vast majority of the existing literature related to suicide training is comprised of research studies designed to measure the effectiveness of a particular workshop and/or training seminar (e.g. McNiel, et. al., 2008; Oordt, Jobes, Fonseca, & Schmidt, 2009; Reis & Cornell, 2008). Thus, much of what is known about the impact of suicide training focuses on a single training modality (i.e. training seminar and/or workshop).

Most commonly explored in the current literature is the impact of various suicide training programs (e.g., suicide gatekeeper training and suicide awareness training) for individuals within schools and on college campuses. For example, Reis and Cornell (2008) examined the suicide knowledge and prevention practices of school counselors and teachers after completing a statewide training program in suicide prevention. Eighty-nine percent of the participants who completed the suicide prevention training program reported that the training was helpful. More significantly, 85% of participants reported that the training increased their knowledge and expertise in dealing with potentially suicidal students and 74% reported feeling more confident in dealing with potentially suicidal students (Reis & Cornell, 2008). In a similar study, Idelicato, Mirsu-Paun, and

Griffin (2011) implemented a university-wide suicide prevention training program to students, faculty, and staff and found that individuals rated themselves significantly higher in suicide prevention knowledge and skills after completing the training. In addition, participants reported more confidence interacting with a suicidal person and more comfort talking about suicide with a suicidal person following training. Finally, participants reported themselves higher in the effectiveness of their interventions with potentially suicidal individuals than those who did not complete training (Indelicato, et. al., 2011). In a final example, Slaven and Kisley (2002) concluded that individuals reported an increase in awareness of risk factors and suicide-related issues, as well as knowledge of ethical and professional responses after completing a suicide awareness training. Individuals in the study also reported an increase in comfort, competence, and confidence when assisting persons at-risk following suicide awareness training (Slaven & Kisley, 2002).

Research examining the impact of suicide training with mental health clinicians suggests similar positive outcomes (Pisani, Cross, & Gould, 2011). For example, McNiel and colleagues (2008) examined the impact of structured training in evidence-based suicide risk assessment for psychology and psychiatry trainees. They concluded that individuals who participated in the training experienced a greater improvement in the overall quality of their documentation related to risk assessment, and in their ability to identify risk and protective factors for suicide, than those who did not participate in training. In addition, the individuals who participated in training reported significantly increased self-ratings in their knowledge about suicide and working with suicidal patients, and their ability to assess and manage patients at risk (McNiel, et. al., 2008). In

another study of mental health professionals, Sockalingham, Flett, and Bergmans (2010) found that 85% of psychiatry residents reported feeling more comfortable treating suicidal patients and considered their clinical practice to be improved after completing a suicide intervention training. As a final example, Oordt and Colleagues (2009) examined the impact of a continuing education suicide training program with an empirically-based assessment and treatment approach on mental health clinicians in the US Air Force. The results of the study indicated that 44% of clinicians reported more confidence in assessing suicide risk and 54% reported more confidence in managing suicidal patients immediately after the training and again at six months post training. Further, 66% of the clinicians reported changing clinical policy and 83% reported changing suicide care practices following the training (Oordt, et, al., 2009).

Although far less research has examined the impact of suicide training offered through academic coursework, the contemporary literature does highlight the importance of such training during an individual's graduate work (e.g. Foster & McAdams, 1999; Menninger, 1991). In a study of training programs accredited by the British Association for Counseling and Psychotherapy, 95.8 percent of training directors agreed that, "it is essential that all therapy training courses have in their curriculum a specific consideration of risk of suicide or life-threatening self-injury in the counseling relationship (Reeves, Wheeler, & Bowl, 2004, p.240)." Similarly, in considering the impact of a client suicide on a psychotherapist, Menninger (1991) speaks to the importance of providing courses on death and dying and the normal grief processes during graduate training programs. Expanding on the suggestions of Menninger, McAdams and Foster (2000) concluded that

students who receive preparation in the classroom might be less likely to have severe responses to client suicide.

Despite the stated need for formalized suicide training during an individual's graduate work, numerous studies suggest that very few mental health clinicians receive such training. One study of clinical psychology graduate training programs revealed that only 40 percent offer formal training related to suicide (Bongar & Harmatz, 1991). Similarly, Klepsies et. al. (1993) and Dexter-Mazza and Freeman (2003) reported that only approximately half of psychology trainees receive didactic training on suicide during graduate school. In studies as recent as 2003 and 2008, researchers report that only 18 to 44 percent of psychiatric trainees receive formal training related to suicide assessment and intervention (Pieters, et. al., 2003; Palmieri, et. al., 2008). As a result, it is likely that the lack of formalized training during graduate school has contributed to the gap in the literature regarding the impact of such training.

Further contributing to the void in the literature related to the impact of suicide training, is the ambiguity surrounding training within the existing literature. Specifically, a good deal of the current literature related to suicide training does not explicitly state the type of training received by individuals. Therefore, it is often difficult to determine the type of training received, and impossible to distinguish if there are varying impacts of training received via different didactic modalities (e.g. graduate classroom versus continuing education workshop). To provide an example, Pieters and his colleagues (2003) reported that 80 percent of psychiatric trainees who participated in some formal teaching in suicide risk considered it to be moderately to extremely useful. Yet, an explanation of 'formal teaching' was limited to "the training they had received

concerning risk assessment and action to take after patient suicide had occurred”— offering no explanation concerning the training environment or modality (Pieters, et. al., 2003, p. 346). Comparably, VanLith (1996) reported that both psychologists and psychiatrists in training indicated that ‘increased educational preparation’ helped during the recovery process of a patient suicide. However, no further clarification of educational preparation was provided. As such, the current study intends to broadly examine the suicide training received by mental health clinicians, while simultaneously filling the existing gap in the current literature by assessing the various types of training received (e.g. classroom lectures, workshops, continuing education, etc.).

Clinical Experience

In the current study, previous clinical experience with suicide encompasses all knowledge and experience with individual and/or group psychotherapy clients who have engaged in suicidal thoughts, attempts, and/or completion of suicide. In spite of the fact that researchers report that as many as 97% of mental health clinicians will work with at least one suicidal client, the research about the impact of such experiences is largely absent from the current literature (Kleepsies, et. al., 1993). The limited research that does exist focuses solely on the personal impact of losing a client to suicide, with even fewer studies addressing the professional impact of such a loss (e.g. Ellis & Patel, 2012). However, those researchers who do address the professional impact of previous clinical experiences with suicide unanimously report a profound impact on future clinical work (e.g. Chemtob, et. al., 1988; Collins, 2003; McAdams & Foster, 2000).

For example, in a study of 365 psychologists, Chemtob and his colleagues (1988) found that those who experienced the death of a client to suicide became more focused on

potential cues for suicide, were more likely to seek peer and collegial consultation about high-risk cases, became more conservative in their record-keeping, increased their attention to legal liabilities, and experienced increased concern for issues of death and dying. McAdams and Foster (2000) found the same results to be true for one thousand professional counselors. In addition, the counselors who had experienced a client suicide increased their tendency to refer at-risk clients for hospitalization. Finally, Pieters and Colleagues (2003) found that 52% of psychiatric trainees reported that having lost a client to suicide increased their awareness of the risk of patient suicide and changed their clinical practice. Most pertinent to the current study, the trainees also reported that after losing a client to suicide they more frequently asked about suicidal ideation with clients and actively searched for information on risk assessment (Pieters, et. al., 2003). Broadly stated, Collins (2003) reported that clinicians are likely to become more vigilant in treating depressed and/or suicidal clients after the loss of a client to suicide.

Although little, if any, research has extended to other clinical experiences with suicide (e.g., client suicidal ideation or attempts), the reported impact of a client suicide on an individual's future clinical work with potentially suicidal clients leads one to question if the impact would be similar after working with a client engaging in suicidal thoughts and behaviors that did not lead to death. Therefore, the current study intends to examine the impact of clinical experiences with suicide and hopefully expand the existing literature on the relationship between previous clinical experiences and clinician's professional work with potentially suicidal clients, particularly as it relates to their engagement in the four aforementioned suicide assessment behaviors.

Personal Experience

Personal experience with suicide is defined as the knowledge and experience of family members and/or friends who have engaged in suicidal thoughts, attempts, and/or completion of suicide. Given the high percentage of individuals (i.e. 80%) who will lose someone to self-inflicted death, countless organizations (e.g. American Association of Suicidology) have addressed the impact of losing a friend and/or family member to suicide. However, outside of a select few accounts by mental health clinicians who have lost friends and/or family to suicide (e.g. *Dead Reckoning: A Therapist Confronts His Own Grief* by David Treadway), the impact of previous personal experiences with suicide on mental health clinicians is scant. Even more scarce is empirical literature examining the impact of such experiences on clinician's professional work with potentially suicidal clients.

The only study identified by this researcher that addresses the impact of personal experiences with suicide on future suicide risk identification and helping behavior is a study of approximately one thousand college students conducted by King, Vidourek, and Strader (2008). Specifically, the authors examined the impact of previous personal experiences with suicide on participants' perceived self-efficacy in identifying and helping suicidal friends. The results indicated that students who had experienced a friend or family member express suicidal thoughts to them felt more confident in their ability to recognize a friend at risk for suicide, ask if a friend is suicidal, talk with others to determine suicidality, and help a friend at risk seek professional help than those who did not have personal experience with suicide. Additionally, those students who had a friend

or family member complete suicide felt significantly more confident in identifying a friend at risk for suicide than those who had not (King, Vidourek, & Strader, 2008).

