University of New Mexico **UNM Digital Repository**

Individual, Family, and Community Education **ETDs**

Education ETDs

9-1-2015

Suicide Assessment Training in Counselor Education

Neil Rigsbee

Follow this and additional works at: https://digitalrepository.unm.edu/educ_ifce_etds



Part of the Education Commons

Recommended Citation

Rigsbee, Neil. "Suicide Assessment Training in Counselor Education." (2015). https://digitalrepository.unm.edu/educ ifce etds/4

This Dissertation is brought to you for free and open access by the Education ETDs at UNM Digital Repository. It has been accepted for inclusion in Individual, Family, and Community Education ETDs by an authorized administrator of UNM Digital Repository. For more information, please contact disc@unm.edu.

Neil P. Rigsbee
Candidate
Individual, Family, and Community Education Department
This dissertation is approved, and it is acceptable in quality and form for publication:
Approved by the Dissertation Committee:
Dr. Kristopher M. Goodrich, Chairperson
Dr. Matthew E. Lemberger-Truelove
Dr. Martin H. Jones
Dr. Marjori Krebs

SUICIDE ASSESSMENT TRAINING IN COUNSELOR EDUCATION

BY

NEIL P. RIGSBEE

B.A., Psychology, College of Santa Fe, 2005 M.A., Counseling, Webster University, 2008

DISSERTATION

Submitted in Partial Fulfillment of the Requirements for the Degree of **Doctor of Philosophy**

Counselor Education

The University of New Mexico Albuquerque, New Mexico

July, 2015

SUICIDE ASSESSMENT TRAINING IN COUNSELOR EDUCATION

By

Neil P. Rigsbee

B.A., PSYCHOLOGY, COLLEGE OF SANTA FE, 2005 M.A., COUNSELING, WEBSTER UNIVERSITY, 2008 PH.D., COUNSELOR EDUCATION, UNIVERSITY OF NEW MEXICO, 2015

ABSTRACT

This dissertation examines the empirical literature regarding assessment and intervention of suicide, specifically regarding training counseling students to assess and intervene with potentially suicidal individuals. The author developed an online suicide assessment and intervention training module to train counseling students how to assess and intervene with suicidal clients. The author examined the effectiveness of the training module using an experimental randomized controlled pre-post design. Participants were assessed on their suicide intervention skills using the Suicide Intervention Response Inventory-2 (Neimeyer & Bonnelle, 1997), and suicide assessment abilities, abilities to determine level of suicide risk, and abilities to determine appropriate clinical actions using the Suicide Assessment Checklist (Rogers & Alexander, 1994).

Results partially supported for the effectiveness of this method for improving participants' suicide intervention skills. Results indicated a modest improvement in posttest scores in suicide intervention skills, but not more so than the control. Results were inconclusive for the effectiveness of this method for improving participants' abilities for assessment, determining level of risk, and determining clinical action.

TABLE OF CONTENTS

LIST OF FIGURES	viii
LIST OF TABLES	ix
CHAPTER ONE: STATEMENT OF THE PROBLEM	1
Introduction	1
Research Question and Null Hypotheses	6
Assumptions of the Study	8
CHAPTER TWO: LITERATURE REVIEW	9
Prevalence of the Problem	9
Impact on Counselors	10
Risk Factors	13
Gender	14
Age	14
Alcohol/Substance Abuse	15
Hopelessness and Helplessness	15
Mental Illness	15
Impulsivity	16
Previous Attempts	16
Race/Ethnicity	17
Sexual Orientation	18
Demographic Factors	18
Warning Signs	19
Level of Risk	20

Protective Factors	22
Intervention	23
Step One: Assess lethality	24
Step Two: Establish Rapport	24
Step Three: Listen to the Story	26
Step Four: Manage the Feelings	27
Step Five: Explore Alternatives	28
Step Six: Use Behavioral Strategies	30
Step Seven: Follow-up	30
Suicide Assessment	31
Suicide Assessment Training	36
Competencies	36
Evaluation	41
Counseling Pedagogy	43
CHAPTER THREE: METHODOLOGY	49
Design	49
Variables of Interest	49
Additional Variables of Interest	49
Participants	50
Demographics of Total Sample	51
Comparison of Demographics by Group	52
Description of the Treatment	52
Treatment Group	53

53
54
54
54
55
55
56
57
58
58
59
59
59
60
60
60
60
61
63
63
63
63
63

Results of Statistical Analyses	64
Dependent Variable One	64
Dependent Variable Two	65
Dependent Variable Three	66
Dependent variable Four	67
CHAPTER FIVE: DISCUSSION	74
Limitations	82
Strengths	84
Implications for Researchers and Educators	85
Conclusion	88
References	90
APPENDIX A: Definition of Terms	113
APPENDIX B: Request for Permission for SIRI-2	114
APPENDIX C: Request for Permission to Use Video	115
APPENDIX D: Additional Request to Use Video	116
APPENDIX E: SIRI-2	117
APPENDIX F: SAC	123
APPENDIX G: Clinical Vignette 1	125
	125
APPENDIX H: Clinical Vignette 2	

LIST OF FIGURES

Figure 1: Ability to determine level of suicide risk	72
Figure 2: Ability to determine engraprists elimical action	72
Figure 2: Ability to determine appropriate clinical action	/3

LIST OF TABLES

Table 1: Race/Ethnicity	69
Table 2: Counseling Concentration	69
Table 3: Demographics by Group	70
Table 4: Within Group Differences DV1	71
Table 5: Means and Standard Deviations DV2	71

CHAPTER ONE: STATEMENT OF THE PROBLEM

Introduction

Suicide is a national epidemic in the United States. It was the tenth overall leading cause of death in the US in 2010 (Hoyert & Xu, 2012; McIntosh & Drapeau, 2012). Specifically, suicide was the fourth leading cause of death among preadolescents ages 5 to 14 years old; the third leading cause of death among adolescents ages 15 to 24 years old; and the tenth for adults ages 25 years old and older. There were 38,364 total deaths from suicide in 2010. This translates into an average of one death by suicide every 13.7 seconds (McIntosh & Drapeau, 2012). The total number of deaths is likely to be under-reported due to misidentification of the cause of death, especially among young children (Wise & Spangler, 1997).

Due to the high prevalence of suicide, mental health counselors frequently encounter suicidal clients in their daily clinical practice (Wozney, 2005). Counselors' abilities to accurately assess suicide risk is critical, because of the likelihood of encountering suicidal clients (Juhnke, 1994; McAdams & Foster, 2000). Suicide is a serious and complicated issue that requires specific coursework and training before counseling students begin working with clients (Schmitz et al., 2012; Wozney, 2005).

The American Association of Suicidology (AAS) Task Force (Smhmitz et al., 2012) made the following conclusion regarding the current status of suicide risk assessment training: "Competence in the assessment of suicidality is an essential clinical skill that has been consistently overlooked and dismissed by the colleges, universities, clinical training sites, and licensing bodies that prepare mental health professionals" (Smhmitz et al., 2012, p. 294). The AAS made six recommendations addressing the major gaps in training of mental

health professionals in the U.S. Two of their recommendations have particular relevance to the current state of suicide assessment and intervention training in counselor education. The first recommendation made by the task force was: "Accrediting organizations must include suicide-specific education and skill acquisition as part of their requirements for postbaccalaureate degree program accreditation" (Smhmitz et al., 2012, p. 298). The Council for Accreditation of Counseling and Related Educational Programs (CACREP) 2009 Standards state that counseling students acquire and demonstrate knowledge and skill in assessing and managing client suicide risk (CACREP, 2009). Specifically, CACREP Standard D4 for Addiction Counseling, Marriage, Couple and Family Counseling, School Counseling, Student Affairs and College Counseling, and Standard D6 for Clinical Mental Health Counseling states "Demonstrates the ability to use procedures for assessing and managing suicide risk" (CACREP, 2009). In addition, CACREP 2016 Standards state, "suicide prevention models and strategies" (Section 2.5.1.) must be covered in the Helping Relationships course. Finally, the 2016 CACREP standards state, "procedures for assessing risk of aggression or danger to others, self-inflicted harm, or suicide" (Section 2.7.c) must be covered in Assessment and Testing courses.

Despite the need for specific training, only two-percent of CACREP-accredited counseling programs offered courses in suicide assessment and intervention in 2005 (Wozny, 2005). In a study conducted just prior to the implementation of the 2009 CACREP Standards that examined crisis-counseling training among 52 CACREP-accredited counselor education programs (about one quarter of CACREP-accredited counselor education programs), 24 programs had a crisis-counseling course (Barrio Minton & Pease-Carter, 2011). The remaining 28 programs included elements of crisis counseling integrated with other courses,

such as helping relationships, professional identity, group work, and assessment. Of the 24 programs with a dedicated crisis-counseling course, 16 were elective courses, four required it for all students, and four were required of only some students. In addition, the study examined the course syllabi of the crisis counseling courses. A total of 12 course syllabi were examined for course objectives using content analysis. A total of 93 unique course objectives were identified. Seven of the 12 syllabi addressed developing suicide intervention skills (Barrio Minton & Pease-Carter, 2011).

The second recommendation made by the AAS Task Force that has particular relevance to counselor education concerns the state of suicide assessment and intervention training: "Individuals without appropriate graduate or professional training and supervised experience should not be entrusted with the assessment and management of suicidal patients" (Schmitz et al., 2012, p. 300). A number of studies regarding counselors' abilities to assess suicide risk indicate that an alarming number of counselors may not be adequately trained in assessing for suicide risk (e.g. Barrio Minton & Pease-Carter, 2011; King, Price, Telljohann, & Wahl, 1999; Wachter, 2006). For example, Wachter (2006) found approximately 30 percent of school counselors had no previous training in suicide assessment or intervention. In addition, King et al. (1999) found that 38 percent of school counselors thought they could identify a student at risk for suicide. This is especially concerning because school counselors are frequently involved in potentially high-risk situations (Wachter, 2006).

Lack of specific suicide assessment and management training is not limited to the counseling profession. Other mental health professions lack specific suicide assessment and management training in their training programs (Schmitz et al., 2012). Six-percent of Commission on Accreditation for Marriage and Family Therapy Education (COAMFTE)-

accredited Marriage and Family Therapy programs had a specific course in suicide assessment and intervention (Wozney, 2005). In a national sample of social workers, less than 25-percent reported having any training in suicide prevention (Feldman & Freedenthal, 2006). Only 50-percent of graduate psychology trainees had received didactic suicide training in their training programs (Dexter-Mazza & Freeman, 2003). Conversely, in a national survey of psychiatric training programs, 94-percent of the training directors indicated their programs include some type of suicide assessment and intervention training (Schmitz et al., 2012).

In an effort to address the lack of evidenced-based competency goals in graduate psychology programs, Cramer, Johnson, McLaughlin, Rausch, and Conroy (2013) proposed ten literature-based competencies for suicide assessment. The ten competencies proposed are distilled from the multitude of competencies in the professional literature (i.e. AAS, 2010; Joiner, 2005; Kleespies, Hough, & Romeo, 2009; Kleespies, Penk, & Forsyth, 1993; Rudd, 2006). This empirically-based list of competencies can be used as the standard to which mental health graduate training programs are held in training their students in suicide assessment (Cramer at al., 2013). The ten core competencies are as follows:

(a) know and manage your attitude and reactions toward suicide when with a client; (b) develop and maintain a collaborative, empathetic stance toward the client; (c) know and elicit evidence-based risk and protective factors; (d) focus on current plan and intent of suicidal ideation; (e) determine level of risk; (f) develop and enact a collaborative evidence-based treatment plan; (g) notify and involve other persons; (h) document risk, plan, and reasoning for clinical decisions; (i) know the law concerning suicide; and (j) engage in debriefing and self-care (Cramer et al., 2013, p. 3).

One method of training that has been used in teaching counseling students suicide assessment is through instructional video (Juhnke, 1992; 1994). Video training has been suggested as a useful method since 1970 (Berger, 1970) and has been used in various mental health training programs to teach different clinical skills (Iverson, 1986). Video training, specifically self-instructional video programs, has been used in training medical students suicide assessment for over three decades (Golden, 1978). Juhnke (1992, 1994) demonstrated the effectiveness of self-instructional video programs in teaching suicide assessment skills to counselor education students.

More recently, with the advent of high-speed Internet and Web-based courseware (Jerry & Collins, 2005), many counselor education courses are now Web-based or Webenhanced (Blackmore, Tantam, & van Deurzen, 2008; Jerry & Collins, 2005). With the increased use of Web-based technology in many counselor education programs, the practicality of delivering suicide assessment and intervention training online needs to be examined. Many technologies that have a proven track record for effectively training counselor education students, such as video training and self-instructional video (e.g. Eisenberg & Delaney, 1970; Peters, Cormier, & Cormier, 1978; Junke, 1994; Stone & Vance, 1976; Stone, Wolraich, & Hillerbrand, 1988) can be readily adapted for use in an online classroom environment (Jerry & Collins, 2005). The present study used a commercially produced video vignette of a clinician working with a client at risk for suicide (O'Donovan, Casey, van der Veen, & Boschen, 2013); study participants accessed the video online. Furthermore, well-validated measures of counseling skills can be purchased for online administration (i.e. Pearson Q-global and Q-interactive) or be adapted for online administration using readily available software, such as Opinio (Version 6.6.1). For the

purpose of this study, the Suicide Intervention Response Inventory-2 (SIRI-2; Neimeyer & Bonnelle, 1997) was adapted for online administration. In addition, the Suicide Assessment Checklist (SAC; Rogers & Alexander, 1994) was adapted for online administration.

The purpose of this investigation was to evaluate the effectiveness of a standardized suicide assessment and intervention training module with master's level counselor education students enrolled in a crisis counseling course within a CACREP-accredited counselor education program. Of major concern was students' abilities to properly intervene with suicidal clients, accurately assess for suicide risk, determine level of risk, and determine appropriate clinical action for suicidal clients. The current study was based in part on Juhnke's (1994) study of teaching suicide risk assessment to master's level counselor education students through the use of self-instructional video training. In addition, this study was also based on Neimeyer and Bonnelle's (1997) study of measuring the effectiveness of suicide intervention training.

Research Question and Null Hypotheses

The research question this study aimed to investigate is as follows: Is an online suicide assessment and intervention training module an effective method for teaching suicide assessment and intervention skills to counseling students? Specifically, this study aimed to investigate whether the online suicide assessment and intervention training module (OSAITM) was an effective method of training counseling students to effectively assess suicide risk and intervene with suicidal clients. The hypotheses that were tested in this study covered the following competencies of suicide risk assessment, as proposed by Cramer et al. (2013): suicide intervention skills (competencies one and two), suicide assessment ability

(competencies three and four), suicide risk level determination (competency five), and determining clinical intervention (competency six).

The following hypotheses were tested:

Null hypothesis 1: Participants in the treatment group will demonstrate no difference in suicide intervention skills with suicidal clients than the control group, as measured by their scores on the SIRI-2.

Null hypothesis 2: Participants in the treatment group will demonstrate no difference in suicide risk assessment ability than the control group, as measured by their scores on the SAC.

Null hypothesis 3: Participants in the treatment group will demonstrate no difference in ability to determine level of suicide risk, as measured by their scores on the SAC.

Null hypothesis 4: Participants in the treatment group will demonstrate no difference in ability to determine appropriate clinical action with a suicidal client than the control group, as measured by their scores on the SAC.

Null hypothesis 5: Participants in the treatment group will demonstrate no difference in suicide intervention skills with a suicidal client as measured by their scores on the SIRI-2 from pretest to posttest.

Null hypothesis 6: Participants in the treatment group will demonstrate no difference in suicide risk assessment ability, as measured by their scores on the SAC from pretest to posttest.

Null hypothesis 7: Participants in the treatment group will demonstrate no difference in ability to determine level of suicide risk, as measured by their scores on the SAC from pretest to posttest.

Null hypothesis 8: Participants in the treatment group will demonstrate no difference in ability to determine appropriate clinical action with a suicidal client, as measured by their scores on the SAC from pretest to posttest.

Assumptions of the Study

For the purposes of the current study, the following assumptions were made:

- 1. The SIRI-2 is an accurate measure of counselor suicide intervention skills.
- 2. The SAC is an accurate measure of counselor education students' ability to identify clients' suicide risk factors, warning signs, and protective factors.
- 3. The SAC is an accurate measure of counselor education students' abilities to identify clients' level of suicide risk.
- 4. The SAC is an accurate measure of counselor education students' ability to determine appropriate clinical action with clients at risk for suicide.
- 5. Suicide assessment and intervention skills are critical to the process of assessing and treating individuals at risk for suicide.
- 6. Counselor education students will likely work with clients at risk for suicide.
- 7. Training in suicide assessment and intervention skills are critical competencies for counselor education students who are likely to work with clients at risk for suicide.
- 8. All participants in this study will participate willingly and honestly.

CHAPTER TWO: LITERATURE REVIEW

Prevalence of the Problem

Suicide ranks as one of the top ten causes of death for nearly every age group in the United States (Hoyert & Xu, 2012; McIntosh & Drapeau, 2012). Data for 2011 indicate that suicide is among the leading causes of deaths for people between the ages of 5 and 65 years. Suicide is the fourth leading cause of death for children ages 5 to 14. There were 281 children who died by suicide in 2011; this is at a rate of 0.7 per 100,000 children (Hoyert & Xu, 2012). The actual number of suicides among children is likely to be higher due to misidentification of the cause of death (Wise & Spangler, 1997). Suicide was the second leading cause of death among adolescents and young adults. There were 4,688 deaths by suicide for ages 15 to 25 years old in 2011; rate of 10.7 per 100,000 people. For people age 25 to 45 years old, suicide was the fourth leading cause of death. There were 12,269 deaths by suicide; rate of 14.9 deaths per 100,000 people. For people ages 45 to 64 years old, suicide was the eighth leading cause of death in 2011. A total of 14,852 people died by suicide; rate of 17.9 deaths per 100,000 people (Hoyert & Xu, 2012).

Due to the high rates of suicide counselors are likely to encounter suicidal clients in their daily clinical practice (Wozney, 2005). A study on the frequency and impact of client suicide on counselors and counseling students concluded that 24% of counselors could expect to lose a client to suicide (McAdams & Foster, 2000). The study included a national sample of 376 counselors that consisted of licensed counselors, NBCC certified counselors, and counselor education students. Of the 376 participants, 23.7% indicated they had lost a client to suicide. Of the participants within this group, 23.6% were counseling students and 76.4% were counselors in professional practice at the time of the suicide (McAdams &

Foster, 2000). These rates are similar to both psychologists and social workers. Twenty-two to 29% of psychologists in two national samples reported losing a client to suicide (Chemtob, Hamada, Bauer, Torigoe, & Kinney, 1988; Pope & Tabachnick, 1993) and 33% of social workers in a national sample reported experiencing a client suicide (Jacobson, Ting, Sanders, & Harrington, 2004). Psychiatrists experience the greatest number of client suicides among all of the mental health professionals, with a rate of 51% (Chemtob, Hamada, Bauer, Kinney, & Torigoe, 1988).

Impact on Counselors

Due to the high prevalence of and seriousness of suicide in the US, counselors need to be adequately trained and prepared to assess for and intervene with suicidal clients. As previously stated, in order to accomplish this level of training, counselor education programs need to increase their attention to training their students to assess and intervene with suicidal clients. Counseling students should be thoroughly trained before entering into the clinical portion of their training. At a minimum, counseling students need to be aware of the prevalence of suicide in the US population, know the risk factors and warning signs in general and the specifics for the major US ethnic and cultural groups, know basic intervention strategies, as well the applicable ethical guidelines and laws, and specific procedures for handling suicidal clients in their agencies (Schmitz et al., 2012). This latter point would begin as soon as they start at their practicum site, whether it is their school's practicum clinic, or an agency in their community. Students may or may not be exposed to a client in suicidal crises during their practicum and internship experiences, so this cannot be relied on as the time for them to receive training in suicide assessment and intervention. Moreover, students should not be faced with having to work with a suicidal client without

adequate prior training. This carries major ethical and developmental ramifications for the student. The American Counseling Association (ACA) Code of Ethics (2014; section C.2.a.) states that counselors only provide services to clients with issues for which they are adequately trained. Given the high prevalence of suicide across the US, it is extremely risky and unwise for students untrained in suicide assessment and intervention to provide services to clients. From a developmental standpoint, the impact of a client suicide on a counseling student could be highly detrimental. Client suicide has been shown to have serious and farreaching consequences on licensed counselors and counseling students alike (McAdams & Foster, 2000).

Client suicide is a common and devastating issue. Its frequency and impact is great enough to be referred to as an "occupational hazard" (Chemtob, Bauer, Hamada, Pelowski, & Muraoka, 1989, p. 294) for mental health professionals. Client suicide has potentially serious and negative consequences on mental health professionals. Surveys of mental health professionals in national samples across the fields of psychiatry, psychology, social work, and counseling have indicated that professionals who provide direct client care are adversely affected from the loss of a client to suicide (Chemtob, Hamada, Bauer, Kinney et al., 1988; Chemtob, Hamada, Bauer, Torigoe et al., 1988; Chemtob et al., 1989; Jacobson et al., 2004; McAdams & Foster, 2000).

Client suicide affects mental health professionals both professionally and personally. Effects of client suicide on mental health professionals from all disciplines include guilt, anger, loss of self-esteem, and intrusive thoughts (Chemtob, Hamada, Bauer, Kinney et al., 1988; Chemtob, Hamada, Bauer, Torigoe et al., 1988; Chemtob et al., 1989; Jacobson et al., 2004; McAdams & Foster, 2000). Many of the clinicians who had experienced client suicide

had clinical levels of distress following a client's suicide as indicated by scores on the Impact of Events Scale (IES; Horowitz, Wilner, & Alvarez, 1979; Zilberg, Weiss, & Horowitz, 1982) that was completed by survey participants who had lost a client to suicide (Chemtob, Hamada, Bauer, Kinney et al., 1988; Chemtob, Hamada, Bauer, Torigoe et al., 1988; Chemtob et al., 1989; Jacobson et al., 2004; McAdams & Foster, 2000).

The IES is a self-report instrument designed to measure subjective distress in people following a serious life event. It is a 15-item scale that measures two major response sets following a stressful life event: intrusion and avoidance. The scale yields a total scale score, and scores for the Intrusion and Avoidance subscales. Evidence of reliability was demonstrated by split half reliability score for the total scale of r = 0.86; test–retest reliability was 0.87 for the total stress score, 0.89 for the Intrusion subscale, and 0.79 for the Avoidance subscale (Horowitz et al., 1979). Evidence of validity was demonstrated by internal consistency of the subscales. Cronbach's Alpha for the Intrusion subscale was 0.78 and Avoidance was 0.82. Correlation between the subscales was 0.42 (Horowitz et al., 1979).

Effects of client suicide were shown to be greater among counselors than in psychiatrists or psychologists. While psychologists and psychiatrists both indicated experiencing anger, guilt, and a loss of self-esteem following client suicide (Chemtob, Hamada, Bauer, Kinney et al., 1988; Chemtob, Hamada, Bauer, Torigoe et al., 1988; Chemtob et al., 1989), counselors experienced higher levels of intrusive and avoidant thoughts (McAdams & Foster, 2000). One plausible explanation for this is that counselor education programs place less emphasis on client suicide than do psychiatric and psychology training programs (McAdams & Foster, 2000).

The amount of training psychiatrists and psychologists receive is associated with how greatly they are impacted by a client's suicide. Greater amount of training is negatively correlated with the severity of clinicians' response (Chemtob, Hamada, Bauer, Kinney et al., 1988; Chemtob, Hamada, Bauer, Torigoe et al., 1988; Chemtob et al., 1989) There's a number of factors that possibly contribute to this difference. Differences in work settings, clients treated, and amount of time providing direct client care. This difference does not seem to extend to counselors. The amount of training (PhD vs. Masters) that counselors receive is not associated with the probability of counselors losing a client to suicide. (McAdams & Foster, 2000).

Client suicide also affects mental health professionals in the professional domain.

Mental health professionals who lose a client to suicide often increased hospitalization referrals of at-risk clients, increased attentiveness to legal liabilities of working with suicidal clients, increased consultation with peers regarding high-risk clients, greatly increased focus on suicide risk factors and warning signs in clients, greater conservativeness in record-keeping, and greater concern for issues concerning death and dying (Chemtob, Hamada, Bauer, Kinney et al., 1988; Chemtob, Hamada, Bauer, Torigoe et al., 1988; Chemtob et al., 1989; McAdams & Foster, 2000). Effects of client suicide were found to be greater in the personal domain than in the professional domain among counselors. This suggests that the stress of a client's suicide may manifest to a greater extent through counselors' self-doubt than through doubt concerning the adequacy of treatment (McAdams & Foster, 2000).

