

August 2019

Analysis of a Standardized Suicide Intervention Training for Counselor Trainees

Laura Shannonhouse
Georgia State University

Amanda D. Rumsey
Clemson University

Nikki Elston
Wake Forest University

Mary Chase Mize
Georgia State University

Jennifer Hightower
University of Tennessee, Knoxville

See next page for additional authors

Follow this and additional works at: <https://trace.tennessee.edu/tsc>



Part of the [Counselor Education Commons](#)

Recommended Citation

Shannonhouse, Laura; Rumsey, Amanda D.; Elston, Nikki; Mize, Mary Chase; Hightower, Jennifer; and Lin, Yung-Wei (2019) "Analysis of a Standardized Suicide Intervention Training for Counselor Trainees," *Teaching and Supervision in Counseling*: Vol. 1 : Iss. 2 , Article 9.

<https://doi.org/10.7290/tsc010209>

Available at: <https://trace.tennessee.edu/tsc/vol1/iss2/9>

This article is brought to you freely and openly by Volunteer, Open-access, Library-hosted Journals (VOL Journals), published in partnership with The University of Tennessee (UT) University Libraries. This article has been accepted for inclusion in *Teaching and Supervision in Counseling* by an authorized editor. For more information, please visit <https://trace.tennessee.edu/tsc>.

Analysis of a Standardized Suicide Intervention Training for Counselor Trainees

Cover Page Footnote

Funding Details This work was supported by Chi Sigma Iota, International under an Excellence in Counseling Research Grant awarded to the first, third, and sixth author in 2015. Disclosure Statement No financial interest or benefit has arisen from the direct applications of this research.

Authors

Laura Shannonhouse, Amanda D. Rumsey, Nikki Elston, Mary Chase Mize, Jennifer Hightower, and Yung-Wei Lin

Analysis of a Standardized Suicide Intervention Training for Counselor-Trainees

Laura Shannonhouse, Amanda Rumsey, Nikki Elston, Mary Chase Mize, Jennifer Hightower, Yung-Wei “Dennis” Lin

■ The present study evaluates the impact of an evidence-based suicide intervention model and how pedagogical practices of counselor education programs may prepare counselors-in-training (CIT) to respond to clients considering suicide. Using content analysis to explore pre- and post-training data, the researchers examined the impact of the 14-hour evidence-based Applied Suicide Intervention Skills Training (ASIST) on 54 CITs (76% female, 24% male; 58% White, 20% African American, 11% Latinx/Hispanic, 11% other), with a mean age of 30 years ($SD = 8.6$). Further data were collected six months later after CITs had the opportunity to utilize suicide intervention skills during their clinical experiences. Content analysis yielded several changes between pre- and post-training data that elucidate the process of suicide intervention skill acquisition. The CITs also reported frequently applying their skills during their clinical internships with clients considering suicide. The findings support the use of ASIST in the preparation of future counselors.

Keywords: Applied Suicide Intervention Skills Training, within-subjects design, quantitative content analysis, training outcomes

Suicide is a leading cause of death worldwide, claiming more than 800,000 lives annually (World Health Organization, 2018). In 2016, there were 44,965 reported suicides in the United States (Centers for Disease Control [CDC], 2016), which translates to one death roughly every 12 minutes. Many more deaths by suicide are categorized incorrectly or unreported (e.g., car accident, drug overdose). The number of non-fatal suicide actions or suicide attempts range from 40 to 100 times higher than the number of report-

ed suicides (Lang et al., 2013). According to the CDC (2018), 13.9 million people think about or attempt suicide, indicating a serious public health crisis that demands more attention to intervention.

Considering that 90% of mental health practitioners will work with suicidal clients (Feldman & Freedenthal, 2006) and that the Council for Accreditation of Counseling and Related Educational Programs (CACREP) requires suicide training in counselor preparation, counselors

Amanda Rumsey, Clemson University; Nikki Elston, Wake Forest University; Mary Chase Mize, Georgia State University; Jennifer Hightower, University of Tennessee Knoxville; Yung-Wei “Dennis” Lin, New Jersey City University

remain underprepared to respond to such clients (Page, Saumweber, Hall, Crookston, & West, 2013). Most counselors-in-training (CITs) do not receive suicide training until undertaking their practicums/internships, when or after they begin seeing clients considering suicide (Barrio Minton & Pease-Carter, 2011; Liebling-Boccio & Jennings, 2013). Crisis skill development should occur throughout the counselor education curriculum and not when suicide situations arise during a CIT's first clinical practice (Barrio Minton & Pease-Carter, 2011). Therefore, it is necessary for counselor educators and supervisors to help CITs acquire additional suicide intervention skills before engaging in clinical work.

Applied Suicide Intervention Skills Training (ASIST), an evidence-based suicide *intervention* training (Suicide Prevention Resource Center, 2007), has been institutionalized by branches of the U.S. Armed Forces, the CDC, and crisis centers throughout the country (Rodgers, 2010). ASIST has been found to increase suicide intervention skills (Shannonhouse, Lin, Shaw, & Porter, 2017; Shannonhouse, Lin, Shaw, Wanna, & Porter, 2017; Gould, Cross, Pisani, Munfalsh, & Kleinman, 2013); increase knowledge about suicide; and increase comfort, competence, and confidence to intervene with a person considering suicide (for review, see Rodgers, 2010). These gains have been maintained over time (Shannonhouse et al., 2018). Those quantitative studies offer “explanations” for the “hypothesis-deductive” methodology (Hjelmeland & Knizek, 2010, p. 74). There is a need to better understand the pedagogical practices inherent within the ASIST curriculum that contribute to changes in helper response ability and to explore how CITs integrate them into their clinical development (Shannonhouse et al., 2018). Integrating this evidence-based model into counselor training programs has the potential to reduce the fear, anxiety, and avoidance CITs may experience when facing a suicidal client.

Suicide Intervention Training for CITs

Suicide affects individuals across the lifespan (CDC, 2016), making it inevitable that practicing counselors will encounter a client considering suicide. Counselors who received suicide training during their graduate programs have been found to better handle interactions with such clients (Miller, McGlothlin, & West, 2013). CACREP mandates the use of prevention and suicide intervention models, but counselors continue to report feeling ill-prepared to identify and respond to clients contemplating suicide (Liebling-Boccio & Jennings, 2013; Page et al., 2013). In response to this need, researchers suggest examining existing training practices in counselor preparation programs (Barrio Minton & Pease-Carter, 2011).

A survey of 193 counselors found that 67.4% did not take a crisis course during their master's training (Wachter Morris & Barrio Minton, 2012). Students obtain the bulk of their experience with suicidal ideation and suicide intervention in the practicum/internship setting rather than in the classroom (Liebling-Boccio & Jennings, 2013). A study of 113 master's counseling students in a CACREP-accredited program found that pre-practicum suicide response training lowered CITs' anxiety and increased their confidence when treating suicidal clients (Binkley & Leibert, 2015). Jahn, Quinnett, and Ries (2016) found that among 289 mental health workers, 140 (48.4%) reported feeling fearful of patient death by suicide, and nearly one-third ($n = 86$; 29.8%) stated their suicide-focused training was not sufficient. Client suicide has historically been rated the greatest fear by mental health practitioners (Pope & Tabachnick, 1993).