Despite the lack of literature related to the impact of personal suicide experiences on an individual's clinical work, the available literature discussing the impact of clinical suicide experiences leads one to suspect similar implications would be true for personal experiences. As previously stated, Dr. Nadine Kaslow speaks to these implications, suggesting that an individual's history with suicide, including the loss of a loved one, will greatly impact their interactions with potentially suicidal individuals (Pope & Vasquez, 2007). As a result, the final relationship being examined in the current study is the one between previous personal experiences with suicide and engagement in the four suicide assessment behaviors discussed in this chapter.

Summary and Implications

Suicide assessment is a source of extraordinary discomfort and stress for most mental health professionals, and is often considered one of the most challenging clinical endeavors clinicians will face in their careers (Pope & Vasquez, 2007; Toth, et. al., 2007). However, suicide assessment is also one of the most essential, and potentially life-saving, responsibilities that mental health clinicians possess. As such, researchers have long explored the components necessary for comprehensive and effective assessment of client risk. Four key components, referred to as suicide assessment behaviors, have been identified: (1) completing a thorough screening of lethality, (2) utilizing direct language, (3) engaging in narrative dialogues related to suicide, and (4) conducting routine re-assessments of client's suicidality and level of risk (Bongar & Stolberg, 2009; O'Connor,

et. al., 2004; Toth, et. al., 2007). Each of these four behaviors was discussed in detail in this chapter.

Having identified the behaviors necessary for an effective suicide assessment, research must begin to address what variables impact a mental health professional's engagement (or lack of) in these behaviors when working with potentially suicidal clients. Although research in this area is scarce, the existing literature suggests that three variables may impact a clinician's engagement in suicide assessment behaviors: suicide training, personal experiences with suicide, and clinical experiences with suicide. This chapter provided an overview of the relevant research related to each of these variables and highlighted the gaps in the current literature.

The remainder of this dissertation intends to begin filling the gaps in the current literature by more thoroughly exploring the relationship between mental health professionals' previous experiences with suicide (i.e. suicide training, clinical experiences, and/or personal experiences) and their engagement in suicide assessment behaviors (i.e. completing a lethality screening, using direct language, engaging in narrative dialogues related to suicide, and conducting routine re-assessments of risk).

CHAPTER 3

RESEARCH METHODOLOGY

This chapter presents the research design and methodology for the current study, including the research questions and hypotheses, participants, instrumentation, procedures and statistical procedures to be used in data analyses. The present study employed a quasi-experimental research design to examine the relationship between university counseling center clinicians' previous experiences with suicide (as defined by training, clinical experiences, and personal experiences) and their engagement in suicide assessment behaviors (i.e. completing a screening of lethality, utilizing direct language, engaging in narrative dialogues related to suicide, and conducting routine re-assessments of risk level) when working with clients who have expressed thoughts of suicide. The following research questions provided the foundation for the current study.

Research Questions and Hypotheses

Research Question 1: Is there a relationship between the variable set that includes all previous experiences with suicide (i.e. suicide training, clinical experiences and/or personal experiences) and the variable set that includes the four suicide assessment behaviors (i.e. completing a screening of lethality, utilizing direct language when discussing suicide, engaging in narrative dialogues related to suicide, and conducting routine re-assessments of risk)?

Hypothesis 1: It is hypothesized that there will be a statistically significant relationship between the variable set that includes previous experiences with suicide and the variable set that includes suicide assessment behaviors.

Research Question 2: Is there a relationship between suicide training (i.e. all didactic training related to suicide received prior to, during, and after completion of graduate work) and counseling center clinicians' engagement in suicide assessment behaviors (i.e. completing a screening of lethality, utilizing direct language when discussing suicide, engaging in narrative dialogues related to suicide, and conducting routine re-assessments of risk)?

Hypothesis 2: It is hypothesized that there will be a statistically significant positive relationship between suicide training and suicide assessment behaviors, such that participants who report more suicide training will also report higher engagement in suicide assessment behaviors.

Research Question 3: Is there a relationship between previous clinical experiences with suicide (i.e. all knowledge and experience of individual and/or group psychotherapy clients who have engaged in suicidal thoughts, attempts, and/or completion of suicide) and counseling center clinicians' engagement in suicide assessment behaviors (i.e. completing a screening of lethality, utilizing direct language when discussing suicide, engaging in narrative dialogues related to suicide, and conducting routine re-assessments of risk)?

Hypothesis 3: It is hypothesized that there will be a statistically significant positive relationship between previous clinical experiences and suicide assessment

behaviors, such that participants who report more clinical experiences with suicide will also report higher engagement in suicide assessment behaviors.

Research Question 4: Is there a relationship between previous personal experiences with suicide (i.e. all knowledge and experience of family members and/or friends who have engaged in suicidal thoughts, attempts, and/or completion of suicide) and counseling center clinicians' engagement in suicide assessment behaviors (i.e. completing a screening of lethality, utilizing direct language when discussing suicide, engaging in narrative dialogues related to suicide, and conducting routine re-assessments of risk) when working with suicidal clients?

Hypothesis 4: It is hypothesized that there will be a statistically significant positive relationship between previous personal experiences and suicide assessment behaviors, such that participants who report more personal experiences with suicide will also report higher engagement in suicide assessment behaviors.

Participants

The target population for the current study was 150 mental health professionals over the age of 18 who have completed clinical work (either as an employee or trainee) in a university counseling center. In addition, all participants must have worked in an individual session with at least one client who endorsed thoughts of suicide. In order to determine the representativeness of the current sample, staff demographics from the 2012 National Survey of College Counseling (NSCC) and the 2011-2012 Association for University and College Counseling Center Directors Annual Survey (AUCCCD) were examined (Gallagher, 2012; Mistler, Reetz, Krylowicz, & Barr, 2012). The NSCC is an annual survey that includes data provided by the administrative heads of university

counseling centers in the United States and Canada, and the AUCCCD is an international, annual survey that reports data from counseling center directors in the United States, Canada, Europe, the Middle East, Australia, and Asia. For the 2012 annual reports examined, information was provided from 293 and 400 counseling centers, respectively (Gallagher, 2012; Mistler, et. al., 2012).

According to the 2012 NSCC survey, 68.89% of university counseling center staff identified as female and 31.11% identified as male. In addition, 90.06% identified as heterosexual, while 9.94% reported being gay/lesbian/bisexual. With regard to ethnicity, 77.9% of staff members identified as Caucasian, 9.69% African American, 5.72% Asian American, 4.14% Hispanic American, 0.45% Native American, and 2.1% identified as Other (Gallagher, 2012). Similarly, the AUCCCD reported that 70.83% of professional staff in university counseling centers identified as female, 28.63% identified as male, and 0.17% identified as transgender. In addition, 78.39% identified as heterosexual, 5.22% lesbian, 3.54% gay, and 1.57% bisexual. With regard to ethnicity, 73.18% were Caucasian, 10.35% African American, 6.65% Asian/Asian American, 6.30% Latino/Latina, 1.88% Multiracial, 0.60% Native American, and 1.0% Other (Mistler, et. al., 2012).

Instrumentation

Data was collected via a questionnaire designed by this researcher to assess participant's previous experiences with suicide and engagement in suicide assessment behaviors. The questionnaire was comprised of 4 subsections designed to measure: eligibility to participate in the survey, previous experiences with suicide, engagement in

suicide assessment behaviors, and demographic information. Each of the subsections is discussed in detail below. The complete survey is included in Appendix A.

Screening Items

Questions 1 and 2 were created to ensure that survey participants met the inclusion criteria for the current study (i.e. “Have you ever completed clinical work in a university counseling center?” and “During your clinical work in a university counseling center, have you ever worked in an individual session (e.g. initial consultation/screening, individual psychotherapy, or career/academic counseling) with a client who endorsed suicidal thoughts or behaviors?”). Both items were forced response (i.e. yes or no) to ensure participants met necessary requirements before proceeding with the questionnaire. If a participant answered ‘no’ to either question, they were redirected to the end of the survey and excluded from participation.

Suicide Assessment Behaviors

The first subsection (i.e. Question 4) included 10 questions designed to measure participants’ engagement in each of the four suicide assessment behaviors included in the current study: completing a screening of lethality (questions 1-5), using direct language when discussing suicide (questions 6-7), engaging in narrative dialogues related to suicide (question 8), and conducting routine re-assessments of suicidality (questions 9-10). Responses to each item were based on a 5-point rating scale: 1 = never, 2 = rarely, 3 = sometimes, 4 = often, 5 = all of the time.

Previous Suicide Experiences

The second subsection of the questionnaire (i.e. Questions 5-7) included questions designed to measure the quantity of participants’ previous experiences with suicide in

each of the three areas discussed in the previous chapter: personal experiences (question 5), clinical experiences (question 6), and suicide training (question 7). For both personal experiences with suicide and clinical experiences with suicide, participants were asked to report the number of individuals who engaged in suicidal thoughts and/or behaviors. Sample questions included: “Number of family members who attempted suicide” and “Number of clients who completed suicide.” To measure previous training experiences, participants were asked to report the total number of hours spent in training related to suicide in various environments. For example, participants were asked to report the number of hours spent in continuing education sessions related to suicide.

The final question of this subsection (i.e. Question 8) allowed participants the opportunity to share their thoughts about how their previous experiences with suicide have impacted their clinical work with clients. Specifically, clients were asked, “Do you think that your previous experiences with suicide (e.g. training, clinical and/or personal experiences) have impacted your clinical work with clients, particularly in the area of suicide assessment?” Participants who responded ‘yes’ were encouraged to “explain how below.”