Risk Factors

A major objective in conducting a suicide risk assessment is to elicit clients' suicide risk factors (Cramer et al., 2013). While previous attempts at formulating a predictive model

for suicide have largely failed (Maris, Berman, Maltsberger, & Yufit, 1992), there are a multitude of risk factors that are correlated with suicide (Westefeld, Range, Rogers, Maples, Bromley, & Alcorn, 2000). While no one risk factor is predictive of suicide, the presence of one or more risk factors is associated with higher risk (Patterson, Dohn, Bird, & Patterson, 1983). Risk factors more closely associated with suicide risk across all US populations include client being male, being under the age of 25 and over 65, history of alcohol/substance abuse, mental illness, and previous attempts (Westefeld et al., 2000).

Gender

Males compared to females complete suicide at a ratio of 4.5 to 1 (National Institute of Mental Health, 2013). Caucasian males have the highest rate of all populations in the US. Caucasian male suicides accounted for 73% of total suicides in the US. While females have greater rates of suicide attempts, males complete suicide at a much higher rate (Iribaren, Sidney, Jacobs, & Weisner, 2000). Due to the extremely high rate of suicide in Caucasian males, it is considered a predominantly Caucasian male phenomenon (Granello & Granello, 2007). Suicide in African American male adolescents is on the rise. Between 1980 and 1995, completed suicides in African American adolescent males increase by 114% (Granello & Granello, 2007).

Age

Rates of suicide vary widely across different age groups. Adolescents and young adults ages 15 to 24 have very high rates. Suicide is the third leading cause of death for adolescents in the US (McIntosh & Drapeau, 2012). As with other age groups, adolescent males have higher rates of suicide completion than adolescent females. Adolescent females have higher rates of suicide attempts. For young adults, suicide is the third leading cause of

death. Young adult males have higher completion rates, while young adult females have higher rates of attempts. The age group with the highest completion rates is the elderly, ages 65 and over. As with all age groups, elderly males have much higher completion rates than female, while females have higher rates of attempts (Iribaren et al., 2000). Elderly persons over the age of 85 have even higher rates of suicide completions. Elderly persons tend to attempt suicide with deadlier intent and means. The use of firearms and hanging are the most common means. Suicide among the elderly tends to be used with the intent to die as opposed to an escape from extreme psychological and emotional suffering or as a cry for help (Granello & Granello, 2007).

Alcohol/Substance Abuse

Alcohol and/or substance abuse is a major risk factor for suicide in the presence of or absence of mental illness (Westefeld et al., 2000). The presence of alcoholism increases the risk of suicide exponentially. The lifetime risk of suicide for individuals with alcoholism is 60 to 220 times the risk of individuals without alcoholism (Murphy & Wetzel, 1990). The presence of alcoholism and depression further increases risk for suicide (Westermeyer, Harrow, & Marengo, 1991).

Hopelessness and Helplessness

Suicidal individuals often feel hopeless and helpless. They often feel hopeless that their lives will ever improve and that there is nothing that can be done to change their lives (Westefeld et al., 2000). The presence of hopelessness is a greater predictor of suicide than depression (Weishaar & Beck, 1992). It is one of the strongest predictors of eventual suicide (Beck, Steer, Kovacs, & Garrison, 1985).

Mental Illness

The presence of one or more mental illnesses is a major risk factor for suicide. While most people with a diagnosable mental disorder do not complete suicide, the presence of one or more mental disorders has been found in 90% of suicide completers (Westefeld et al., 2000). The most significant suicide risk has been found in people with mood disorders, particularly bipolar disorders and major depressive disorder; schizophrenia spectrum disorders—schizophrenia, schizophreniform disorder, schizoaffective disorder, and schizotypal personality disorder; anxiety disorders, particularly posttraumatic stress disorder (PTSD); and cluster C personality disorders, particularly Borderline Personality Disorder (BPD). People with comorbid mental disorders, especially involving a mood disorder and substance abuse disorder, are at especially high risk for suicide (Westefeld et al., 2000).

Impulsivity

Individuals who are impulsive because of a mental disorder, substance use, or personality trait are at a significantly increased risk for suicide. Impulsive individuals are more likely to attempt suicide as a reaction to an immediate stressor than are nonimpulsive individuals. The presence of both impulsivity and hoplessness increases suicide risk even further (Granello & Granello, 2007).

Previous Attempts

People who have attempted suicide previously are at an increased risk for subsequent attempts and eventual suicide completion (Westefeld et al., 2000). Previous suicide attempts are the strongest consistent predictor for future suicide attempts and completions (Fowler, 2012). The risk for completed suicide increases with each additional attempt. The lethality of the previous attempt is related to current risk, with higher lethality related with higher current risk. Recency of the previous attempt is also positively associated with current risk. Finally,

the opportunity for rescue is an important factor in level of risk. The lower the probability of being discovered by someone, the higher the level of risk (Westefeld, 2008).

Race/Ethnicity

Caucasians, as a whole have the highest number of completed suicides in the US. As a group, Caucasian suicides accounted for 34,690 of the 38,364 total suicide deaths in 2010; a rate of 14.1 deaths per 100,000 people (McIntosh & Drapeau, 2012). African Americans as a whole had a total of 2,144 deaths by suicide in 2010; rate of 5.1 deaths per 100,000 people (McIntosh & Drapeau, 2012). Hispanics as a group had a total of 2,661 suicide deaths in 2010; rate of 5.3 per 100,000. Asian American and Pacific Islanders as a whole had a total of 1,061 suicide deaths in 2010; rate of 6.2 per 100,000. Native American had a total of 469 deaths in 2010; rate of 11.0 per 100,000 (McIntosh & Drapeau, 2012).

Suicide among Caucasians has gradually and steadily increased since 2000. Suicide among African Americans as a whole has remained relatively stable since 2000; however, suicide among adolescent African American males has been on the rise since the 1980's (Granello & Granello, 2007; Lyon et al., 2000). The suicide rate for African American females is the lowest among all populations in the US (McIntosh & Drapeau, 2012). Suicide is the third leading cause of death among Native American ages 10–14 years, and the second leading cause of deaths for ages 15–34 years (Centers for Disease Control, 2012). From 2005 to 2009, Native Americans had the highest rate of suicide among all racial groups in the US, with a rate of 17.48 per 100,000 (Centers for Disease Control, 2013). Asian/Pacific Islanders had the lowest suicide rates among males, (Centers for Disease Control, 2013).

When assessing suicide risk, counselors must take into account cultural difference in attitudes toward suicide and acceptability of suicide (Range et al., 1999). Counselors need to

consider the cultural group with which clients identify, because different cultures hold varying beliefs and views of suicide (Granello, 2010). Cultural attitudes and religious beliefs about suicide can serve as protective factors. At the same time, such attitudes and beliefs can be risk factors if they result in denial of suicidal intent or limit help-seeking behavior, such as accessing mental health care (Range et al., 1999).

Sexual Orientation

Lesbian, gay, bisexual, and transgender (LGBT) individuals may be at an increased risk for suicidality (Westefeld et al., 2000). While there are several risk factors that may place LGBT individuals at increased risk of suicide, it is unclear, however, if sexual orientation is, of itself, an independent risk factor. Risk factors that seem to place LGBT individuals at particular risk include substance abuse, which is higher among LGBT adolescents than for the general population (Westefeld et al., 2000). McBee-Strayer and Rogers (2002) found in their study that substance abuse accounted for 5% of the variance in suicidal ideation among their entire sample and 13% of the variance in suicide attempts in males in their sample. In a meta-analysis by King et al. (2008), substance abuse, anxiety, and depression were found to be one and a half times higher in LGBT individuals than in the general population. In addition, gay and bisexual men were found to have an overall lifetime risk four times higher than the general population (King et al., 2008).

Demographic Factors

There are several demographic factors that are positively associated with increased suicide risk (Westefeld et al., 2000). A family history of mental illness and/or history of suicide are risk factors. A history of physical and/or sexual abuse is associated with elevated risk. In addition, disrupted family environments and negative parenting styles are correlated

with increase risk (Moscicki, 1999). Additional demographics factors for increased suicide risk include being unmarried (Bongar, 1991), unemployed (Norstrom, 1995), and living in urban areas (Garrison, 1992).

Counselors who work with clients with any one or combination of the above risk factors should conduct ongoing suicide assessments during each counseling session (Granello & Granello, 2007; Westefeld et al., 2000). While the presence of these risk factors is not predictive of suicide, the risk of suicide does increase with the presence of any one or more of these risk factors (Granello & Granello, 2007). In order to accurately determine level of suicide risk, counselors must gather additional information about clients, including warning signs of imminent risk and client protective factors (Granello & Granello, 2007; Westefeld et al., 2000).

Warning Signs

Suicide warning signs are observable indicators of a client's intent to die (Rudd, 2008). Specifically, Rudd et al. (2006) gave the following definition:

A suicide warning sign is the earliest detectable sign that indicates heightened risk for suicide in the near term (ie, within minutes, hours, or days). A warning sign refers to some feature of the developing outcome of interest (suicide) rather than to a distinct construct (risk factor) that predicts or may be related to suicide. (p. 88)

Warning signs are signals of imminent suicide risk and are vital for counselors to assess when working with potentially suicidal clients (Schwartz & Rogers 2004). Counselors should associate warning signs with adverse events in clients' lives within very short periods of time (Rudd, 2008). Warning signs are associated with risk that is near-term, ranging from minutes to days, rather than days to weeks or years (acute and long-term, respectively). They

help counselors answer the question, "What is my patient [client] doing (observable signs) or saying (expressed symptoms) that elevates his or her risk to die by suicide in the next few minutes, hours, or days" (Rudd, 2008, p. 88).

An expert consensus panel of the AAS identified multiple observable signs and symptoms. The following warning signs indicate the need for immediate attention and intervention: threatening to harm or kill oneself, seeking access to suicide means (pills, weapons, or other means), and talking or writing about suicide, death, or dying (Rudd et al., 2006). In addition, the panel identified the following as warning signs: hopelessness; increased substance use; purposelessness and/or no reason for living; isolating oneself from family, friends, and society; reckless behavior or engaging in risky behavior; anger, rage, or seeking revenge; feeling trapped; anxiety, agitation, changes in sleep; and dramatic mood changes (Rudd et al., 2006). Additional warning signs identified in the literature include: a history of suicide attempts; having a specific suicide plan; access to means to carry out the suicide plan; putting one's personal affairs in order, making final plans, or giving away prized possessions; and a preoccupation with death (Schwartz & Rogers 2004). The presence of any one or more of these factors indicates an increased level of risk for suicide; the likelihood of a suicide attempt increases as the number of warning signs increases (Schwartz & Rogers, 2004).

Level of Risk

Suicide lethality refers to the probability of an individual dying by suicide. It exists along a continuum of risk (Schwartz & Rogers, 2004). When assessing suicidal clients, counselors attempt to determine where on the suicide lethality continuum they are at the present moment. Low indicates a client is not actively suicidal at the present time. Moderate

indicates a client is suicidal, but desires for his or her pain to end rather than necessarily die (Schwartz & Rogers, 2004). This is sometime referred to as "suicide ambivalence" (Westefeld, 2008). High risk indicates a client has a high probability of dying by suicide in the near future without intervention (Schwartz & Rogers, 2004).

There are four general areas to evaluate when determining a client's level of suicide risk: ideation (suicidal thoughts), intent, plan, and access to means (Schwartz & Rogers, 2004). When assessing suicide risk, counselors need to know if their client is currently having suicidal ideation. If a client is having suicidal ideation, counselors need to ascertain the frequency of these thoughts, length of time they have been experiencing them, if they have become more intense, and difficulty in restraining him or herself from acting on these thoughts. The next area counselors need to determine is the presence of suicide intent (Schwartz & Rogers, 2004). Clients are often ambivalent about suicide. In other words, they want their psychological and emotional pain to end as opposed to wanting to kill themselves (Westefeld, 2008) or wanting to end their physical existance (Schwartz & Rogers, 2004). In such cases, they may see death as the only way to end their suffering (Westefeld, 2008). It is imperative that counselors attempt to understand their clients' intent for suicide, because it will have important implications for treatment (Schwartz & Rogers, 2004). Determining whether a client has a definite suicide plan is the next area to assess. Counselors need to determine the concreteness and lethality of a client's plan (Schwartz & Rogers, 2004). Another factor for counselors to consider is the likelihood of the client being discovered when making a suicide attempt (Westefeld, 2008). For example, a client's statement that he will shoot himself in the head after his family leaves home for the day is more concrete and lethal than a client who states she would probably take a handful of sleeping pills 20 minutes before her spouse comes home from work. The final area that counselors need to determine when assessing suicide risk is the client's access to a means for suicide (Schwartz & Rogers, 2004). If a client plans to shoot his or herself, does he or she have access to a firearm or ammunition, or access to a large dosage of medications if the plan is overdosing?

Based on the above four areas to evaluate when assessing suicide risk, Schwartz and Rogers (2004) offered the following guidelines for estimating the overall suicide lethality: (a) low lethality: client has suicidal ideations, no intent or intent denied, absence of a definite plan, and no previous suicide attempts; (b) moderate lethality: client has two or more general risk factors, presence of suicidal ideation and intent, no definite plan, and client is motivated to change his or her psychological and emotional condition; (c) high lethality: multiple risk factors are present, presence of suicidal ideation and intent, client has a definite plan for suicide, and has access to a means for suicide; and (d) very high lethality: presence of suicidal ideation and intent, client has a well thought out plan, has immediate access to means for suicide, presence of hopelessness and cognitive rigidity, lack of social support, and has made prior suicide attempts.

Protective Factors

Protective factors are those factors that can mitigate suicide risk (Cramer et al., 2013). Protective factors can provide a degree of resilience from suicidal behavior, and are critical to assess because the interaction of risk and protective factors will ultimately determine the client's outcome (Fowler, 2012; Goldsmith, Pellmar, Kleinman, & Bunney, 2002). Some of the most robust protective factors include social support, spiritual or religious beliefs, and active involvement in the therapeutic relationship (Cramer et al., 2013).

In a comprehensive review, Fowler (2012) listed the major protective factors from the suicidology literature in order to bring attention to the importance of considering both risk factors and protective factors when assessing suicide risk. The following are the protective factors identified by Fowler (2012): Maintaining a cognitive set of reasons for living; (Malone et al., 2000; Linehan, Goodstein, Nielsen, & Chiles, 1983); strength of religious beliefs and moral objections (APA, 2003; Maris, 1981; Neeleman, Wessley, & Lewis, 1998); marriage (Kposowa, 2000; Kreitman, 1988; Smith, Mercy, & Conn, 1988), except in the case of a violent or high-conflict marriage (APA, 2003); pregnancy in healthy women (Harris & Barraclough, 1998); however, pregnancy becomes a risk factor for teenage women, women of lower socioeconomic status (SES), and psychiatric hospitalized women postpartum (Appleby, Mortensen, & Faragher, 1998; Yonkers et al., 2001); dependent children in the home can serve as an additional protective factor for women (Marzuk et al., 1997; Qin & Mortensen, 2003; Nock et al., 2008); however, it has been shown to increase the likelihood of suicidal ideation, possibly due to the stress involved in raising children (Nock et al., 2008); for adolescents, feeling safe at school (Winfree & Jiang, 2010) and the presence of strong family attachments and a cohesive neighborhood network (Maimon, Browning, & Brooks-Gunn, 2010).

Intervention

Thorough assessment of suicide risk is vital to the process of treating individuals at risk for suicide (Cramer et al., 2013; Fowler, 2012; Schwartz & Rogers, 2004; Westefeld et al., 2000). While the topic of suicide assessment is well researched and documented in the professional literature, much less has been disseminated about the process of interacting with suicidal clients (Granello, 2010). Clinical interventions with clients at high risk for suicide

generally take a two-tiered approach: immediate intervention for short-term stabilization and therapy to address the underlying factors contributing to a client's suicidality (Granello, 2010).

Short-term stabilization of clients at high risk for suicide is based upon models of crisis intervention (Aguilera, 1998; Greenstone & Leviton, 2002; James & Gilliland, 2001). Granello & Granello (2007) recommended using an expanded crisis intervention model based on Roberts (2000). The model consists of seven steps. Granello (2010) listed twenty-five strategies for implementing the seven stages of the crisis intervention model. Many of the strategies listed use basic counseling skills, while other are more advanced. Granello (2010) advises that beginning counselors may need to observe more skilled counselors or practice these skills under supervision before using them on their own:

Step One: Assess Lethality

Accurate assessment of suicide risk is the first and most important step when working with a suicidal client. When working with a suicidal client, counselors need to "ensure immediate safety" (Granello, 2010, p. 221) of the client. This includes never leaving the client alone and never transporting a client at high risk to the hospital in their own vehicle (Sommers-Flanagan & Sommers-Flanagan, 1999). In addition, counselors should "have and use suicide emergency plans" (Granello, 2010, p. 221). Counselors should have a set of planned steps to guide decisions and actions during a suicidal emergency. This includes upholding the ethical obligation of duty to protect (Werth & Rogers, 2005). Counselors need to know what their resources are, what to do about containment if a highly suicidal client attempts to leave, and how to alert others in the counselor's agency (Granello, 2010).

Step Two: Establish Rapport

The therapeutic relationship is one of the most significant factors is assessing suicidal risk in clients and for the success of clinical interventions (Bongar, 2002). Basic counseling skills and the core conditions set forth by Rogers (1957) help clinicians convey a nonjudgmental, caring, and genuine therapeutic stance (Chiles & Strosahl, 2005). When working with a suicidal client, counselors should "stay with the client" (Granello, 2010, p. 222) throughout the entire assessment phase. In cases where hospitalization becomes necessary, counselors should remain with their client, at a minimum, during the initial transfer to the hospital to pass along pertinent information about the client to hospital staff (Granello, 2010). Granello and Granello (2007) warn that counselors who do not do so may be held legally liable. In addition, counselors must learn to "manage countertransference" (Granello, 2010, p. 222). Working with suicidal clients may arouse strong feelings of anxiety, fear, defensiveness, resignation, or overprotectiveness in counselors (Bongar, 1991). Managing countertransference toward suicide is a competency listed by many suicideologists and is the first competency listed by Cramer et al. (2013). Counselors are likely to under- or overreact in situations where they are acting on their own emotional reaction to a suicidal client instead of to the needs of the client. In either case, it is dangerous for the client (Granello, 2010).

It is important for counselors to "normalize the topic" (Granello, 2010, p. 222) when working with suicidal clients. Counselors need to have the goal of remaining calm while expressing empathy toward the circumstances that brought clients to considering suicide Counselors can help clients feel safe by normalizing the topic (Granello, 2010). It is important for counselors to make clear to clients that talking about suicide openly and honestly is acceptable. Creating a therapeutic setting where clients can discuss suicidal

thoughts and behaviors can reduce risk (Chiles & Strosahl, 2005). Normalizing the guilt and shame that accompany the disclosure of suicidal thoughts is also important. It is also important to deal with clients' suicidal thoughts and behaviors in a matter-of-fact manner that conveys a sense of normalcy that allows clients to explore their suicidal thoughts and behaviors in the safety the therapeutic relationship (Granello, 2010). In addition, counselors should "convey calm through short declarative sentences and downspeak" (Granello, 2010, p. 223). When working with suicidal clients, counselors should speak slowly, calmly, and in short declarative sentences. The technique of downspeak-pitch of voice drops at the end of the sentence-helps counselors speak in declarative sentences. Taken together, these techniques convey calm, control, and safety (Granello, 2010). Furthermore, counselors should "move from an authoritative to a collaborative approach" (Granello, 2010, p. 223) when working with suicidal clients. The therapeutic relationship in traditional counseling approaches is inherently hierarchical. In the context of working with suicidal clients, it is recommended that counselors strive for a collaborative approach where both counselor and client work together (Cramer et al., 2013; Jobes, 2006). Counselors can conceptualize the relationship as the client being the expert of his or her own experience and the counselor as an "active collaborator in care" (Granello, 2010, p. 223). Finally, counselors should "support the decision to seek help" (Granello, 2010, p. 224). This includes reassuring clients that their decision to seek help was a good idea (Granello, 2010).

Step Three: Listen to the Story

A large percentage of individuals, around 70%, who died by suicide had let someone know of their intent in the week preceding their deaths (U.S. Department of Health & Human Services, 2001). Unfortunately, many times clients' suicidal statements are met with

judgment, ridicule, or silence (Suicide Prevention Resource Center, 2005). In working with suicidal clients, it is necessary to "listen, understand, and validate" (Granello, 2010, p. 224) clients and their stories (Granello, 2010). Another important strategy for counselors to use is to "slow things down" (Granello, 2010, p. 224) by allowing clients plenty of time to tell their story. In addition, counselors need to "create a therapeutic window" (Granello, 2010, p. 225) in order to buy time to help stabilize the client. This strategy helps put distance between clients and suicide and gives the message that if suicide really is the only solution that it will still be an option later on; it does not have to occur immediately. Furthermore, counselors can help clients "categorize the problems" (Granello, 2010, p. 225) into what needs to be addressed immediately and what can wait for longer-term counseling. Finally, counselors need to try to "identify the message" (Granello, 2010, p. 226) underlying the client's suicidality, because it will have important implications for intervention. Completed suicides may indicate the individuals' message was not received (Portes, Sandu, & Longwell-Grice, 2002). The majority of suicidal individuals are suicidal for the following reasons: They are attempting to communicate the severity of psychological pain they are in; they are trying to control others, their own fate, or take control when they perceive the world around them as unsafe or chaotic; or avoidance of some real or perceived intolerable fate (Shneidman, 1981).

Step Four: Manage the Feelings

Clients in suicidal crisis are often ambiguous about suicide—they don't want to die, but want the pain to stop (Granello, 2010). Common themes identified among individuals in suicidal crisis include acute perturbation, increased negative emotions, cognitive restriction, and sharpened focus on the idea of suicide as the only solution (Shneidman, 1981). When working with suicidal clients, counselors need to "encourage emotional ventilation"

(Granello, 2010, p. 227) to allow clients to fully express and experience their feelings (Granello, 2010). While emotional ventilation is not sufficient alone, it has been linked to reduced intent (Apter, Horesh, Gothelf, Graffi, & Lepkifter, 2001) and is critical in managing a suicidal crisis (Granello, 2010). In addition, counselors need to "acknowledge the psychache" (Granello, 2010, p. 227). Psychache refers to the severe psychological pain the suicidal individual experiences (Shneidman, 2005). In working with suicidal clients, it is critical for counselors to acknowledge the pain clients are experiencing. Suicide risk may actually increase if clients perceive the counselor as disconfirming their pain (Granello, 2010). Finally, by using the previous two strategies, counselors can "teach tolerance of negative emotions" (Granello, 2010, p. 227). The goal should not be eliminating all negative or distressing thoughts or feelings, but instead to allow them to exist and get on with life (Chiles & Strosahl, 2005). Using change strategies in the presence of negative feelings reinforces the resiliency of the client and teaches tolerance of negative emotions (Granello, 2010).

Step Five: Explore Alternatives

Exploring alternatives is critical, because individuals in suicidal crisis engage in selective abstraction where they make negative generalizations about themselves and the world (Granello, 2010; Granello & Granello, 2007). Equally critical is that counselors do not move into this stage prematurely, otherwise the client may feel rushed, minimized, or not be ready to problem solve (Granello, 2010). An essential strategy in exploring alternatives is to "minimize the power struggle" (Granello, 2010, p. 228) between the counselor and client (Granello, 2010). Counselors need to understand that clients have the power to end their own lives. When counselors take a stance against suicide, clients will almost invariably take

stances in the opposite direction. Statements by counselors can move clients from ambivalence to defense of suicide. A linguistic strategy to reduce the power struggle is to acknowledge suicide as an option, and then explore other options available to the client. By doing so, the client no longer has to defend suicide as an available option (Granello, 2010). It is important for counselors to "establish a problem-solving framework" (Granello, 2010, p. 228) to find other alternatives to suicide when working with suicidal clients (Granello, 2010). Clients' past attempts at problem-solving have been met with limited success and counselors can reframe the crisis by helping clients making connection between their unsuccessful attempts at problem-solving and suicidality. Counselors must be careful not to pass judgment on whether clients have actually made real efforts in problem-solving. Equally important is not to give advice or problem-solve for clients. Both are equally unhelpful (Granello, 2010).

When working with suicidal clients, it is important for counselors to "engage social support, as appropriate" (Granello, 2010, p. 229) for the client. Suicidal clients are often lonely or socially isolated. In cases of suicidal crises, the normal limits of confidentiality don't apply. Counselors may find it helpful to reframe "breaking confidentiality" to "adding layers of support" (Granello, 2010, p. 229). A major goal in working with suicidal clients is to "restore hope" (Granello, 2010, p. 229). Suicidal clients are often hopeless, and both immediate and longer-term interventions should be aimed at restoring hope (Ellis, 2001). In working to restore hope, counselors must not appear to minimize the client's crisis. In addition, appearing too hopeful can be perceived as inauthentic or unempathetic (Granello & Granello, 2007) and can result in clients defending their decision for suicide (MacDonald, Pelling, & Granello, 2009). Finally, counselors need to "help the client to envision possibilities and develop resilience" (Granello, 2010, p. 230). Drawing from the concept of

clients being ambivalent about suicide, the goal of using this strategy is to reinforce clients' reasons for living. It may be helpful for counselors to conceptualize that the client, by coming to therapy, has at least some desire to live, and that the goal of treatment is to uncover and reinforce that reason (Chiles & Strosahl, 2005).

