

Experience, Knowledge, and Perceived Comfort and Clinical Competency in Working With Suicidal Clients Among Vocational Rehabilitation Counselors

Rehabilitation Counseling Bulletin
1–10
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sagepub.com/journalsPermissions.nav
DOI: 10.1177/0034355217695776
rcb.sagepub.com
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Abstract

Despite the well-documented elevated rates of suicidality among people with disabilities, no published research has examined rehabilitation counselors' experiences or perceived competency in suicide assessment or intervention. In the present study, we surveyed 223 vocational rehabilitation (VR) counselors from state VR offices in eight states regarding their experiences with, knowledge of, and perceived comfort with and competency in suicide assessment and intervention. Almost a quarter of participants worked with suicidal clients once a month or more, with more than half reporting working with suicidal clients at least once a year. Two thirds of participants reported having received some training related to suicide, and participants demonstrated both a good knowledge of suicide myths and facts, and a willingness to work with suicidal clients. However, most participants did not perceive themselves as being competent in core skills related to suicide assessment and intervention. These results suggest that more clinical training in suicide assessment and intervention is needed for VR counselors.

Keywords

psychiatric, disability(ies), mental illness, education/training for, rehabilitation counseling, professional training, rehabilitation counselors, suicide

Suicide is the 10th leading cause of death in the United States and is responsible for 41,000 American deaths each year (Centers for Disease Control and Prevention, 2015). Furthermore, there are approximately 25 suicide attempts for every death by suicide (American Foundation for Suicide Prevention, 2015), and suicide rates have increased markedly from 1999 to 2014 (Curtin, Warner, & Hedegaard, 2016). Furthermore, researchers have repeatedly found that individuals with disabilities tend to experience increased and elevated suicidality relative to those without disabilities. This has been documented both in individuals with disabilities in general (Lund, Nadorff, & Seader, 2016; McConnell, Hahn, Savage, Dubé, & Park, 2016) and across many specific disability groups such as individuals with multiple sclerosis (Giannini et al., 2010; Pompili et al., 2012), autism spectrum disorders (Segers & Rawana, 2014), spinal cord injury (Giannini et al., 2010), and Huntington's disease (Wetzel et al., 2011).

The exact mechanism or mechanisms through which disability increases suicide risk is unclear. Certainly, the higher rate of depression and anxiety seen in people with disabilities (Dennis et al., 2009; Giannini et al., 2010; Lund,

Nadorff, & Seader, 2016) is one possible contributor, although researchers have found that controlling for depression and anxiety diagnoses (Dennis et al., 2009; McConnell et al., 2016) and depressive symptoms (Lund, Nadorff, & Seader, 2016) cannot fully explain the significant relationship between disability status and suicidality. The higher rates of unemployment and low income among people with disabilities (Mitra et al., 2015; U.S. Census Bureau, 2013) may also help explain the higher rates of suicidality among people with disabilities, as unemployment has been consistently shown to be a sociodemographic risk factor for suicidality (Fiedorowicz, Weldon, & Bergus, 2010; McConnell

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et al., 2016). However, a small body of research on sociodemographic predictors and suicidality has shown that accounting for these sociodemographic risk factors again cannot fully account for the higher rates of suicidality seen among people with disabilities (McConnell et al., 2016; Russell, Turner, & Joiner, 2009). Attitudinal factors may also be at play with regard to suicidality and disability; Lund, Nadorff, Winer, and Seader (2016) found that participants rated suicidality as significantly more understandable and acceptable when a hypothetical suicidal individual had a disability than when they did not. This was true even when participants themselves had disabilities, or had friends or family members with disabilities; this overall greater social permissiveness toward suicidality in people with disabilities may help explain some of the increased risk of suicidality in this population. In sum, people with disabilities experience a variety of social, demographic, and psychological risk factors for suicide, but the exact reasons for their increased risk remain somewhat unclear, highlighting the importance of acknowledging disability itself as a risk factor for suicide.