Demographics

The final subsection of the questionnaire was designed to obtain demographic data about the participants who participated in the study. Demographics of interest included gender, racial heritage, age, doctoral degree, program of study, current year status, educational background, and length of time working in a university counseling center.

Procedures

Prior to data collection, the researcher completed an Institutional Review Board process and approval was granted. In order to recruit potential participants, a call for research participation (see Appendix B) was posted on a social media website (i.e. Facebook) and sent via electronic mail to identified mental health professionals working in university counseling centers. The call for research participation provided information about the purpose and nature of the survey, inclusion criteria, and a link for the online questionnaire for those who were interested in participating. The call for participation also invited individuals to pass along the participation request to those in their social network who were eligible to participate.

The questionnaire was administered online through the online survey platform, Qualtrics (www.qualtrics.com). Individuals who followed the survey link included in the call for research participation were directed to an informed consent document detailing the purpose of the study, potential risks and benefits of participation, and the voluntary and confidential nature of the study. The informed consent is included in Appendix C. After providing consent to participate, participants proceeded to complete the online questionnaire. As incentive to participate in the study, individuals were given the opportunity to provide their email address to be included in a random drawing for one of three \$20 gift cards from Amazon.com. After completing the questionnaire, participants were redirected to a second questionnaire, which allowed them to provide their email address separate from their survey data. Those individuals who declined participation were immediately redirected to the second questionnaire and offered the opportunity to enter their email address in the drawing.

Statistical Analysis

All analyses were computed using Statistical Packaging for the Social Sciences (SPSS) for Windows Version 21.0. Descriptive statistics were examined to determine participant demographics, and an average participant profile is presented. In addition, frequencies were analyzed for each of the study variables in order to determine the quantity and types of previous suicide experiences reported by participants and the frequency of engagement in each of the suicide assessment behaviors. Finally, a canonical correlation analysis was conducted to explore the four research questions presented in chapter one and the corresponding hypotheses stated earlier in this chapter. Such an analysis allows for the examination of the relationship between multiple independent and dependent variables (Hair, Anderson, Tatham, & Black, 1998; Kerlinger & Lee, 2000; Tabacknick & Fidell, 2007). Further, such an analysis may:

best honor the reality of psychological research. Most human behavior research typically investigates variables that possibly have multiple causes and multiple effects. Determining outcomes based on research that separately examines singular causes and effects may distort the complexity of human behavior and cognition (Sherry & Henson, 2005, p. 38).

In the current study, the set of independent variables, identified as the predictor set within the canonical correlation analysis, is comprised of all suicide experiences, including: suicide training, clinical experience, and personal experience. The set of dependent variables, identified as the criterion set within the canonical correlation analysis, includes the four suicide assessment behaviors: completing a screening of lethality, utilizing direct

language, engaging in narrative dialogues about suicide, and conducting routine re-assessments of risk (Sherry & Henson, 2005).

In canonical correlation two linear equations are formed: one for the predictor variables and one for the criterion variables (Sherry & Henson, 2005). This combination is designed to yield the maximum correlation between the two variable sets. In order to explore hypothesis 1, which states that there will be a significant relationship between the two variable sets (i.e. previous experiences with suicide and suicide assessment behaviors), the significance of the full canonical model was examined. To address the three remaining hypotheses, which state that each of the predictor variables: suicide training (hypothesis 2), clinical experiences (hypothesis 3), and personal experiences (hypothesis 4), will have a positive relationship with the criterion variable set (i.e. suicide assessment behaviors), structure coefficients were examined.

CHAPTER 4

RESULTS

A total of 145 participants completed the online survey utilizing the sampling procedures described in the previous chapter. All questionnaires were screened for eligibility and the following exclusions were made: (a) 10 participants had not completed clinical work in a university counseling center, (b) 5 participants had not worked in an individual session with at least one client who had endorsed suicidal thoughts and/or behaviors, (c) 18 participants did not complete any questions after the screening items, and (d) 5 participants provided incomplete data (i.e. no information related to previous suicide experiences). After all ineligible participants were excluded, the final *N* for data analysis was 107. This yielded a total response rate of 73.8%.

Description of the Sample

Of the 107 participants included in the current study, 77.6% ($n = 83$) identified as female and 22.4% ($n = 24$) identified as male. Approximately 76.6% of participants identified as Caucasian ($n = 82$), 11.2% African American ($n = 12$), 4.7% Asian/Pacific Islander ($n = 5$), 2.8% Latino/a ($n = 3$), 2.8% Biracial ($n = 3$), 0.9% as Other ($n = 1$), and 0.9% did not report ethnicity ($n = 1$). The majority of participants (80.4%) were between the ages of 25-34 (63.6%; $n = 68$) and 35- 44 (16.8%; $n = 18$). Complete demographic information is included in Table 1. Based on demographic information presented by the 2012 NSCCC and the 2012 AUCCCD, the sample of participants in the current study

appear to be representative of the larger population of mental health professionals working in university counseling centers (Gallagher, 2012; Mistler, et. al., 2012).

As indicated in Table 2, participants reported working toward or having earned the following degrees: 61% PhD ($n = 66$), 21% PsyD ($n = 23$), 1% Marriage and Family Therapy ($n = 1$), 8% Masters of Social Work ($n = 9$), 1% Masters of Education ($n = 1$), 11% Masters of Counseling ($n = 12$), and 5% Other ($n = 5$). Among the other degrees

TABLE 1. Description of Participants by Age, Gender, and Ethnicity

Demographic Variable	N	%
AGE		
18 - 24	3	2.8
25 - 34	68	63.6
35 - 44	18	16.8
45 - 54	5	4.7
55 - 64	9	8.4
65 +	3	2.8
Not Reported	1	0.9
Total	107	100
GENDER		
Male	24	22.4
Female	83	77.6
Total	107	100
ETHNICITY		
Caucasian	82	76.7
Asian/Pacific Islander	5	4.7
Native American	0	0
African American	12	11.2
Latino/a	3	2.8
Biracial	3	2.8
Other	1	0.9
Not Reported	1	0.9
Total	107	100

reported were: Master’s of Arts in Women’s Studies, Masters in Clinical Psychology, and Educational Specialist. Numerous participants indicated multiple degrees, thus the total percentage exceeded one hundred. Most participants (80%) reported being in either a Clinical Psychology (32%; $n = 35$) or a Counseling Psychology (48%; $n = 52$) program of study. Finally, the average amount of time spent completing clinical work in a university counseling center was 56.32 months (4.67 years; $SD = 71.38$), with ranges from 1 month to 408 months (i.e. 34 years).

TABLE 2. Description of Participants’ Educational Degree and Program of Study

Demographic Variable	N	%
DEGREE		
PhD	66	61
PsyD	23	21
Marriage and Family Therapy	1	1
Masters of Social Work	9	8
Masters of Education	1	1
Masters of Counseling	12	11
Other	5	5
PROGRAM OF STUDY		
Clinical Psychology	35	32
Counseling Psychology	52	48
Counselor Education	10	9
Social Work	8	7
Marriage and Family Therapy	1	1
Other	6	6

Note: Other degrees reported included Educational Specialist, Masters in Clinical Psychology, & Master of Arts in Women’s Studies. Other programs of study included: Community Counseling, Behavioral Health, School Psychology, Professional Counseling, & Women’s Gender and Sexuality Studies.

Frequency of Previous Experiences with Suicide

Previous experiences with suicide included all suicide training, clinical experiences with suicide, and personal experiences with suicide reported by participants. Information about the frequency of each of the three suicide experiences will be discussed in this section. Consistent with the anticipated highly variable nature of individual experiences, a wide range was reported among participants for each type of suicide experience. Thus, for this sample the mean may not be the best depiction of the majority of participants' experiences. As a result, medians will also be reported and are considered a more accurate representation of the entire sample.

Suicide Training

Previous suicide training includes all didactic training related to suicide received prior to, during, and after completion of graduate work. Specifically, participants were asked to consider all sessions at professional conferences (e.g. APA; ACA), lectures both inside and outside of the classroom, workshops and/or training seminars, and continuing education sessions. As indicated in Table 3, participants reported receiving an average of 33.34 total hours (SD = 81.03) of suicide training, with a range between 0 and 740 hours. The median for total suicide training was 14 hours. Five participants (4.7%) denied having any previous suicide training. The most frequent modality for suicide training was classroom lecture (M = 11.70, SD = 49.73), followed by workshop and/or training seminar (M = 7.53, SD = 13.62), continuing education session (M = 5.12, SD = 13.06), session at a professional conference (M = 4.75, SD = 12.57), and a lecture outside of the classroom (M = 4.25, SD = 12.03), respectively. Interestingly, approximately half of participants denied any previous suicide training through three of the five training

modalities, including: sessions at a professional conference (54.2%; $n = 58$), a lecture outside of the classroom (47.7%; $n = 51$), or a continuing education session (63.6%; $n = 68$).