Step Six: Use Behavioral Strategies

A thorough assessment of suicide risk is necessary in order to determine an appropriate level of care, and to plan and implement a comprehensive treatment plan (Granello, 2010). Counselors need to "draft a short-term, positive action plan" (Granello, 2010, p. 230) as one part of a comprehensive treatment plan (Granello, 2010). This plan addresses how to move from suicidal thoughts and behaviors toward problem resolution. To be effective, this plan needs to be detailed, realistic, and concrete (Chiles & Strosahl, 2005). The goal is to make small manageable steps to increase clients' quality of life. Typically, the initial follow-up after implementing the short-term action plan is within one to three days (Chiles & Strosahl, 2005). As a final behavioral strategy, counselors are encouraged to "use a safety plan" (Granello, 2010, p. 231). The goal of using a safety plan is to assist clients in knowing what they can do when they experience suicidal thoughts or feel at increased risk for suicide. The counselor and client should write the safety plan collaboratively. They should include names and contact information of individuals the client has agreed to call if they feel at risk. Safety plans should also include phone numbers to local emergency mental health services, location of nearest emergency departments, and a reminder to call 911 if necessary (Granello, 2010).

Step Seven: Follow-up

The level of follow-up will depend on the level of risk (Granello, 2010). Follow-up for clients at increase suicide risk should be frequent and aggressive (McDonald et al., 2009). Follow-up typically includes case management, home visits, and phone contacts; a safety plan; and some form of short-term therapy to increase problem-solving ability and reduce suicidal ideation, such as cognitive-behavioral therapy (Rudd, Joiner, Jobes, & King, 1999). Following the suicidal crisis, counselors should "use the concept of funneling to ensure quality follow-up care" (Granello, 2010, p. 232). A single person assumes responsibility for all treatment coordination, follow-up treatment, and continued risk assessment (Granello, 2010). Funneling is a case management procedure that ensures the client and all information regarding the client is returned to one point of contact (Chiles & Strosahl, 2005). The final intervention that counselors should implement when working with sucidal clients is "assess the intervention for future learning and enhanced care" (Granello, 2010, p. 233). Counselors can take the opportunity after working with a suicidal client to assess the effectiveness of their strategies and make any necessary changes to those strategies to improve future effectiveness (Granello, 2010).

Suicide Assessment

Comprehensive suicide assessment consists of three necessary components: Clinical interview, empirical evaluation, and consultation (Juhnke, 1994). In addition, documentation has become an increasingly necessary component of assessment (AAS, 2010; Cramer et al., 2013; Granello & Granello, 2007; Rogers & Alexander, 1994). Furthermore, clinicians should gather relevant collateral information from other health professionals, family, and friends (AAS, 2010; Schwartz & Rogers, 2004). The first component of a comprehensive suicide assessment is the face-to-face clinical interview (Juhnke, 1994; Maris, 1991; Maris,

Berman, Maltsberger, & Yufit, 1992; Motto, 1991; Schwartz & Rogers, 2004). During the clinical interview, clinicians gather pertinent data regarding the client's mental and affective states and their psychosocial context (Bonner, 1990).

Numerous semistructured interviews have been published by suicidologists and organizations. One semistructured interview that has a moderate amount of reliability and validity is the Suicide Assessment Checklist (SAC; Rogers & Alexander, 1994). The initial version was called the Crisis Line Suicide Risk Scale (CLSRS; Rogers & Alexander, 1989). It was developed as an emergency suicide risk assessment measure. In addition, it was developed for documentation purposes. There were four primary considerations for the development of the CLSRS: a) focus on a broad population; b) different training and experience levels of people trained to assess suicide risk; c) brevity; and d) psychometric integrity (Rogers & Alexander, 1994).

In addition to semistructured interviews, numerous mnemonics have been created to help guide clinicians in assessing suicide risk. Commonly used mnemonics in the field of counseling include the SAD PERSONS scale (SPS; Patterson et al., 1983) and the IS PATH WARM? (AAS, 2006). Each mnemonic is based on the suicidology literature identified risk factors. The SPS is based on the first letter of ten major risk factors for suicide: sex, age, depression, previous attempt, ethanol abuse (drugs), rational thinking loss, social supports lacking, organized plan, no spouse, and sickness (Patterson et al., 1983). One point is assigned for the presence of each risk factor; males get one point for sex and females get zero for sex. The scale includes a scoring guideline, with greater scores indicating greater risk. Included in the scoring guideline are recommendations for clinical intervention for each score range (Patterson et al., 1983).

The AAS (2006) published the mnemonic device of IS PATH WARM? This mnemonic is an updated and more thorough tool for assessing immediate suicide risk in individuals (AAS, 2006; Berman, 2006). Each letter represents a risk factor frequently indicated in individuals within the months prior to a suicide. The risk factors are as follows: Suicide Ideation, Substance Abuse, Purposelessness, Anger, Trapped, Hopelessness, Withdrawing, Anxiety, Recklessness, and Mood Change (AAS, 2006). Unlike the SPS, the IS PATH WARM mnemonic does not have a scoring key. Its purpose is to guide assessment and augment the clinical judgment of the counselor (Juhnke, Granello, & Lebron-Striker, 2007).

The second component of a comprehensive suicide assessment is empirical evaluation (Eyman & Eyman, 1991; Juhnke, 1994; Maris, 1991; Motto, 1991; Schwartz & Rogers, 2004; Yufit, 1991). Using an assessment instrument augments the clinician's clinical judgment and can give guidelines for clinical intervention (Juhnke, 1994). Empirically supported and commonly used instruments for screening for suicide or for assessing risk include personality measures and specific suicide assessment questionnaires (Westefeld et al., 2000). Personality measures used for screening for suicide include the Minnesota Multiphasic Personality Inventory (MMPI & MMPI-2; Hathaway & McKinley, 1942; Hathaway & McKinley, 1989), the Beck Depression Inventory (BDI & BDI-II; Beck, 1970; Beck, Steer, & Brown, 1996), and the Beck Hopelessness Scale (BHS; Beck, Weissman, Lester, & Trexler, 1974; Beck & Steer, 1988). Specific suicide questionnaires include the following: The Scale for Suicide Ideation (SSI; Beck, Kovacs, & Weissman, 1979); the Suicide Ideation Scale (SIS; Rudd, 1989); the Suicide Behaviors Questionnaire (SBQ; Cole, 1988; Linehan, 1981); the Reasons for Living Inventory (Linehan, Goodstein, Nielsen, &

Chiles, 1983); the Suicide Probability Scale (SPS; Cull & Gill, 1982); the Suicidal Ideation Questionnaire (SIQ; Reynolds, 1987); the Multiattitude Suicide Tendency Scale (MAST; Orbach et al., 1991), and the Suicide Status Form (SSF; Jobes, Jacoby, Cimbolic, & Hustead, 1997),

The third component of a comprehensive suicide assessment is consultation (Juhnke, 1994). Consultation with a clinical supervisor or a colleague increases the likelihood of a multifaceted assessment approach and decreases the chances of client suicide as the result of inappropriate intervention. Clinical consultation can also reduce the legal liability of the counselor if the client who sought treatment later completes suicide (Juhnke, 1994).

Related to consultation is notifying and involving other people in the suicide risk assessment (Cramer et al., 2013). Notifying clients' friends and family serves to establish and mobilize a social support system for the client that will be available throughout the course of treatment (Sullivan & Bongar, 2009). Notifying other treatment providers establishes an interdisciplinary approach to treating the client. This is especially important when hospitalization or psychopharmocological treatment is required (Sullivan & Bongar, 2009). When working with clients at risk for suicide, it is recommended that counselors obtain consent from clients before notifying others who will be involved in their treatment; however, in cases where clients are at high risk, such consent is unnecessary (AAS, 2010; Sullivan & Bongar, 2009).

The final component of a comprehensive suicide assessment is documentation (Juhnke, 1994). Documentation of suicide risk and appropriate intervention is a necessary clinical and legal action (AAS, 2010; Rudd, 2006). As a clinical action, documentation can help ensure that assessment is comprehensive and covers the relevant factors involved,

especially if it is standardized. Standardized documentation can assist counselors in maintaining necessary clinical focus (Rogers & Alexander, 1994). This is especially critical because of the paralyzing fear that can interfere with counselors' sound clinical judgment in the moments of suicidal crises (Bonner, 1990). Documentation should include informed consent (AAS, 2010; Rudd, 2006), direct quotations from the client and copies of any safety plan used (Rudd, 2006), any contact with colleagues regarding the client, progress and outcome of assessment (AAS, 2010; Rudd, 2006). Other items to document include prominent risk factors, protective factors, level of risk and rationale for assigned risk level, and actions taken (Cramer et al., 2013). In addition, standardized documentation can provide a method of assessing clients' status of suicide risk across time. Furthermore, standardized documentation provides consistency among clinicians. Finally, documentation is an admissible source of information in the event of a malpractice suit following a client suicide (Bongar, Lomax, & Harmatz, 1992).

Research in the field of suicidology has failed to create an accurate model for predicting suicide (Kleespies, Deleppo, Gallagher, & Niles, 1999; Maris et al., 1992). Since the early 1990's the field has moved toward the goal of assessing suicide risk and away from prediction. The goal of assessing level of suicide risk in clients is to inform disposition and treatment decisions (Jobes, Eyman, & Yufit, 1995; Maris et al., 1992; Rogers & Alexander, 1994). The shift from prediction to assessment partially came about because of the failure of research in suicidology to produce an effective measure to predict suicide. There was considerable research into using suicide prediction scales and personality measures as instruments for prediction. The predictive ability of these measures was disappointing (Maris et al., 1992). Personality and suicide risk measures have value as a measure of a singular risk

in isolation. In order to have clinical utility, however, a thorough suicide risk assessment needs to assess an individual's risk across many risk factors rather than an in-depth assessment of only a few factors (Westefeld et al., 2000). Finally, if a suicide risk assessment is to have clinical utility it needs to be practical. If an assessment is overly time-consuming, intrusive, or burdensome, then it will be a little value to counselors (Jobes et al., 1995). Thus, a clinically useful assessment needs to be comprehensive in gathering pertinent information on risk factors as well as be concise enough to be used quickly and effectively.

Suicide Assessment Training

Competencies

CACREP established a standard in its 2009 Standards for suicide assessment training in accredited master's-level counseling programs. Section D–Skills and Practice of *Counseling, Prevention, and Intervention* Standard 4 for Addiction Counseling, Marriage, Couple and Family Counseling, School Counseling, Student Affairs and College Counseling, and Standard 6 for Clinical Mental Health Counseling states "[Students] demonstrates the ability to use procedures for assessing and managing suicide risk" (CACREP, 2009). While this standard specifies what counseling students are expected to be able to do upon graduation, it does not establish specific competencies for suicide assessment and management that students must attain.

Counseling students need to attain a benchmark of competencies before entering into their initial practica (Schmitz et al., 2012), given the standards set forth by the 2009 CACREP Standards, the prevalence of suicide, and the likelihood that they will eventually work with suicidal clients. While the CACREP (2009) Standards establish a benchmark for what they are supposed to do, there is still a need for an established set of core competencies

in suicide assessment within the field of counseling to which students can attain the benchmark set forth by the 2009 CACREP Standards. Numerous organizations and suicidology scholars have established competencies for suicide risk assessment (AAS, 2010; Joiner, 2005; Kleespies et al., 1993; Kleespies, et al., 2009; Rudd, 2006; Sullivan & Bongar, 2009). Cramer et al. (2013) synthesized the suicide risk assessment competencies from these sources and scholars into ten core competencies for suicide risk assessment. These competencies were distilled for use to train doctoral level psychology students in attaining an established and empirically supported level of competency in suicide assessment. The ten core competencies by Cramer et al. (2013) are as follows:

- 1. "Know and manage your attitude and reactions toward suicide when with a client" (Cramer et al., 2013, p. 3). Clinicians need to meet clients' disclosures of suicidality with care and concern, instead of with alarm or dismay (Joiner, 2005). Clinicians should be encouraged to reflect on their own attitudes toward suicide and monitor their reactions to disclosures of suicidality (AAS, 2010; Joiner, 2005).
- 2. "Develop and maintain a collaborative, empathetic stance toward the client" (Cramer et al., 2013, p. 3). Establishing a therapeutic relationship with clients is one of the essential tasks of effective therapy; in successfully working with clients at risk for suicide it is particularly important (AAS, 2010; Joiner, 2005; Rudd, 2006). Clinicians must work to reconcile the conflicting goals of wanting to prevent clients' suicide with clients' desire to end their psychological pain (AAS, 2010). In order to reconcile these conflicting goals, clinicians need to establish and maintain an empathetic and collaborative approach to treatment that involves using precise suicide terminology and never eliminating the option of suicide (AAS, 2010; Joiner, 2005; Rudd, 2006).

- 3. "Know and elicit evidence-based risk and protective factors" (Cramer et al., 2013, p. 6). Clinicians need to know the evidenced-based factors, because one of their primary goals in conducting a suicide risk assessment is to elicit clients' risk and protective factors (AAS, 2010; Kleespies et al., 1993; Kleespies et al., 2009; Rudd, 2006; Sullivan & Bongar, 2009). As previously mentioned, knowing clients' risk and protective factors are necessary because of their association with suicide risk (e.g. Fowler, 2012; Patterson et al., 1983; Westefeld et al., 2000).
- 4. "Focus on current plan and intent of suicidal ideation" (Cramer et al., 2013, p. 6). Particular attention needs to be paid to clients' immediate suicide intent and plan when assessing suicide risk (AAS, 2010; Joiner, 2005; Sullivan & Bongar, 2009). Clinicians need to gather detailed information concerning clients' frequency, intensity, and duration of suicidal ideation (AAS, 2010; Rudd, 2006; Sullivan & Bongar, 2009). In addition, clinicians need to assess clients' access to suicide means, as well as if they have made any final arrangements (ASS, 2010; Joiner, 2005; Rudd, 2006). Finally, reasonable measures should be made to remove or restrict clients' access to means, unless doing so would place client, clinician, or others at risk for harm (Cramer et al., 2013).
- 5. "Determine level of risk" (Cramer et al., 2013, p. 6). Determining clients' level of risk is important when assessing suicidality (AAS, 2010, Joiner, 2005, Rudd, 2006, Sullivan & Bongar, 2009). Pertinent information should be gathered through a thorough bio-psychosocial interview and, if possible, through available patient records and collateral information through clients' family, friends, or previous treatment providers (AAS, 2010). In addition, additional information can be attained

through psychodiagnostic testing (Sullivan & Bongar, 2009). Clinicians should integrate and analyze all available information to inform their clinical judgment in determining clients' level of suicide risk (AAS, 2010; Joiner, 2005; Rudd, 2006; Sullivan & Bongar, 2009). Clinicians should determine both long-term (chronic) risk and imminent (acute) risk (Bryan & Rudd, 2006; Van Orden et al., 2010). Finally, clinicians should use precise terminology when describing level of risk, such as low, moderate, high, and extreme (Cramer et al., 2013).

- 6. "Develop and enact a collaborative evidence-based treatment plan" (Cramer et al., 2013, p. 7). Once clients' level of risk has been determined, client and clinician can collaborate to develop a treatment or emergency plan. The purpose of the emergency plan is to keep the client safe (AAS, 2010; Joiner, 2005; Rudd, 2006; Sullivan & Bongar, 2009). It needs to address clients' immediate suicidal ideation and behaviors, implement interventions during session to reduce clients' distress, and monitor clients' level of risk (ASS, 2010; Rudd, 2006). Emergency plans should also include coping skills that clients can use between sessions, persons that clients can contact or safe environments, written reminders of clients' reasons for living, and a list of all emergency contacts (Cramer et al., 2013).
- 7. "Notify and involve other persons" (Cramer et al., 2013, p. 7). Assessing and treating a suicidal client is not an individual endeavor involving only the clinician and client (AAS, 2010; Rudd, 2006; Sullivan & Bongar, 2009. The clinicians should attempt to gain consent from the client to involve others from the client's social network and other treatment providers (AAS, 2010; Sullivan & Bongar, 2009). In cases of high risk, clinicians do not need consent from the client to contact others necessary for

- maintaining the client's safety (Cramer et al., 2013). Collaborating with other treatment providers ensures a higher level of interdisciplinary care. Involving the client's social supports can establish a support system that will be in place for the duration of treatment and beyond (Sullivan & Bongar, 2009).
- 8. "Document risk, plan, and reasoning for clinical decisions" (Cramer et al., 2013, p. 7). Documentation is necessary to ensure both consistent monitoring of the client's risk and treatment and for reasons of professional liability (AAS, 2010; Rudd, 2006). Documentation begins with informed consent, and should include information regarding risk and rationale for treatment (AAS, 2010; Rudd 2006). In addition, documentation should include direct quotations from the client and copies of any safety plans used (Rudd, 2006). Furthermore, contact with supervisors or colleagues regarding treatment of the suicidal client should be documented. The client's progress and outcomes of assessment and treatment should be documented (AAS, 2010; Rudd, 2006). Finally, in addition to the above items, the following should be included as minimal standards for documentation: prominent risk and protective factors identified during the clinical assessment interview, current risk level and rationale for risk level, and immediate and long-term clinical actions taken based on level of risk (Cramer et al., 2013).
- 9. "Know the law concerning suicide" (Cramer et al., 2013, p. 7). Clinicians need to be familiar with laws pertaining to suicide (AAS, 2010; Joiner, 2005; Rudd, 2006). In addition, they need to be familiar with state laws, as well laws in their jurisdiction pertaining to hospitalization of suicidal clients in order to expedite the commitment process if it becomes necessary (Cramer et al., 2013). Furthermore, clinicians need to

be familiar with their ethical obligations and professional standards of care concerning assessment and treatment of suicidal clients. Failure to meet such ethical obligations and standards of care could result in legal action against clinicians.

(Joiner, 2005). Finally, knowledge of applicable laws and ethical obligations should guide documentation by providing additional structure and guidance (AAS, 2010; Rudd, 2006).

10. "Engage in debriefing and self-care" (Cramer et al., 2013, p. 7). Working with clients at risk for suicide is a stressful event, regardless of the clinician's level of expertise (Cramer et al., 2013). Clinicians often experience feelings of incompetence, guilt, and concern over possible mistakes made during the assessment or treatment process following a suicide attempt or completion by a client (Webb, 2011). Due to the inherent stress of work with suicidal clients, clinician self-care is an important and integral aspect of treatment. It helps clinicians remain emotionally and psychologically available (Cramer et al., 2013). Clinicians should be encouraged to consult with their colleagues who have similar experiences and utilize their social support systems to mitigate the effects of clinical work with suicidal clients (Kleepies et al., 2009; Kleespies et al., 1993).

Evaluation

Suicidologists have published numerous instruments that are intended to evaluate paraprofessional and professionals' knowledge, attitudes, and various abilities related to suicide (Domino, Moore, Westlake, & Gibson, 1982; Holmes & Howard, 1980; McIntosh & Hubbard, 2004; Neimeyer & Bonnelle, 1997; Neimeyer & MacInnes, 1981). The Suicide Opinion Questionnaire (SOQ; Domino et al., 1982) was designed to measure respondents'

attitudes toward suicide. The Suicide Lethality Scale (SLS; Holmes & Howard, 1980) was designed to assess respondents' knowledge of suicide. The Expanded Revised Facts on Suicide Quiz (ERFOS; McIntosh & Hubbard, 2004) was designed to evaluate respondents' knowledge of suicide facts and myths. Finally, the Suicide Intervention Response Inventory (SIRI; Neimeyer & MacInnes, 1981) and the Suicide Intervention Response Inventory 2 (SIRI-2; Neimeyer & Bonnelle, 1997) are commonly used instruments designed to measure respondents' suicide intervention skills.

The SIRI-2 was designed to measure how counselors would respond to a call from a suicidal person. The original version, the SIRI (Neimeyer & MacInnes, 1981) consists of 25 statements that a suicidal caller is likely to make. Following each statement are two forced-choice counselor responses, one that is facilitative and one that is neutral or deleterious to the relationship. Respondents indicate which response choice is most facilitative (Neimeyer & MacInnes, 1981; Westefeld et al., 2000). The SIRI-2 was developed because of a ceiling effect with the SIRI due to its dichotomous scoring, which gave respondents a 50-percent chance of choosing the correct answer by chance. Also, there is the potential for a ceiling effect when it is used with experienced professionals (Neimeyer & Bonnelle, 1997; Range & Knott, 1997). Instead of the dichotomous response option, the SIRI-2 requires respondents to evaluate the appropriateness of each response on a scale of + 3 to - 3. The revised scale of the SIRI-2 eliminates the ceiling effect that is present in the SIRI, making it a useful instrument for measuring the suicide intervention skills of counselors and counseling students (Neimeyer & Bonnelle, 1997; Range & Knott, 1997; Westefeld et al., 2000).

To address the need for systematic evaluation of students' attainment of suicide assessment competencies, Cramer et al. (2013) devised an instrument to measure students'

level of competency in the ten core competencies. The Suicide Competency Assessment Form (SCAF) is intended as a measure of students' competency. Both instructor and student can complete the instrument (Cramer et al., 2013). The SCAF has potential for assessing counseling students' competency in the practica portion of their training.

Counseling Pedagogy

Pedagogical foundations in counseling research in general since 2001 have included constructivist learning theories, critical pedagogical theories, humanistic learning theories, and instructional research without theoretical grounding (Barrio Minton, Wachter Morris, & Yaites (2014). Teaching strategies commonly used in counselor education include lecturing, discussion, questioning, small groups, reading and writing, and improvisation (McAuliffe, 2011). Specific to suicide assessment and intervention training, the focus has been on strategies for training students, with little mention of theoretical underpinnings (e.g. Juhnke, 1994; Laux, 2002; Westefeld et al., 2000; Wachter Morris & Barrio Minton, 2012). Recommended learning strategies specific to suicide training include crisis intervention courses that cover protocols for managing suicidal clients, systematic and supervised practicum experiences in working with suicidal clients (Westefeld et al., 2000), guest lectures by scholars and clinicians with expertise (Laux, 2002), role plays, modeling, small-group activities, didactic content (Wachter Morris & Barrio Minton, 2012), and self-instructional videos (Juhnke, 1994).

Video training has long been used in training mental health professionals (e.g. Shostrom, 1965). Video training, specifically self-instructional video, has been a method of training since the early 1970s (Eisenberg & Delaney, 1970). Self-instructional learning consists of three components: modeled examples, practice, and immediate feedback (Cormier

& Cormier, 1976). It is based on the microskills model. The microskills model consists of four components: written material, videotaped model, practice with feedback, and remediation practice. Self-instructional video training has been used to train mental health professionals many skills from basic listening and interviewing skills (Eisenberg & Delaney, 1970; Peters, Cormier, & Cormier, 1978; Stone & Vance, 1976; Stone et al., 1988) to suicide assessment training (Juhnke, 1994).

The effectiveness of instructional videos is based on the use of modeling in teaching basic skills to counseling students (Stone & Vance, 1976). Modeling is a highly effective method of teaching new skills to students (Larson, 1998). It is particularly effective when the new task is ambiguous, because it decreases the ambiguity of the task (Bandura, 1986; Larson et al., 1999). The underlying theoretical constituent of modeling in video training is social-cognitive theory (Bandura, 1986; Larson et al., 1999). Modeling, followed by mastery, is one of the strongest methods of increasing self-efficacy according to social cognitive theory (Bandura, 1986). In the context of counselor training, modeling would be students observing a successful counseling session; mastery would entail students counseling with a client (Larson, 1998).

When considering methods of training counseling students in new skills, it is important to consider the impact of different methods of training on students' self-efficacy (Larson & Daniels, 1998). "Counseling self-efficacy is defined as one's beliefs or judgments about their capability to effectively counsel a client in the near future" (Larson et al., 1999, p. 237). Self-efficacy has been associated with counseling student anxiety and performance (Larson & Daniels, 1998), and counseling self-efficacy and anxiety are significant predictors of counselor performance (Larson et al., 1992). According to Larson (1998), "counseling

self-efficacy is conceptualized as a generative mechanism through which counselors integrate and apply their existing cognitive, behavioral, and social skills to the counseling task" (p. 219).

In terms of self-efficacy, the use of modeling (video) is potentially safer in teaching skills to students who do not yet possess them (Larson et al., 1999). While learning strategies such as role-playing have potentially greater impact on learning, they have a potentially deleterious effect on students' self-efficacy, and thus learning, if they perceive they did not perform adequately (Larson et al., 1999). Because the focus of this study is on basic skill acquisition for assessing suicide, modeling, in addition to written materials, will be the one of the primary teaching strategies. Introducing and teaching such skills through modeling lays the groundwork for the more complex, and potentially risky training of role-plays, mock counseling sessions, and working with real clients (Larson et al., 1999). The training module for teaching suicide assessment that was used in this study was intended for use in crisis counseling, prepractica, clinical or community mental health, assessment, or school counseling.