Due to their specific focus on serving individuals with disabilities, vocational rehabilitation (VR) counselors may be at the frontlines of working with individuals with disabilities who are experiencing suicidality, and may be in prime position to assess and intervene with clients who are experiencing suicidality, especially given their role as counseling professionals. Indeed, assessing for and intervening regarding risk of harm to self or others is well within the professional scope of rehabilitation counseling (Commission on Rehabilitation Counselor Certification [CRCC], 2010). Although we are not aware of any published research specifically examining suicide-related training in rehabilitation counselors, Hunt and Rosenthal (1997) found that rehabilitation counseling trainees expressed their desire for more training related to dealing with client death in general. Only 23% of the 160 respondents reporting that they had received any training on death and dying-related issues, but 83% felt that such training was important or very important. In a sample of 153 rehabilitation counselors, Hunt and Rosenthal (2000) found that the most commonly cited death-and-dying-related concern was related to client suicide, and participants reported experiencing 39 client deaths by suicide during their time as rehabilitation counselors.

Within the mental health and medical field in general, suicide is a topic that often creates anxiety, stress, and confusion among professionals (Cramer, Johnson, McLaughlin, Rausch, & Conroy, 2016; Saunders, Hawton, Fortune, & Farrell, 2012). There are complex legal and ethical issues surrounding suicide, such as exceptions to confidentiality (CRCC, 2010; Cramer, Johnson, McLaughlin, Rausch, & Conroy, 2013); clinical issues such as appropriate risk assessment (Cramer et al., 2013); and emotional considerations, such as fear for or judgment of the suicidal

individual on behalf of the counselor (Saunders et al., 2012) that necessitate specific training on this topic (Cramer et al., 2013). Because suicide is literally a “life or death” matter, increased emphasis has been placed on training a wide range of mental health providers, educators, and other professionals in suicide assessment and crisis intervention, even if their role is not the direct provision of mental health counseling or psychological or psychiatric treatment (Isaac et al., 2009). As trained counseling professionals, rehabilitation counselors would benefit from understanding basic suicide risk assessment and crisis intervention to better ensure their clients’ immediate safety and to work as part of a team with treating mental health and social service professionals as needed. However, no published research has examined suicide assessment and intervention competency in rehabilitation counselors. Therefore, we set out to examine the following research questions in a multistate sample of public sector VR counselors:

Research Question 1: How often do VR counselors report working with suicidal clients?

Research Question 2: How often do VR counselors report receiving training on suicide assessment and prevention?

Research Question 3: How knowledgeable are VR counselors about suicide myths and facts?

Research Question 4: How do VR counselors perceive their own comfort and competency in assessing, intervening, and working with suicidal or potentially suicidal clients?

Research Question 5: How do certification status, suicide training history, and length of time spent working as a rehabilitation counselor relate to suicide knowledge and perceived comfort and competence regarding suicide assessment and intervention?

Method

Participants and Recruitment

Participants were recruited via emails sent out by technical assistance centers and state VR offices in Utah, Texas, Oregon (Division of Blind Services only), Idaho, Alaska, South Dakota, North Dakota, and New Mexico. Participants were informed that the survey was approved by the Utah State University Institutional Review Board (IRB), and that participation was voluntary and not in any way tied to employment or other incentives. They were also informed that responses were anonymous and would only be reported in aggregate, and that questions could be skipped without penalty. Reminder emails were sent out after 2 weeks.

Two hundred twenty-three rehabilitation counselors completed all survey measures. Most participants were from Texas (57.4%; $n = 128$), followed by Utah (13.5%; $n = 30$),

Table 1. Suicide Knowledge Items and Responses.