Hoffmann, Osborn, and West (2013) found that CITs specifically requested skill-based training components (e.g., simulations, role-plays) to learn intervention skills. CITs felt they needed suicide intervention skill training before clinical work and reported that suicide was rarely discussed in classes (Hoffmann

et al., 2013). Despite these findings, there is a dearth of qualitative data on suicide intervention skills training (Kral, Links, & Bergmans, 2012). No study to date has qualitatively evaluated any suicide intervention skills training with beginning clinicians. Such a study may provide insight into the pedagogical processes of skill acquisition from evidence-based suicide intervention trainings (Evans & Hurrell, 2016).

ASIST

ASIST differs from other standardized training programs since it is a longer (two-day, 14-hour) training that emphasizes the needs of the person experiencing thoughts of suicide. Throughout the two-day interactive training, certified ASIST trainers use multiple simulations to help participants rehearse and refine the skills used in the suicide intervention model. On day one, participants engage in group discussions about the warning signs of suicide (e.g., comments, actions, thoughts, feelings); how personal thoughts, beliefs, and attitudes influence interventions; and the Pathway for Assisting Life (PAL), the framework that guides someone through a suicide intervention. On day two, trainers lead participants in hands-on, experiential practice with PAL. Using role-play simulations, attendees have the opportunity to intervene with a suicidal person through mock suicidal encounters led by the trainers as well as one-on-one role-play simulations with fellow participants. Throughout the training, participants continually practice suicide intervention skills in large and small groups, watch videos that depict interactions with persons considering suicide, and learn how to use each step of the PAL model to assist the person at risk. ASIST has been intentionally designed to incorporate multiple layers of simulation via trainer-to-trainer, trainer-to-audience, trainer-to-trainee, and trainee-to-trainee interactions (Rogers, 2010).

One of the core components of ASIST involves teaching participants the PAL model. PAL consists of three phases: connecting, understanding, and assisting.

Each of these phases contains responsibilities for the person conducting the intervention (the helper) and the person at risk. During the connecting phase, the helper explores warnings of suicide and directly asks about suicide. In the understanding phase, the emphasis is on thoroughly understanding the reasons for dying and assessing for lethality. The final phase, assisting, requires the development of and agreement to a safety plan. While PAL may sound linear, it is flexible and adaptable, and steps can be repeated throughout the intervention until the helper and person with thoughts of suicide agree about safety.

Those trained in ASIST report increased levels of comfort in responding and confidence in attempting to respond to a person thinking of suicide (Griesbach, Dolev, Russel, & Lardner, 2008). Furthermore, those trained in ASIST have also reported increased levels of competence, which have been corroborated through objective assessments of simulated interventions. Through observed behavior simulations, Tierney (1994) found that those trained in ASIST were more successful at employing best practices (e.g., asking explicitly about suicidal thoughts/actions, identifying risk factors, recognizing hesitation, and creating measurable safe plans). With taped scenarios, Turley, Pullen, Thomas, and Rolfe (2000) also found a significant increase in counselor identification of persons considering suicide.

In addition, Gould et al. (2013) conducted a double-blind, hierarchical, linear modeling evaluation of national suicide prevention lifeline outcomes ($N = 1,507$ calls), resulting in ASIST becoming part of the NREPP. Key components inherent within the model (i.e., ability to work effectively with ambivalence about dying, exhaust reasons for dying, identify a turning point, reach mutually agreed-upon safe plans) employed by ASIST-trained phone counselors were associated with better caller outcomes. While quantitative studies have examined the effect of ASIST in counselor preparation (Shannonhouse et al., 2018) and in K–12 schools with school counselors (Shan-

nonhouse Lin, Shaw, & Porter, 2017), no qualitative studies have explored CITs' acquisition of skills during pre- to post-training and/or their clinical use of the model.

Therefore, our research questions included the following: (1) What was the impact of receiving ASIST training on CITs' attitudes and beliefs towards suicide, knowledge about suicide, and comfort, competence, and confidence in responding to persons with thoughts of suicide?; (2) What particular components of the PAL model were most impactful on CITs' skill development?; and (3) To what extent did CITs use their new skills in their first clinical experiences?

Methods

This within-subjects research design included the standardized and manualized ASIST training as the treatment among CITs at a CACREP-accredited training program. Content analysis was the primary mode of analysis, with qualitative data from before and immediately after training analyzed. In addition, similar data as well as several discrete, closed items were collected from participating students six months after receiving ASIST. All procedures were approved and monitored by the institutional review board at the institution of the first author and the participating CITs. After a brief overview of the recruitment and characteristics of participating CITs, the basic study procedures are outlined, followed by detailed descriptions of treatment fidelity and data analysis.

Participants

CITs enrolled in a CACREP-accredited counselor preparation program in the southeastern United States were considered eligible for this study if they had completed a counseling skills and a multicultural counseling course. Potentially eligible CITs were notified about the training and optional study via email and in person through course announcements. Interested CITs then registered online for the training.

Participation in this study was not required for interested CITs to receive ASIST; however, all registered CITs chose to do so. The 54 participating CITs were 76% female (11 male), 58% White/Caucasian (11 African American, one Asian, six Latino/Hispanic, five mixed ethnicity), with a mean age of 30 years ($SD = 8.6$). Six months later, 34 participants (63% of the full sample) completed the follow-up survey on their use of ASIST. The primary source of attrition for the follow-up sample was matriculation. Of the pre- and post-training participants, 25 (46.3%) were first-year master's students. While two of those students did not complete the follow-up survey, most of the attrition (18 participants) was from CITs who were more advanced in their programs and who had graduated by the administration of the six-month follow-up survey.

Procedures

Upon registration, CITs were grouped into trainings by specialty area (e.g., school counseling training, mental health/rehabilitation counseling training). These trainings were then provided in January 2016. Data collection occurred directly prior to, directly after, and six months after the ASIST training. During the period between training and follow-up, first-year master's students completed their first semesters of clinical experience (i.e., practicum). To de-identify participants, CITs used a unique, self-generated code number for all surveys. The surveys were administered electronically via the online data collection/management platform Qualtrics.