The use of instructional videos has been found to be just as effective as more comprehensive and time-consuming models of counselor training (Peters et al., 1978). An early study by Peters et al. (1978) assessed each the four components of the microskills model to determine if each component contributed significantly to the acquisition of a counseling skill set (Peters et al., 1978). Results of the study indicated no statistically significant difference between groups that received two, three, or all four components of the microskills model. Participants who were trained using only written material and a videotaped model learned the steps in setting goals with clients equally as well as participants

who were trained using the written material, videotaped model, practice with feedback, and remediation practice. The authors concluded that using written materials and videotaped modeling were effective and efficient for counseling skill acquisition and short-term retention of the learned skill (Peters et al., 1978).

Modeling by way of instructional video is an effective training strategy by itself. When compared with reinforcement only, modeling and reinforcement, and no modeling or reinforcements strategies, it has been shown to be more effective than reinforcement only and no reinforcement or modeling strategies. In addition, it is just as effective as modeling reinforcement strategies in teaching appropriate counselor response leads to counseling students (Eisenberg & Delaney, 1970).

Traditionally, video training has been used in the context of the classroom, such as with the instructor showing the class a counseling demonstration on recorded on VHS tape or some other video medium (Jerry & Collins, 2005). More recently, with the advent of the Internet and subsequent use of web enhanced classroom training, instructional and self-instructional training materials, such as videos can be readily uploaded or streamed online so students may view them outside of the classroom (Jerry & Collins, 2005; Merriam, Caffarella, & Baumgartner, 2007). In addition, many college and graduate courses are offered as online only, whether as part of an online degree program or as an online class in a residence program. In such a case, the use of online training modules is necessary and crucial to the delivery of the class. In either class format—online only or web-enhanced, the use of online training modules is important in the delivery of the course (Merriam et al., 2007).

In the realm of counselor education programs, many core and elective classes are online; and many that are face-to-face are web-enhanced. Using an online training module

that utilizes written materials and instructional video in suicide assessment would be necessary in the context of online-only courses where suicide assessment training would be a topic. One such class would be a crisis intervention course, now a required course in many counselor education programs (Barrio Minton & Pease-Carter, 2011).

Online learning is different from video training in several distinct ways. Video training describes a form of technology that has been commonly used for educational purposes (Eisenberg & Delaney, 1970; McAuliffe, 2011; Merriam et al., 2007). Online learning refers to any form of learning within the context of a devise connected to a communication network (e.g. the World Wide Web; Merriam et al., 2007). Online learning may or may not involve video training, depending on what technologies are utilized within the online environment. Other technologies that may be used in an online learning environment include PowerPoint slide presentations, blogs and discussion boards, audio recordings, wikis, and email. All or some of these technologies may be bundled together and used within a course management system, such as Blackboard or Moodle (Buono, Uellendahl, Guth, & Dandeneau (2011). Online learning can have several benefits when used singularly or in combination with traditional face-to-face learning. In a study that compared online learners to traditional face-to-face learners in an online postgraduate psychotherapy course, online learners demonstrated greater engagement and greater satisfaction with the learning materials (Blackmore et al., 2008). The authors concluded that online elements to psychotherapy education are an effective complement to traditional face-to-face courses. In addition, online course elements can help students accomplish some aspects of learning that face-to-face classes may not accomplish, such as higher levels of self-disclosure that can facilitate learning (Blackmore et al., 2008). Finally, the authors concluded that the most

effective approach to psychotherapy education might be a blend of traditional face-to-face learning and online learning.

CHAPTER THREE: METHODOLOGY

Design

This study used a randomized control, pre-posttest between-groups experimental design to test for statistically significant differences between groups. Specifically, between-groups differences in suicide intervention skills, suicide assessment ability, and ability to determine appropriate clinical action were examined. In addition, differences between pretest and posttest scores in both groups were examined.

Variables of Interest

The independent variable (IV) in this study was the suicide assessment and intervention training. The first dependent variable (DV1) measured was participants' suicide intervention skills. The second dependent variable (DV2) measured was participants' suicide assessment ability. The third dependent variable (DV3) measured was participants' ability to determine level of suicide risk. The final dependent variable (DV4) measured was participants' ability to determine appropriate clinical action.

Additional Variables of Interest

The researcher used a researcher-designed demographics questionnaire to gather the following data: age, gender, counseling concentration, number of counseling classes completed, and previous crisis or suicide intervention training. Data collected using the demographics questionnaire was used for descriptive purposes only. Previous studies using the original Suicide Intervention Response Inventory (SIRI; Neimeyer & MacInnes, 1981) have demonstrated gender to be associated with differences in scores, with females tending to score higher than males (Neimeyer & Diamond, 1983; Norton, Durlak, & Richards, 1989). In addition, prior training or experience in suicide intervention has been positively associated

with higher scores on the SIRI (Neimeyer & Diamond, 1983; Neimeyer & MacInnes, 1981). Gender, however, was not associated with difference in scores in the validation study of the SIRI-2 (Neimeyer & Bonnelle, 1997). Due to its association with scores in earlier studies, data on gender were collected in this study. Finally, studies using both the SIRI and SAC have demonstrated that age is not associated with scores. Data on age were collected in this study for descriptive purposes only.

Participants

Participants were 74 master's level counseling students enrolled in a CACREP-accredited counselor education program. Volunteers were recruited from multiple CACREP-accredited master's-level counseling programs in the US. To reduce variability within the sample, programs selected for sampling in the study were matched on the basis CACREP-accreditation.

The researcher initially planned to utilize random sampling to select participants from volunteers in the available population; however, due to the limited number of volunteers from the available population, all volunteers who met the inclusion criteria and returned an informed consent were included in the study. Counselor educators who taught at CACREP-accredited master's level counseling programs were solicited through CESNET and asked if they were teaching a crisis counseling course in the spring, summer, or fall semesters of 2014, or spring 2015 semester if they would permit students in their courses to be recruited for the study.

Inclusion criteria for participation in this study were graduate students who were currently enrolled in a crisis counseling course in a CACREP-accredited counselor education program. Exclusion criteria for participation in this study were non-graduate students

(undergraduate or faculty) who were enrolled in a crisis counseling course or students who were not enrolled in a crisis counseling course (graduate or undergraduate). In addition, students who were enrolled in a non-CACREP-accredited counselor education program were not eligible.

Participants were informed in the recruitment letter and the informed consent the purpose of the study. Specifically, they were informed the purpose of the study was to assess the effectiveness of training counseling students to assess and intervene with potentially suicidal clients using an online training module. Participants were not informed that they might be assigned to a control group that trained in multicultural counseling skills.

Demographics of Current Sample

Eighty students returned signed consent forms and were sent electronic invitations using OPINIO's electronic invitation. All 80 responded to the pre-test. A total of six participants were excluded from data analysis: Three participants' data were excluded due to non-response or non-completion of the post-test. Two participants' data were excluded from analysis due to extremely high scores on the SIRI-2 at pretest and posttest (outliers). One participant was excluded due to failure to meet the inclusion criteria. During inspection of the demographic data, the researcher discovered the participant did not meet all of the inclusion criteria and was thus eliminated from the data analyses. The final total of study participants included in the data analysis was 74.

Final participants ranged in age from 22 years to 59 years, mean age 32.22 years; mode 25 years. Sixty-two (83.8%) participants were female; 12 (16.2%) male. Participants' race and ethnicity are displayed in Table 1. Participants' counseling concentrations are displayed in Table 2. All participants who indicated multiple counseling concentrations also

indicated a clinical mental health concentration. The number of counseling courses completed by participants ranged from 0 to 25 courses, mean number of courses: 10.91, *SD* 5.55; mode, 4 and 12; median, 11 courses completed. Two participants indicated extremely high numbers of course completed (42 and 51 courses). The researcher divided both numbers by 3 credit hours, because it was likely both participants indicated number of credit hours completed. All participants indicated that they were currently enrolled in a crisis counseling course. Forty-two (56.8%) participants indicated no previous suicide/crisis training; 32 (43.2%) indicated previous training.

Comparison of Demographics by Group

Thirty-seven participants were assigned to the treatment group and 37 assigned to the control group following random assignment. Both groups were nearly identical across all demographic variables. The mean age of participants in the treatment group was slightly higher than the mean age of participants in the control group, 33.49 years (SD = 10.126) vs. 30.95 years (SD = 8.692), respectively. In addition, the treatment group had a moderately higher percentage of participants with previous suicide assessment training, 48.6% vs. 37.8%, respectively. Similarly, the treatment group had a moderately higher percentage of participants with a clinical mental health concentration, 67.6% vs. 54.1%, respectively; however, the control group had a moderately higher percentage of participants with multiple concentrations, all of which included clinical mental health, 37.8% vs. 21.6%, respectively. Finally, control group participants had a slightly higher number of completed counseling courses than the treatment group, 11.43 (SD = 5.086) vs. 10.38 (SD = 6.011), respectively. Demographic differences by group are displayed in Table 3.

Description of the Treatment

Treatment Group

The OSAITM consisted of a slide presentation component and a video component. The slide presentation portion included recent suicide related statistics for the US, facts about suicide risk factors, warning signs, and protective factors. It also taught students how to determine level of suicide risk and appropriate clinical intervention. In addition, it taught participants the process of intervening with a client at risk for suicide based on the seven-step crisis intervention model with the 25 strategies for working with a suicidal client (Granello, 2010). For the purpose of modeling suicide assessment and intervention, a video component was presented consisting of a vignette of a clinician working with a suicidal client (O'Donovan et al., 2013). The OSAITM covered the following six core competencies outlined by Cramer et al. (2013) in depth: know and manage your attitude and reactions toward suicide when with a client; develop and maintain a collaborative, empathetic stance toward the client; know and elicit evidence-based risk and protective factors; focus on current plan and intent of suicidal ideation; determine level of risk; and develop and enact a collaborative evidence-based treatment plan. In addition, the OSAITM also briefly covered the following four core competencies outlined by Cramer et al. (2013): notify and involve other persons; document risk, plan, and reasoning for clinical decisions; know the law concerning suicide; and engage in debriefing and self-care. At the conclusion of the posttest, treatment group participants were given access to the control group training module.

Control Group

The control module consisted of a slide presentation component and a video component on a non-suicide topic. Specifically, it consisted of a slide presentation and video vignette on multicultural counseling skills (O'Donovan et al., 2013). The slide presentation

and video were similar in length to the presentation and video used in the treatment condition. At the conclusion of the posttest, control group participants were given access to the treatment group training module.

Instrumentation

SIRI-2

The SIRI-2 was used to measure participants' suicide intervention skills at pretest and posttest. The SIRI-2 was designed to measure the suicide intervention skills of professional and paraprofessional groups, such as crisis-line workers and masters level counseling students (Neimeyer & Bonnelle, 1997). Multiple studies have demonstrated the SIRI-2 to be a useful for assessing the effectiveness of suicide intervention training (Palmieri et al., 2008; Pisani, Cross, & Gould, 2011). The instrument is comprised of 50 items: 25 statements made by a suicidal caller, and two counselor responses to each statement. Respondents read each statement made by the client, then rate the appropriateness or inappropriateness of two counselor responses. Responses are rated by respondents on a scale of +3 to -3, with +3 representing highly appropriate, 0 neutral, and -3 as highly inappropriate (Neimeyer & Bonnelle, 1997).

Scoring. Scores for the SIRI-2 were computed by taking the difference between respondents' scores for each item and the mean score for that item. Means scores were computed from a group of expert suicidologists. Respondents' total scores for the SIRI-2 represented the discrepancy between respondents' ratings and that of the panel of experts' ratings. Smaller total scores represent greater suicide intervention skills; larger total scores represent less suicide intervention ability (Neimeyer & Bonnelle, 1997).

Validity and reliability. Evidence of construct-related validity was demonstrated by an analysis of variance (ANOVA) that compared counseling and introductory psychology students. Counseling students outperformed introductory psychology students p < .001. ANOVA performed on scores from Master's level students pre-suicide intervention training and post-intervention training. Scores improved with training p < .001 (Neimeyer & Bonnelle, 1997). Evidence of discriminant validity was demonstrated by lack of association between the SIRI-2 and Marlowe-Crowne Social Desirability Scale r = -.01, p = .94 (Neimeyer & Bonnelle, 1997). Internal consistency of the SIRI-2 was examined using the same sample of Master's level counseling students (Neimeyer & Bonnelle, 1997). Cronbach's alpha was high, ranging from .90 at pretest to .93 at posttest. In addition, test-retest reliability over a two-week period was high, with a Pearson correlation coefficient of .92, p < .001 (Neimeyer & Bonnelle, 1997). Cronbach's alpha for the current sample was .71 for pretest and posttest.

SAC

The SAC (Rogers & Alexander, 1994) was used to measure participants' suicide assessment ability, ability to determine risk level, and ability to determine clinical action at pretest and posttest. The SAC is a two-part suicide assessment checklist designed for administration as a semistructured interview by counselors and crisis line workers consisting of 21 items. Part one of the SAC consists of 12 items that are used to gather pertinent demographic and historical data considered to be indicative of suicide risk. Part two of the SAC is comprised of nine items that represent psychological, psychosocial, and clinical risk factors indicative of increased risk of suicidality. There are two auxiliary items in addition to Parts one and two of the SAC. One item is used to document whether a "no suicide" contract

was used with the client. The second auxiliary item is for rating the client's level of suicide risk based on all information gathered during the interview. The rating is a one to five scale with one indicating low risk and five indicating high risk. This scale represents the clinician's judgment of the client's level of suicide risk. The SAC has two appendices on the reverse side of the scale that defines each item of the scale for quick reference by the clinician (Rogers & Alexander, 1994).

Scoring. Scores for the SAC were computed by adding the scores for all responses in part one and part two. Total score for the SAC was computed by adding the totals for part 1 and part 2. Total scores for the SAC range from 11 to 108, with higher scores indicating greater risk (Range, 2005). In addition to parts one, two, and the total score, there are two auxiliary items: one concerns whether the client is engaged in a "no suicide contract;" the other is a scale of the clinician's determination of risk inclusive of all other factors from the interview (Range, 2005). The scale is a likert-type scale, ranging from one to five, with one indicating low risk and five indicating high risk. The final item of the SAC is labeled "Disposition or referral." This item is left blank in order for the clinician to indicate what clinical action was taken (Rogers & Alexander, 1994).

The scoring of the SAC had to be modified for the purpose of this study in order to adapt it for use with the clinical vignettes used in this study. A group of five doctoral counselor education students were selected to assess both clinical vignettes using the SAC in order to provide criterion scores that were used for comparing the differences between participants' scores and criterion scores for the three dependent variables. A mean total score was calculated for Parts 1 and 2 of the SAC for comparison of participants' scores for suicide assessment ability (DV2) to the criterion score. In addition, a median criterion score was

calculated for the suicide risk level scale of the SAC in order to measure participants' ability to determine suicide risk level (DV3). Finally, a similar likert-type scale was devised for the final item "Disposition or referral." Five levels of disposition ranging from "No immediate intervention to "Immediate hospitalization" were represented by the likert-type scale. A median criterion score was calculated for comparison to participants' rating for disposition or referral (DV4).

Validity and reliability. Evidence of validity for the SAC was gathered from a psychiatric emergency crisis center over a one-year period from 1,969 clients (Rogers, Lewis, & Subich, 2002). Evidence of construct-related validity was gathered by examining the ability the total score of the SAC to differentiate between clients who were referred to the crisis center for either suicide attempt, suicidal ideation, and nonsuicidal reasons. The results of a one-way ANOVA were statistically significant, p < .0001, indicating that total scores for the SAC differentiated between clients based on reason for referral (Rogers et al., 2002).

Evidence of convergent validity was gathered by correlating the SAC items of worthlessness, hopelessness, intent to die, social isolation, and future time perspective with conceptually comparable items of the BDI, total BDI score, and a composite item comprised of items 2 and 9 of the BDI that indicate suicide risk. A total of 13 correlations were calculated for the subsample. Twelve of the 13 correlations were statistically significant at the p < .05 level (Bonferroni correction to p < .0038). SAC social isolation and BDI social withdrawal did not have a statistically significant correlation, r = .08, p > .0038. The correlations for the other 12 items ranged from r = .17 to r = .36 (Rogers et al., 2002).

Evidence of content-related validity was gathered using discriminant analysis. Using discriminant analysis allowed the researchers to examine which items of the SAC made

significant contributions to the prediction of the criterion (suicide referral group). Results of discriminant analysis were statistically significant, p < .0001. Fifteen of the 21 items of the SAC made statistically significant contributions to predicting membership to the referral groups. Statistically nonsignificant items were substance abuse, suicide note, dependent children, psychiatric history, age category, and marital category (Rogers et al., 2002).

Preliminary psychometric data for the SAC indicated moderate to moderately high levels of reliability. The SAC was originally field tested in a crisis line setting. Data from 300 calls to the center were analyzed to assess the instrument's appropriateness for use in the crisis center. Evidence of reliability based on internal consistency indicated a moderately high Chronbach's alpha of .74 (Rogers & Alexander, 1989). Subsequent investigation of the SAC's reliability was conducted using a group of five experts and a group of 30 volunteers who had completed a 40-hour crisis-training program. Interrater reliability of the SAC was .84 based on the expert group and .83 based on the volunteer group. Internal consistency resulted in a reliability coefficient of .81. Four-week test-retest reliability estimate of the SAC was .82 (Rogers & Alexander, 1994). Cronbach's alpha for the current sample was .50 for pretest and .60 for posttest.

Analysis

Statistical Analysis

All statistical analyses were calculated using SPSS. A series of univariate repeated measures between-groups analysis of variance (ANOVA) were used to determine if there were any statistically significant differences between groups and within groups in their suicide intervention skills (DV1) and suicide assessment ability (DV2). Univariate analyses were selected because of the conceptual independence (Huberty & Morris, 1989) of suicide

intervention skills and suicide assessment ability. While both variables are critical when working with clients at risk for suicide, they are conceptually distinct enough to warrant independent analyses (Granello, 2010). A nonparametric Mann-Whitney U test was used to test for statistically significant differences between groups in their ability to determine level of suicide risk (DV3), and ability to determine appropriate clinical action (DV4). In addition, differences in scores on both variables between pretest and posttest conditions for both groups were analyzed using a nonparametric Wilcoxon Signed Rank Test. Both nonparametric tests were selected because of the ordinal level scores of DV's 3 and 4 (Howell, 2011). Level of variables and associated scores were as follows:

- IV: nominal level scores, training/no training
- DV1: interval level scores -3 to +3
- DV2: interval level scores 11 to 108
- DV3: ordinal level scores 1 to 5 (low risk to high risk)
- DV4: ordinal level scores 1 to 5 (no intervention to hospitalization)

Assumptions

ANOVA. The assumptions of ANOVA are independence of scores, normality of scores, and homogeneity of variance (Howell, 2011). The assumption of independence of scores was met through the design of the study. The assumption of normality was met by visual inspection of histograms, stem-and-leaf plots, and p-norm and q-norm plots on the SPSS output. The assumption of homogeneity of variance was met by inspecting Levene's test of homogeneity of variance on the SPSS output where p > .05.

Nonparametric tests. The assumptions of nonparametric tests are independence of scores and randomness (Howell, 2011). The assumption of independence of scores was met

through research design. The assumption of randomness was also met through research design.

Missing Data

The researcher examined data to determine if data was missing at random or not at random. Data missing at random was imputed using mean imputation. Data missing not at random were deleted using listwise deletion (Sterner, 2011).

Power Analyses

SIRI-2. G*Power (Faul, Erdfelder, Lang, & Buchner, 2007) was used to calculate a priori and post hoc power analyses. Power analysis, based on figures from Neimeyer and Bonnelle (1997), was as follows: Statistical test: one-way ANOVA; significance level (α): .05; power (1 - β): .80; sample size: 62; number of groups: 3; and effect size: .36. A priori power analysis for the current study was as follows: Statistical test: ANOVA, repeated measures, between groups; significance level (α): .05; power (1 - β): .80; Number of groups: 2; number of measures: 2; correlation between measures: .92; and effect size: .36. Based on the power analysis, a total sample size of 62 participants was required to find statistically significant results at the .05 level of significance.

SAC. Power analysis of the SAC was based on figures from Rogers and Alexander (1994): One-way ANOVA; significance level (assumed): .05; power (assumed): .80; sample size: 35; number of groups: 2; effect size .48. A priori power analysis for the current study was as follows: ANOVA, repeated measures, between groups; significance level: .05; power: .80; number of groups: 2; number of measures: 2; correlation between measures: .82; effect size: .42. Based on the power analysis, a total sample size of 34 participants was required to find statistically significant results at the .05 level of significance.

Procedure

The researcher posted an electronic message to the CESNET listserv in the spring, summer, and fall of 2014 asking for counselor educators of CACREP-accredited counseling programs who would be teaching a crisis counseling course in the spring, summer, and fall 2014 semesters and Spring 2015 semester if they were willing to make the study available to their students enrolled in their crisis-counseling courses. Counselor educators who responded indicating their interest were sent a recruitment letter detailing the study, including course and program eligibility criteria. Counselor educators whose course and programs met the eligibility criteria and who were willing to permit their students to participate in the study were instructed to have interested students email the researcher.

The researcher sent an email containing instructions, recruitment letter with eligibility criteria, and informed consent to volunteers who expressed interest in participating in the study. Volunteers who agreed to participate electronically signed the informed consent form with their initials and six-digit date of birth (alpha-numeric identifier), then emailed the consent form back to the researcher. The researcher then entered participants' alpha-numeric identifier into SPSS and generated a random number table in order to assign participants to the treatment group or control group.

Next, the researcher sent an electronic invitation to each participant via OPINIO (Version 6.6.1) inviting participants to complete the pretest assessment (demographics questionnaire, SIRI-2, and SAC). Using a web link contained in the electronic invitation, participants were directed to the demographics questionnaire. After completing the demographics questionnaire, participants were automatically directed to the Suicide Intervention Response Inventory–2 (SIRI–2). After completing the SIRI–2, participants were

automatically directed to the Suicide Assessment Checklist (SAC). After completing the SAC, participants completed the pretest.

After completing the pretest, the researcher sent participants the web link to their respective training modules via OPINIO's invitation function. Participants completed their respective training modules. After completion of the training module, participants were automatically directed to the posttest (SIRI-2 and SAC). Participants concluded the study after completing the posttests. Finally, after participants completed both posttests, the researcher emailed participants the other training module (i.e. training group received the control group's training module; control group received the training group's training module). As an additional measure, the researcher also screened participants' completed demographics questionnaires to ensure they met the inclusion criteria for the study. Data obtained from screen failures were excluded from data analysis.

CHAPTER FOUR: RESULTS

Preliminary Analysis

Missing Data

All data were examined for missing scores. Three cases were missing data not at random and thus were deleted from analysis. Data missing at random were imputed using the mean from scores for the variable (Sterner, 2011).

Statistical Assumptions

The data for dependent variables one and two met all assumptions for ANOVA (Howell, 2011). The assumption of independence was met through research design. Specifically, participants were counted only once per analysis; were assigned only to one group; and completed pre-test, training and posttest independently. Homogeneity of variance was satisfied for both variables (Levene's test p > .05). The assumption of normality was met for both variables by visual inspection. Nonparametric analyses were utilized to analyze data for dependent variables 3 and 4, because SAC scores corresponding to both variables were ordinal level. Data for both variables met all assumptions for nonparametric analyses (Howell, 2011). The assumption of independent observations was satisfied through research design. Specifically, participants were counted only once per analysis; were assigned only to one group; and completed pre-test, training and posttest independently. In addition, the assumption of random samples was met through research design. Specifically, participants were randomly selected from the available population.

Outliers

Two cases were deleted from analysis due to extremely high scores on the SIRI-2 at pretest and posttest (DV1). The researcher deleted both cases because they were likely to bias

the mean (Howell, 2011). The biased means would affect the results of the analyses, because ANOVA compares differences in means between and within groups.

Results of Statistical Analysis

Dependent Variable One: Suicide Intervention Skills

The first dependent variable assessed in this study was participants' suicide intervention skills. Participants' scores on the SIRI-2 were compared from pretest to posttest and between the treatment and control groups. Means and standard deviations are displayed in Table 4. An independent samples t-test was performed to test for a statistically significant difference between the treatment and control groups' SIRI-2 pretest scores. Results indicated no statistically significant difference in pretest scores, t(72) = -.887, p = .378 (two-tailed). This suggests participants in both groups had similar suicide intervention skills at pre-test.

Null hypothesis one stated that participants in the treatment group would demonstrate no difference in suicide intervention skills with suicidal clients than the control group, as measured by their scores on the SIRI-2. Results of the repeated measures ANOVA indicated no statistically significant difference between the treatment group and the control group's SIRI-2 posttest scores, F(1, 72) = .020, p = .889, partial eta squared < .001. Therefore, the researcher retained null hypothesis one. Results suggested there was no difference between both groups' suicide intervention skills following training.