Item (correct answer)	% correct
1. If you talk to a consumer about suicide, you may inadvertently give them permission to seriously consider it. (False)	86.1
2. Most suicidal people tell others about their suicidal thoughts. (True)	43.5
3. People who talk about suicide won't actually do it. (False)	91.0
4. People who are suicidal are often relieved to be asked about suicide. (True)	82.1
5. Most people who commit or attempt suicide have displayed some warning signs before their attempt. (True)	86.1
6. Only people with previously diagnosed mental illness are at risk of suicide. (False)	98.2
7. Depression indicates a potential suicide risk. (True)	84.8
8. If a person is serious about suicide, there is little that can be done to prevent it. (False)	91.0

Idaho (8.5%; $n = 19$), and South Dakota ($n = 16$; 7.2%). North Dakota ($n = 10$; 4.5%), New Mexico ($n = 9$; 4.0%), Alaska ($n = 4$; 1.8%), and Oregon ($n = 3$; 1.3%) were also represented. Four participants (1.8%) did not provide information on their location.

More than two thirds of the participants were female ($n = 154$; 69.1%), with 30.5% ($n = 68$) identifying as male and one participant (0.4%) declining to answer the question. The mean age of participants was 44.53 years ($SD = 11.95$; range = 24–71). Eight participants (3.6%) did not provide their age. In terms of education and training, all participants held a bachelor's degree or higher, and 95% ($n = 212$) of respondents had a master's degree or higher. Three of these participants (1.3%) reported holding doctoral degrees.

Participants had worked in VR an average of 9.92 years ($SD = 8.79$; range = 0–41 years; $n = 220$). Slightly more than half (55.6%; $n = 124$) reported being a certified rehabilitation counselor (CRC). Twenty-four (10.8%) reported being a licensed counselor, two (0.9%) reported being a licensed clinical social worker, and seven (3.1%) reported being a licensed addictions counselor. Two thirds of participants ($n = 150$; 67.3%) reported receiving training related to suicide. More than half (52.5%; $n = 117$) reported having a friend or family member who “attempted or completed” suicide.

When broken down by state, the percentage of participants who reported having received training on suicide ranged from 52.6% to 100%. Only two states had fewer than 75% of participants report receiving training on suicide, and all participants from three of the participating states reported receiving training on suicide. To better protect the privacy of the participating state agencies and in concordance with our recruitment materials, we did not report the training breakdown for participants from each specific state. In addition, because we used a sample of convenience and sample sizes were not equal across states, training rates in our sample may not accurately reflect the frequency of suicide-related training in those individual states.

Measures

In addition to the demographic items described above, participants completed measures related to suicide knowledge, comfort, and competency asking about and working with suicidal clients, and competency in suicide assessment and intervention. Participants also indicated how frequently they work with clients who express their thoughts or behaviors related to suicide.

Suicide knowledge. The eight-item suicide myths and facts measure was developed from a combination of the items used in Smith, Smith, Silva, Covington, and Joiner (2014) and the World Health Organization (n.d.) suicide myths booklet. Participants rated each item as dichotomously true or false. Items are listed in Table 1, and correct answers were shown to participants after completing all survey measures. Because the purpose of this study was to explore rehabilitation counselors' knowledge of and perceived comfort and competency with suicide and not to create a highly discriminative knowledge measure, we did not conduct a traditional item discrimination analysis; however, we did examine item-by-item responses individually as well as calculating overall scores. More information on how these analyses were used can be found in the “Results” section.

Suicide Competency Inventory (SCI). The suicide competency measure is a modified version of the 11-item suicide assessment competency measure developed by Graham, Rudd, and Bryan (2011). The original measure included three additional items assessing suicide training and experience; these were not included in the present study because the purpose was to assess perceived suicide competency and comfort. Each item is rated on a 5-point Likert-type scale (1 = *strongly disagree* to 5 = *strongly agree*). Items representing hesitance or discomfort are reserve coded, so that higher scores represent higher comfort and competence in dealing with suicidal clients. Total scores range from 11 to 55. The original measure used the terminology “patient”; this was changed to “client” in the current study.