Clinical Experiences

Previous clinical experiences with suicide included all clients who participants reported having worked with in individual or group psychotherapy that endorsed suicidal ideation (with and without a plan), attempted suicide, and/or completed suicide. The mean, median, mode, standard deviations, and ranges for all clinical experiences are provided in Table 3. Participants reported working with an average of approximately 104 clients ($M = 104.35$, $SD = 303.90$) with any suicidal thoughts and/or behaviors. The median was 24.5 and the range was between 0 and 2,603 clients. Although all participants included in analyses positively endorsed having worked with at least one client who endorsed suicidal thoughts/behaviors on the initial screening item, two participants (1.9%) denied having any previous clinical experiences with suicide on this subsection of the questionnaire. Participants most frequently reported working with clients who endorsed suicidal ideation without a plan ($M = 78.77$, $SD = 201.47$), followed by clients who endorsed suicidal ideation with a plan ($M = 28.84$, $SD = 111.90$) and clients who attempted suicide ($M = 7.31$, $SD = 20.54$). Finally, analyses revealed that 70.1% of participants ($n = 75$) have worked with at least one client who attempted suicide and 14.95% have lost a client to suicide ($n = 16$). More specifically, 12.1% of participants ($n = 13$) reported having lost one client to suicide, 1.9% ($n = 2$) reported having lost two clients to suicide, and 0.9% ($n = 1$) of participants reported having lost 3 clients to suicide.

TABLE 3. Mean, Median, Mode, Standard Deviations (SD) and Ranges for Suicide Experiences

	Mean	Median	Mode	SD	Range
Training					
PROCONF	4.75	0	0	12.57	90
LECTOC	4.25	1	0	12.03	100
CLASSLEC	11.70	3	2	49.73	500
WKSHP/TS	7.53	4	0	13.62	100
CONTEU	5.12	0	0	13.06	90
Total	33.34	14	6	81.03	740
Clinical Experience					
CLNTSINOP	78.77	20	100	201.47	1500
CLNTSIP	28.84	5.5	1	111.90	1000
CLNTAS	7.31	1	0	20.54	150
CLNTCS	0.19	0	0	0.50	3
Total	104.35	24.5	2	303.90	2603
Personal Experience					
FAMSINP	0.65	0	0	0.95	5
FAMSIP	0.39	0	0	0.74	4
FAMAS	0.47	0	0	1.54	15
FAMCS	0.32	0	0	1.50	15
FRNDSINP	1.53	1	0	2.37	5
FRNDSIP	0.59	0	0	0.97	5
FRNDAS	0.61	0	0	1.42	14
FRNDCS	0.35	0	0	1.42	14
Total	4.89	3	2	7.78	74

Note. PROCONF = professional conferences, LECTOC = lectures outside of the classroom, CLASSLEC = classroom lecture, WKSHP/TS = workshops and/or training seminars, CONTEU = continuing education, CLNTSINP = clients who endorsed suicidal ideation with no plan, CLNTSIP = clients who endorsed suicidal ideation with plan, CLNTAS = clients who attempted suicide, CLNTCS = clients who completed suicide, FAMSINP = Family members who endorsed suicidal ideation with no plan, FAMSIP = family members who endorsed suicidal ideation with plan, FAMAS= family members who attempted suicide, FAMCS = family members who completed suicide, FRNDSINP = friends who endorsed suicidal ideation with no plan, FRNDSIP = friends who endorsed suicidal ideation with a plan, FRNDAS = friends who attempted suicide, FRNDCS = friends who completed suicide.

Personal Experiences

Previous personal experiences with suicide included all friends and family members who have endorsed suicidal ideation (with and without a plan), attempted suicide, and/or completed suicide. Participants reported having personal suicide experience with an average of 4.89 family members and/or friends ($SD = 7.78$). The median was 3 and the range was between 0 and 74. Fourteen percent of participants ($n = 15$) denied having any previous personal experiences with suicide. On average, participants reported having more personal suicide experiences with friends ($M = 2.69$, $SD = 2.95$) than family members ($M = 1.55$, $SD = 1.97$). When considering specific personal experiences, participants reported having the most experience with friends and family members who endorsed suicidal ideation without a plan ($M = 1.53$, $SD = 2.37$; $M = 0.65$, $SD = 0.95$). Interestingly, participants reported having more experience with friends ($M = 0.61$, $SD = 1.26$) and family members ($M = 0.47$, $SD = 1.54$) who attempted suicide than they did with friends or family members who had endorsed suicidal ideation with a plan, respectively. Specifically, 28% of participants ($n = 30$) reported having at least one family member attempt suicide, and 33.6% or participants ($n = 36$) reported having at least one friend attempt suicide. Finally, 19.6% of participants ($n = 21$) reported having lost at least one friend to suicide and 16.8% ($n = 18$) having lost at least one family member to suicide.

Frequency of Suicide Assessment Behaviors

Identified as the four essential components of a comprehensive suicide assessment in the existing literature, the following suicide assessment behaviors were measured in the current study: (1) completing a screening of lethality, (2) utilizing direct language, (3)

engaging in narrative dialogues related to suicide, and (4) conducting routine re-assessments of suicidality. Participant responses were scored as follows: Never = 1, Rarely = 2, Sometimes = 3, Often = 4, and All of the Time = 5. Complete descriptive statistics for each of the behaviors are provided in Table 4 and the results are summarized below.

Participants most frequently reported completing a screening of lethality ($M = 4.51$, $SD = .51$), with approximately 84% of participants ($n = 90$) reporting that they complete a lethality screening often or all of the time. When completing the screening of

TABLE 4. Mean, Median, Mode, Standard Deviation (SD), and Ranges for Suicide Assessment Behaviors

	Mean	Median	Mode	SD	Range
LETHSCRN	4.51	4.60	5	.51	2
Plan	4.68	5.00	5	.56	2
Intent	4.58	5.00	5	.66	4
Means	4.38	5.00	5	.77	3
Protect	4.38	5.00	5	.75	3
PrevAttempt	4.52	5.00	5	.73	3
DRCTLNG	3.74	4.00	4	1.17	4
NARRDIA	3.81	4.00	4	1.00	4
ROUTRE	3.93	4.00	4	.75	3

Note. LETHSCRN = screening of lethality, Protect = protective factors, PrevAttempt = previous suicide attempts, DRCTLNG = direct language, NARRDIA = narrative dialogue, ROUTRE = routine re-assessment.

lethality, participants most often asked questions about suicidal plans ($M = 4.68$, $SD = .56$) and intent ($M = 4.58$, $SD = .66$), followed by previous suicide attempts ($M = 4.52$, $SD = .73$). Specifically, 72.9% of participants reported asking about suicidal plans, 64.5% intent, and 63.6% previous suicide attempts all of the time. The second most commonly reported suicide assessment behavior reported by participants was conducting routine re-assessments of risk ($M = 3.93$, $SD = .75$). 71.9% of participants ($n = 77$) endorsed conducting routine re-assessments often or all of the time, while only 1.9% ($n = 2$) reported rarely re-assessing for risk. Approximately 67% of participants reported engaging in narrative dialogues about suicide with their clients often or all of the time, and 11.2% endorsed never or rarely engaging in narrative dialogues about suicide with clients. Of the four suicide assessment behaviors, participants least often used direct language ($M = 3.74$, $SD = 1.17$) when discussing suicide with clients. Further examination of the data revealed that only 29.9% of participants ($n = 32$) reported using direct language all of the time, while almost 6% of participants ($n = 6$) denied ever using direct language when discussing suicide with clients.

Results of Canonical Correlation Analysis

Hypothesis one stated that there would be a statistically significant relationship between the variable set that includes all previous experiences with suicide (i.e. suicide training, clinical experiences, and personal experiences) and the variable set that includes the four suicide assessment behaviors. A canonical correlation analysis was conducted using previous experiences with suicide as predictors of suicide assessment behaviors in order to evaluate the proportion of variance shared by the two variable sets (Oslund, 2010). As indicated in Table 5, the analysis yielded three functions with canonical

TABLE 5. Canonical Correlations and Eigenvalues for Each Function Separately

Root No.	Eigenvalues	%	Cumulative %	Canonical Correlation	Squared Correlation
1	.194	76.579	76.579	.403	.162
2	.387	15.300	91.879	.193	.037
3	.021	8.121	100.00	.142	.020

TABLE 6. Dimension Reduction Analysis

Root No.	Wilk's λ	F	Hypothesis DF	Error DF	Significance of F
1	.790	1.972	12.00	254.28	.027
2	.943	.957	6.00	194.00	.456
3	.980	1.01	2.00	98.00	.369

correlations (R_c) of .403, .193, and .142 for each successive function. The full model across all functions was statistically significant with a Wilk's λ of .790, $F(12, 254.28) = 1.97, p = .027$. Acting as an inverse effect size, the Wilk's λ indicated an overall effect size of .21, suggesting that the full model explained 21% of the shared variance between the two variable sets across all functions (Sherry & Henson, 2005). These results provide support for hypothesis one. The second and third canonical functions failed to reach statistical significance ($p = .456; p = .369$). Table 7 presents the standardized canonical functions coefficient, the structure coefficient, and the squared structure coefficient for each variable in the full model. Canonical solutions for each of the variables for functions two and three are provided in Table 8. According to Sherry and Henson (2005), a

TABLE 7. Canonical Solutions for Suicide Experiences Predicting Suicide Assessment Behaviors for Function 1

Variable	Coef	r_s	r^2 (%)
TRAINING	.216	.159	.03
CLINEXP	-.063	-.087	.01
PEREXP	-.981	<u>-.979</u>	.96
LETHSCRN	-.604	<u>-.438</u>	.19
DRCTLNG	.891	<u>.666</u>	.44
NARRDIA	-.412	<u>-.374</u>	.14
ROUTRE	.198	-.057	.003

Note. Structure coefficients (r_s) greater than $|\text{.30}|$ are underlined. Coef = standardized canonical function coefficient; r^2 = squared structure coefficient. CLINEXP = clinical experience, PEREXP = personal experience, LETHSCRN = screening of lethality, DRCTLNG = direct language, NARRDIA = narrative dialogue, ROUTRE = routine re-assessment.