Null hypothesis five stated that participants in the treatment group would demonstrate no difference in suicide intervention skills with a suicidal client as measured by their scores on the SIRI-2 from pretest to posttest. Results of the repeated measures ANOVA indicated a statistically significant interaction between pretest–posttest and training, Wilks Lambda = .923, F(1, 72) = 6.044, p = .016, partial eta squared = .077. There was also a statistically

significant main effect of training for participants' scores from pretest to posttest, Wilks Lambda = .687, F(1, 72) = 32.814, p < .001, partial eta squared = .313. Post hoc paired-samples t-tests were conducted between the treatment and control groups' pretest and posttest SIRI-2 scores. Results were statistically significant for both groups: treatment, t(36) = 2.352, p = .024 (two-tailed); control, t(36) = 5.694, p < .001 (two-tailed). Therefore, the researcher rejected null hypothesis five. Results suggest both groups' suicide intervention skills improved following completion of training.

Dependent Variable Two: Suicide Assessment Ability

The second dependent variable examined in this study was participants' suicide assessment ability. Participants' scores on the SAC were compared from pretest to posttest and between the treatment and control groups. Means and standard deviations are displayed in Table 5. An independent samples t-test was performed to test for a statistically significant difference between the treatment and control groups' SAC pretest scores. Results indicated no statistically significant difference in pretest scores, t(72) = -.968, p = .336 (two-tailed). This suggests participants in both groups had similar suicide assessment ability at pre-test.

Null hypothesis two stated that participants in the treatment group would demonstrate no difference in suicide risk assessment ability than the control group, as measured by their scores on the SAC. Results of the repeated measures ANOVA indicated no statistically significant difference between the treatment group and the control group's SAC posttest scores, F(1, 72) = .001, p = .979, partial eta squared < .001. Therefore, the researcher retained null hypothesis 2. Results suggested there was no difference between both groups' suicide assessment ability following training.

Null hypothesis six stated that participants in the treatment group would demonstrate no difference in suicide risk assessment ability as measured by their scores on the SAC from pretest to posttest. Results of the repeated measures ANOVA indicated there was a non-statistically significant interaction between pretest–posttest and training, Wilks Lambda = .967, F(1, 72) = 2.432, p = .123, partial eta squared = .033. In addition, there was a non-statistically significant main effect of training for participants' scores from pretest to posttest, Wilks Lambda = .995, F(1, 72) = .333, p = .566, partial eta squared = .005. Therefore, the researcher retained null hypothesis six. Results suggested that neither group improved in their suicide assessment ability following training.

Dependent Variable Three: Ability to Determine Level of Risk

The third dependent variable examined in this study was participants' ability to determine level of suicide risk. Participants' scores on the SAC were compared from pretest to posttest and between the treatment and control groups. Medians are displayed in Figure 1. A Mann-Whitney U test was performed to test for a statistically significant difference between the treatment and control groups' SAC pretest scores. Results indicated no statistically significant difference in pretest scores, U = 672.50, z = -.149, p = .882. This suggests participants in both groups had similar ability to determine level of suicide risk at pre-test.

Null hypothesis three stated that participants in the treatment group would demonstrate no difference in ability to assess suicide risk than the control group, as measured by their scores on the SAC. Results of the Mann-Whitney U test indicated no statistically significant difference between the treatment group and the control group's SAC posttest scores, U = 681.00, z = -.041, p = .968. Therefore, the researcher retained null hypothesis

three. Results suggested there was no difference between both groups' ability to determine level of suicide risk following training.

Null hypothesis seven stated that participants in the treatment group would demonstrate no difference in suicide risk assessment ability as measured by their scores on the SAC from pretest to posttest. Both groups were examined separately using the Wilcoxon Signed Rank Test. To prevent a Type I error, the significance level was adjusted to .01 for both analyses. Results for the treatment group indicated a statistically significant difference between pretest and posttest scores, z = -4.009, p < .001, with a large effect size (r = .66). Results for the control group indicated similar statistically significant results, z = -3.554, p < .001, with a large effect size (r = .58). Therefore, the researcher rejected null hypothesis seven. Results, however, must be interpreted with caution. Inspection of the participants' scores indicated that a greater number of scores deviated from the criterion score for dependent variable three at posttest than at pretest, suggesting participants in both groups performed worse following training.

Dependent Variable Four: Ability to Determine Appropriate Clinical Action

The fourth dependent variable examined in this study was participants' ability to determine appropriate clinical action. Participants' scores on the SAC were compared from pretest to posttest and between the treatment and control groups. Medians are displayed in Figure 2. A Mann-Whitney U test was performed to test for a statistically significant difference between the treatment and control groups' SAC pretest scores. Results indicated no statistically significant difference in pretest scores, U = 621.00, z = -.832, p = .563. This suggests participants in both groups had similar ability to determine appropriate clinical action at pre-test.

Null hypothesis four stated that participants in the treatment group would demonstrate no difference in ability to determine appropriate clinical action than the control group, as measured by their scores on the SAC. Results of the Mann-Whitney U test indicated no statistically significant difference between the treatment group and the control group's SAC posttest scores, U = 620.50, z = -.764, p = .445. Therefore, the researcher retained null hypothesis four. Results suggested there was no difference between both groups' ability to determine appropriate clinical action following training.

Null hypothesis eight stated that participants in the treatment group would demonstrate no difference in suicide risk assessment ability as measured by their scores on the SAC from pretest to posttest. Both groups were examined separately using the Wilcoxon Signed Rank Test. To prevent a Type I error, the significance level was adjusted to .01 for both analyses. Results for the treatment group indicated a statistically significant difference between pretest and posttest scores, z = -3.130, p = .002, with a large effect size (r = .51). Results for the control group indicated similar statistically significant results, z = -2.744, p < .006, with a medium effect size (r = .45). Therefore, the researcher rejected null hypothesis eight. Similar to dependent variable three, the results must be interpreted with caution. Inspection of the participants' scores indicated that a greater number of scores deviated from the criterion score for dependent variable four at posttest than at pretest, suggesting participants in both groups performed worse following training.

Table 1: Race/Ethnicity

10010 1: 11000; 201111010		
Race/Ethnicity	n	%
Hispanic/Latino/Latina	26	35.1
Native American/Alaska Native	1	1.4
Asian	0	0
Black/African American	3	4.1
Native Hawaiian/Pacific Islander	0	0
White	41	55.4
Multi	3	4.1

Table 2: Counseling concentration

Counseling concentration	n	%
Clinical mental health (CMH)	45	60.8
School counseling	7	9.5
Multi	22	29.7

Note. All participants who indicated multiple concentrations were enrolled in CMHC

Table 3: Demographics by group

Variable		Control			Treatment	
	n	%	M	n	%	M
	37	50	_	37	50	_
Gender						
Female	33	89.2	_	29	78.4	_
Male	4	10.8	_	8	21.6	_
Mean Age (years)			30.95	-	_	33.49
Race Ethnicity						
His/Lat	12	32.4	_	14	37.8	_
NA/AN	0	0	_	1	2.7	_
African	2	5.4	_	1	2.7	
American						_
White	21	56.8	_	20	54.1	_
Multi	2	5.4	_	1	2.7	_
Previous Training						
No	23	62.2	_	19	51.4	_
Yes	14	37.8	_	18	48.6	_
Number of Courses			11.43			10.38
Counseling						
Concentration						
CMH	20	54.1	_	25	67.6	_
School	3	8.1	_	4	10.8	_
Multi	14	37.8	_	8	21.6	_

Table 4: Within-group differences DV1

			Pretest		Posttest			
Group	Variable	n	M	SD	M	SD	t(36)	p
Treatment	Intervention skills	37	42.437	10.204	39.935	9.28	2.352	0.024
Control	Intervention skills	37	44.626	11.017	38.361	9.28	5.694	0.001

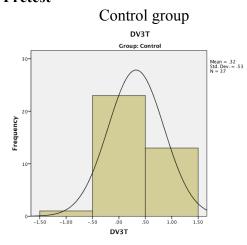
Note. SIRI-2 scores

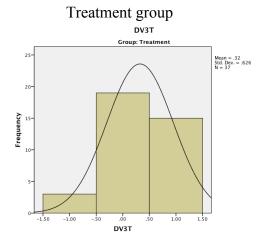
Table 5: Means and standard deviations DV2

		Pretest			Posttest		
		n	M	SD	M	SD	
Treatment	Assessment ability	37	7.643	6.801	8.716	5.628	
Control	Assessment ability	37	9.32	8.045	6.987	5.207	

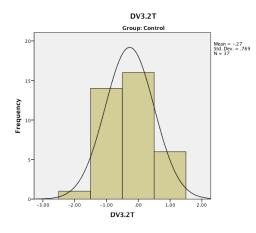
Note. SAC scores

Figure 1. Ability to determine level of suicide risk: Between and within group ranks **Pretest**





Posttest



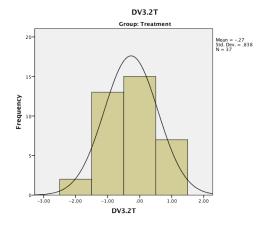
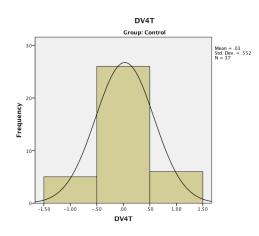
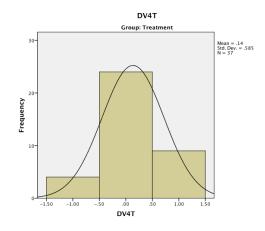


Figure 2. Ability to determine appropriate clinical action: Between and within group ranks **Pretest**

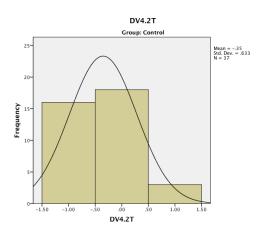
Control group

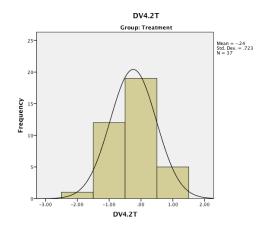
Treatment group





Posttest





CHAPTER FIVE: DISCUSSION

The purpose of this study was to investigate whether the online suicide assessment and intervention training module (OSAITM) was an effective method of training counseling students to effectively assess suicide risk and intervene with suicidal clients. Specifically, the researcher attempted to answer the following research question: Is an online suicide assessment and intervention training module an effective method for teaching suicide assessment and intervention skills to counseling students? The researcher hypothesized scores of participants who were trained using the researcher-developed Online Suicide Assessment and Intervention Training Module (OSAITM) would improve in their ability to assess and intervene with suicidal clients over participants who were trained in multicultural skills (nonsuicide intervention). In addition, the researcher hypothesized scores of participants who were trained using the OSAITM would improve from pretest to posttest on all variables as a result of training.

The results of the study supported the fifth hypothesis. Participants who were trained with the OSAITM improved in their suicide intervention skills (DV1) as hypothesized. Participants' mean scores on the SIRI-2 at pretest were 42.437(10.204) and 39.935(9.28) at posttest, indicating a statistically significant improvement following training. Control group participants' scores also improved at posttest following training in multicultural counseling skills: pretest 44.626(11.017) and posttest 38.361(9.28). Effect size for both groups was medium (partial eta squared = .313) according to Cohen (1988). This suggested that the suicide assessment and intervention training module was not more effective than the control module in improving counseling students' ability to effectively intervene with clients at risk for suicide.

The results of the study supported the null hypothesis for hypothesis one. There was no statistically significant difference between the treatment group and control groups' posttest SIRI-2 scores. This suggests the OSAITM was not more effective in training counseling students to intervene with suicidal clients than the multicultural skills training module.

A possible explanation for the improvement in all participants' scores on the SIRI-2 is both training modules included training in basic counseling skills, including establishing rapport, empathy, attending behaviors, active listening, and nonjudgmental attitude and the Rogerian core conditions of congruence, unconditional positive regard, and empathy (Granello, 2010; Rogers 1957). The SIRI-2 was designed to measure how counselors would respond to a call from a suicidal person (Neimeyer & MacInnes, 1981). Within the instrument, counselors rate two responses to a statement made by a suicidal caller. Responses are facilitative, neutral, or deleterious to the caller's statement (Neimeyer & MacInnes, 1981; Westefeld et al., 2000). Facilitative responses are indicative of the counselor utilizing basic counseling skills, such as empathy, active listening, reflective responses, and a nonjudgmental stance. Deleterious responses are indicative of the counselor not utilizing basic counseling skills (Neimeyer & MacInnes, 1981).

This result is consistent with and supports the common factors theory (Wampold, 2001; 2007). Common factors are universal and nonspecific among different therapies. They include the relationship factors between the counselor and client (Wampold, 2007), client characteristics, counselor qualities, the change process, and the structure of the treatment (Wampold, 2001). The Rogerian core conditions of congruence, unconditional positive regard, and empathy are embedded in the common factors (Wampold, 2001). There is a large body of research spanning several decades (e.g. Luborsky, Singer, & Luborsky, 1975;

Norcross, 2001; Seligman, 1995, Shapiro & Shapiro, 1982; Smith & Glass, 1977; Wampold et al., 1997; Wampold, 2001, 2007) indicating common factors among different therapies are largely responsible for client outcomes. In a study of suicidal adolescents, the quality of the therapeutic relationship was found to be among the most beneficial aspects of treatment (Paulson & Everall, 2003). Common factors, including the quality of the therapeutic relationship, account for the greatest amount of variability in counseling outcomes (Hansen, 2007; Lambert & Barley, 2001; Norcross, 2001; Wampold, 2001; 2007). In addition, Lambert and Barley (2001) stated, "...it is imperative that clinicians remember that decades of research consistently demonstrate that relationship factors correlate more highly with client outcome than do specialized techniques" (p. 359). Finally, the lack of a quality therapeutic relationship has been found to have a negative impact on outcomes among clients at risk for suicide (Granello, 2010; Maltzberger, 1986).

Basic counseling skills comprise three of the seven steps delineated by Granello (2010) for effective suicide intervention. Step two suggests establishing rapport with the client (Granello, 2010). Establishing rapport is considered one of the most important factors when assessing and intervening with clients at risk for suicide (Bongar, 2002). Step three suggests counselors listen to their clients' stories (Granello, 2010). Granello (2010) states that it is necessary to "listen, understand, and validate" (p. 224) the suicidal client's story. Finally, step four suggests counselors manage the feelings of suicidal clients (Granello, 2010). Specifically, counselors must "encourage emotional ventilation" (Granello, 2010, p. 227) in order to allow clients to fully express and experience their feelings (Granello, 2010), which has been shown to reduce suicidal intent (Apter et al., 2001).

Training in basic counseling skills for assessing and intervening with suicidal clients is also consistent with Competency number two of the ten core competencies for suicide risk assessment developed by Cramer et al. (2013): "Develop and maintain a collaborative, empathetic stance toward the client" (p. 3). This is one of the most essential tasks of successful counseling and is particularly important when working with clients at risk for suicide (AAS, 2010; Joiner, 2005; Rudd, 2006).

Finally, consistent with Granello (2010) recommendation of beginning counselors observing more skilled counselors intervene with suicidal clients, all participants viewed short video segments of seasoned counselors working with clients. One video demonstrated a counselor working with a client at risk for suicide; the other demonstrated a counselor working in a multicultural counseling session. It is possible participants' basic counseling skills improved as a result of viewing the video vignettes in their respective training modules, which, in-turn, improved their suicide intervention skills.

The results of this study supported the null hypothesis for hypothesis two. There was no statistically significant difference between treatment and control groups' suicide risk assessment abilities (DV2) as measured by the SAC. This suggests that the OSAITM was no more effective in training counseling students to assess suicide risk than the online multicultural training module.

The results of this study supported the null hypothesis for hypothesis six. There was no statistically significant difference in either groups' suicide risk assessment ability from pretest to posttest as measured by the SAC. This suggests that neither the OSAITM nor the multicultural training modules were effective in training counseling students to assess suicide risk.

A possible explanation for the lack of improvement following training was the nature of the training and training assessment itself. While the literature supports the necessity of using basic counseling skills to help elicit risk factors and protective factors (assessment ability) while assessing for suicide risk (Granello, 2010; Cramer et al., 2013), the nature and design of the training module, specifically the clinical vignettes did not require participants to utilize basic counseling skills for suicide assessment. The risk factors, protective factors, and warning signs were already delineated in the clinical vignettes. It is more likely this design required participants to utilize knowledge of suicide risk assessment over ability to assess for risk. This is partially supported by the non-statistically significant difference following training; however, it would be expected that participants in the suicide assessment training group would have improved scores over the non-suicide training group following training. This is not supported due to the non-statistically significant difference between groups following training. Pretest scores on the SAC indicate that both groups possessed equal suicide assessment ability prior to training. In light of the results of the study, the OSAITM was not effective in increasing participants' abilities in suicide assessment. A replication study that specifically measures participants' suicide assessment knowledge could conclusively indicate if the OSAITM was effective in increasing knowledge of suicide assessment (i.e. risk factors, warning signs, and protective factors).

The results of this study supported the null hypothesis for hypotheses three. There was no statistically significant difference between the treatment group and control groups posttest ability to determine level of suicide risk as measured by the SAC. This suggests that the online suicide training module was no more effective in training participants in

determining level of suicide risk than an online training module in multicultural counseling skills.

This result was unexpected because participants who were trained with the OSAITM received specific training in determining level of suicide risk, while participants who were trained in multicultural counseling skills did not receive any training in determining level of suicide risk. It is possible that participants in both groups already possessed a high level of skill due to prior training in crisis intervention, suicide intervention training, and training received while in their respective crisis counseling courses that there was no training effect from the suicide training module. Another possible explanation was the limited variability of the likert-type scale used to measure participants' ability to determine level of suicide risk. The limited variability of this scale (1 to 5) may have been insufficiently sensitive to detect a training effect.

The results of this study supported hypothesis seven. There was a statistically significant difference in SAC scores from pretest to posttest for both groups. Visual inspection of the data indicated participants' abilities to determine suicide risk (DV3) actually decreased following training. Participants rated suicide risk less consistently with the criterion score for suicide risk level at posttest than at pretest. Nineteen participants in the treatment group rated suicide risk consistently with the criterion rating at pretest; whereas only 15 rated consistently with the criterion score at posttest. Similarly, 22 control group participants rated suicide risk level consistently with the criterion score at pretest and only 16 at posttest. In addition, both groups' had ratings of suicide risk at posttest that were father from the criterion score. This suggests neither the suicide training module nor the

multicultural counseling skills training module were effective in training participants' to assess level of suicide risk.

A possible explanation for the decrease in scores from pretest to posttest is the clinical vignettes of suicidal clients were not identical. The participants were asked to assess the suicidal risk of two different suicidal clients. While the researcher aimed to make the level of suicide risk equal in both vignettes by incorporating an equal number of risk factors, protective factors, and warning signs, it is possible that risk level was not truly identical. The researcher used criterion scores for both vignettes derived from a group of advanced doctoral counselor education students. Median scores from this group were used as the criterion scores. The researcher expected, despite the differences in the clinical vignettes, that a greater number of treatment group participants would score closer to the criterion score following training. Subsequent studies should pilot test both vignettes, using identical vignettes at pretest and posttest to assess for a training effect.

The results of this study supported the null hypothesis for hypothesis four. There was no statistically significant difference between the treatment and control groups' posttest ability to determine appropriate clinical action as measured by the SAC. This suggests that the online suicide training module was no more effective in training participants in determining appropriate clinical action than the online training module in multicultural counseling skills. Similar to the result for hypothesis three, this result was unexpected because participants who were trained with the OSAITM received specific training in determining appropriate clinical action, while participants who were trained in multicultural counseling skills did not receive any training in determining clinical action. It is possible that participants in both groups already possessed a high level of skill due to prior training in

crisis intervention, suicide assessment, and training received and while in their respective crisis counseling courses that there was no training effect from the suicide training module. It is also possible that the limited variability of the likert-type scale used to measure participants' ability to determine appropriate clinical action may have been insufficiently sensitive to detect a training effect.

The results of this study supported hypothesis eight. The final statistically significant result was participants' abilities to determine appropriate clinical action (DV4). Similar to participants' abilities to determine level of suicide risk, participants' abilities to determine appropriate clinical action decreased at posttest following training. Participants' determination of appropriate clinical action was less consistent with the criterion score at posttest than at pretest. Twenty-four participants in the treatment group rated appropriate clinical action consistently with the criterion rating at pretest, whereas only 19 rated consistently with the criterion score at posttest. Similarly, 26 control group participants rated appropriate clinical action consistently with the criterion score at pretest and only 18 at posttest. In addition, the treatment groups had ratings of appropriate clinical action at posttest that were father from the criterion score.

Similar to the possible explanation for the decrease in scores from pretest to posttest for the counseling students' ability to determine suicide risk, a possible explanation for the decrease in scores following training was the different clinical vignettes of suicidal clients used in the pretest and posttest. Due to the different hypothetical scenarios of suicidal clients presented, improvement in participants' ability to determine level of risk may not have been detected. It should be emphasized again; however, because differences in participants' scores from the criterion scores were compared that any improvement in participants' ability to

determine level of risk should have been detected. Subsequent studies should pilot test both vignettes, using identical vignettes at pretest and posttest to assess for a training effect.

Limitations

There were several limitations of the study. The first limitation was no limit placed on the amount of time participants' had to complete the study. It was possible that participants' scores on the SIRI-2 improved as a result of their training in their respective crisis counseling courses. Time to completion for participants ranged from 1–46 days, with a mean completion of 6(SD = 8) days, median of four days, and a mode of two days. In addition, participants completed the study at different points in time during their respective semesters in which they were enrolled in a crisis counseling course. Due to the varying amount of time and different time points that participants completed the study, it is possible that some may have a greater degree of crisis counseling training, including specific suicide assessment and intervention training. This may have accounted for some of the training effect observed from pretest to posttest for both groups. Due to random assignment; however, the effects of more crisis counseling training, including specific suicide intervention training is likely minimal. This is evidenced by both groups SIRI-2 scores improving at posttest following training. Furthermore, it is possible that both groups possessed advanced counseling skills that there was a minimal training effect. There may have been a greater training effect had the groups been comprised of participants with less advanced counseling skills. Participants were recruited from crisis counseling courses and likely had been exposed to advanced and relationship-building skills early in their coursework. The researcher thinks it is highly likely that if students from a different course, such as professional orientation and ethics or foundations course, then the training effect would have been much greater. Replication

studies should focus on implementing the training and measurements during a predetermined time period, such as during the first three weeks of a crisis course. In addition, future studies should recruit participants possessing less advanced counseling skills, such as recruiting first semester counseling students to assess the training effect.

The second limitation was 43% of participants indicated they had prior crisis-intervention or suicide intervention training. It is possible that due to the large percentage of participants with prior relevant training that the training effect was minimal for all measures. Future studies could control for prior training by using a larger sample and/or excluding participants with prior crisis or suicide intervention training.

The third limitation was the clinical vignettes of suicidal clients used at pretest and posttest had only minimal empirical validation. Both vignettes were pilot tested with a small group of doctoral counselor education students who used the SAC to score each vignette. The researcher developed both vignettes to similarly reflect level of risk and for participants to choose similar clinical interventions; however, because they were not identical, any difference in scores from pretest to posttest may not have been indicative of actual differences in participants' performance. Future studies should conducted further empirical validation of both vignettes, including additional pilot testing with participants with different skill levels (e.g. expert, counseling students, and minimally trained). In addition, a replication study should use identical vignettes at pretest and posttest to address this limitation.

The final limitation was the selection of the SAC. The authors of the SAC (i.e. Rogers & Alexander, 1994) developed the instrument to be used as part of a thorough and standardized suicide risk assessment in actual crisis counseling work (Rogers & Alexander, 1994). The OSAITM may have emphasized intervention skills and knowledge of suicide risk

and protective factors, as well as warning signs over training in suicide assessment ability. It is likely the SAC was not the appropriate instrument to assess knowledge. There are a handful of validated instruments, such as the Suicide Opinion Questionnaire, the Suicide Lethality Scale, and the Expanded Revised Facts on Suicide Quiz that have been developed to assess respondents' knowledge of suicide facts and myths for the purposes of training (Domino et al., 1982; Holmes & Howard, 1980; McIntosh & Hubbard, 2004). In addition, the instrument was modified for use in this study. The final item "Disposition or referral" had to be modified from its original form by including a five-point likert scale. In the original instrument, this item was left blank in order for the clinician to write in the client's disposition. This was a deviation from the original format of the instrument for the purposes of adapting this instrument for training. Furthermore, the second auxiliary item, "Considering all of the information available, indicate the client's level of suicide risk on the following scale:" contained a five-point likert scale. It is possible there was not enough variability on either scale to detect a training effect. Finally, scores were derived by taking the difference from the participants' scores from the criterion scores for both items further reducing the variability of scores. It is likely that both scales were not sensitive enough to detect a training effect. Future studies could focus on making a pilot training version of the SAC to increase its utility as a training instrument. This could include revising the risk level scale and the disposition item to include scales with greater score ranges to increase variability of respondents' scores. Increased variability of scores would likely make the instrument more sensitive to detect a training effect (Howell, 2010).