At both pre- and post-training, participants answered a set of open-ended questions about their attitudes and beliefs related to people who complete suicide, important qualities/skills for those who intervene, and barriers to effective responses (see Table 1 for sample questions). Furthermore, on the follow-up survey, CITs were asked to report on their interventions with suicidal clients in practice. More specifically, they were asked whether (and how) they utilized

Table 1
Open-Ended Questions

Time Point	Themes	Sample Questions
Pre-training	Attitudes/beliefs related to those who have died by suicide	What are your views/beliefs about suicide?
	Knowledge of warning signs	What signs/symptoms might indicate a client is at risk of suicide?
	Important qualities/skills for those who intervene	What skills do you believe a person should have to effectively respond to a person at risk?
	Barriers to effective response	What might keep you from addressing someone you think may be considering suicide?
	Training	What are you hoping to get out of taking ASIST?
Post-training	Attitudes/beliefs related to those who have died by suicide	What are your views/beliefs about suicide?
	Knowledge of warning signs	What signs/symptoms might indicate a client is at risk of suicide?
	Important qualities/skills for those who intervene	What skills do you believe a person should have to effectively respond to a person at risk?
	Barriers to effective response	After ASIST, what might keep you from responding to a client at risk of suicide?
	Training	Which training components were helpful to your learning and why?
Six-month follow-up	Risk factors	Thinking about the individuals you have seen, what signs made you believe that they were at risk of suicide?
	Barriers to intervening at sites	What are the beliefs from your site about the role you have in responding to persons at risk of suicide?
	Utilization of the six evidence-based PAL components	How you were able to support the turn to safety and work with ambivalence about dying?

the six evidence-based PAL components: (1) exploring invitations, (2) asking directly about suicide, (3) hearing the story, (4) identifying turning points, (5) developing safety plans, and (6) confirming actions (e.g., “Did you help the client identify a turning point?”; “How you were able to support the turn to safety and work with ambivalence about dying?”). These questions allowed an analysis of how frequently aspects of the training were integrated into participants’ developing skills and provided context for how PAL components are implemented in practice.

Treatment and Treatment Integrity

During the trainings, which followed the ASIST training manual (Lang et al., 2013), participants learned the six-step PAL model to provide a life-assisting intervention with a person considering suicide. Training emphasized “quality of the interaction between the caregiver and the person at risk” (Rodgers, 2010, p. 9) and reduction of suicide risk through connection and safety planning. PAL consists of three phases: connecting, understanding, and assisting. In the connecting phase, counselors explore client distress and ask directly about suicide. The understanding suicide phase tasks the counselor with exhausting client reasons for dying and uncovering a reason for living. Choosing to live or die can be a tough choice; therefore, in the final phase, assisting life, the counselor provides clients with an option to “stay safe for now,” which often turns into long-term safety.

Training fidelity was monitored throughout the study. All two-day ASIST trainings were conducted within the span of 10 days and facilitated by the first and sixth authors, both of whom are counselor educators and certified ASIST master trainers (i.e., they have conducted at least 10 standardized trainings). In accordance with ASIST procedures, training reports were compiled after each training and provided to LivingWorks, the ASIST publisher, for review (these trainer reports are available upon request). Further-

more, the trainers consistently facilitated the same learning modules across trainings to avoid undue training effects.

Research Team

The research team consisted of six members previously trained in ASIST. Coders included a 38-year-old Caucasian, female, third-year doctoral student; a 48-year-old Caucasian, female, fourth-year doctoral student; and a 26-year-old Caucasian, female, second-year master’s student. A 37-year-old Caucasian, female, third-year counselor educator provided expertise on methodology and treatment, ran inter-rater agreement, and analyzed follow-up data. The fifth member, a 23-year-old Caucasian, female, second-year master’s student, supported data collection and follow-up analysis. The sixth member was a 42-year-old Asian, male, fifth-year counselor educator. Since the first and sixth authors provided the ASIST training, they did not participate in the coding and main study analysis, allowing the coders to function more objectively. The coding team began with a bracketing exercise (Fischer, 2009) to formally record biases and values on suicide training and then independently evaluated participant responses.

Data Analysis

Because content analysis lends itself to both qualitative and quantitative methodologies for analysis, researchers can examine existing and emergent categories and relationships between categories (Neuendorf, 2016). Qualitative content analysis provides an objective, systematic method for analyzing text and allows categories to emerge from the data based on deductive and inductive processes (Krippendorff, 2013). The current study structured survey questions according to an a priori framework of helper responses to suicidal ideation adapted from Washington’s Youth Suicide Prevention Program (Organizational Research Services, 2002). However, it would be more appropriate to consider the ensuing analysis to be primarily

in the inductive mode of content analysis. Categories could emerge from the data without an a priori theory of which factors of the ASIST training program were critical for CIT development or even how any changes would manifest.

Krippendorff's (2013) four components of content analysis were utilized: unitizing, sampling, recording/coding, and reducing. We determined the unit subject for analysis to be the individual; determined the method of sampling, units, and number of units needed; and engaged in recording/coding participants' written responses to open-ended questions adapted from Washington's program (Organizational Research Services, 2002) so data were transferable and understandable for multiple coders. Data were imputed into an Excel file, enabling a visual representation of each response across cases, which enabled category reduction based on clusters of data. For instance, "giving away possessions," "changes in appearance," and "isolation" are encapsulated under the category of "warning signs" or, in ASIST language, "invitations" to ask about suicide. For the initial categories, we created a codebook to guide the process, which required several iterations of coding data and revising the codebook until a stable list was established. The three-member coding team operationally defined each codebook category and then worked independently to code responses from 15 cases. They convened to build an initial framework and met eight times to compare codes, divide material into units of coding, and revise the coding frame, continually increasing familiarity with each category and subcategory.

Trustworthiness was achieved through reflexivity in data interpretation, the use of multiple coders, and calculations of interrater agreement (Krippendorff, 2013). As a pilot, the first four authors independently coded a subset of data from 15 randomly selected pre-training cases (60 decisional units). The average pairwise percentage of agreement before comparison and discussion of the coding was 75.56%. The four met, revised the codebook, and recoded the full

pre-training data on these 15 cases (760 decisional units). The pairwise percentage agreement improved to 88.77%. These cases were returned to the full dataset. After revisions of the codebook without the first author, the full pre-training data were coded by the three coders (2,430 decisional units). An agreement of 96.01% was achieved, indicating substantial agreement between raters. Across the 54 participants, interrater reliabilities on individual codes (Krippendorff's alpha) ranged from 0.821 to 1.00. The average interrater reliability across codes was .939 (SD = .048), indicating excellent reliability (Krippendorff, 2013). No systemic discrepancies were noted on specific individual codes when examining coder-level data.

Similarly, the same three coders coded a subset of data from 15 post-training cases as a pilot (60 decisional units). The pairwise percentage agreement was higher (90%) before comparison than with the pre-training pilot data. The coders met again, revised the codebook, and then coded the full post-training data (1,080 decisional units), achieving a 95% pairwise percentage agreement. For the post-training data, interrater reliabilities on all individual codes fell within the range of Krippendorff's alphas found on pre-training data, again indicating excellent coding reliability. Again, no systemic discrepancies were noted on specific codes. Once the final pre- and post-training coding frames were developed, they were reviewed and necessary modifications were identified, including condensing and/or renaming several categories. The final coding frames were used to recode text responses from the 54 participants.