In addition to the total score, Graham and colleagues (2011) conceptualized the scale as having three subscales (Perceived Competency, Willingness to Treat, and Willingness to Assess). The first two items assess perceived competency, the second four items assess willingness to treat suicide, and the final five items assess willingness to assess for suicide. In their sample of 195 primary care providers (physicians, nurses, and physician assistants), Graham and colleagues found that each of these three subscales had adequate internal consistency ($\alpha = .82, .74, \text{ and } .88$, respectively). Internal consistency in the present sample was also high ($\alpha = .87$). A previous analysis (Lund, Schultz, & Nadorff, in press) established a three-factor structure for the SCI in the present sample. Internal consistency was high for the Competency ($\alpha = .87$), Willingness to Treat ($\alpha = .96$), and Willingness to Assess ($\alpha = .85$) subscales.

Suicide Competency Assessment Form (SCAF). The SCAF (Cramer et al., 2013) was developed for both self and observer rating of suicide assessment competency, particularly in psychology trainees. The SCAF consists of 10 items on which respondents rate their perceived level of competence in different areas related to suicide assessment (e.g., notifying and involving other parties, assessing risk, developing a safety plan) on a 4-point Likert-type scale, with higher scores representing higher perceived competency. A score of 1 is said to represent incapability to perform the task, a score of 2 represents approaching or partial competency, a score of 3 represents competency, and a score of 4 represents advanced competency. Internal consistency in the present sample was excellent ($\alpha = .93$). A previous analysis (Lund et al., in press) established a one-factor structure for the SCAF in the present sample.

In addition to the total score, participants are asked to rate their overall suicide assessment competency on a scale from 1 to 8. Scores from 1 to 2 represent “unacceptable” competency (“I have not been trained or an unable to do this task”), scores of 3 to 4 represent “working toward competency” (“I have been partially trained or educated to do this task”), scores of 5 to 6 represent “competent” skill (“I have adequate training and skill in this task”), and scores of 7 to 8 represent “advanced” competency (“I have exceptional skill on the most current techniques for this task”).

Analyses

For the suicide myth and fact questions, we analyzed the percentage of respondents who answered each item correctly. For the measures of suicide competency and comfort (i.e., the SCI and the SCAF), we examined both total scores and individual item responses. To assess training, certification, and personal and work experience on SCAF and SCI scores, we used Pearson's r correlations, independent sample t tests, and Cohen's d effect sizes. Per Cohen (1992),

effect sizes of .2, .5, and .8 were used to differentiate small, medium, and large effect sizes for Cohen's d .

Results

Professional Experience With and Knowledge About Suicide

Experience. More than half (55.0%; $n = 121$) of the participants reported working with clients who express their suicidal thoughts or behaviors more than once a year, with 16.6% ($n = 37$) reporting working with these clients about once a month and 7.6% ($n = 17$) reporting working with them once a week or more. About one fifth of respondents ($n = 50$; 22.4%) reported working with suicidal clients only once a year, and 16.1% ($n = 36$) reported working with them less than once a year. Only 5.8% ($n = 13$) of participants reported never working with suicidal clients. Three participants (1.3%) did not answer the question. Those who had received training on suicide reported working with suicidal clients more frequently than those who had not received training on suicide, $t(218) = 2.19, p = .028$. Of those who reported having a friend or family member who attempted or died by suicide, 72.6% reported having received training on suicide, compared with 61.9% of participants who did not report having a friend or family exposure to suicide; this difference was not statistically significant, $\chi^2(1) = 2.915, p = .088$.

Knowledge. Participants generally scored well on the eight suicide knowledge questions. The one exception was the item, “Most people tell others about their suicidal thoughts,” with 56.5% ($n = 126$) of participants incorrectly answering “false.” This may have been in part due to confusion about whether this included both direct suicidal statements (e.g., “I'm going to kill myself”) and indirect suicidal statements (e.g., “You won't have to worry about me soon”; “I can't take life anymore”). Accuracy on the other items ranged from 82.1% (“People who are suicidal are often relieved to be asked about it”) to 98.2% (“Only people with previously diagnosed mental illness are at risk for suicide”). The percentage correct for each item can be seen in Table 1.