“researcher should only interpret those functions that explain a reasonable amount of variance between the variable sets or risk interpreting an effect that may not be noteworthy or replicable in future studies (p. 42).” Therefore, only the results of function 1 will be discussed.

Based on guidelines for interpretation provided by Tabacknick and Fidell (2007), .30 was utilized as a cutoff for all correlations. Initial examination of the squared structure coefficients of Function 1 indicated that personal experience with suicide was most relevant in its contribution to the synthetic predictor variable, followed by suicide training, which was a minor, secondary contributor.

TABLE 8. Canonical Solutions for Suicide Experiences Predicting Suicide Assessment Behaviors for Functions 2 and 3

Variable	Function 2			Function 3		
	Coef	r_s	r^2 (%)	Coef	r_s	r^2 (%)
TRAINING	-.839	<u>-.942</u>	.89	-.592	-.296	.09
CLINEXP	-.325	<u>-.589</u>	.35	.999	<u>.804</u>	.65
PEREXP	-.108	-.170	.03	-.185	-.117	.01
LETHSCRN	-.070	-.299	.09	.835	<u>.848</u>	.72
DRCTLNG	-.460	<u>-.606</u>	.37	.297	<u>.436</u>	.19
NARRDIA	-.799	<u>-.818</u>	.67	-.489	-.042	.002
ROUTRE	.420	.111	.01	.264	<u>.538</u>	.29

Note. Structure coefficients (r_s) greater than $|.30|$ are underlined. Coef = standardized canonical function coefficient; r^2 = squared structure coefficient. CLINEXP = clinical experience, PEREXP = personal experience, LETHSCRN = screening of lethality, DRCTLNG = direct language, NARRDIA = narrative dialogue, ROUTRE = routine re-assessment.

Structure coefficients were examined to explore the remaining three hypotheses. Hypothesis two stated that there would be a statistically significant positive relationship between suicide training and suicide assessment behaviors. This hypothesis was not fully supported by the results. Specifically, structure coefficients revealed a positive relationship between suicide training ($r_s = .159$) and direct language ($r_s = .666$), indicating that individuals with more suicide training more frequently utilize direct language when discussing suicide with clients. However, structure coefficients revealed inverse relationships with lethality screening ($r_s = -.438$) and narrative dialogue ($r_s = -.374$),

suggesting that individuals with more suicide training are less likely to complete a screening of lethality or engage in narrative dialogues with clients about suicide.

Hypothesis three stated that there would be a statistically significant positive relationship between clinical experiences and suicide assessment behaviors. This hypothesis was not supported by the results. More specifically, the structure coefficient for clinical experience with suicide ($r_s = -.087$) suggests no relationship exists with suicide assessment behaviors.

Finally, hypothesis four stated that there would be a statistically significant positive relationship between personal experiences with suicide and suicide assessment behaviors. This hypothesis was partially supported by the results. Specifically, structure coefficients revealed a positive relationship between personal experiences with suicide ($r_s = -.979$) and lethality screening ($r_s = -.438$) and narrative dialogue ($r_s = -.374$). These results indicate that individuals with more personal experiences with suicide more often complete lethality screenings and engage in narrative dialogues related to suicide with at-risk clients. However, structure coefficients revealed an inverse relationship between personal experience ($r_s = -.979$) and direct language ($r_s = .666$), suggesting that individuals who have more personal experience with suicide less often utilize direct language when discussing suicide with clients.

CHAPTER 5

DISCUSSION

This final chapter begins with a brief overview of the current study, followed by a discussion of the results. These findings are discussed with consideration of the current literature. In the subsequent subsections, the limitations and implications for clinical practice and training are addressed. Finally, recommendations for future research are provided.

Overview of the Study

Countless researchers have stated the importance of including four, core suicide assessment behaviors when working with clients to determine their level of risk: (1) completing a lethality screening, which addresses questions of suicidal intent, plan, and means, along with protective factors and previous suicide attempts, (2) utilizing direct language that conveys understanding, acceptance, and a willingness to hear clients' suicidal thoughts and behaviors, (3) engaging in narrative dialogues with clients about their suicidal histories and meaning of suicide in their own life, and (4) conducting routine re-assessments of clients' level of risk throughout the counseling process. Yet, very little if any research has examined if mental health professionals are actually engaging in these behaviors when working with potentially suicidal clients, and more importantly, how clinicians' previous experiences with suicide impact their willingness to engage in these suicide assessment behaviors when necessary.

Thus, this study was designed to examine the relationship between the four aforementioned suicide assessment behaviors and mental health clinician's previous experiences with suicide. Specifically, four research questions were proposed: (1) Is there a relationship between the variable set that includes previous experience with suicide (i.e. suicide training, clinical experiences, and personal experiences) and the variable set that includes suicide assessment behaviors (i.e. screening of lethality, use of direct language, engagement in narrative dialogue related to suicide, and routine re-assessment of risk)? (2) Is there a relationship between suicide training (i.e. all didactic training related to suicide received prior to, during, and after completion of an individual's graduate training) and counseling center clinicians' engagement in suicide assessment behaviors when working with suicidal clients? (3) Is there a relationship between previous clinical experiences with suicide (i.e. all knowledge and experience of individual and/or group psychotherapy clients who have engaged in suicidal thoughts, attempts, and/or completion of suicide) and counseling center clinicians' engagement in suicide assessment behaviors when working with suicidal clients? (4) Is there a relationship between previous personal experiences with suicide (i.e. all knowledge and experiences of family and/or friends who have engaged in suicidal thoughts, attempts, and/or completion of suicide) and counseling center clinicians' engagement in suicide assessment behaviors when working with suicidal clients?

To test the research hypotheses, 145 mental health clinicians working in university counseling centers were recruited as volunteers to complete a survey assessing their previous experiences with suicide and engagement in suicide assessment behaviors. After excluding participants who did not meet study criteria and those who did not

provide complete information, data from a 107 participants was examined. Descriptive statistics were analyzed to examine the frequency of experiences with suicide and suicide assessment behaviors. A canonical correlation analysis was conducted to examine the relationship between suicide experiences and suicide assessment behaviors. This model included a predictor variable set consisting of all previous experiences with suicide and a criterion variable set consisting of all suicide assessment behaviors.

Summary of the Results

Frequency of Suicide Experiences

Three types of suicide experience were examined in the current study: (1) suicide training, which included all didactic training related to suicide that was received prior to, during, and after completion of graduate work, (2) clinical experiences, which included all knowledge and experience with individual and/or group psychotherapy clients who have engaged in suicidal thoughts, attempts, and/or completion of suicide, and (3) personal experiences, which included all knowledge and experience with friends and/or family members who have engaged in suicidal thoughts, attempts, and/or completion of suicide.

In the current study, approximately 95% of participants endorsed having some previous training related to suicide, with an average of 33.34 total hours of suicide training reported. These results indicate that the overwhelming majority of mental health clinicians receive at least some didactic training related to suicide, which is encouraging given the empirically-supported positive impact of such training that was highlighted in chapter two (e.g. Reis & Cornell, 2008; Slaven & Kisley, 2002). Unique to the current study, participants were also asked to identify the various modalities through which

training was received. The modalities assessed were: workshops and/or seminars, continuing education sessions, sessions at professional conferences, and lectures both inside and outside of the classroom. Participants most frequently reported receiving suicide training through classroom lectures, with 86.9% of participants endorsing suicide training via class lecture. Presumably, the most frequent opportunity for classroom lectures is during an individual's graduate training; suggesting that most, if not all, of participants' reported suicide training via classroom lecture occurred as a component of individuals' graduate coursework. Given this assumption, the results of the current study suggest an increase in the 50% of individuals who receive suicide training during their graduate work reported by both Kleepsies et. al. (1993) and Dexter-Mazza and Freeman (2003). Conversely, approximately half of participants denied receiving any training related to suicide at professional conferences, lectures outside of the classroom, and continuing education sessions. The absence of such training leads one to question if there is a potential lack of availability of training through such modalities or a perception that such training is not necessary and/or a priority.

With regard to previous clinical experiences with suicide, participants reported working with an average of approximately 104 suicidal clients. This mean was elevated by a couple of participants with extensive experience (e.g. 34 years) in university counseling centers, thus the median of 14 suicidal clients more accurately represents the majority sample. Participants reported having the most experience with clients who endorsed suicidal ideation without a plan, followed by suicidal ideation with a plan, attempts, and finally completions. Although the prevailing literature has only provided statistics on client attempts and completions, these results are consistent with the

relationship currently portrayed in the existing research. That is, as severity of suicidality increases, frequency decreases (Kleespies, et. al., 1993; Rogers, et. al. 2001). Also consistent with the current literature, approximately 70% of participants in the current study reported having worked with at least one client who attempted suicide (Rogers, et. al., 2001).

Only approximately 15% of participants in the current study reported having lost a client to suicide, which is less than the 22-51% frequently reported in the current literature (e.g. Chemtob, et. al., 1988a; Chemtob, et. al., 1988b; Menninger, 1991; McAdams & Foster, 2000; Rogers, et. al., 2001). It is speculated that this decreased percentage is due to the clinical setting of the current study. Specifically, most of the existing literature that provides client suicide rates samples participants by field of study (e.g. social work, psychiatry, psychology, etc.) without consideration of the practice environment (e.g. hospital, community clinic, counseling center, etc.). Thus, it is likely that participants included in previous studies have completed clinical work in a variety of settings with varying frequencies and severity of clients presenting at-risk. The current study was limited to mental health clinicians working in university counseling centers, where the frequency and severity of at-risk clients is typically lower than alternative settings, such as hospitals.