Results

Qualitative content analysis of 1,170 participant responses initially yielded 11 categories for the pre-training data and nine categories for the post-training data, which were each separated into multiple subcategories. The nomothetic approach of content analysis is aimed at generalizing data rather than reporting

all details of each unit of analysis (Neuendorf, 2016); therefore, the researchers used an inductive approach to move from specific ideas and details of the 20 original categories to more generalizable categories that summarized the data. This process of condensing and renaming categories resulted in five main categories, which were then separated into subcategories for the pre- and post-training data (both shown in Table 2). The categories and subcategories were identified along with mention frequency and text quotes. A discussion of participants' pre- and post-training differences in attitudes, knowledge, skills, comfort, confidence, and competence follows along with the reported "most impactful aspects" of the standardized ASIST training for participants' work with clients.

Pre- and Post-Training Changes

Attitudes towards and views of suicide. Prior to training, the most frequent statements about suicide were related to ideas that suicide is "preventable" and that "people who suicide cannot see other options." The attitude that suicide is "taboo" and a "permanent solution to a temporary problem" were both reported. Prevention was viewed as "necessary" and "possible with resources," "support," and "training." Intervention was viewed as "necessary" and as requiring "continued support" and "follow-up" services. Participant attitudes about postvention (e.g., systemic response after a suicide) were that it was "needed" but described nebulously.

After training, participants' attitudes were overall more accepting, less judgmental, and more prevention specific. More participants shared that "suicide is common" and "anyone" can "be susceptible" if a series of "stressors" or "painful life events" "pile up" and one perceives "the absence of help." Suicidal thoughts can be part of life and "develop over time" as one perceives suicide as the answer to "relieve pain." After training, participants discussed more specific attitudes that relate to intervention, such as the belief that a "life force" exists and that such a force is part

of the human condition to "want to live." Participants described more specific attitudes about postvention as well since they had a better understanding about their roles as school, mental health, and rehabilitation counselors in building a "suicide-safer community." Some noted that "postvention was an opportunity for prevention."

The attitude that people complete suicide because they "cannot see options" and see it as a "last resort" was frequently reported pre-training, but it was not a subtheme in post-training analysis. Another common attitude prior to training was that suicide is "taboo"; however, this was only brought up once post-training. Alternatively, the theme "suicide is a choice" came up post-training, but it was not present prior to training. Prior to training, participants believed "choosing to live or die" can be a "tough choice"; after training, participants reported a third option to "stay safe for now."

Knowledge of warning signs. Warning signs that indicate a person may be considering suicide were discussed extensively pre-training. Three subcategories emerged: (a) emotional signs or symptoms (e.g., "hopelessness," "changes in mood," "anger," "depression," and "feelings of apathy"); (b) behavioral signs or symptoms (e.g., "withdrawal/isolation," "saying goodbye," "giving away possessions," "talking about suicide," "isolation," "self-harm/recklessness,"); and (c) signs of lethality (e.g., "having a plan," "access to means," and "previous attempts"). Participants reported that signs of lethality indicated a "higher risk" of death.

Prior to training, 42 participants brought up observable warning-sign behaviors, 34 discussed emotional warning signs, and 21 participants discussed warning signs related to lethality. Following training, there was a sophistication in the discussion about behavioral and emotional warning signs. Participants named the same warning signs but with a new awareness that focusing on warning signs alone could

Table 2 <i>Frequencies and Examples of Categories Observed in Pre- and Post-Training Data</i>				
Categories Subcategories	Pre-Training		Post-Training	
	Freq.	Example	Freq.	Example
Attitudes, views and beliefs				
Suicidal thoughts are common/everyone is susceptible	4	"I believe a death wish or feeling that life is meaningless is a common phenomenon."	12	"Suicidal ideation can occur in anyone's life, not just a certain type of person dealing with certain stressors."
Suicide is preventable/life force exists	22	"It is a problem that people like to ignore, which adds to the problem."	26	"It is preventable—people want to tell their stories and be heard."
Taboo (considering/completing suicide is wrong)	3	"It is a problem that people like to ignore, which adds to the problem."	0	
Suicide is neither right nor wrong	5	"Suicide is not right or wrong."	0	
Suicide is a choice	0		6	"That it is a choice and they should be given the space to identify their own plan"
Suicide is a last resort after other options are tried	18	"Suicide occurs when an individual loses all hope. I believe that people commit suicide as the ultimate way to end their misery."	0	
Permanent solution to temporary problem	7	"Serious, preventable, permanent solution to temporary problem"	0	
Prevention, intervention, and postvention are necessary	43	"Increased awareness is vital to prevention. We need to be TRAINED for intervention."	9	"You can build community support to prevent suicide."
Knowledge of warning signs				
Emotional warning signs	34	"Depression"; "Sadness"	38	"Depression"; "Hopelessness"
Behavioral warning signs	42	"Withdraw from previously enjoyable activities"; "High levels of risk taking, recklessness"	47	"Talk about ending life, wanting it to be over"
Lethality of current suicidal ideation	21	"Previous suicide attempts"	15	"Recent/past attempts and access to means"
Beliefs about Caregivers/Responders				
Interpersonal skills that help caregivers	37	"A calm presence, genuine concern, patience"	54	"I am empathetic and dedicated to my clients."

Knowledge that helps a caregiver effectively respond	23	“Know the warning signs, know resources, know how to assess for suicide”	29	“I know the overall approach that is proven to work.”
Intervention skills a caregiver needs to be able to assist	22	“Skills controlling the situation, confirming that hope is present, great listening skills”	30	“Active listening and the sense of the PAL model”
Intervention comfort, competence, and confidence (barriers or weaknesses)				
Fear around intervening	16	“Fear of not being able to handle the situation; fear of offending others due to being incorrect; fear of being held responsible for outcome”	14	“Getting over my own fear—although in this moment I feel like nothing would stop me”
The setting or role of caregiver may be a barrier to responding	10	“If I had concerns at school but couldn’t reach the kid before going home”		
Lack of training, confidence, or relationship as a barrier to responding	19	“Fear that I do not have enough training”; “Saying the wrong thing and lacking the confidence in my ability to help”		
Lack of experience in that situation	0		11	“Need to further develop skills and knowledge”
Physical safety would interfere	0		4	“If I am in danger”
Personal experiences/being unable to control own emotions	0		19	“My distress in crisis situations, but I know now more what to do even with that”
Overlooking signs and recognizing	0		7	“I may be too busy to notice signs of distress or answer invitations.”
Rushing the process of intervention	0		11	“Sometimes, I can move too fast and not trust the process.”

be “problematic” because counselors could “miss persons at risk” if they only look for certain signs or target only groups known to be “at risk.” Less emphasis was placed on lethality post-training, and more emphasis was placed on “disarming the plan,” “developing” mutually agreed-upon “safe plans,” and “enlarging the support network.”