Scores on the measure of suicide knowledge generally demonstrated a ceiling effect. When all eight items were included, the mean percentage of items correct was 82.9 ($SD = 14.34$, range = 38%–100%). Fifty-six participants (25.1%) correctly answered all eight items, and an additional 78 (35.0%) correctly answered seven items. Only 38 participants (17.0%) answered fewer than six items correctly.

Because Item 2 demonstrated a lower accuracy rate than the other items as described above, we also examined total scores with that item removed. Again, a ceiling effect appeared to occur; the mean percentage of items correct on the seven-item measure was 88.5 ($SD = 13.17$, range = 43%–100%).

Table 2. Item-Level Means on the *Suicide Competency Assessment Form*.

Item	M	SD
1. Know and manage your attitude and reactions toward suicide	2.66	0.748
2. Maintain a collaborative, empathetic stance toward the client	3.09	0.730
3. Know and elicit evidence-based risk and protective factors	2.41	0.789
4. Focus on current plan and intent of suicidal ideation	2.47	0.853
5. Determine the level of risk	2.32	0.871
6. Develop and enact a collaborative evidence-based treatment plan	2.03	0.838
7. Notify and involve other persons	2.94	0.817
8. Document risk, plan, and reasoning for clinical decisions	2.36	0.989
9. Know the law concerning suicide	2.30	0.916
10. Engage in debriefing and self-care	2.22	0.919

Source. Cramer, Johnson, McLaughlin, Rausch, and Conroy (2013).

Note. All items had a range of 1 to 4 on a 4-point scale.

Almost half of all participants ($n = 104$, 46.6%) answered all items correctly, and an additional third (32.3%, $n = 72$) answered six of the seven items correctly. A paired sample t test indicated that percentage correct was significantly higher when Item 2 was removed, $t(222) = 13.91$, $p < .001$; however, it should be noted that both mean values were very high (above 80%), and the seven- and eight-item scores were very highly correlated ($r = .907$, $p < .001$).

Perceived Suicide Comfort and Competency

SCAF. Scores on the SCAF ranged from 10 to 40, covering the full range of possible scores. The mean score was 24.79 ($SD = 6.66$). Mean scores on each item ranged from 2.03 (“Develop and enact a collaborative and evidence-based treatment program”) to 3.09 (“Maintain a collaborative and empathetic stance toward the client”), and standard deviations ranged from 0.730 to 0.989. Only one item had a mean score of 3 or above, and seven items had mean scores below 2.5, indicating that most participants rated themselves toward the lower half of the scale (i.e., having no or only partial competency). Means and standard deviations for each item can be seen in Table 2.

The mean rating on the self-perceived overall suicide risk assessment competency item was 3.71 ($SD = 1.69$), suggesting perceived partial competency. About a fifth of respondents (22.9%; $n = 51$) rated themselves in the low to minimal competency range, with a score of 1 or 2. Ninety-nine participants (44.4%) rated themselves in the working toward competency range with a score of 3 or 4, and an additional 58 (26.0%) rated themselves in the nearing competency

range, with a score of 5 or 6. Only 10 participants (4.4%) rated themselves in the competent range with a score of 7 or 8. Five participants (2.2%) did not complete this item.

SCI. The mean total score on the SCI was 41.97 ($SD = 7.89$; range = 13–55). The mean score on the Competency subscale was 5.08 ($SD = 2.30$; range = 2–10). The mean score on the Willingness subscale was 14.91 ($SD = 4.68$; range = 4–20), and the mean score on the Willingness to Assess subscale was 21.98 ($SD = 3.58$; range = 7–25).