To date, the existing literature has not assessed the frequency of mental health clinicians' personal experiences with suicide. Therefore, it is not possible to determine if the results of the current study are representative of the larger population of mental health professionals working in university counseling centers. However, the results of this survey may serve as a baseline exploration into such data. Accordingly, 86% of

participants endorsed previous personal experiences with suicide. Specifically, participants reported having an average of 4.89 friends and/or family members who engaged in suicidal thoughts and/or behaviors. Consistent with the inverse relationship highlighted through clinical experiences with suicide (i.e. frequency decreases as severity increases), participants reported having the most experience with friends and family members who endorsed suicidal ideation without a plan, and the least experience with friends and family members who completed suicide. More specifically, approximately 42 to 65% of participants reported having personal experience with family members and/or friends who endorsed suicidal ideation without a plan, while only between 16.8 and 19.6% reported having personal experience with self-inflicted death.

Interestingly, the inverse relationship between severity and frequency was not supported when examining other personal experiences with suicide. The results of the current study revealed that participants reported more experience with friends who attempted suicide than they did with friends who endorsed suicidal ideation with a plan. The same finding was true with family members. One hypothesis for the discrepancy in these findings is the often anxiety-provoking and taboo nature of suicide. Specifically, individuals may be less inclined to ask about a plan (or report a plan to others) due to the discomfort that frequently surrounds discussions of suicidality, whereas consequences of an attempt (e.g. need to seek medical attention) often force disclosure to others.

Frequency of Suicide Assessment Behaviors

Four suicide assessment behaviors were assessed in the current study: (1) completion of a lethality screening, which is composed of five questions measuring suicidal plan, intent, means, previous suicide attempts, and protective factors, (2) use of

direct language when discussing suicide, (3) engagement in narrative dialogues related to suicide, and (4) routine re-assessments of client suicidality. According to the results, participants were most likely to complete a screening of lethality, and when completing the screening were most likely to ask potentially suicidal clients if they had a plan and intent to complete suicide, followed by assessment of previous suicide attempts. Although still more frequent than the other suicide assessment behaviors, participants less frequently asked clients if they had means to complete suicide or assessed the protective factors that prevented clients from attempting to take their own life. These results suggest that although completing a lethality screening is the most common behavior completed by mental health clinicians, the screening is not always done by all mental health clinicians and is often incomplete.

The results of the current study indicated that participants less often conducted routine re-assessments of risk or engaged in narrative dialogues with clients about suicide. In fact, between 2 and 11% of participants reported never or rarely asking about suicidal thoughts or behaviors at regular intervals over the course of counseling or engaging in narrative dialogues about suicide with at risk clients. Finally, participants most infrequently reported using direct language such as “kill” or “death” when talking with clients about suicide, with only approximately 30% of participants reporting that they use direct language all of the time while almost 6% of participants denied ever using direct language with suicidal clients.

Overall, the current results suggest that suicide assessments conducted by mental health clinicians working in university counseling centers are often inadequate. As presented in chapter two, the existing literature indicates that each of four aforementioned

suicide assessment behaviors is an essential component of a thorough suicide assessment that should be completed by all mental health clinicians with all suicidal clients. At best, the results suggest that the majority of clinicians complete some of the appropriate suicide assessment behaviors most of the time. Interestingly, the results suggest that mental health clinicians most frequently engage in the behaviors that tend to be more standardized, such as asking about a suicide plan or re-assessing for risk, rather than engaging in open conversations about the impact and meaning of suicide, and using open, frank language. It is again speculated that the difficult and discomfoting nature of suicidality is to blame. More standardized questions allow mental health clinicians to obtain the information they believe to be necessary with less risk of engaging in potential anxiety-provoking conversations that may be difficult for the client and clinician alike. Unfortunately, the result is an inadequate suicide assessment. Further, clinicians' unwillingness to do so sends the message to clients that clinicians are unable to handle their suicidal thoughts and/or behaviors, and suggests that clinicians are unwilling to consider individual's unique experiences and personal meaning of suicide (Pope & Vasquez, 2007).

Relationship between Experiences with Suicide and Suicide Assessment Behaviors

A canonical correlation analysis was conducted to examine the relationship between mental health professionals' experiences with suicide and suicide assessment behaviors. In canonical analysis, two linear combinations are formed; the first form the predictor variable set and the second form the criterion variable set (Sherry & Henson, 2005). The canonical analysis yields a canonical correlation coefficient, which is designed to maximize the relationship between the two sets. Much like a Pearson Product

Moment correlation, the canonical correlation coefficient allows a researcher to explore the relationship between multiple dependent and independent variables. In the current study, the three previous suicide experiences (i.e. suicide training, clinical experiences with suicide, and personal experiences with suicide) comprised the predictor variable set and the four suicide assessment behaviors (i.e. completing a screening of lethality, utilizing direct language when discussing suicide, engaging in narrative dialogues related to suicide, and conducting routine re-assessments of suicidality) comprised the criterion variable set. The four research questions proposed in chapter one were addressed by analyzing the results of the canonical analysis.

Research Question 1

The first research question examined the relationship between the two variable sets. It was hypothesized that there would be a statistically significant relationship between the variable set that included all suicide experiences and the variable set that included all suicide assessment behaviors. This hypothesis was supported by results of the canonical analysis. Specifically, the canonical correlation analysis produced three canonical functions, with the first function reaching statistical significance and explaining 16.2% of the shared variance between the two variable sets. This is thought to be between a small and medium effect size using Cohen's (1988) conventions to interpret effect size. Despite the small to medium effect size, the current results indicate that as hypothesized there is a significant relationship between individuals' previous experiences with suicide and their engagement in suicide assessment behaviors. This finding is further supported by participants' responses to the final question of the suicide experiences subsection of the questionnaire.

As discussed in chapter three, the final question in the suicide experiences subsection of the questionnaire asked participants if they believed their previous experiences with suicide (i.e. training, clinical and/or personal experiences) have impacted their clinical work with clients, particularly in the area of suicide assessment. The overwhelming majority of participants (91%) endorsed that they believe their previous experiences with suicide significantly impact their suicide assessments with at-risk clients. When asked to explain how, the following were among the responses reported by participants: “I am more comfortable asking the difficult questions about suicide and having an open dialogue about it because of my training, personal, and clinical experiences;” “They have given me insight on how to best assess and talk about it with others;” “It has made me more aware of how to competently assess for suicide, associated risk and protective factors, and the temporal nature of suicidal ideation and attempts;” and “Because of these experiences I feel more equipped to do a more thorough suicide assessment.”

Research Question 2

The second research question examined the relationship between an individual’s previous suicide training and engagement in suicide assessment behaviors. Initial examination of the squared structure coefficients revealed that suicide training was a minor, secondary contributor to the synthetic predictor variable. With regard to the specific impact of suicide training, it was hypothesized that the more suicide training a mental health clinician had, the more he or she would engage in the four suicide assessment behaviors when working with potentially suicidal clients. However, examination of the structure coefficients did not fully support this hypothesis.

Specifically, results of the current study indicated that individuals with more suicide training reported more frequently utilizing direct language when discussing suicide with clients, but reported less frequently completing a screening of lethality or engaging in narrative dialogues about suicide with at-risk clients.

This finding seems to suggest a gap in the existing research. As discussed in chapter two, several studies have examined the impact of previous suicide training on mental health professionals. The research suggests that individuals with suicide training: are better able to identify risk and protective factors for suicide, feel more comfortable treating suicidal patients, report more confidence in assessing suicide risk, experience an improvement in the quality of their risk assessment documentation, and rate themselves as more knowledgeable about suicide and their ability to assess and manage clients at risk (McNiel, et. al., 2008; Oordt, et. al., 2009; Sockalingham, Flett, & Bergmans, 2010). Such findings lead one to assume that feelings of increased confidence and competence will lead mental health professionals to complete the behaviors necessary in a comprehensive suicide assessment. However, the findings of the current study suggest that mental health clinicians with more suicide training are only more likely to engage in one (i.e. use of direct language when discussing suicide) of the four suicide assessment behaviors necessary as part of a comprehensive suicide assessment.

Two hypotheses are presented to address the discrepancy between previous research and the current findings. First, suicide assessment is often considered the most challenging and anxiety-provoking endeavor of a clinician's career (Toth, et. al., 2007). As such, it is possible that feelings of confidence and competence are undermined by fear and discomfort when actually working with a suicidal client. Essentially, despite

reporting more perceived confidence managing suicidal clients, clinicians may not complete the necessary suicide assessment behaviors when working with at risk clients due to the discomfort, anxiety, and fear that often comes when interacting with a suicidal individual. Second, clinicians may report more confidence and comfort in their ability to assess and manage a client at risk, all while being unaware of the four behaviors necessary in a thorough suicide assessment. In essence, confidence and competence hold little value if a mental health professional has not learned the appropriate suicide assessment behaviors necessary for assessing at risk clients.

Research Question 3

The third research question examined the relationship between previous clinical experiences with suicide (i.e. all knowledge and experience of individual and/or group psychotherapy clients who have engaged in suicidal thoughts, attempts, and/or completion of suicide) and engagement in suicide assessment behaviors. It was hypothesized that mental health clinicians with more previous clinical experiences with suicide would more frequently engage in the four suicide assessment behaviors when working with potentially suicidal clients. The results did not support this hypothesis. Specifically, examination of the squared structure coefficients suggested no significant relationship between clinical experiences and suicide assessment behaviors. This finding was contrary to what would have been expected in light of the current literature and leads one to question the reasoning for such findings.