Beliefs about responders/caregivers/clinicians. Beliefs about suicide intervention were discussed in terms of important traits, strengths, and needs that support effective responses. Participants discussed interpersonal skills, information/necessary knowledge, and intervention skills. “Patience,” “genuineness,” “being present,” and “willingness to help”

were mentioned as important interpersonal skills along with having “empathy,” “openness,” and a “non-judgmental” attitude. Knowledge of “warning signs,” “depression,” and “resources” along with “training” in “counseling skills,” “risk assessment,” and “de-escalation” were identified as important for those who respond. The most mentioned subtheme was strong interpersonal skills, followed by specific knowledge and intervention skills.

Post-training, participants responded to questions about the strengths and weaknesses they personally possessed as a caregiver and the skills clinicians need to effectively intervene. “Empathy,” “listening”/“counseling skills,” and “training” were most commonly noted pre-training along with being “genuine,” “caring,” and “compassionate” and having a “non-judgmental attitude.” The same subcategories applied to pre- and post-training codes; however, all 54 participants mentioned the importance of caregiver/clinician interpersonal skills post-training. The need for “intervention skills” was the second most commonly mentioned subtheme post-training, and the importance of “knowledge” or “training” was the third. “Willingness to intervene” was a common response after training, although it was rarely mentioned pre-training.

Intervention comfort, competence, and confidence. These were considered prior to and after training by exploring issues participants believed might interfere or present a barrier to intervening or providing support to someone contemplating suicide. Before training, participants most commonly believed that “fear” and “lack of training” would be barriers to intervening. They were also very concerned about the “physical safety” of someone in distress. However, after training, these subcategories appeared much less frequently.

Participants were more definitive after training, commonly reporting that their “personal experiences” with suicide (e.g., future client experiences or person-

al connections to suicide) and/or ability to “control their own emotions” may interfere with intervening. The lack of “real-world [clinical] experience” was discussed along with a “fear” of “rushing the intervention.” Participants were less concerned about “overlooking [warning] signs” than not picking up on the “life force” after hearing the story and exhausting reason for dying. Supporting “ambivalence” and “uncertainty about dying” emerged post-training as well as “supporting the turn to safety.”

Before training, most participants conceptualized “future clients” as being “at risk,” whereas post-training language shifted to being “willing to intervene” with a “community member,” “colleague,” or “friend/family.” A few mentioned that the “setting” or their relationship (i.e., “their role”) with the client may interfere post-training, which was not present pre-training. Overall, participants reported feeling “ready,” “willing,” and “able” to intervene and stated that “nothing would get in the way of me trying” after receiving the 14-hour ASIST training.

Hope/significance of training. Participants sought to increase “awareness” and “knowledge” of suicide intervention skills. They hoped their participation would lead to increased intervention “tools” and increased “comfort” and “ability to be present” when working with a person considering suicide. After training, subcategories for training significance included increased knowledge, awareness, and comfort with “increased skills.” All the participants reported feeling more “prepared,” “confident,” “aware,” and “open-minded.” They identified the structured group process on attitudes and beliefs, the simulations, and the day-one group process (e.g., personal experiences with suicide) as the most meaningful training components.

Six-Month Follow-Up

Of the participants, 34 completed a third Qualtrics survey six months later. On average, they saw

38.7 clients per week, with whom they could ascertain suicidality and respond if needed. Most participants (91.2%; $n = 31$) reported interactions with at least one client contemplating suicide during the six-month period; on average, the participants reported 26.7 such individuals, and they used the ASIST PAL model to respond to an average of 18.8 of those clients. They referred an average of 14.4 clients at risk of suicide for reasons including “the protocol at [school district]” and/or the level of lethality. One participant stated, “I heard their story, listened for turning points, assessed, safety planned, and ultimately decided to hospitalize.” The participants reported that 100% of their clients were “kept safe for now” during the time they worked with them.

The participants were then asked whether they used the six PAL model intervention components during their work with clients considering suicide. Their specific use of individual aspects of the PAL model are discussed below; however, it should be noted that our methodology did not track the individual use of components with specific clients or their coincident use with the same client. The numbers reported below represent using said components at least once during the six-month period. Furthermore, no definitive conclusions are possible for why particular components were implemented more or less frequently than others. For example, while qualitative data suggests that safety planning happened less frequently than exploring invitations due to the constraints of particular clinical sites, the available data cannot validate such a statement.

Nearly all 31 participants who interacted with clients displaying suicidality “explored invitations” with their clients (96.8%; $n = 30$), and several discussed the nature of noticing an invitation. The participants made statements such as “It was easy because they were direct in stating their thoughts” or “[It was] difficult at first because I didn’t want to be wrong.” The CITs’ emotional responses when exploring invitations were shared (e.g., “open to the client’s

experience,” “scary and reassuring because I have a roadmap,” “un-shocked”). Several participants noted shifts in their clinical approaches: “Since the training I have become very direct. Whenever I feel that a client is taking me there, I just ask if they are having thoughts of killing themselves.”

A similar number of participants (96.8%; $n = 30$) also reported that they “asked directly about suicide.” Some described the process of asking: “It was like taking a leap, but always land[ing] in a helpful space, even if a client denied [suicidal ideation]”; “As long as there are invitations, it is not difficult to ask.” Others shared feeling “uncomfortable initially, but confident in my ability to ask,” “relieving for me and the client,” and “comfortable since learning [that asking] would not affect or encourage suicide.”

Most participants (87.1%; $n = 27$) reported they then “heard the client’s story about suicide.” The participants shared their emotional reactions to this process: “I felt sad to hear the stories but comfortable sitting with the client through it”; “[It was] difficult as the client is facing a lot of external obstacles that won’t be able to be changed [e.g., discrimination, disowned, etc.]”; “It was heartbreaking to hear such young kids having such intense emotions and thoughts about ending their lives”; and “I felt good as I may have been one of the only people they told about suicide.” Several described skills they used, including “active listening,” “reflections of feeling,” and “[relying] on my training and offered compassion.” Others shared that hearing clients’ stories “allowed me to connect with the emotions of the client when telling me about past attempts,” “increased my empathy for them,” “eased the tension,” and helped them “[feel] more connected.”

Fewer participants, although still a strong majority (71.0%; $n = 22$), reported that they facilitated a turning point. Many participants remembered specific ways they supported turning, such as “The client went there on her own; she identified her grandkids as a

reason for living.” Several noted how they completed this step, e.g., “by picking up on the student’s social connection.... He mentioned several people he would hurt by going through with his plan to kill himself.” Some noted specific counseling skills needed to support turning, e.g., “asking the student what is keeping them alive,” “showing genuine concern,” and “[giving] them the third choice [and asking] if they will be willing to just stay safe for now.” Participants also noted results of supporting “turning,” e.g., “identifying the ‘glimmers of hope’”; “It was always based on the strengths and supports they already had in their lives.” Participants shared challenges they had in supporting turning, such as helping youth “try to truly find reasonable and tangible ways to keep them safe”; one participant noted that “one [client] couldn’t identify any hope, so had to do safety first, hospitalized.” Overall, 87.1% of the participants ($n = 21$) reported supporting their clients in “staying safe for now.”