Strengths

Despite the limitations, this study had several strengths. The researcher sampled

participants from multiple counselor education programs throughout the US. Programs by American Counseling Association (ACA) regions included North Atlantic, Southern, and Western regions. External validity was enhanced due to sampling from diverse regions. It is possible to generalize the results to other CACREP-accredited programs because of the diversity of the sample. In addition, because the sample consisted of counseling students of varying skill level—beginning students through advanced students—it is likely the results are generalizable to masters-level counseling students of all skill levels.

The second major strength of this study was the randomized controlled experimental design. Due to random assignment, differences between groups was likely negligible. This is evidenced by non-statistically significant differences (p > .05) between groups on all pretest measures despite the variations in previous suicide and/or crisis counseling experience and number of counseling courses completed.

The third major strength of the study was the use of the SIRI-2. The SIRI-2 is a highly validated and widely used training instrument for assessing the effects of training in suicide intervention skills (Neimeyer & Bonnelle, 1997; Range & Knott, 1997; Westefeld et al., 2000). Due to its validation, the researcher is confident that there was, indeed, a positive training effect for both groups in suicide intervention skills.

Implications for Researchers and Educators

There are several implications of this study for researchers and educators. While results regarding the effectiveness of training counseling students in suicide assessment using an online training module are inconclusive, this study does lend tentative support for the effectiveness of this approach in training counseling students to effectively intervene with suicidal clients. According to Granello (2010) and Cramer et al. (2013), basic counseling

skills and the core conditions as posited by Rogers (1957) are the foundations for establishing rapport and the therapeutic relationship and are essential when intervening with suicidal clients (Chiles & Strosahl, 2005; Granello, 2010; Maltzberger, 1986). As previously stated, this result is consistent with and supports the common factors theory. Incorporating basic counseling skills into suicide intervention training is crucial in order to train counseling students to effectively intervene with suicidal clients. This is also consistent with Granello (2010) who stated that effective suicide intervention training includes basic counseling skills. Counselor educators need to emphasize the importance of basic counseling skills and design activities to develop students' basic counseling skills when training students to intervene with suicidal clients. It must be emphasized that the effectiveness of this approach for training in suicide intervention skills was only minimally effective and was not more effective than the non-suicide control. In addition, the training approach used in this study was not effective in increasing counseling students' suicide assessment skills, and was actually detrimental in increasing abilities to determine risk levels and choosing appropriate clinical actions. In light of these results, the researcher questions the validity of this approach for training counseling students in suicide assessment and intervention. As discussed in the literature review, suicide training in counseling has not been grounded in pedagogy based on learning theory, but has historically been taught through the use of different learning strategies. Future studies should investigate the effectiveness of different pedagogical approaches to training in suicide assessment and intervention, such as humanistic, critical, or constructivist pedagogies.

A second implication from this study is it lends tentative support to infusing multicultural counseling skills into suicide intervention training. As indicated by the results of this study, participants' scores for suicide intervention decreased (improved) following

training in multicultural counseling skills. Granello (2010) emphasized that suicide assessment is done within a multicultural context. When assessing risk for suicide, it is imperative counselors consider clients' cultural attitudes and beliefs regarding suicide in order to implement appropriate interventions (Range et al., 1999). Including general and specific multicultural counseling knowledge and skills into suicide intervention training may strengthen the effectiveness of counseling students' ability to intervene with suicidal clients. It must be emphasized again that the results of this study lend only tentative support for the effectiveness of infusing multicultural counseling skills into suicide intervention training. This study did not control against the multicultural skills training module. Results must be interpreted with caution, especially in light of common factors, particularly therapeutic relationship factors, which account for a the largest proportion of variance in client outcomes (Hansen, 2007; Lambert & Barley, 2001; Norcross, 2001; Wampold, 2001; 2007). Future studies should incorporate a no-training control group for comparison of the multicultural training group.

A third implication from this study is the need for an instrument that is designed to assess counseling students' abilities to conduct a suicide assessment. Specifically, it should assess students' ability to gather pertinent information about risk factors, warning signs, protective factors, suicide means, and access to means, and determine suicide risk level, and appropriate clinical action or disposition (Swartz & Rogers, 2004; Westefeld, 2008; Westefeld et al., 2000). The SAC assesses all of these domains and should be further studied for its utility as a training instrument. The clinical vignettes used in this study could also be used as part of this training instrument by being validated in future studies. Validation could

include using group of expert suicidologists to assess each vignette using the SAC to derive criterion scores for each clinical vignette.

Conclusion

This study was one step in the larger process of improving suicide assessment and intervention training in counselor education. It lends tentative support to the effectiveness of infusing suicide intervention training into online and web-enhanced counselor education courses, specifically within crisis counseling courses. It helps counselor educators and researchers to address the pressing need to infuse more training in suicide intervention training into counselor training programs. Specifically, the findings from this study lend tentative support to counselor educators in providing online training modules to train counseling students to effectively intervene with clients who are at risk for suicide within the context of crisis counseling courses for meeting CACREP 2009 standards D4 and D6, "Demonstrates the ability to use procedures for assessing and managing suicide risk". In addition, it tentatively supports counselor educators in addressing the newly released 2016 standards that state counselor educators must teach "suicide prevention models and strategies" (Section 2.5.1.) within Helping Relationships courses and "procedures for assessing risk of aggression or danger to others, self-inflicted harm, or suicide" (Section 2.7.c) within Assessment and Testing courses. Furthermore, it helps counselor educators partially address the second recommendation made by the American Association of Suicidology Task Force that states, "Individuals without appropriate graduate or professional training and supervised experience should not be entrusted with the assessment and management of suicidal patients" (Schmitz et al., 2012, p. 300). Finally, the results of this study tentatively support the counseling profession's ethical (ACA, 2014, section C.2.a.) and

SUICIDE ASSESSMENT TRAINING

legal obligation to the public by training professionals who are competent in effectively intervening with individuals at risk for suicide.

References

- Aguilera, D. C. (1998). *Crisis intervention: Theory and methodology* (8th ed.). St Louis: Mosby.
- American Counseling Association (2014). ACA code of ethics. Alexandria, VA: Author.
- American Psychiatric Association. (2003). American Psychiatric Association Practice

 Guideline for the assessment and treatment of suicidal behaviors. Arlington, VA:

 American Psychiatric Publishing.
- American Association of Suicidology (2006). *Suicide in the USA*. Retrieved from http://www.suicidology.org/
- American Association of Suicidology. (2010). Some facts about suicide and depression.

 Retrieved from http://www.suicidology.org/
- Appleby, L., Mortensen, P. B., & Faragher, E. B. (1998). Suicide and other causes of mortality after postpartum psychiatric admission. *British Journal of Psychiatry*, *173*(3), 209–221. doi: 10.1192/bjp.173.3.209
- Apter, A., Horesh, D., Gothelf, D., Graffi, H., & Lepkifter, E. (2001). Relationship between self-disclosure and serious suicidal behavior. *Comprehensive Psychiatry*, 42(1), 70–75. doi: 10.1053/comp.2001.19748
- Bandura, A. (1986). Self-efficacy. In A. Bandura (Ed.), *Social foundations of thought and action: A social cognitive theory* (pp. 390-453). Englewood Cliffs, NJ: Prentice Hall.
- Barrio Minton, C. A., & Pease-Carter, C. (2011). The status of crisis preparation in counselor education: A national study and content analysis. *Journal of Professional Counseling:*Practice, Theory, and Research, 38(2), 5–17. Retrieved from http://www.txca.org/

- Barrio Minton, C. A., Wachter Morris, C. A., & Yaites, L. D. (2014). Pedagogy in counselor education: A 10-year content analysis of journals. *Counselor Education and Supervision*, *53*(3), 162–177. doi: 10.1002/j.1556-6978.2014.00055.x
- Beck, A. T. (1970). *Depression: Causes and treatment*. Philadephia: University of Pennsylvania Press.
- Beck, A. T., Kovacs, M., & Weissman, A. (1979). Assessment of suicidal ideation: The Scale for Suicide Ideation. *Journal of Consulting and Clinical Psychology*, 47(2), 343–352. doi: 10.1037/0022-006X.47.2.343
- Beck, A. T., & Steer, R. (1988). *Manual for the Beck Hopelessness Scale*. San Antonio, TX: Psychological Corporation.
- Beck, A. T., Steer, R., & Brown, G. (1996). *Beck Depression Inventory* (2nd ed.). San Antonio, TX: Psychological Corporation.
- Beck, A., Steer, R., Kovacs, M., & Garrison, B. (1985). Hopelessness and eventual suicide:

 A 10-year prospective study of patients hospitalized with suicide ideation. *American Journal of Psychiatry*, 142(5), 559–563. Retrieved from http://ajp.psychiatryonline.org
- Beck, A. T., Weissman, A., Lester, D., & Trexler, L. (1974). The measurement of pessimism:

 The Hopelessness Scale. *Journal of Consulting and Clinical Psychology*, 42(6), 861–865. doi: 10.1037/h0037562
- Berger, M. (Ed.). (1970). *Videotape techniques in psychiatry: Training and treatment*. New York: Brunner/Mazel.
- Berman, A. (2006, July/August). Risk assessment, treatment, planning, and managment of the at-risk-for suicide client: The "how to" aspects of assessing suicide risk and

- formulating treatment plans. *Family Therapy Magazine*, *5*(4), 7–10. Retrieved from http://www.aamft.org/
- Blackmore, C., Tantam, D., & van Deurzen, E. (2008). Evaluation of e-learning outcomes: experience from an online psychotherapy education programme. *Open Learning*, 23(3), 185–201. doi: 10.1080/02680510802420027
- Bolton, J. M., Spiwak, R., & Sareen, J. (2012). Predicting suicide attempts with the SAD PERSONS Scale: A longitudinal analysis. *Journal of Clinical Psychiatry*, 73(6), 735–741. doi:10.4088/JCP.11m07362
- Bongar, B. (1991). *The suicidal patient*. Washington, DC: American Psychological Association.
- Bongar, B. (2002). Risk management: Prevention and postvention. In B. Bongar (Ed.), The suicidal patient: *Clinical and legal standards of care* (2nd ed.). (p. 213-261). Washington, DC: American Psychological Association.
- Bongar, B., Lomax, J. W., & Harmatz, M. (1992). Training and supervisory issues in the assessment and management of the suicidal patient. In B. Bongar (Ed.), *Suicide: Guidelines for assessment, management, and treatment* (pp. 253-267). New York, NY: Oxford University Press.
- Bonner, R. L. (1990). A "M.A.P." to the clinical assessment of suicide risk. *Journal of Mental Health Counseling*, 12(2), 232–236. Retrieved from http://www.amhca.org/journal.html
- Bryan, C., & Rudd, M. (2006). Advances in the assessment of suicide risk. *Journal of Clinical Psychology*, 62(2), 185–200. doi:10.1002/jclp.20222
- Buono, L. L., Uellendahl, G. E., Guth, L. J., & Dandeneau, C. J. (2011). The use of

- technology in counselor education and supervision. In G. McAuliffe, & K. Eriksen (Eds.), *Handbook of counselor preparation* (pp. 377–392). Thousand Oaks, CA: Sage Publications.
- Centers for Diseases Control (2012). Deaths: Leading causes for 2009. *National Vital Statistics Reports*, 61(7). Retrieved from http://www.cdc.gov
- Centers for Disease Control and Prevention (2013). Suicide rates among persons ages 25–64 years, by race/ethnicity and sex, United States, 2005–2009. Retrieved from http://www.cdc.gov
- Centers for Disease Control and Prevention (2013). Suicide rates among persons ages 10 years and older, by race/ethnicity, United States, 2005–2009. Retrieved from http://www.cdc.gov
- Chemtob, C. M., Bauer, G. B. Hamada, R. S., Pelowski, S. R., & Muraoka, M. Y. (1989).

 Patient suicide: Occupational hazard for psychologists and psychiatrists. *Professional Psychology, Research and Practice, 20*(5), 294–300. doi: 10.1037/0735-7028.20.5.294
- Chemtob, C. M., Hamada, R. S., Bauer, G., Kinney, B., & Torigoe, R. Y. (1988). Patients' suicides: Frequency and impact on psychiatrists. *The American Journal of Psychiatry*, 145(2), 224–228. Retrieved from http://ajp.psychiatryonline.org/
- Chemtob, C. M., Hamada, R. S., Bauer, G., Torigoe, R. Y., & Kinney (1988). Patient suicide: Frequency and impact on psychologists. *Professional Psychology, Research and Practice*, 19(4), 416–420. doi: 10.1037/0735-7028.19.4.416
- Chiles, J. A., & Strosahl, K. D. (2005). Clinical manual for assessment and treatment of suicidal patients. Washington, DC: American Psychiatric Press.

- Cohen, J. (1988). *Statistical power analysis for the behavioral sciences* (2nd ed.). Hillsdale, NJ: Lawrence Erlbaum Associates.
- Cole, D. A. (1988). Hopelessness, social desirability, depression, and parasuicide in two college student samples. *Journal of Consulting and Clinical Psychology*, *56*(1), 131-136. doi: 10.1037/0022-006X.56.1.131
- Cormier, L. S., & Cormier, W. H. (1976). Developing and implementing self-instructional modules for counselor training. *Counselor Education and Supervision*, *16*(1), 37–45.

 Retrieved from http://www.counseling.org/
- Council for Accreditation of Counseling and Related Educational Programs Standards.

 (2009). 2009 standards for accreditation. Alexandria, VA: Author. Retrieved from http://www.cacrep.org
- Council for Accreditation of Counseling and Related Educational Programs Standards.

 (2015). 2016 standards for accreditation. Alexandria, VA: Author. Retrieved from http://www.cacrep.org
- Cramer, R. J., Johnson, S. M., McLaughlin, J., Rausch, E. M., & Conroy, M. A. (2013).

 Suicide risk assessment training for psychology doctoral programs: Core competencies and a framework for training. *Training and Education in Professional Psychology*, 7(1), 1–11. doi: 10.1037/a0031836.
- Cull, J. G., & Gill, W. S. (1982). Suicide Probability Scale manual. Los Angeles: Western Psychological Services.
- Dexter-Mazza E. T., & Freeman (2003). Graduate training and the treatment of suicidal clients: The students' perspective. *Suicide and Life-Threatening Behavior*, *33*(2), 211–218. doi: 10.1521/suli.33.2.211.22769

- Domino, G., Moore, D., Westlake, L., & Gibson, L. (1982). Attitudes toward suicide: A factor analytic approach. *Journal of Clinical Psychology*, *38*(2), 257–262. doi: 10.1002/1097-4679(198204)38:2<257
- Eisenberg, S. & Delaney, D. J. (1970). Using video simulation of counseling for training counselors. *Journal of Counseling Psychology*, 17(1), 15–19. doi: 10.1037/h0028643
- Ellis, T. (2001). Psychotherapy with suicidal patients. In D. Lester (Ed). *Suicide prevention:**Resources for the millennium (pp. 129–152). New York: Brunner-Routledge.
- Eyman, J. R., & Eyman, S. K. (1991). Personality assessment in suicide prediction. *Suicide* and Life-Threatening Behavior, 21(1), 37–55. doi: 10.1111/j.1943-278X.1991.tb00793.x
- Faul, F., Erdfelder, E., Lang, A.-G., & Buchner, A. (2007). G*Power 3: A flexible statistical power analysis program for the social, behavioral, and biomedical sciences. *Behavior Research Methods*, *39*, 175–191.
- Feldman, B. N., & Freedenthal, S. (2006). Social work education in suicide intervention and prevention: An unmet need? *Suicide and Life-Threatening Behavior*, *36*(4), 467–480. doi: 10.1521/suli.2006.36.4.467
- Fowler, J. C. (2012). Suicide risk assessment in clinical practice: Pragmatic guidelines for imperfect assessments. *Psychotherapy*, 49(1), 81–90. doi: 10.1037/a0026148
- Garrison, C. (1992). Demographic predictors of suicide. In R. Maris, A. Berman, J.Maltsberger, & R. Yufit (Eds.), Assessment and prediction of suicide (pp. 484-498).New York: Guilford.

- Golden, K. M. (1978). Evaluation of a self-instructional videotape program for teaching suicide assessment to medical students (Doctoral dissertation). Retrieved from Dissertation Abstracts International, 39, 3398A.
- Goldsmith, S. K., Pellmar, T. C., Kleinman, A. M., & Bunney, W. E. (2002). *Reducing suicide: A national imperative* (Committee on Pathophysiology and Prevention of Adolescent and Adult Suicide, Board on Neuroscience and Behavioral Health,

 Institute of Medicine of the National Academies). Washington, DC: The National Academies Press.
- Granello, D. H. (2010). A suicide crisis intervention model with 25 practical strategies for implementation. *Journal of Mental Health Counseling*, 32(3), 218–235. Retrieved from http://www.counseling.org/
- Granello, D. H. (2010). The process of suicide risk assessment: Twelve core principles.

 *Journal of Counseling & Development, 88(3), 363–371. Retrieved from http://www.counseling.org/
- Granello, D. H., & Granello, P. F. (2007). Suicide: An essential guide for helping professionals and educators. Allyn and Bacon: Boston, MA.
- Granello D. H., & Granello, P. F. (2007). Suicide assessment: Strategies for determining risk.

 *Counselling, Psychotherapy, and Health, 3(1), 42–51. Retrieved from http://www.cphjournal.com
- Greenstone, J. L., & Levitón, S. C. (2002). *Elements of crisis intervention: Crises and how to respond to them.* Springfield, IL: Charles C. Thomas.

- Hansen, J. T. (2007). Should counseling be considered a healthcare profession? Critical thoughts on the transition to a health care ideology. *Journal of Counseling & Development*, 85, 286–293. http://www.counseling.org/
- Harris, E., & Barraclough, B. (1998). Excess mortality of mental disorder: Erratum. *British Journal of Psychiatry*, *173*(1), 11–53. doi: 10.1192/bjp.173.1.11
- Hathaway, S., & McKinley, J., (1942). *The Minnesota Multiphasic Personality Schedule*.

 Minneapolis: University of Minnesota Press.
- Hathaway, S., & McKinley, J., (1989). *The MMPI-2*. Minneapolis: University of Minnesota Press.
- Holmes, C. B., & Howard, M. E. (1980). Recognition of suicide lethality factors by physicians, mental health professionals, ministers, and college students. *Journal of Consulting and Clinical Psychology*, 48(3), 383–387. doi: 10.1037/0022-006X.48.3.383
- Horowitz, M. J., Wilner, N., & Alvarez, W. (1979). Impact of Event Scale: A measure of subjective distress. *Psychosomatic Medicine*, *41*(3), 209–218. Retrieved from http://www.psychosomaticmedicine.org
- Howell, D. C. (2011). *Fundamental statistics for the behavioral sciences* (7th ed.). Belmont, CA: Wadsworth.
- Hoyert, D. L., & Xu, J. (2012) Deaths: Preliminary data for 2011. *National Vital Statistics**Report 61(6). Retrieved from http://www.cdc.gov/nchs/products/nvsr.htm
- Huberty, C. J., & Morris, J. D. (January 01, 1989). Multivariate analysis versus multiple univariate analyses. *Psychological Bulletin*, 105(2), 302–308. doi: 10.1037/0033-2909.105.2.302

- Iribaren, C., Sidney, S., Jacobs, Jr., D. R., & Weisner, C. (2000). Hospitalization for suicide attempt and completed suicide: Epidemiological features in a managed care population. *Social Psychiatry*, *35*(7), 288–296. Retrieved from http://link.springer.com/journal/127
- Iverson, P. C. (1986). Developing social work interviewing skills through a micro-video analysis training program. *Journal of Sociology and Social Welfare, 139*(1). 142–156. Retrieved from http://www.wmich.edu/
- Jacobson, J. M., Ting, L., Sanders, S., & Harrington, D. (2004). Prevalence of and reactions to fatal and nonfatal client suicidal behavior: A national study of mental health social workers. *Omega*, 49(3), 237–248. doi: 10.2190/HPKQ-T700-EPQL-58JQ
- James, R. K., & Gilliland, B. E. (2001). *Crisis intervention strategies* (4th ed.). Belmont, CA: Brooks/Cole.
- Jerry, P., & Collins, S. (2005). Web-based education in the human services: Use of web-based video clips in counselling skills training. *Journal of Technology in Human Services*, 23(3/4), 183–199. doi: 10.1300/J017v023n03_02
- Jobes, D. A. (2006). Managing suicidal risk: A collaborative approach. New York: Guilford.
- Jobes, D. A., Eyman, J. R., & Yufit, R. I. (1995). How clinicians assess suicide risk in adolescents and adults. *Crisis Intervention and Time-Limited Treatment*, *2*(1), 1–12. Retrieved from http://psycnet.apa.org
- Jobes, D., Jacoby, A., Cimbolic, P., & Hustead, L. (1997). Assessment and treatment of suicidal clients in a university counseling center. *Journal of Counseling Psychology*, 44(4), 368–377. doi: 10.1037/0022-0167.44.4.368
- Joiner, T. E. (2005). Why people die by suicide. Cambridge, MA: Harvard University Press.

- Juhnke, G. A. (1992). An evaluation of a method of suicide assessment training. *Dissertation Abstracts International: Section B: The Sciences and Engineering*, *52*(11), 3827.
- Juhnke, G. A. (1994). SAD PERSONS Scale review. *Measurement & Evaluation In Counseling & Development*, 27(1), 325. Retrieved from http://www.counseling.org/
- Juhnke, G. A. (1994). Teaching suicide risk assessment to counselor education students.

 *Counselor Education & Supervision, 34(1), 52. Retrieved from http://www.counseling.org/
- Juhnke, G. A., Granello, P. F., Lebron-Striker, M. (2007). *IS PATH WARM? A suicide*assessment mnemonic for counselors (ACAPCD-03). Alexandria, VA: American Counseling Association.
- King, K. A., Price, J. H., Telljohann, S. K., & Wahl, J. (1999). How confident do school counselors feel in recognizing students at risk for suicide? *American Journal of Health Behavior*, 23(6), 457–467. doi: 10.5993/AJHB.23.6.5
- King, M., Semlyen, J., Tai, S. S., Killaspy, H., Osborn, D., Popelyuk, D., & Nazareth, I.
 (2008). A systematic review of mental disorder, suicide, and deliberate self harm in lesbian, gay and bisexual people. *BMC Psychiatry*, 8(70), 1–17. doi: 10.1186/1471-244X-8-70
- Kleespies, P. M., Deleppo, J. D., Gallagher, P. L., & Niles, B. L. (1999). Managing suicidal emergencies: Recommendations for the practitioner. *Professional Psychology:**Research and Practice, 30(5), 454–463. doi: 10.1037/0735-7028.30.5.454
- Kleespies, P. M., Hough, S., & Romeo, A. M. (2009). Suicide risk in people with medical and terminal illness. In P. M. Kleespies (Ed.), Behavioral emergencies: An evidence-based resource for evaluating and managing risk of suicide, violence, and

- victimization (pp. 103–121). Washington, DC: American Psychological Association.
- Kleespies, P. M., Penk, W., & Forsyth, J. (1993). The stress of patient suicidal behavior during clinical training: Incidence, impact, and recovery. *Professional Psychology:**Research and Practice, 24(3), 293–303. doi:10.1037/0735-7028.24.3.293
- Kposowa, A. J. (2000). Marital status and suicide in the National Longitudinal Mortality Study. *Journal of Epidemiology and Community Health*, *54*(4), 254–261. doi: 10.1136/jech.54.4.254
- Kreitman, N. (1988). Suicide, age, and marital status. *Psychological Medicine*, *18*(1), 121–128. doi: 10.1017/S0033291700001951
- Lambert, M. J., & Barley, D. E. (2001). Research summary on the therapeutic relationship and psychotherapy outcome. *Psychotherapy*, *38*, 357–361. doi: 10.1037/0033-3204.38.4.357
- Larson, L. M. (1998). The social cognitive model of counselor training. *The Counseling Psychologist*, 26(2), 219. Retrieved from http://tcpsagepub.com/
- Larson, L. M., Clark, M. P., Wesely, L. H., Koraleski, S. F., Daniels, J. A., & Smith, P. L. (1999). Videos versus roles plays to increase counseling self-efficacy in prepractica trainees. *Counselor Education & Supervision*, *38*(4), 237. Retrieved from http://www.counseling.org/
- Larson, L. M., Suzuki, L. A., Gillepie, K. N., Potenza, M. T., Toulouse, A. L., & Bechtel, M.
 A. (1992). Development and validation of the Counseling Self-Estimate Inventory.
 Journal of Counseling Psychology, 39(1), 105–120. doi: 10.1037/0022-0167.39.1.105
- Larson, L. M., & Daniels, J. A. (1998). Review of the counseling self-efficacy literature. *The Counseling Psychologist*, 26(2), 179–218. doi: 10.1177/0011000098262001

- Laux, J. M. (2002). A primer on suicidology: Implications for counselors. *Journal of Counseling & Development*, 80(3), 380-83. Retrieved from http://www.counseling.org/
- Linehan, M. M. (1981). *Suicidal Behaviors Questionnaire*. Unpublished inventory, University of Washington, Seattle.
- Linehan, M., Goodstein, J., Nielsen, S., & Chiles, J. (1983). Reasons for staying alive when you are thinking of killing yourself: The Reasons for Living Inventory. *Journal of Consulting and Clinical Psychology*, *51*(2), 276–286. doi: 10.1037/0022-006X.51.2.276
- Luborsky, L., Singer, B., & Luborsky, L. (1975). Comparative studies of psychotherapy: Is it true that "everyone has won and all must have prizes?" *Archives of General Psychiatry*, 32, 995–1008.
- Lyon, M. E., Benoit, M., O'Donnell, R. M., Getson, P. R., Silber, T., & Walsh, T. (2000).