Although very few researchers have examined the impact of clinical experiences with suicide on mental health clinicians' professional work, those who have suggest that a relationship exists. Specifically, researchers who have examined the impact of the loss

of a client to suicide have indicated that afterwards clinicians: became more focused on potential cues for suicide, were more likely to seek peer and collegial consultation about high-risk cases, became more conservative in their record-keeping, increased their attention to legal liabilities, experienced increased concern for issues of death and dying, increased tendency to refer at-risk clients for hospitalization, and more frequently asked about suicidal ideation with clients (Chemtob, et. al., 1988; McAdams & Foster, 2000; Pieters, et. al., 2003). In the current study, participants were given the opportunity to explain via an open-ended question (i.e. “Do you think your previous experiences with suicide have impacted your clinical work with clients, particularly in the area of suicide assessment? If so, please explain how.”) how they believe their previous clinical experiences with suicide impact their suicide assessments with at risk clients. Numerous participant responses suggested previous clinical experiences with suicide had a significant impact on future clinical work. Specifically, multiple participants reported that their previous clinical experiences with suicide decreased fears of asking about suicide, made them more proactive with clients, and decreased hesitation to discuss suicide openly and candidly. Yet, the results of the canonical correlation analysis did not support a relationship between previous clinical experiences with suicide and suicide assessment behaviors.

It is possible that the current findings suggest a lack of knowledge among mental health professionals regarding appropriate suicide behaviors. Essentially, previous clinical experiences with suicide may in fact significantly impact mental health professionals’ future clinical work, but do not ensure that clinicians engage in the appropriate suicide assessment behaviors. As suggested by participants and in the

existing literature, mental health clinicians with more clinical experiences with suicide may be more aware of risk factors, or document more thoroughly, or even ask about suicidal ideation; but any of these behaviors alone is insufficient. In essence, the results may not indicate a significant relationship exists between clinical experiences and suicide assessment behaviors because clinicians are unaware of the four behaviors that comprise a comprehensive suicide assessment.

Research Question 4

The fourth research question examined the relationship between an individual's previous personal experiences with suicide (i.e. all knowledge and experience of friends and/or family members who have engaged in suicidal thoughts, attempts, and/or completion of suicide) and engagement in suicide assessment behaviors. Initial examination of the squared structure coefficients revealed that personal experience was the most significant contributor to the synthetic predictor variable. With regard to the specific impact of personal experiences, it was hypothesized that the more personal suicide experiences a mental health professional had, the more he or she would engage in the four suicide assessment behaviors when working with potentially suicidal clients. Examination of the structure coefficients partially supported this hypothesis. Specifically, results indicated that individuals who reported more knowledge and experience of friends and family members who have engaged in suicidal thoughts and/or behaviors more frequently completed lethality screenings and engaged in narrative dialogues about suicide with at risk clients. However, results also indicated that these same individuals were less likely to utilize direct language when discussing suicide with clients.

As this researcher hypothesized, the results of the current study indicate that mental health professionals who have more experience with friends and/or family members who have engaged in suicidal thoughts and/or behaviors are more likely to ask at risk clients about their suicidal intent, plans, means, previous attempts, and protective factors, and openly discuss suicide, its impact, and client's beliefs about it. Given that the same was not found to be true with more clinical experiences with suicide, one is left to question what might be unique about personal experiences with suicide that lead to a significant relationship with suicide assessment behaviors. Earlier in this chapter, it was suggested that a relationship did not exist between clinical experiences with suicide and suicide assessment behaviors because clinicians are unaware of the four suicide assessment behaviors deemed necessary in the current literature. With this in mind, this researcher questions if the impact of personal experiences with suicide is more significant to the mental health professional and leads a clinician to educate themselves on suicide and the necessary suicide assessment behaviors.

The results of the current study also indicated that mental health professionals with more personal experiences with suicide are less likely to use direct language when discussing suicide with clients. One possible hypothesis for this finding may be related to one of the most common myths surrounding suicide: the belief that discussing suicide may lead to increased suicide risk (Toth, et. al., 2007). In essence, clinicians may be hesitant to use words such as 'death' or 'kill' with clients for fear that doing so may increase clients' thoughts of suicide. Again, the findings of the current study suggest a unique impact of personal experiences with suicide that leaves mental health professionals' particularly hesitant to utilize direct language with at risk clients.

Limitations

A number of potential limitations should be taken into consideration when interpreting the current findings. Most notably, one should take into account the small sample size of the current study. According to Sherry and Henson (2005), the method of analysis used in the current study (i.e. canonical correlation analysis) is particularly influenced by participant sample size. They suggest that it is possible with large enough sample sizes to get statistically significant outcomes for small, unimportant effects (Sherry & Henson, 2005). Similarly, a small sample size may fail to produce significant relationships that might actually exist. However, it is important to note that although small, the sample size of the current study exceeds the guideline of 10 observations per variable frequently defined in the literature (Hair, et. al., 1998). Specifically, the seven variables resulted in a 15-to-1 ratio of observations to variables, suggesting that the sample size “is not felt to affect the estimates of sampling error markedly and thus should have no impact on the statistical significance of the results (p. 14; Hair, et. al., 1998).”

The generalizability of the current study should also be considered. Although the questionnaire was conducted online to broaden the sample of participants, invitations to participate were only distributed to mental health clinicians working in university counseling centers located nationally. Thus, all participants were geographically limited to the United States. In addition, completion of the survey required an individual have access to a computer and internet capabilities. Finally, it could be argued that there may be baseline differences in those participants who chose to complete the study as compared to those who did not.

The possibility of measurement error is another potential limitation of the current study. According to Heppner, Wampold, and Kivlinghan (2007), self-report instruments possess an inherent limitation due to the influence of response bias, social desirability, and a lack of corroboration from other studies. The influence of social desirability is of particular concern on the suicide assessment behaviors subsection of the questionnaire, as all participants are mental health clinicians often expected to engage in best practice methods with their clients. Therefore, participants may have been hesitant to deny engaging in appropriate suicide assessment behaviors. The open-ended nature of questions may have also contributed to potential measurement error. Specifically, all items measuring participants' previous experiences with suicide (i.e. suicide training, clinical experiences, and personal experiences) allowed an open-response format in which participants reported a total number of hours and individuals, respectively. Although this format was designed to capture the broad range of potential individual experiences, it may have also produced potential errors in reporting.

A final potential limitation of the current study is the lack of psychometric properties related to the survey instrument. Specifically, the questionnaire used to measure previous experiences with suicide and suicide assessment behaviors was created by the researcher for the purposes of this study. As such, no information exists on the validity or reliability of the measure. However, in an effort to minimize potential limitations related to defining and measuring constructs, the researcher ensured all questions were designed to directly measure behaviors.

Implications

The results of the current study suggest that a relationship exists between mental health clinicians' previous experiences with suicide and their suicide assessment behaviors when working with at risk students in university counseling centers. Specifically, results suggest that mental health professionals' knowledge and experience with friends and/or family members who have engaged in suicidal thoughts and/or behaviors is most significantly related to suicide assessment behaviors, followed by clinicians' previous suicide training. These results have important implications for clinical practice, education and training, and future research.

Clinical Practice

The results of this study in context with past research have substantial implications for mental health professionals working in university counseling centers. According to the current literature, approximately 97% of mental health clinicians will manage at least one suicidal client (Kleepsies, et. al., 1993). Thus, it is safe to assume that most if not all clinicians working in university counseling centers will work with students who present at risk. With this in mind, it seems crucial that mental health clinicians are not only aware of the behaviors necessary for a comprehensive suicide assessment, but completing them with all suicidal clients. Yet, the results of the current study indicate that the vast majority of mental health clinicians working in university counseling centers often fail to complete all of the behaviors defined as essential in the existing literature. Thus, the current study may serve as an educational foundation for teaching mental health professionals the four essential behaviors necessary when conducting comprehensive suicide assessments with potentially suicidal clients. In addition, the findings of the

current study can serve to increase knowledge and awareness of the impact of an individual's experiences with suicide on his/her professional work in order to inevitably enhance suicide assessments, and overall clinical practice.

Education and Training

The findings of the current study suggest that approximately 5% of mental health clinicians working in college counseling centers have never had any previous training related to suicide. Moreover, approximately half of participants denied receiving any suicide training during professional conferences, continuing education sessions, or lectures outside of the classroom. Yet, the results of the current study also indicate that there is a relationship between suicide training and engagement in suicide assessment behaviors.

The current study indicated that the most common modality for training related to suicide is classroom lecture. It seems reasonable to presume that most classroom lectures occur as part of an individual's graduate training. As such, it is essential that graduate programs are intentional about the education they provide regarding suicide and the mental health clinician's role in suicide assessment. As previously discussed, it is plausible that mental health clinicians who denied completing one or all of the suicide assessment behaviors did so because they were unaware of the necessary components essential to a suicide assessment. As the primary modality for suicide training, graduate programs have the platform to begin teaching all mental health clinicians the four behaviors that make up a comprehensive suicide assessment and encouraging trainees to begin exploring the impact of their own experiences with suicide on their clinical work.