A larger number of participants (87.1%; $n = 27$) reported developing a safe plan with their clients. Several shared examples, e.g., “involving his mother (fifth-grade student) and relying on supports he identified at school and at home” and “support network was two people, and then suicide hotline.” Other participants shared more general safety planning approaches: “I asked directly how we can make a plan to stay safe”; “[I asked] about a plan and means, who is available to be a support, and what they may be looking forward to in the next couple of days or until we next talk”; “In my work with minors I include the parents, and so far I have not had a child or adolescent who does not want to include their parents or caregivers.” Many shared about disabling suicide plans: “removing what they would use to kill themselves” and “bringing parents in to address safety concerns to provide [an] avenue to [a] higher level of care.”

Along with facilitating the turning point, asking the client to repeat the safety plan was the least consistently applied although still frequently utilized aspect of the PAL model (71.0%; $n = 22$). The partic-

ipants described specific experiences performing this step: “He confirmed actions after I quickly summarized them.... Thinking back, I maybe should have had him confirm first so he really had to engage with the ideas rather than simply repeat [them]”; “The student was able to confirm their actions and speak with his family about their concerns.” The participants shared strategies they used, e.g., “encouragement, encouragement, encouragement”; “jog the memory a bit if they forget one or two”; “follow up with each student at risk”; and “After confirming it, we write it down in a formal contract which we reviewed on a consistent basis until she discharged.” The participants described resources clients helped them identify (e.g., “family,” “teachers,” “sports”) and provided additional resources for clients at risk (e.g., “crisis line,” “school counselor”).

At the six-months follow-up, the participants overwhelmingly reported that ASIST prepared them to respond to clients at risk. When asked about the helpfulness of ASIST on a scale from 1 (not helpful) to 10 (extremely helpful), all the participants reported an 8 or above ($M = 9.44$, $SD = 0.79$). One shared, “I am thankful for the ASIST training. It helped make me more confident and feel prepared to provide suicide first aid.” When asked how comfortable they felt “facilitating a life-assisting intervention with a patient at-risk of suicide,” on a scale from 1 (no discomfort) to 10 (high discomfort), 70.6% of the participants were at or below reported a three 3 or below ($M = 3.38$, $SD = 2.32$). In considering the impact of the ASIST training, participants stated that, “when facilitating a life-assisting intervention” they felt “natural,” “confident,” “comfortable,” and “prepared.”

Discussion

Pre- to post-training changes in attitudes, beliefs, and views about suicide included several important shifts. Prior to training, the participants discussed general beliefs about suicide, whereas after training, they described specific evidence-based details that

support their beliefs, including an emphasis on the existence of a “life force,” the “importance of listening,” and the idea that “turning points exist.” This shift in attitudes may have resulted from specific pedagogical components inherent within the ASIST training, e.g., simulations to practice identifying turning points with persons considering suicide and demonstrating how the life force emerges during the intervention. This supports outcomes Gould et al. (2013) found in ASIST-trained counselors who effectively worked with ambivalence about dying, elucidating the processes through which these changes occur. This change also carried over into the CITs’ clinical work, evidenced through examples of skills used to support turning with at-risk clients (e.g., “encouragement,” “asking...what is keeping them alive,” “what gives them hope”).

Although no large change was evident in the general subthemes under the knowledge of warning signs, there was an increase in awareness about emotional and behavioral warning signs and much less emphasis on lethality warning signs. Recognizing the signs can be difficult given the unique pathways to suicidality (Lang et al., 2013), but doing so is imperative both for confidence in one’s ability to successfully intervene and for completing an effective intervention (Griesbach et al, 2008). As currently enrolled CITs, it is likely the participants came to the training with some previous knowledge, yet their understanding of the warning signs became more nuanced after training. Notably, the participants shifted their focus from a knowledge of warning signs to the meaning behind them. ASIST emphasizes that the “invitations” (i.e., signs of distress) associated are often about pain and considered solutions to pain; the training focuses on the meanings people considering suicide ascribe to particular life events and not on those events themselves. This shift in focus also carried into clinical work, with 96.8% of the participants exploring invitations with clients and reporting shifts in their clinical approaches even though they were not prompted.

Data on beliefs about responders represented a strong change in all three of the identified subthemes (interpersonal skills, knowledge, and intervention skills). Interpersonal skills emerged as a unanimous subtheme, with every participant discussing the importance of clinicians’ strong interpersonal skills. There is support for the idea that this shift was due to the training since ASIST is “relationship centered” with practical opportunities to sincerely connect and build relationships in a variety of suicidal situations. Similar to the theme of attitudes, beliefs, and views about suicide, participants’ beliefs or attitudes regarding skills rather than skill levels were not previously captured in quantitative studies. During ASIST, emphasis is placed on the impact of attitudes and beliefs on counselors’ ability to intervene and, in particular, be flexible with the amount of guidance provided to persons at risk. Some clients at risk need more guidance (e.g., they may have taken a bottle of pills when they come in for counseling), whereas others need less (e.g., they have fleeting thoughts or no suicide plan). Ramsey, one of the developers of ASIST, argued that “attitudes/beliefs are complex; under various conditions one’s attitude can be actuated differently... attitudes are not static and fixed” and stated that “ASIST isn’t about changing your attitude, it is about increasing awareness of how your attitude impacts your ability to intervene with a person at risk of suicide” (personal communication, April, 2018).

There was a shift in concern from a “lack of training” prior to participation in ASIST to a “lack of experience” after training. An exploration of the participants’ experiences with suicide as helpers is included in the training, and although some participants may have had previous experiences with intervention, it is quite possible that they became more aware that they need real experience using PAL in suicidal situations. It appears that such opportunities presented themselves during the participants’ clinical work since they identified and worked with, in aggregate, over 900 clients who showed signs of distress. It should also be noted that not all such identifications resulted

in dedicated interventions; however, from the descriptions provided, it is evident the ASIST-trained CITs explored, asked, intervened, and supported the turn to safety and the development of a safety plan with many clients.

Prior to training, participants identified their general hopes for increased knowledge, more understanding, and skill learning. Few participants mentioned these hopes after training, reporting that they felt more ready, willing, and able to respond to those considering suicide. They also discussed specific details of the training that were useful to their learning (e.g., simulations, group process). This is aligned with the works of Cross, Matthieu, Cerel, and Knox (2007) since “intervention skills” have been shown to be highest when active learning strategies are used; in addition, skills developed through participant practice, as opposed to didactic learning, have positively affected the outcome of health-related interventions (Davis et al., 1999). Furthermore, ASIST has been found to improve participants’ self-reported comfort, confidence, and competence in previous quantitative research (Griesbach et al., 2008; Rodgers, 2010; Turley et al., 2000). This study provided additional understanding regarding how these changes occurred and how that was carried through into CITs’ first clinical experiences.