Almost half of the participants (48.0%; $n = 107$) rated themselves as disagreeing or strongly disagreeing (i.e., a rating of 1 or 2) on the item, “I am comfortable with the responsibility of treating suicidal clients,” and only 26.0% ($n = 68$) of participants rated themselves as agreeing or strongly agreeing (i.e., a rating of 4 or 5) with this item. Similarly, only 57 participants (21.0%) agreed or strongly agreed that they felt “competent to treat a client in an acute suicidal crisis,” with more than half (53.8%; $n = 120$) disagreeing or strongly disagreeing with this item. Most participants agreed or strongly agreed that they would be willing to work with clients who are depressed and have some history of suicidal thoughts or attempts (61.9%–73.1%), and more than four fifths of participants (84.8%–86.1%) disagreed or strongly disagreed that they would be less willing to ask certain types of clients about suicide. With regard to general hesitations about suicidality, more than four fifths of the participants (85.7%; $n = 191$) disagreed or strongly disagreed that they “might refrain from asking a client about suicide due to fear of offending the client,” and four fifths (79.8%; $n = 178$) of participants disagreed or strongly disagreed that they “worry that bringing up suicide with a client might make the problem worse.” Response breakdowns for all items can be seen in Table 3.

Factors Associated With Perceived Suicide Knowledge, Comfort, and Competency

Participants who reported receiving training on suicide had significantly higher scores on all suicide competency measures than those who did not. The mean total score on the SCAF was 26.99 ($SD = 6.09$) for those who had received suicide training versus 20.26 ($SD = 5.40$) for those who had not; this difference was significant, $t(221) = 8.03$, $p < .000$, $d = 1.17$. Similarly, the mean self-perceived overall competency score was 4.27 ($SD = 1.60$) for those who had received training versus 2.57 ($SD = 1.23$) for those who had not. Those who had received training scored significantly higher, $t(216) = 7.91$, $p < .000$, $d = 1.19$. Finally, those who reported having received training on suicide ($M = 44.16$; $SD = 7.07$) had higher total scores on the SCI, $t(221) = 6.47$, $p < .000$, $d = .91$, than those who did not report having received such training ($M = 37.47$; $SD = 7.62$). Having received training on suicide was not associated with higher

Table 3. *Suicide Competency Inventory* Items and Responses.

Item	Agree/strongly agree	Neutral	Disagree/strongly agree
1. I am comfortable with the responsibility of treating suicidal clients.	26.0% (58)	26.0% (58)	48.0% (107)
2. I feel competent to treat a client in an acute suicidal crisis	21.0% (47)	25.1% (56)	53.8% (120)
3. I would be willing to treat a depressed client who had made a suicide attempt in the past.	63.2% (141)	22.9% (51)	13.9% (31)
4. I would be willing to treat a depressed client who had reported a suicide attempt over 5 years in the past.	73.1% (163)	14.8% (33)	12.1% (27)
5. I would be willing to treat a depressed client with suicidal thoughts.	61.9% (138)	17.0% (38)	21.1% (47)
6. I would be willing to treat a depressed client who had made a suicide attempt in the past year.	62.3% (139)	19.3% (43)	18.4% (41)
7. I would be more hesitant to ask about suicidality in a client who is 20 years older than me.	5.8% (13)	9.0% (20)	85.2% (190)
8. I might refrain from asking a client about suicide due to fear of offending the client.	5.4% (12)	9.0% (20)	85.7% (191)
9. I worry that bringing up suicide with a client might make the problem worse.	6.3% (14)	13.9% (31)	79.8% (178)
10. I would be more hesitant to ask a male client about suicide.	2.7% (6)	11.2% (25)	86.1% (192)
11. I would be more hesitant to ask about suicidal tendencies in a client who was of higher social status or rank than me.	4.5% (10)	10.8% (24)	84.8% (189)

knowledge scores. This was true for both the eight-item score, $t(221) = .476, p = .635, d = .07$, and the seven-item score, $t(221) = .321, p = .749, d = .05$. However, it should be noted that mean percentage correct was very high for both the training (83.2% and 88.7% on the eight- and seven-item measures, respectively) and no-training (82.2% and 88.1%, respectively) groups, suggesting a probable ceiling effect.