 Assessing African American adolescents' risk for suicide attempts: Attachment theory. *Adolescence*, *35*(137), 121–134.
- Maimon, D., Browning, C. R., & Brooks-Gunn, J. (2010). Collective efficacy, family attachment, and urban adolescent suicide attempts. *Journal of Health and Social Behavior*, *51*(3), 307–324. doi: 10.1177/0022146510377878
- Malone, K. M., Oquendo, M. A., Haas, G. L., Ellis, S. P., Li, S., & Mann, J. J. (2000).
 Protective factors against suicidal acts in major depression: Reasons for living.
 American Journal of Psychiatry, 157(7), 1084–1088. doi: 10.1176/appi.ajp.157.7.1084
- Maltzberger, J. T. (1986). Suicide risk: The formulation of clinical judgment. New York, NY:

- New York University Press.
- Maris, R. W. (1981). *Pathways to suicide: A survey of self-destructive behaviors*. Baltimore, MD: Johns Hopkins University Press.
- Maris, R. W. (1991). Introduction. *Suicide and Life-Threatening Behavior*, *21*(1), 1–17. doi: 10.1111/j.1943-278X.1991.tb00791.x
- Maris, R. W., Berman, A. L., Maltsberger, J. T., & Yufit, R. I. (Eds.). (1992). *Assessment and prediction of suicide*. New York, NY: Guilford.
- Marzuk, P. M., Tardiff, K., Leon, A. C., Hirsch, C. S., Portera, L., Hartwell, N., & Iqbal, M. I. (1997). Lower risk of suicide during pregnancy. *American Journal of Psychiatry*, *154*(1), 122–123. Retrieved from http://ajp.psychiatryonline.org/
- MacDonald, L., Pelling, N., & Granello, D. H. (2009). Suicide: A biopsychosocial approach.

 *Psychotherapy in Australia. 15(2), 52–61. Retrieved from http://www.psychotherapy.com.au/
- McAdams, C. R. & Foster, V. A. (2000). Client suicide: Its frequency and impact on counselors. *Journal of Mental Health Counseling*, 22(2), 107–121. Retrieved from http://www.amhca.org/journal.html
- McAuliffe, G. J. (2011). A primer on six key teaching strategies. In G. McAuliffe, & K. Eriksen (Eds.), *Handbook of counselor preparation* (pp. 59–75). Thousand Oaks, CA: Sage Publications.
- McBee-Strayer, S. M, & Rogers, J. R. (2002). Lesbian, gay, and bisexual behavior: Testing a constructivist model. *Suicide and Life-Threatening Behavior*, *32*(3), 272–283. doi: 10.1521/suli.32.3.272.22171
- McIntosh, J. L., & Drapeau, C. W. (2012). U.S.A. suicide 2010: Official final data.

- Washington, DC: American Association of Suicidology. Retrieved from http://www.suicidology.org.
- McIntosh, J. L., & Hubbard, R. W. (2004, April). *A facts on suicide quiz*. Paper presented at the annual conference of the American Association of Suicidology, Miami, FL. Retrieved from http://www.suicidology.org.
- Merriam, S. B., Caffarella, R. S., & Baumgartner, L. S. (2007). *Learning in adulthood* (3rd ed.). San Francisco: Jossey-Bass.
- Moscicki, E. K. (1999). Epidemiology of suicide. In D. G. Jacobs (Ed.), *The Harvard Medical School guide to suicide assessment and intervention* (pp. 40–51). San Francisco, CA: Jossey-Bass.
- Motto, J. A. (1991). An integrated approach to estimating suicide risk. *Suicide and Life-Threatening Behavior*, 21(1), 74–89. doi: 10.1111/j.1943-278X.1991.tb00795.x
- Murphy, G. E., & Wetzel, R. D. (1990). The lifetime risk of suicide in alcoholism. *Archives of General Psychiatry*, 47(4), 383–392. doi: 10.1001/archpsyc.1990.01810160083012
- National Institute of Mental Health (2013). Suicide in the U.S.: Statistics and Prevention.

 Retrieved from http://www.nimh.nih.gov
- Neeleman, J., Wessely, S., & Lewis, G. (1998). Suicide acceptability in African- and white Americans: The role of religion. *Journal of Nervous and Mental Disease*, 186(1), 12–16. doi: 10.1097/00005053-199801000-00003
- Neimeyer, R. A., & Bonnelle, K. (1997). The suicide intervention response inventory: A revision and validation. *Death Studies*, 21(1), 59–81. doi: 10.1080/074811897202119

- Neimeyer, R. A., & Diamond, R. J. (1983). Suicide management skills and the medical student. *Journal of Medical Education*, *58*(7), 562–567. Retrieved from http://www.ncbi.nlm.nih.gov/pubmed/6864744
- Neimeyer, R. A., & MacInnes, W. D. (1981). Assessing paraprofessional competence with the Suicide Intervention Response Inventory. *Journal of Counseling Psychology*, 28(2), 176–179. doi: 10.1037/h0077970
- Nisbet, P. A. (1996). Protective factors for suicidal Black females. *Suicide and Life-Threatening Behavior*, *26*, 325–340.
- Nock, M. K., Borges, G., Bromet, E. J, Alonso J, Angermeyer M, Beautrais, A, . . . Williams D. (2008). Cross-national prevalence and risk factors for suicidal ideation, plans and attempts. *British Journal of Psychiatry*, *192*(2), 98–105. doi: 10.1192/bjp.bp.107.040113
- Norcross, J. C. (2001). Purposes, processes, and products of the task force on empirically supported therapy relationships. *Psychotherapy*, *38*, 345–356. doi: 10.1037/0033-3204.38.4.345
- Norstrom, T. (1995). The impact of alcohol, divorce, and unemployment on suicide: A multilevel analysis. *Social Forces*, 74(1), 293–314. doi: 10.1093/sf/74.1.293
- Norton, E. M., Durlak, J. A., & Richards, M. H. (1989). Peer knowledge of and reactions to adolescent suicide. *Journal of Youth and Adolescence*, *18*(5), 427–437. doi: 10.1007/BF02132778
- O'Donovan, A., Casey, L., van der Veen, M., & Boschen, M. (Authors). (2013).

 *Psychotherapy: An Australian Perspective. Available from http://www.ipcommunications.com.au/

- OPINIO (Version 6.6.1) [Online Computer Software]. Oslo, Norway: ObjectPlanet, Inc.
- Orbach, I., Milstein, I., Har-Even, D., Apter, A., Tiano, S., & Elizur, A. (1991). A Multi-Attitude Suicide Tendency Scale for adolescents. *Psychological Assessment: A Journal of Consulting and Clinical Psychology, 3*(3), 398–404. doi: 10.1037/1040-3590.3.3.398
- Palmieri, G., Forghieri, M., Ferrari, S., Pingani, L., Coppola, P., Colombini, N.,...Neimeyer, R. A. (2008). Suicide intervention skills in health professionals: A multidisciplinary comparison. *Archives of Suicide Research*, *12*(3), 232–237. doi: 10.1080/13811110802101047
- Patterson, W. M., Dohn, H. H., Bird, J., & Patterson, G. A. (1983). Evaluation of suicidal patients: The SAD PERSONS scale. *Psychosomatics*, *24*(4), 343–349. doi: doi:10.1016/S0033-3182(83)73213-5
- Paulson, B. L., & Everall, R. D. (2003). Suicidal adolescents: Helpful aspects of psychotherapy. *Archives of Suicide Research*, 7(4), 309–321. doi: 10.1080/13811110390226426
- Peters, G. A., Cormier, L. S., & Cormier, W. C. (1978). Effects of modeling, rehearsal, feedback, and remediation on acquisition of a counseling strategy. *Journal of Counseling Psychology*, 25(3), 231–237. doi: 10.1037/0022-0167.25.3.231
- Pfeffer, C. R. (1981). Suicidal behavior of children: A review with implications for research and practices. *American Journal of Psychiatry*, *138*(2). 154–159. Retrieved from http://ajp.psychiatryonline.org

- Pisani, A. R., Cross, W. F., & Gould M. S. (2011). The assessment and management of suicide risk: State of workshop education. *Suicide and Life-Threatening Behavior*, 41(3), 255–276. doi: 10.1111/j.1943-278X.2011.00026.x
- Pope, K. S., & Tabachnick, B. G. (1993). Therapists' anger, hate, fear, and sexual feelings:

 National survey of therapist responses, client characteristics, critical events, formal complaints, and training. *Professional Psychology, Research and Practice, 24*(2), 142–152. doi: 10.1037/0735-7028.24.2.142
- Portes, P. R., Sandhu, D. S., & Longwell-Grice, R. (2002). Understanding adolescent suicide:

 A psychosocial interpretation of developmental and contextual factors. *Adolescence*,

 37(148), 805–814. Retrieved from http://www.ncbi.nlm.nih.gov/pubmed
- Qin, P., & Mortensen, P. B. (2003). The impact of parental status on the risk of completed suicide. *Archives of General Psychiatry*, 60(8), 797–802. doi: 10.1001/archpsyc.60.8.797
- Range, L. M. (2005). The family of instruments that assess suicide risk. *Journal of Psychopathology and Behavioral Assessment*, 27(2), 133–140. doi: 10.1007/s10862-005-5387-8
- Range, L. M., & Knott, E. C. (1997). Twenty suicide assessment instruments: Evaluation and recommendations. *Death Studies*, *21*(1), 25–58. doi: 10.1080/074811897202128
- Range, L., Leach, M., MacIntyre, D., Posey-Deters, P., Marion, M., Kovac, S.,...Vigil, J. (1999). Multicultural perspectives on suicide. *Aggression and Violent Behavior*, *4*(4), 413–430. doi: 10.1016/S1359-1789(98)00022-6
- Reynolds, W. M. (1987). *Suicide Ideation Questionnaire: Professional manual.* Odessa, FL: Psychological Assessment Resources.

- Roberts, A. R. (2000). Crisis intervention handbook: Assessment, treatment, and research.

 New York: Oxford University Press.
- Rogers, C. R. (1957). The necessary and sufficient conditions of therapeutic personality change. *Journal of Consulting Psychology*, *21*(2), 95–103. doi: 10.1037/h0045357
- Rogers, J. R., & Alexander, R. A. (1989). Crisis Line Suicide Risk Scale. In D. Lester (Ed.), Suicide '89: Proceeding of the 22nd Annual Meeting of the American Association of Suicidology (pp. 167–169). Denver, CO: American Association of Suicidology.
- Rogers, J. R., & Alexander, R. A. (1994). Development and psychometric analysis of the Suicide Assessment Checklist. *Journal of Mental Health Counseling*, *16*(3), 352. Retrieved from http://www.amhca.org/journal.html
- Rogers, J. R., Lewis, M. M., Subich, L. M. (2002). Validity of the Suicide Assessment Checklist in an emergency crisis center. *Journal of Counseling & Development*, 80(4), 493–502. Retrieved from http://www.counseling.org/
- Rudd, M. D. (1989). The prevalence of suicidal ideation among college students. *Suicide and Life-Threatening Behavior*, 19(2), 173–183. doi: 10.1111/j.1943278X.1989.tb01031.x
- Rudd, M. D. (2006). Assessment and management of suicidality. Sarasota, FL: Professional Resource Press.
- Rudd M. D. (2008). Suicide warning signs in clinical practice. *Current Psychiatric Reports*, 10(1), 87–90. doi: 10.1007/s11920-008-0015-4
- Rudd, M. D., Berman, A. L., Joiner, T. E., Nock, M. K., Silverman, M. M., Mandrusiak, M.,... Witte, T. (2006). *Warning signs for suicide: Theory, research, and clinical applications*, 36(3), 255–262. doi: 10.1521/suli.2006.36.3.255
- Rudd, M. D., Joiner, T. E., Jobes, D. A., & King, C. A. (1999). The outpatient treatment of

- suicidality: An integration of science and recognition of its limitations. *Professional Psychology: Research and Practice*, *30*(5), 437–446. doi: 10.1037/0735-7028.30.5.437
- Schmitz Jr., W. M., Allen, M. H., Feldman, B. N., Gutin, N. J., Jahn, D. R., Kleespies, P. M.,...Simpson, S. (2012). Preventing suicide through improved training in suicide risk assessment and care: An American Association of Suicidology Task Force report addressing serious gaps in U.S. mental health training. *Suicide and Life-Threatening Behavior*, 43(3), 292–304. doi: 10.1111/j.1943-278X.2012.00090.x
- Schwartz R. C., & Rogers, J. R. (2004). Suicide assessment and evaluation strategies: A primer for counselling psychologists. *Counselling Psychology Quarterly*, *17*(1), 89–97. doi: 10.1080/09515070410001665712
- Seligman, M. E. P. (1995). The effectiveness of psychotherapy: The consumer reports study. *American Psychologist*, *50*, 965–974. doi: 10.1037/0003-066X.50.12.965
- Shapiro & Shapiro (1982). Meta-Analysis of comparative therapy outcome studies: A replication and refinement. *Pychological Bulletin*, *93*, 581–604. doi: 10.1037/0033-2909.92.3.581
- Shneidman, E. S. (1981). Psychotherapy with suicidal patients. *Suicide and Life-Threatening Behavior*, 11(4), 341–348. doi: 10.1111/j.1943-278X.1981.tb01010.x
- Shneidman, E. S. (2005). How I read. *Suicide and Life-Threatening Behavior*, *35*(2), 117–120. doi: 10.1521/suli.35.2.117.62879
- Shostrom, E. L. (Producer). (1965). Three approaches to psychotherapy, Series I [Motion picture]. (Available from Psychological & Educational Films, 3334 East Coast Highway #252, Corona Del Mar, CA 92625)

- Smith, M. L. & Glass, G. V. (1977). Meta-analysis of psychotherapy outcome studies.

 *American Psychologist, 32, 752–760. doi: 10.1037/0003-066X.32.9.752
- Smith, J. C., Mercy, J. A., & Conn, J. M. (1988). Marital status and the risk of suicide.

 American Journal of Public Health, 78(1), 78–80. doi:10.2105/AJPH.78.1.78
- Sommers-Flanagan, R., & Sommers-Flanagan, J. (1999). *Clinical interviewing* (2nd ed.). New York: Wiley.
- Sterner, W. R. (2012). What is missing in counseling research? Reporting missing data.

 **Journal of Counseling & Development, 89(1), 56–62. Retrieved from:

 http://www.counseling.org/
- Stone, G. L., & Vance, A. (1976). Instructions, modeling, and rehearsal: Implications for training. *Journal of Counseling Psychology*, 23(3), 272–279. doi: 10.1037/0022-0167.23.3.272
- Stone, G. L., Wolraich, M. L., & Hillerbrand, E. (1988). Communicating distressful information: A video training program in a special education setting. *Journal of Counseling and Development*, 66, 438–441. Retrieved from: http://www.counseling.org/
- Suicide Prevention Resource Center. (2005). *Best practices registry*. Retrieved from http://www.sprc.org/featured_resources/
- Sullivan, G. R., & Bongar, B. (2009). Assessing suicide risk in the adult patient. In P. M. Kleespies (Ed.), *Behavioral emergencies: An evidence-based resource for evaluating and managing risk of suicide, violence, and victimization* (pp. 59–78). Washington, DC: American Psychological Association.

- U.S. Department of Health & Human Services (2001). *National strategy for suicide prevention*. Retrieved from www.mentalhealth.org/suicideprevention
- Van Orden, K. A., Witte, T. K., Cukrowicz, K. C., Braithwaite, R. S., Selby, E. A., & Joiner, T. E. (2010). The interpersonal theory of suicide. *Psychological Review*, *117*(2), 575–600. doi:10.1037/a0018697
- Wachter, C. A. (2006). Crisis in the schools: Crisis, crisis intervention training, and school counselor burnout. *Dissertation Abstracts International Section A: Humanities and Social Sciences*, 67(6-A), 2062.
- Wachter Morris, C. A., & Barrio Minton, C. A. (2012). Crisis in the curriculum? New counselors' crisis preparation, experiences, and self-efficacy. *Counselor Education and Supervision*, *51*(4), 256-269. doi: 10.1002/j.1556-6978.2012.00019.x
- Wampold, B. E. (2001). *The great psychotherapy debate: Models, methods, and findings.*Mahwah, NJ: Erlbaum.
- Wampold, B. E. (2007). Psychotherapy: The humanistic (and effective) treatment. *American Psychologist*, 62(8), 857–873. doi: 10.1037/0003-066X.62.8.857
- Wampold, B. E., Mondin, G. W., Moody, M., Stich, F., Benson, K., & Ahn, H. (1997). A meta-analysis of outcome studies comparing bona-fide psychotherapies: Empirically, "All must have prizes". *Psychological Bulletin*, 122, 203–215. doi: 10.1037/0033-2909.122.3.203
- Webb, K. B. (2011). Care of others and self: A suicidal patient's impact on the psychologist.

 *Professional Psychology: Research and Practice, 42(3), 215–221.

 doi:10.1037/a0022752
- Weishaar, M. E., & Beck, A. T. (1992). Clinical and cognitive predictors of suicide. In R. W.

- Maris, A. L. Berman, J. T. Maltsberger, & R. I. Yufit (Eds.), *Assessment and prediction of suicide* (pp. 467–483). New York: Guilford.
- Wendler, S., & Matthews, D. (2006). Cultural competence in suicide risk assessment: In R. I.
 Simon & R. E. Hales (Eds.), *The American Psychiatric Publishing textbook of suicide*assessment and management (pp. 159–176). Washington, DC: American Psychiatric Publishing.
- Werth, J. L., & Rogers, J. R. (2005). Assessing for impaired judgment as a means of meeting the "duty to protect" when a client is a potential harm to self: Implications for clients making end of life decisions. *Mortality*. *10*(1), 7–21. doi: 10.1080/13576270500030966.
- Westefeld, J. S. (Director). (2008). Suicide Assessment and Prevention-Educational Version with PPR [DVD]. Available from http://www.counseling.org/Publications/2013_Catalog/
- Westefield, J. S., Bell, A., Bermingham, C., Button, C., Shaw, K., Skow, C., ... Woods, T. (2010). Suicide among preadolescents: A call to action. *Journal of Loss and Trauma*, *15*(5), 381–407. doi: 10.1080/15325024.2010.507655.
- Westefeld, J. S., Range, L. M., Rogers, J. R., Maples, M. R., Bromley, J. L., & Alcorn, J. (2000). Suicide: An overview. *The Counseling Psychologist*, 28(4), 445–510. doi: 10.1177/0011000000284002
- Westermeyer, J. F., Harrow, M., & Marengo, J. T. (1991). Risk factor for suicide in schizophrenia and other psychotic and nonpsychotic disorders. *Journal of Nervous and Mental Disease*, 179(5), 259–266. Retrieved from http://journals.lww.com/
- Winfree, L. R., & Jiang, S. (2010). Youthful suicide and social support: Exploring the social

- dynamics of suicide-related behavior and attitudes within a national sample of US adolescents. *Youth Violence and Juvenile Justice*, 8(1), 19–37. doi: 10.1177/1541204009338252
- Wise, A. J., & Spangler, P. M. (1997). Suicide in children younger than age fourteen:

 Clinical judgment and assessment issues. *Journal of Mental Health Counseling*,

 19(4), 318. Retrieved from http://www.amhca.org/journal.html
- Wozney D. A. (2005). The prevalence of suicide assessment/intervention courses in CACREP- and COAMFTE-accredited counseling curriculums. In G. R. Waltz & R. Yep (Eds.), *Compelling perspectives on counseling* (pp. 271–274). Alexandria, VA: American Counseling Association. Retrieved from: http://counselingoutfitters.com
- Yonkers, K. A., Ramin, S. M., Rush, A. J., Navarrete, C. A., Carmody, T., March, D., . . . Leveno, K. J. (2001). Onset and persistence of postpartum depression in an inner-city maternal health clinic system. *American Journal of Psychiatry*, *158*(11), 1856 –1863. doi: 10.1176/appi.ajp.158.11.1856
- Yufit, R. I. (1991). American Association of Suicidology presidential address: Suicide assessment in the 1990's. *Suicide and Life-Threatening Behavior*, *21*(2), 152–163. doi: 10.1111/j.1943-278X.1991.tb00462.x
- Zilberg, N. J., Weiss, D. S., & Horowitz, M. J. (1982). Impact of Event Scale: A cross-validation study and some empirical evidence supporting a model of stress response syndromes. *Journal of Consulting and Clinical Psychology*, *50*(3), 407–414. doi: 10.1037/0022-006X.50.3.407

Appendix A: Definition of Terms

Definition of Terms

The following definitions apply to this study:

Suicide. Suicide refers to "the act of intentionally killing oneself." (Granello & Granello 2007, p xi).

Suicidality. "Thoughts and/or actions that if fully carried out may lead to serious self-injury or death" (Pfeffer, 1981, p. 154).

Suicidology. "The study and research into the phenomenon of suicide" (Granello & Granello, 2007, p. 20).

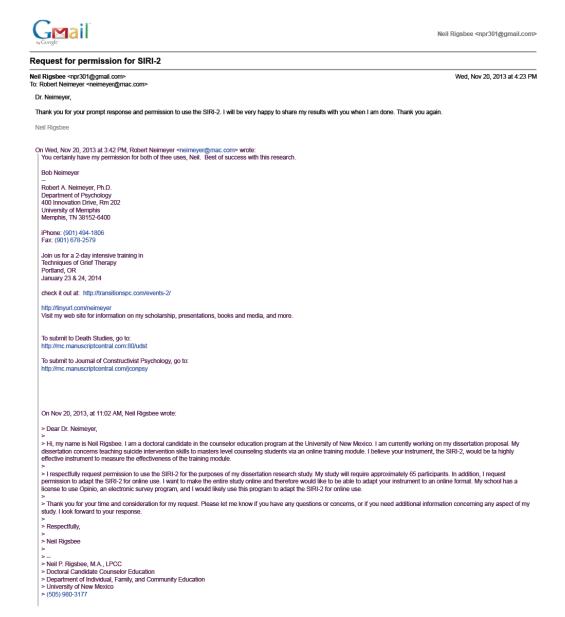
Suicide risk. Level of significant and immediate danger of attempting suicide (Juhnke, 1992).

Suicide assessment. The process of gathering relevant personal data for the purposes of determining suicide risk in an individual.

Suicide intervention. The process of interacting with an individual at risk for suicide for the purpose of preventing a suicide attempt.

Clinical action. Specific actions taken to prevent an individual from attempting suicide.

Appendix B: Request for Permission for SIRI-2



Appendix C: Request for Permission to Use Video



Neil Rigsbee <npr301@gmail.com>

Request for permission

Neil Rigsbee <npr301@gmail.com> To: ipcomm@bigpond.com

Wed, Oct 30, 2013 at 8:49 PM

To Whom it May Concern:

Hi, my name is Neil Rigsbee. I am a doctoral candidate in the counselor education program at the University of New Mexico in Albuquerque, New Mexico, US. I am currently working on my dissertation proposal. My research involves training master's level counseling students to conduct suicide assessments. I recently viewed your video segment on 'YouTube entitled "Suicide Risk Assessment" from your book *Psychotherapy: An Australian Perspective*, by Analise O'Donovan, Leanne Casey, Marchiene van der Veen, and Mark Boschen.

I was highly impressed with the video segment and believe it would work very well as part of the training module on assessing suicide that I am creating. I respectfully ask for permission to use it for the purposes of my study. It will be viewed by approximately 50 individuals who will be research participants.

I will be happy to purchase the your book Psychotherapy: An Australian Perspective if required for permission to use the video segment. Thank you for your time and consideration for my request.

Respectfully,

Neil Rigsbee

Neil P. Rigsbee, M.A., LPCC Declaral Candidate Counselor Education
Department of Individual, Family, and Community Education
University of New Mexico
(505) 980-3177

Sun. Nov 3. 2013 at 10:15 PM

Mon, Nov 4, 2013 at 1:00 AM

Alan Fettling <ipcomm@bigpond.com>
To: Neil Rigsbee <npr301@gmail.com>
Cc: Analise O'Donovan <a.odonovan@griffith.edu.au>

Thanks for this, In fact, rights in the videos remain with Analise O'Donovan and her Griffith University colleagues. You will note that I have copied this email to Analise and you might expect to hear from her in due course.

Regards,

Alan Fettling, Alan Fettling, IP Communications, P/L, Level 1, 123 Camberwell Rt East Hawthorn, VIC, 3123, Australia. Ph +61 3 9811 6818 Fax +61 3 9813 3979 Email, ipcomm@bigpond.com www.ipcommunications.com.au [Quoted text hidden]

Analise O'Donovan <a.odonovan@griffith.edu.au>
To: Alan Fettling <ipcomm@bigpond.com>
Cc: Neil Rigsbee <npr301@gmail.com>

Dear Neil.