Limitations

The results from the current study offer insight into the influence of ASIST on CITs. However, the study results must be interpreted within the context of the limitations: research design, sampling, and researcher bias. While the purposive convenience sample was within the content analysis recommendations (Krippendorff, 2013), inclusion in the research study was voluntary, and sampling procedures were nonrandom. CITs who chose to be trained in ASIST may have had different characteristics from those who did not, although the majority of eligible students were trained. Writer fatigue after a two-day, 14-hour

training may have also limited the thoroughness of post-training responses; however, the data were overall comprehensive. Despite data de-identification, all CITs were asked to respond to items assessing their attitudes about suicide, knowledge about suicide, suicide intervention skills, and the actuation of PAL components in their work with clients. Therefore, social desirability may be a limitation. Researcher bias may also be a limitation. Although we included strategies to reduce this (e.g., bracketing, independent coding, research team), bias is a threat in qualitative research. Finally, in pre- and post-training, participants answered qualitative questions, and their responses were used to identify themes and subthemes and explore the frequency of those themes. The follow-up survey included qualitative and quantitative questions asked to better understand details about how often participants were intervening with suicidal clients and how they were implementing the PAL model components. The quantitative data reported in the follow-up is based on self-reported data spanning a six-month period; therefore, the data may include more subjectivity than is typical with quantitative findings.

Implications for Counselor Educators and Practicing Counselors

Counselor educators are charged with understanding the professional development and training needs of those in the counseling field and applying that understanding to counselor preparation programs. Because suicide is an issue across the lifespan, many CITs will encounter suicidal clients during their first clinical experiences, and there is a lack of preparation among CITs to respond to suicide despite CACREP requirements. CITs’ under-preparedness to effectively intervene with suicidal clients (Liebling-Boccio & Jennings, 2013; Page et al., 2013) presents a problem that counselor educators need to address. The results of this within-group study support the use of ASIST as a pedagogical practice in counselor preparation. Participation in ASIST training led to more accepting attitudes towards suicide; increased awareness

about behavioral and emotional signs of suicide; and increased comfort, competence, and confidence in responding as well as the application of skills with clients considering suicide. Through the inclusion of evidence-based intervention skills training, counselor educators may close the gap between the academic demands of the profession and counselor experiences.

To better prepare CITs to meet the needs of persons considering suicide, counselor education programs should consider incorporating required suicide intervention trainings into their curriculum. Counselor educators who provide the ASIST training or a comparable suicide intervention skill training to CITs prior to their practicum/internship experiences will prepare students to actively, effectively respond to suicidal clients. This will address the disparity between aspirational CACREP requirements and the reality of students learning to respond to suicide while sitting with their first suicidal clients (Shannonhouse et al., 2018). In addition, practicing counselors who report feeling underprepared to work with persons considering suicide may also benefit from such training. The time-limited structure of ASIST and continuing education opportunities may accommodate the needs of licensed practicing counselors.

Participants in this study expressed awareness of their own possible emotional reactions while stating that “nothing would interfere with their willingness to try” to help a person at risk after undergoing the ASIST training. As noted earlier, willingness to help was a common response in the post-intervention data. The participants also identified the discussion of attitudes and beliefs regarding suicide as one of the most meaningful parts of the training. These findings suggest that personal beliefs and values impact how clinicians respond to persons at risk of suicide, although further research is warranted. The simulations, practice, and group supervision inherent within ASIST training were found to be effective, meaningful learning experiences among participants. Counselor educators teaching crisis intervention or counseling

skills courses may consider implementing these types of pedagogical practices to facilitate the experiential learning of key skills in suicide intervention, particularly the ability to work effectively with ambivalence about dying and supporting turning. Similarly, group discussions and processing were found to be meaningful effective components of the ASIST training among participants. Counselor educators may also consider utilizing group processing of attitudes to increase awareness of the impact of one’s personal experiences with suicide on one’s responder behavior.

Suggestions for Future Research

CITs reported certain challenges (e.g., site protocols, school counselor roles) in actuating ASIST interventions at their clinical sites. Future qualitative studies are needed to explore the impact of ASIST trainings on other community participants (e.g., K–12 personnel, college faculty/staff, health clinicians). The findings regarding CITs’ attitudes, skills, and practice with ASIST reveal a need for a more in-depth qualitative study with focused interviews to learn more about the changes prior to and after training within a variety of settings.

This study required CITs to retroflect on the number of suicidal clients they had during their clinical experience. Retroflection is a limitation; therefore, prospectively tracking interventions in real time is another area of future study. Referral tools can be developed and institutionalized within counselor preparatory programs to enable CITs to quickly chart the details of an intervention after it is completed. Furthermore, CITs can give clients measures of suicide-related constructs, such as thwarted belongingness and perceived burdensomeness (Joiner, 2005). CITs could also utilize a lethality measure such as the Columbia Suicide Severity Rating to track clients. This would enable trainees to learn additional skills in progress monitoring and develop their identities as scholar practitioners.

In addition, the CITs' unanimous presentation of the theme related to interpersonal skills after the training shows their recognition of the importance of interpersonal skills when intervening with suicidal clients. A future quantitative study (e.g., a mediation analysis) may explore the role of participants' beliefs about skills between training effect and their skill improvement. ASIST offers a significant proportion of experiential practice (e.g., simulations, practice, group supervision). Future research could explore participants' skills and knowledge improvement along with their increased practical experience. Finally, future researchers may also explore CITs' experiences with ASIST compared with other gatekeeper trainings.

With regard to its limitations, the findings of this study indicate that ASIST may be, as one participant described, a "roadmap" for CITs who encounter persons at risk of suicide during their clinical practice. The PAL model may be a useful, accessible tool for CITs to use in their first encounters with persons at risk of suicide. In addition to the skill acquisition and retention of working with individuals who are at risk of suicide (Shannonhouse et al., 2018), CITs developed more understanding, less judgmental attitudes toward suicide, more nuanced understandings of warning signs of suicide, and more willingness to intervene as a result of the ASIST training. Although intervening with a person at risk of suicide may provoke anxiety, particularly among CITs, 100% of clients whom participants encountered with thoughts of suicide were kept safe, and the skills learned in ASIST supported those CITs through their discomfort. Finally, this qualitative post-test data uncovered attitudes among CITs of a greater awareness of the human condition of wanting to live and the idea that life will prevail when it is supported. This learning may impact how systems and society respond to those struggling with thoughts of suicide.