The findings of the current study also indicated that approximately half of mental health clinicians have not received suicide training at professional conferences, continuing education sessions, or lectures outside of the classroom. Earlier in this chapter it was suggested that this might be due to a lack of available training opportunities via these modalities or a perception that such training is not needed. Regardless, as the most challenging clinical endeavor of an individual's career with potentially life-threatening consequences, it seems appropriate to assert that such training is absolutely critical. As a result, education and training programs must emphasize the importance of such training and make suicide training opportunities readily available.

Future Research

Given the limited research that examines the relationship between previous experiences with suicide and suicide assessment, the current study was largely exploratory. However, the findings of the current study may serve as a foundation for future research and have significant implications that can strengthen future research in the area of suicide experience and assessment. Specifically, this study provided the first detailed look at mental health professionals' previous experiences with suicide and provided preliminary information about how often they complete appropriate suicide assessment behaviors when working with potentially suicidal clients. Such information may serve as a baseline for future researchers hoping to better understand the availability of suicide training and the nature of individuals' previous experiences with suicide. Most notably, the current study was one of the first to examine the relationship between individuals' previous suicide experiences and their engagement in suicide assessment

behaviors. Hopefully, this study serves as a model for future researchers continuing to examine this relationship.

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Appendix A: SUICIDE EXPERIENCE AND ASSESSMENT QUESTIONNAIRE

Suicide Experience and Assessment Questionnaire

1. Have you ever completed clinical work in a university counseling center?

- Yes
- No

2. During your clinical work in a university counseling center, have you ever worked in an individual session (e.g. initial consultation/screening, individual psychotherapy, or career/academic counseling) with a client who endorsed suicidal thoughts and/or behaviors?

- Yes
- No

3. Please indicate the amount of time you have spent completing clinical work in a university counseling center.

- a. Total Months Employed/ In Training:
- b. Start Date:
- c. End Date:

4. Please consider your clinical work with those clients who endorsed suicidal thoughts or behaviors when answering the following questions. When working with clients who have endorsed suicidal ideation and/or behaviors, I have...

	Never	Rarely	Sometimes	Often	All of the Time
1. Asked if the client had a plan to complete suicide (e.g. "Have you thought about how you would kill yourself?")	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2. Asked the client their level of intention to engage in suicidal behaviors	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3. Asked if the client had means (e.g. access to a gun) to complete suicide	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4. Asked the client reasons (i.e. protective factors) that stop him/her from completing suicide (e.g. leaving loved ones behind, responsibilities not completed at work, etc.)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
5. Asked the client about any past suicide attempts	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

6. Used language such as "hurt" and "harm" when discussing suicide	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
7. Used language such as "kill" and "death" when discussing suicide	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
8. Engaged in narrative dialogue with clients about suicide (e.g. open conversation about their thoughts on suicide, the impact of suicide, what suicide means to them, etc.)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
9. Asked about suicidal ideation and/or engagement in suicidal behaviors after the initial interview/session.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
10. Asked about suicidal ideation and/or engagement in suicidal behaviors at regular intervals over the course of counseling.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

5. Please consider all of your previous personal experiences with friends and/or family members when answering the following questions.

- a. Number of family members who endorsed suicidal ideation without a plan:
- b. Number of family members who endorsed suicidal ideation with a plan:
- c. Number of family members who attempted suicide:
- d. Number of family members who completed suicide:
- e. Number of friends who endorsed suicidal ideation without a plan:
- f. Number of friends who endorsed suicidal ideation with a plan:
- g. Number of friends who attempted suicide:
- h. Number of friends who completed suicide:

6. Please consider all the clients whom you have worked with in individual and/or group psychotherapy when answering the following questions.

- a. Number of clients who endorsed suicidal ideation without a plan:
- b. Number of clients who endorsed suicidal ideation with a plan:
- c. Number of clients who attempted suicide:
- d. Number of clients who completed suicide:

7. Please consider all training that you have received related to suicide prior to, during, and after completion of your graduate work. In each of the categories below, please indicate **the total number of hours** in training and/or coursework related to suicide.

- a. Session at a professional conference (e.g. APA, ACA):
- b. Lecture (outside of classroom):
- c. Workshop and/or training seminar:
- d. Classroom lecture:
- e. Continuing Education session:

8. Do you think that your previous experiences with suicide (e.g. training, clinical and/or personal experiences) have impacted your clinical work with clients, particularly in the area of suicide assessment?

- Yes (If so, please explain how below) _____
- No

Demographic Questionnaire

Please answer the following questions about yourself.

1. Gender

- Male
- Female
- Transgender
- Another Gender Identity _____

2. Age

- 18-24
- 25-34
- 35-44
- 45-54
- 55-64
- 65+

3. Please indicate the race with which you identify.

- Caucasian
- Asian/Pacific Islander
- Native American
- African American
- Latino/a
- Biracial
- Other _____

4. Please indicate the type of degree you are working toward or have earned.

- PhD
- PsyD
- MFT
- MSW
- MED
- Masters in Counseling
- Other _____

5. Please indicate your program of study.

- Clinical Psychology
- Counseling Psychology
- Counselor Education
- Social Work
- Marriage and Family Therapy
- Other _____

6. Please check all previous degrees earned and include area of study.

- Bachelor's Degree _____
- Master's Degree _____
- Specialist Degree _____
- Doctoral Degree _____

7. Do you want to submit your data?

- Yes
- No, please discard my data.

Appendix B: CALL FOR RESEARCH PARTICIPATION

Hello! My name is Lacy Currie, and I am a doctoral student in the counseling psychology program at the University of Georgia. I am currently conducting a research study titled “The Relationship Between Experience with Suicide and Suicide Assessment in University Counseling Centers” under the guidance of Dr. Linda Campbell. I am contacting you to request your participation. The study aims to examine the relationship between university counseling center clinicians’ previous experiences with suicide and their engagement in suicide assessment behaviors when working with clients. It is our hope that with this study, we can contribute to the training of clinicians in college counseling centers, and ultimately, decrease the number of lives lost to suicide. Your participation is essential to achieving this goal, so we hope that you will take part in our study.

In order to participate, you must be over the age of 18, have completed clinical work (i.e. either as an employee or trainee) in a university counseling center, and have worked in an individual session with at least one client who endorsed suicidal thoughts and/or behaviors. The survey takes approximately 10-20 minutes to complete. All participants will be redirected to another link at the end of the survey for an opportunity to enter a drawing to win 1 of 3 \$20 Amazon.com gift cards. Participants who chose not to complete the survey will also be automatically redirected to this link. If you would like to participate in our study, please click on the link below and you will be directed to the online survey:

https://ugeorgia.qualtrics.com/SE/?SID=SV_ehC7nadi3AoqHCR

Thank you very much in advance for your time. Please feel free to pass on this link to other people who might be eligible. If you have any questions about this study, please feel free to contact me at curriel@uga.edu or Dr. Linda Campbell at lcampbel@uga.edu. This research has been approved by the University of Georgia Institutional Review Board (IRB# 2013-10610-0).

Sincerely,

Lacy Currie, M.S.
Linda Campbell, Ph.D.
Counseling Psychology
University of Georgia
Athens, Georgia 30602

Appendix C: INFORMED CONSENT

I agree to participate in a research study entitled "The Relationship Between Experience with Suicide and Suicide Assessment in University Counseling Centers" conducted by Lacy Currie from the Department of Counseling and Human Development Services under the direction of Linda Campbell, Ph.D., Department of Counseling and Human Development Services, University of Georgia. I understand that my participation is voluntary. I can refuse to participate or stop taking part at anytime without giving any reason and without penalty or loss of benefits to which I am otherwise entitled.

Purpose: This study is designed to explore the relationship between university counseling center clinicians' previous experience with suicide and suicide assessment. The time to complete this survey is estimated to be 10-20 minutes.

Taking part is voluntary: Taking part in this study is completely voluntary. I acknowledge that since my responses are not individually identifiable, it will be impossible to withdraw my data once I submit my responses.

Participation is confidential: Any individually identifiable information obtained during this study will be kept private. Please note that Internet communications are insecure and there is a limit to the confidentiality that can be guaranteed due to the technology itself. However, all IP addresses have been masked from the researchers by the survey host. The survey host will encrypt the data. In the event of a security breach, all participant answers would be uninterpretable. Only the primary investigators and the survey host site will have access to the records. Records will not be released unless required by law.

Risks and Benefits: Potential risks to me may include slight psychological discomfort when answering questions that may be sensitive in nature. I understand that I will be able to skip any question that I choose not to answer. My participation has the potential to raise my own awareness about the impact of my experiences with suicide and engagement in suicide assessment behaviors. My responses will also contribute to the existing body of literature designed to enhance the training of clinicians in university counseling centers.

Incentives: I have the opportunity to participate in drawings for a \$20 Amazon.com gift card. At the conclusion of the current study, a drawing in which every entry has an equal chance of receiving the incentive will take place to reveal the three winners of the \$20 gift cards. Participation is not required to enter the drawing. If I am

interested in participating in the drawing, I agree to submit my email address, which will be separated from my responses. Winners will be contacted via email with a link to access the gift card.

Questions: If I have any questions or concerns now or during the course of the project, I may contact Lacy Currie at curriel@uga.edu or Dr. Campbell or by telephone at 706-542-8508. If I experience any psychological distress during or after completing this survey I can also contact The National Suicide Prevention Lifeline, a 24/7-suicide hotline, by telephone at 1-800-273-8255 to talk to a trained counselor near me.

By clicking yes I attest that I have read and understand the informed consent terms and agree to participate in this study.

- I agree to participate.
- I do not agree to participate.