I'm pleased that you have found the video useful. It is fine for you to use this. Please note all the disclaimers we make on YouTube, and indicate these limits in your thesis

It would be great if you purchased the book - we think it is really useful. But, this would not be a condition to using the video.

kind regards

Analise [Quoted text hidden]

Analise O'Donovan, PhD Deputy Head of School School of Applied Psychology Mt Gravatt Campus Griffith University 176 Messines Ridge Road MT GRAVATT QLD 4122 07 3735 3373

Neil Rigsbee <npr301@gmail.com>
To: Analise O'Donovan <a.odonovan@griffith.edu.au>

Tue. Nov 12. 2013 at 5:08 PM

Analise,

Thank you very much for getting back to me so quickly. Thank you for permission to use the video clip.

Appendix D: Additional Request to Use Video



Appendix E: SIRI-2

Suicide Intervention Response Inventory

The following items represent a series of excerpts from counseling sessions. Each excerpt beings with an expression by the client concerning some aspect of the situation he or she faces, followed by two possible helper responses to the client's remark.

You are to rate *each* response in terms of how appropriate or inappropriate you feel the reply is to the client's comment. In the blank, you should record a rating from –3 to +3, corresponding to the chart below. Be sure to respond to each item and try not to leave any blanks.

	+3 +2 +1 0 -1 -2 -3	Highly appropriate response Appropriate response Marginally appropriate response Neither appropriate, nor inappropriate Marginally inappropriate response Inappropriate response Highly inappropriate response
1.	Client:	I decided to call in tonight because I really feel like I might do something to myself I've been thinking about suicide. Helper A: You say you're suicidal, but what is it that's really bothering you? Helper B: Can you tell me more about your suicidal feelings?
2.	Client:	And now my health is going downhill too, on top of all the rest. Without my husband around to care for me anymore, it just seems like the end of world. Helper A: Try not to worry so much about it. Everything will be alright. Helper B: You must feel pretty lonely and afraid of what might happen.
3.	Client:	But my thoughts have been so terrible I could never tell them to anybody. <i>Helper A:</i> You can tell me. I'm a professional, and have been trained to be objective about these things. <i>Helper B:</i> Some of your ideas seem so frightening to you, that you imagine other people would be shocked to know you are thinking such things.
4.	Client:	No one can understand the kind of pain I've been through. Sometimes I just feel like I have to hurt myself, so I cut my wrists. *Helper A: It seems like you've been suffering so much that cutting your wrists is the only way you can make the pain go away. *Helper B:* But you're so young, you have so much to live for. How can you think of killing yourself?
5.	Client:	What are you anyway? Are you a doctor? How do you know what I've been going through? You've probably had it pretty soft. <i>Helper A:</i> So you're wondering if I can understand how you feel. <i>Helper B:</i> You're not even giving me a chance. I've had a pretty rough life too; you're not the only one who's seen some hard time.

6.	Client:	My life has been worthless ever since my wife, Emma, died four years ago. The kids are grown and married now, and I've been retired from my job at the railroad for some time. It just seems that I'd be better off dead. Helper A: But try to think of what Emma would want for you. She'd want you to continue leading a productive life, wouldn't she? Helper B: It sounds like everything just collapsed around you when Emma died But what has happened recently to make things even worse, to make you think that dying is the only way out?
7.	Client:	I really need help It's just [voice breaks: silence] Helper A: It must be hard for you to talk about what's bothering you. Helper B: Go on. I'm here to listen to you talk.
8.	Client:	When you sum up my problem like that, it makes it seem less confusing and not so scary. *Helper A: See, it really isn't so bad after all. It certainly isn't anything you
	_	would think of killing yourself over, is it? Helper B: Sometimes talking about problems does make them a bit clearer. I think you realize how dangerous your suicidal feelings were, that's why you decided to contact me.
9.	Client:	You were supposed to help me, but you've only make things worse. Helper A: I'm sorry. I was only trying to help. Helper B: You sound pretty angry.
10.	Client:	How could you ever help me? Have you ever wanted to kill yourself? Helper A: It sounds like you're concerned about whether I can understand and help you. Helper B: Sure. I've thought about suicide sometimes. But I always found
		more realistic solutions to my problems.
11.	Client:	I don't know this whole thing with my wife really gets to me. [Sobs] I try so hard to keep from crying
		Helper A: Do you think that the reason it's hard for you to cry is because you're a man? Helper B: With all the hurt you're feeling, it must be impossible to hold
12.	Client:	those tears in. How can I believe in God anymore? No God would ever let this happen to me; I've never done anything to deserve what's happened.
		Helper A: Things have gotten so bad, that it's difficult to see any meaning in the things that have happened to you. Helper B: Well. God works in mysterious ways. Maybe this is His way of
		testing your faith.

13.	Client:	I don't know why I'm calling you. My family is financially well off, and my husband spends plenty of time with me, even though he has a successful law career. Even my kids have been doing well. They get good marks at school and have lots of free time activities with their friends. But nothing seems to interest me. Life is just a bore Helper A: Considering all you have going for you, your problems can't be all that serious. Try to focus more on the positive aspects of your situation. Helper B: So even though things seem to be going well at one level, life still seems pretty depressing, even if it's hard to say exactly why.
14.	Client:	I have to hang up now. My mother's coming home soon and I don't want her to know I've been talking to you. Helper A: Okay, but if you keep feeling suicidal, remember you can always call back. Helper B: All right, but first I want you to promise me you won't do anything to hurt yourself, until you call and talk to me. Will you repeat that promise?
15.	Client:	Is it really true, that many people feel this way? I thought I was the only one who had such dreadful, sinful ideas. *Helper A: No, there are many people who suffer from mental illness. But with appropriate treatment by a qualified physician, some of these patients can be cured. *Helper B: It is true. You're not the only one who has suiddal thoughts. And you can be helped to get through this crisis, just as others have been.
16.	Client:	I'm so lonely, so tired. [crying] There just isn't anywhere left to turn. Helper A: You seem so alone, so miserable. Have you been feeling suicidal? Helper B: Come on now. Things can't be all that bad.
17.	Client:	[over telephone] It's hard to talk here, with all these people. Helper A: Would it help if I asked questions? Helper B: Why don't you call back some other time when you can talk more easily?
18.	Client:	I have a gun pointed at my head right now, and if you don't help me, I'm going to pull the trigger! Helper A: You seem to be somewhat upset. Helper B: I want you to put down the gun so we can talk.
19.	Client:	Wy should you care about me, anyway? Helper A: I've been trained to care about people. That's my job. Helper B: Because I think your death would be a terrible waste, and it concerns me that things are so that you are considering suicide. You need help to get through this critical period.

20.	Client:	I really hate my father! He's never show any love for me, just complete disregard. Helper A: You must really be angry at him for not being there when you need him.
		Helper B: You shouldn't feel that way. After all, he is your father, and he deserves some respect.
21.	Client:	I don't think there's really anyone who cares whether I'm alive or dead. Helper A: It sounds like you're feeling pretty isolated. Helper B: Why do you think that no one cares about you anymore?
22.	Client:	I tried going to a therapist once before, but it didn't help Nothing I do now will change anything. Helper A: You've got to look on the bright side! There must be something
		you can do to make things better, isn't there? Helper B: Okay, so you're feeling hopeless, like even a therapist couldn't help you. But has anyone else been helpful before – maybe a friend, relative, teacher, or dergyman?
23.	Client:	My psychiatrist tells me I have an anxiety neurosis. Do you think that's what's wrong with me? Helper A: I'd like to know what this means to you, in this present situation. How do you feel about your problem? Helper B: I'm not sure I agree with that diagnosis. Maybe you should seek out some psychological testing, just to be certain.
24.	Client:	I can't talk to anybody about my situation. Everyone is against me. Helper A: That isn't true. There are probably lots of people who care about you if you'd only give them a chance. Helper B: It must be difficult to find help when it's so hard to trust people.
25.	Client:	[Voice is slurred, undear over telephone.] Helper A: You sound so tired. Why don't you get some sleep and call back in the morning? Helper B: Your voice sounds so sleepy. Have you taken anything?

SCORING KEY FOR THE ORIGINAL SUICIDE INTERVENTION RESPONSE INVENTORY

To score the original SIRI, simply tally 1 point for each of the 25 questions in which the respondent assigns a higher (more appropriate) rating to the more facilitative response, indicated for each item below. For example, the respondent would score 1 point if he or she assigned a higher value to Option B than to Option A on item 1, and so on. No point is awarded for blanks or if the same is given to each option within an item, because this reflects inability to discriminate a preferred from a nonpreferred response. Total scores can range from 0 to 25, the maximum tally of correct responses.

1. B	10. A	19. B
2. B	11. B	20. A
3. B	12. A	21. A
4. A	13. B	22. B
5. A	14. B	23. A
6. B	15. B	24. B
7. A	16. A	25. B
8. B	17. A	
Q R	18 B	

SCORING KEY FOR THE SUICIDE INTERVENTION RESPONSE INVENTORY FORM 2

To score the revised Suicide Intervention Response Inventory (SIRI-2), simply compute the difference (taking into account sign) between the respondent's rating for a particular item and the mean rating assigned by the criterion group of experts, as indicated in the following table. The total score on the SIRI-2, therefore, represents the total discrepancy between the individual and the panelist ratings across all items. Item 14 proved to be psychometrically ambiguous in our validation study, and we therefore recommend its exclusion from the SIRI-2. Unlike the original SIRI, whose scores range from 0 to 25, with larger scores representing greater degrees of competency, scores on the revised version span a much larger range, and represent degrees of variation from a hypothetically ideal score. Therefore, larger scores represent less, not more, competence in recognizing facilitative responses to a suicidal individual.

SIRI Scoring

Ten most common errors of suicide interventionists,

superficial reassurance	2, 4, 6, 8, 12, 16
avoidance of strong feelings	11, 9, 21
professionalism	3, 15, 19
Inadequate assessment of Intent	1, 6, 16, 25
failure to identify precipitating even	nt 6
passivity	7, 17
Insufficient directiveness	14, 18, 25
advice giving	13, 22
stereotypic responses	11, 20, 23
defensiveness	4, 5, 10, 24

Neimeyer and Pfeiffer, in <u>Treatment of Suicidal People</u>, Eds Leenaars, Matisberger, Neimeyer, Taylor and Francis, 1994.

Mean Ratings (and Standard Deviations) of Appropriateness of Response Options in Items on the Suicide Intervention Response Inventory From 2 by Panel of Experts

Response Option	м	SD	Response Option	М	SD
1A	—2.71	.49	13A	—2.57	.54
1B	1.86	.38	13B	2.29	.95
2A	-2.71	.49	15A	—2.57	.79
2B	1.86	.69	15B	2.14	.69
3A	-2.14	1.07	16A	2.14	.69
3B	2.14	.38	16B	2.86	.38
4A	1.29	1.11	17A	1.57	1.27
4B	-2.71	.49	17B	—1.71	.95
5A	2.43	.54	18A	-2.00	1.41
5B	-2.71	.49	18B	1.43	1.72
6A	-2.00	1.16	19A	-2.29	.76
6B	2.57	.53	19B	1.57	.54
7A	2.00	.86	20A	2.00	1.41
7B	—1.29	1.70	20B	-2.86	.38
8A	-2.29	.49	21A	1.86	1.35
8B	2.14	.90	21B	—1.57	.79
9A	—1.29	1.50	22A	-2.71	.49
9B	1.29	1.80	22B	1.43	1.62
10A	2.29	.76	23A	1.57	1.40
10B	-2.43	.98	23B	-2.57	.54
11A	-2.42	.54	24A	-2.43	.79
11B	2.43	.79	24B	2.14	.69
12A	2.00	.82	25A	—2.57	.79
12B	-3.00	.00	25B	2.43	.79

Appendix F: SAC

Suicide Assessment Checklist-R This form is intended to be used to guide and document comprehensive suicide risk assessment. It should be used in conjunction with other interview and historical data as an aid in determining appropriate client disposition. It is not intended as a predictive device and should not be used as such. However, the higher the scores the more concern one should have regarding potential suicidal behaviors. AGE: SEX: MALE FEMALE CLIENT'S NAME: PART 1 ASSESSING SUICIDAL RISK: Circle all of the items relating to the client's situation and sum the corresponding score at the end of PART 1. CLIENT HAS DEFINITE PLAN: YES (6) PREVIOUS PSYCHIATRIC HISTORY: YES (4) METHOD: FIREARM (10) CAR EXHAUST (7) HANGING (9) DROWNING (6) SUFFOCATING (6) JUMPING (5) DRUGS/POISON (6) CUTTING (3) OTHER (3): METHOD ON HAND: YES (5) SUICIDE SURVIVOR: YES (6) MAKING FINAL PLANS: YES (6) DRUG AND/OR ALCOHOL USE: YES (5) PRIOR ATTEMPT(S): YES (5) MALE 15-35 OR 65 AND OLDER: YES (5) SUICIDE NOTE: YES (6) DEPENDENT CHILDREN AT HOME: YES (-4) MARITAL STATUS: SINGLE (3) MARRIED (2) DIVORCED (5) SEPARATED (5) WIDOWED (5) PART 1 TOTAL**: PART 2 From your interview, rate your impression of the client's status on each of the following items (see back page for explanation). Ratings should be based on initial perceptions of the client's status rather than on changes resulting from any intervention. Sum the corresponding item ratings at the end of PART 2 (minimum score = 9). NONE EXTREME SENSE OF WORTHLESSNESS: 1 2 3 4 5 SENSE OF HOPELESSNESS: 1 2 3 4 5 **SOCIAL ISOLATION: 12345 DEPRESSION: 12345 IMPULSIVITY: 12345 HOSTILITY: 12345** INTENT TO DIE: 12345 **ENVIRONMENTAL STRESS*: 12345 FUTURE TIME PERSPECTIVE: 5 4 3 2 1** *The level of stress precipitated by any actual or anticipated events in the client's life, such as loss of a loved one, change in life style, humiliation, etc. PART 2 TOTAL**: PART 1 TOTAL**: ___ __ (Sum of PART 1 + PART 2) TOTAL SCORE**: ** Total scores are for research purposes and not intended for use as predictors. Was the client engaged in a 'no suicide' contract?: YES NO NOT APPROPRIATE Considering all of the information available, indicate the client's level of suicide risk on the following scale: LOW RISK 1 2 3 4 5 HIGH RISK Disposition or referral: DATE: COUNSELOR'S SIGNATURE:

APPENDIX B

Suicide Assessment Checklist - Terminology Sheet

The following are brief definitions or explanations of the terms used in the Suicide Assessment Checklist.

PART 1

CLIENT HAS A DEFINITE PLAN – Has the client formulated a plan to commit suicide other than a vague 'I'm going to kill

myself.'?

METHOD – If the client does have a concrete plan, which method has she/he chosen?

METHOD ON HAND – Is the method one that is readily available to the client as opposed to one that needs to be obtained?

PREVIOUS PSYCHIATRIC HISTORY – Psychiatric history is used here as a broad term to include the range from inpatient

psychiatric care to outpatient psychotherapy.

MAKING FINAL PLANS – Is the client taking care of 'unfinished business' and/or giving away prized possessions? PRIOR ATTEMPTS – Has the client admitted to having previously attempted suicide or described situations that may have

been 'hidden' attempts?

SUICIDE NOTE – Has the client written or is he/she planning to write a suicide note placing blame for the action, leaving

instructions to survivors, or saying goodbye?

SUICIDE SURVIVOR - Has the client had a close friend or relative who has committed suicide?

DRUG/ALCOHOL USE - Does the client use alcohol or drugs at any level.

MALE 15-35 OR 65 AND OLDER – Is the client a male in either of these age categories?

DEPENDENT CHILDREN AT HOME – Does the client have one or more children 18 years or younger living in the household?

MARITAL STATUS – What is the marital status of the client?

PART 2

Ratings of the following items are to be based upon your impression of the client's status or 'feelings.' For example, how

hopeless does the client 'seem' to feel as opposed to how hopeless do you think the client 'should' feel given the circumstances.

Ratings of these items are to be based upon your initial impressions of the client's status rather than on the client's feelings

resulting from successful resolution of the presenting situations.

SENSE OF WORTHLESSNESS – To what degree does the client 'feel' that she/he has no personal worth or value to him/herself

and others?

SENSE OF HOPELESSNESS – To what degree does the client 'feel' that there is no hope for improvement in his/her situation in

the future?

SOCIAL ISOLATION – To what degree does the client 'feel' that he/she has no friends and relatives to whom he/she can turn?

DEPRESSION – To what degree does the client exhibit signs of depression, i.e., inactivity, lack of interest, disrupted eating

and/or sleeping habits, etc.?

IMPULSIVITY – To what degree does the client exhibit impulsive behavior, i.e., acting with little rational thought to outcomes?

HOSTILITY - How much anger does the client seem to have towards him or herself, others, or institutions?

INTENT TO DIE – To what degree does the client seem determined to carry out his/her plans to their conclusion? ENVIRONMENTAL STRESS – To what degree does the client 'feel' that events in his/her life are 'overwhelming,' painful,

humiliating or are providing insurmountable obstacles?

FUTURE TIME PERSPECTIVE – To what extent is the client able to focus on the future or positive future events as opposed to

focusing on only the present or negative future events? This item is scored in the opposite direction from the previous PART 2

items. That is, the absence of a positive future time perspective is scored 5.

Appendix G: Clinical Vignette 1

Clinical Vignette 1: Paul

Paul was a 45 year-old Caucasian male who had come for a scheduled counseling intake appointment. Paul's 19 year-old daughter, Alyssa, made the appointment for Paul two days after he was released from jail following his arrest for driving while intoxicated (DWI). Paul was recently fired from his job as a clerk at a large retail store. During his most recent major depressive episode, Paul was unable to get out of bed and missed several days of work, resulting in termination from his job. The morning Paul was fired he stopped at a bar on his way to his apartment. Following several drinks he got in his car and drove away to go home. He was stopped shortly afterward by police and arrested for driving while intoxicated.

When asked what brought Paul in for counseling Alyssa replied she was worried about her father drinking again and his depression. She stated he had not left his apartment since coming home from jail. The counselor asked Paul what was going on in his life that made his daughter worry about him. Paul, after a long silence, replied that she worried a lot, that he was a good-for-nothing failure, and that he was worthless as a father and as a person. He stated that he had caused her too much worry and burdened her too much. Paul went on to say that he had failed in everything in his life. He failed at providing for his family and for Alyssa, had failed at every job, and now had failed at his recovery.

Alyssa reported her father had been in recovery from alcoholism for ten years until the day he lost his job. Paul stated that he felt so bad about losing his job because he couldn't get his lazy self out of bed and that he had felt he couldn't hit any lower in his life. He then stated he had been wrong, because he couldn't go lower than he was at the present moment.

Continuing the interview, Paul and Alyssa reported he had no major health problems and no previous legal issues, except for his divorce from Alyssa's mom seven years ago. He had been chronically depressed since his early twenties. Paul reported a family history of depression and suicide. He stated that his father was an alcoholic and depressed most of his life; his father eventually died by suicide when he was in his late sixties. He used a pistol that he had bought from Paul. He stated his mother was also depressed and diagnosed with borderline personality disorder. He stated he witnessed her make several suicide attempts while he was growing up. He disclosed that he made multiple suicide attempts in his past. His first was shortly after his parents divorced when he was away at college. He had cut both his wrists in this attempt. His second attempt was following his own divorce from Alyssa's mom. Paul had taken a large dose of sleep and antidepressant medication along with alcohol. His third and final attempt was while he was in jail for DWI. He had tried to hang himself in his cell with his uniform. He was discovered by another inmate, and was hospitalized for three days for minor injuries sustained from the suicide attempt.

The counselor asked Paul if he was currently having thoughts of suicide. Paul responded that he was. The counselor then asked Paul how he would follow-up on his thoughts. Paul responded he would likely use a gun or hang himself. The counselor followed-up by asking Paul if he had the means to carry out a suicide attempt; Paul replied he no longer had a firearm because he had to sell it a while back to pay his rent. The counselor then followed-up asking, "how about hanging yourself, do you have a place to hang yourself?" Paul replied he didn't really have a place in his apartment that would work and that he would probably fail at that too if he tried.

The counselor asked Paul how likely he was to attempt suicide in the next 48 hours. Paul replied that he didn't know.

The counselor asked Paul what he had to live for—what would stop him from attempting suicide. Paul replied after a long moment of silence that he had his daughter Alyssa. He stated he was more of a burden to her than anything. Alyssa replied that he was not a burden to her and that she loved him. The counselor asked what else he had to live for. Paul replied he had his friends at his Alcoholics Anonymous (AA); although he was afraid they would reject him because of his recent relapse. He also stated that he had been attending church sporadically with a few of his buddies from AA, but had stopped attending during his last bout of depression. Alyssa reminded her father of his buddies from work. Paul stated he had some good friends at work but they probably hated him now because he lost his job.

Appendix H: Clinical Vignette 2

Clinical Vignette 2: Randy

Randy was a fourteen year-old African American male. His mother brought him in initially for counseling because he had been suspended from school for fighting. During the third session with Randy, Randy stated he was defending himself from a group of boys who had been bullying him since he started high school. Randy said he just got so tired of it that he tried to defend himself and was suspended for it. While Randy stated that he did not like school, he received average to above average grades in school and liked most of his teachers, especially his history teacher. During the intake session Randy's mother, Ruth, stated that he had always been "moody and impulsive," but never had been in fights until now.

Randy lived with his mother and two younger sisters in their uncle's house. They had lived with their uncle since their father had gone to prison six years ago. Ruth disclosed to the counselor that their father had been abusive to Randy and her, physically and sexually. He had been abusive to them from early on. When Ruth realized that he was sexually abusive to Randy she left with Randy and the two girls, who were infants then, to a women's shelter. She stated that the counselor there helped her file charges against their father. He was now serving thirty years for abusing Randy.

Ruth and her children eventually left the shelter and moved in with their uncle (Ruth's oldest brother). She described their living situation as "tense." She stated that Randy and his uncle didn't get along very well. His uncle called him names much of the time, such as "crazy" and referred to him as his "niece." The counselor asked if there had been any physical abuse toward Randy from his uncle. Both Randy and his mom stated there had never

128

been any abuse. Ruth stated that the rest of the family was kind and loving toward Randy, but lived too far away and did not have room for them.

During the most recent session, Randy disclosed he had been teased and bullied on and off during elementary and middle school. When he started high school, however, it got much worse. Randy stated he was picked on because he was different. Randy was relatively small in size and had somewhat feminine features. Randy disclosed during the session that he had a growing awareness of his sexual attraction toward other boys.

Randy stated that he had never told anyone about his feelings toward other boys.

Randy stated there is no one who would understand. He was afraid to tell his mom, and his sisters were too young to understand. He said his uncle would harass him forever if he said anything to him. He went on to say his uncle would probably kick him, his mom, and sisters out of the house. Randy reported no close friends at school; however, there was one girl from church with whom he had been friends since elementary school. He stated he just kept to himself most of the time.

The counselor asked Randy what he did when he was by himself–Randy said, "Just think and imagine I'm in a better place." The counselor asked Randy to describe this better place. He described a place where he, his mom, and sisters had their own home, far away from everyone else, and where it was peaceful. Randy stated that sometimes he wanted to go there so badly that he took his mom's pills to try to get there.

The counselor inquired about the pills and how they helped him get there. Randy replied that they helped drown out the voices and thoughts he heard all the time so he could stay there in peace. The counselor then asked if he ever wanted to go there so badly that he would take enough pills to stay there permanently. Randy replied "sometimes." The

counselor then asked him directly if he had thoughts of suicide. Randy replied that he just wished he could escape. The counselor asked Randy if he had ever had to go to the hospital after trying to escape. Randy stated he had to go to the "crazy hospital" before for a few weeks. At this point the counselor asked Randy if she could bring his mom into session with them. Randy agreed.

Randy's mom stated that Randy had been hospitalized twice at the state psychiatric hospital. She stated that the doctors said he had schizoaffective disorder, bipolar type and posttraumatic stress disorder (PTSD). He was currently stabilized on antidepressants and antipsychotics. The counselor encouraged Randy to share with his mom what he had shared with her. As Randy told Ruth about wanting a better place for all of them to live, and that sometimes he tried to get there by taking her pills, Ruth appeared very concerned.

Appendix I: Demographics Questionnaire

Demographics Questionnaire

Please indicate your age:					
Please indicate your gender:					
Please indicate your counseling con-	centration:				
☐ Clinical mental health	☐ School counseling	☐ Marriage and family			
☐ Career counseling	☐ Addiction counseling	□ Doctoral			
☐ Student affairs and colleg	☐ Student affairs and college				
Please list all counseling courses yo	u have completed:				
Please list all counseling courses you are currently enrolled in:					
Do you have any previous training a	and/or experience in crisis or s	uicide intervention?			
□ No □ Yes, pleas	se describe:				