References

- 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*, 39(2), 5-17. doi:10.1080/15566382.2011.12033868
- Binkley, E. E., & Liebert, T. W. (2015). Prepracticum counseling students perceived preparedness for suicide response. *Counselor Education & Supervision*, 54(2), 98-108. doi:10.1002/ceas.12007
- Centers for Disease Control and Prevention. (2016). Web-based injury statistics query and reporting system (WISQARS). Retrieved from <http://www.cdc.gov/injury/wisqars/index.html>
- Centers for Disease Control and Prevention. (2018). 2016 national survey on drug use and health (NSDUH). Retrieved from <https://www.cdc.gov/violenceprevention/pdf/suicide-fact-sheet.pdf>
- Cross, W., Matthieu, M. M., Cerel, J., & Knox, K. L. (2007). Proximate outcomes of gatekeeper training for suicide prevention in the workplace. *Suicide and Life-Threatening Behavior*, 37(6), 659-670. doi:10.1521/suli.2007.37.6.659
- Davis, D., Thomson O'Brien, M. A., Freemantle, N., Wolf, F. M., Mazmanian, P., & Taylor-Vaisey, A. (1999). Impact of formal continuing medical education: Do conferences, workshops, rounds, and other traditional continuing education activities change physician behavior or health care outcomes? *The Journal of the American Medical Association*, 282(9), 867-874. doi:10.1001/jama.282.9.867

- Evans, R., & Hurrell C. (2016). The role of schools in children and young people's self-harm and suicide: Systematic review and meta-ethnography of qualitative research. *BMC Public Health, 16*(1), 1-16. doi:10.1186/s12889-016-3065-2
- 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
- Fischer, C. T. (2009). Bracketing in qualitative research: Conceptual and practical matters. *Psychotherapy Research, 19*(4-5), 583-590. doi:10.1080/10503300902798375
- Gould, S., Cross, W., Pisani, A., Munfals, J. L., & Kleinman, M. (2013). Impact of applied suicide intervention skills training on the national suicide prevention lifeline. *Suicide and Life-threatening Behavior, 43*(6), 676-691. doi:10.1111/sltb.12049
- Griesbach, D., Dolev, R., Russell, P., & Lardner, C. (2008). The use and impact of applied suicide intervention skills training (ASIST) in Scotland: An evaluation. Retrieved from <http://www.scotland.gov.uk/Publications/2008/05/19160035/1>
- Hjelmeland, H., & Knizek, B. L. (2010). Why we need qualitative research in suicidology. *Suicide and Life-Threatening Behavior, 40*(1), 74-80. doi:10.1521/suli.2010.40.1.74
- Hoffmann, R. M., Osborn, C. J., & West, J. D. (2013). Clinical supervision of counselors-in-training working with suicidal clients: A grounded theory investigation. *The Clinical Supervisor, 32*(1), 105-127. doi:10.1080/07325223.2013/780991
- Jahn, D. R., Quinnett, P., & Ries, R. (2016). The influence of training and experience on mental health practitioners' comfort working with suicidal individuals. *Professional Psychology: Research and Practice, 47*(2), 130-138. <http://dx.doi.org/10.1037/pro0000070>
- Joiner, T., Jr. (2005). *Why people die by suicide*. Cambridge, MA: Harvard University Press.
- Kral, M. J., Links, P. S., & Bergmans, Y. (2012). Suicide studies and the need for mixed methods research. *Journal of Mixed Methods Research, 6*(3), 236-249. doi:10.1177/1558689811423914
- Krippendorff, K. (2013). *Content analysis: An introduction to its methodology* (3rd ed.). Thousand Oaks, CA: Sage.
- Lang, W. A., Ramsay, R. F., Tanney, B. L., Kinzel, T., Turley, B., & Tierney, R. J. (2013). *ASIST trainer manual* (11th ed.). Alberta, Canada: LivingWorks Education Incorporated.
- Liebling-Boccio, D. E., & Jennings, H. R. (2013). The current status of graduate training in suicide risk assessment. *Psychology in the Schools, 50*(1), 72-86. doi:10.1002/pits.21661
- Miller, L. G., McGlothlin, J. M., & West, J. D. (2013). Taking the fear out of suicide assessment and intervention: A pedagogical and humanistic practice. *Journal of Humanistic Counseling, 52*(1), 106-121. doi:10.1002/j.2161-1939.2013.00036.x
- Neuendorf, K. A. (2016). *The content analysis guidebook*. Thousand Oaks, CA: Sage.

- Organizational Research Services. (2002). *Youth Suicide Prevention Program: Annual evaluation report 2001-2002 evaluation of program training workshops*. Retrieved from <http://www.yspp.org/aboutYSPP/reports/2001-2002Report.pdf>
- Page, R. M., Saumweber, J., Hall, P. C., Crookston, B. T., & West, J. H. (2013). Multi-country, cross-national comparison of youth suicide ideation: Findings from global school-based health surveys. *School Psychology International*, 34(5), 540-555. doi:10.1177/0143034312469152
- 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
- Rodgers, P. (April 2010). Review of the Applied Suicide Intervention Skills Training Program (ASIST): Rationale, evaluation skills, and direction for future research. Retrieved from www.livingworks.net/dmsdocument/274
- Shannonhouse, L., Lin, Y., Shaw, K., & Porter, M. (2017). Suicide intervention training in K-12 schools: A quasi-experimental study on ASIST. *Journal of Counseling and Development*, 94(1), 3-13. doi:10.1002/jcad.12112
- Shannonhouse, L., Lin, Y., Shaw, K., Wana, R., & Porter, M. (2017). Suicide intervention training for college staff: Program evaluation and intervention skill measurement. *Journal of American College Health*, 65(7), 450-456. doi:10.1080/07448481.2017.1341893
- Shannonhouse, L., Elston, N., Lin, Y-W., Mize, M., Rumsey, A., Rice, R., ... & Porter, M. (2018). Suicide intervention training for counselor-trainees: Quasi-experimental study on skill retention. *Counselor Education and Supervision*, 57(3), 194-210. doi:10.1002/ceas.12110
- Suicide Prevention Resource Center. (2007). *Applied Suicide Intervention Skills Training (ASIST)*. Retrieved from <https://www.sprc.org/resources-programs/applied-suicide-intervention-skills-training-asist>
- Tierney, R. J. (1994). Suicide intervention training evaluation: A preliminary report. *Crisis: The Journal of Crisis Intervention and Suicide Prevention*, 15(2), 69-76.
- Turley, B., Pullen, L., Thomas, A., & Rolfe, A. (2000). *LivingWorks Applied Suicide Intervention Skills Training (ASIST): A competency-based evaluation*. Melbourne, Australia: LivingWorks
- Wachter Morris, C. A., & Barrio Minton, C. A. (2012). Crisis in the curriculum? New counselors' crisis preparation, experiences, and self-efficacy. *Counselor Education & Supervision*, 51(4), 256-269. doi:10.1002/j.1556-6978.2012.00019.x
- World Health Organization. (2018). *Suicide*. Retrieved from <https://www.who.int/en/news-room/fact-sheets/detail/suicide>