Length of time working in rehabilitation counseling was not significantly correlated with the SCAF total score ($r = -.041, p = .544$), SCAF overall assessment competency score ($r = -.097, p = .151$), or SCI total score ($r = -.121, p = .074$). Finally, length of time working in rehabilitation counseling was not significantly associated with suicide knowledge for either the eight-item ($r = -.063, p = .350$) or seven-item ($r = -.119, p = .079$) scores.

More frequent experience working with suicidal clients was positively correlated with the SCAF total score ($r = .264, p < .000$), SCAF overall competency score ($r = .232, p = .001$), and SCI total score ($r = .307, p < .000$). However, it was not significantly related to suicide knowledge on either the eight- ($r = -.009, p = .892$) or seven-item ($r = -.042, p = .534$) measures. Again, the ceiling effect may come in to play with regard to the suicide knowledge measures.

Participants who reported having a friend or family member who attempted or died by suicide did not have significantly different scores on the SCAF total score, $t(220) = -.017, p = .986, d = 0$; SCAF overall assessment competency score, $t(215) = .253, p = .801, d = .04$; or SCI total score, $t(220) = .936, p = .351, d = .16$. Similarly, friend or family member experience with suicide was not significantly related to suicide knowledge scores for either the eight-item, $t(220) = -.147, p = .884, d = -.02$, or seven-item, $t(220) = -.165, p = .869, d = -.02$, scores.

CRC status was not significantly related to higher scores on the SCAF total score, $t(220) = -.488, p = .626, d = -.06$; SCAF overall assessment competency score, $t(215) = -.219, p = .827, d = -.03$; or SCI total score, $t(220) = .713, p = .477, d = .10$. Likewise, CRC status was not associated with significantly higher suicide knowledge scores on either the eight-item, $t(220) = 1.76, p = .081, d = .24$, or seven-item, $t(220) = 1.62, p = .108, d = .22$, scores, although the effect size analysis did yield a small positive result in favor of those holding a CRC credential.

As reported in our measurement validation analyses (Lund et al., in press), the SCAF total score, SCAF overall perceived competency rating, the SCI total score, and all the SCI subscales were all significantly correlated with each other, suggesting strong convergent validity between the two measures of self-perceived suicide-related competency and comfort. Suicide knowledge was not significantly related to SCAF total score (eight-item score: $r = .070, p = .299$, seven-item score: $r = .102, p = .129$) or SCI score (eight-item score: $r = .089, p = .184$, seven-item score: $r = .130, p = .053$), although the correlation between the seven-item score and the SCI total score was nearing significance. The SCAF overall perceived competency rating was significantly correlated with the seven-item suicide knowledge score ($r = .168, p = .018$); the correlation with the eight-item score was approaching significance ($r = .117, p = .085$). Again, the ceiling effect of the suicide knowledge scores is important to consider.

Discussion

We examined VR counselors' experiences with, knowledge of, and perceived comfort and competency with suicide

assessment and intervention. We found that participants commonly reported working with suicidal clients but that only half reported receiving training related to suicide. Similarly, participants generally expressed their willingness to work with clients who had been suicidal and to ask about suicide. However, only about half of the participants felt competent assessing suicidal clients, and less than a quarter felt competent working with a client who was in an acute suicidal crisis. Similarly, two thirds of participants rated themselves as lacking or still working toward competency with suicide assessment and crisis intervention. As a whole, these results suggest that although VR counselors frequently work with clients who are experiencing suicidal thoughts and behaviors and are willing to do so, many do not feel competent in assessing for and intervening with suicidal or potentially suicidal clients.

Our results also support the idea that more suicide assessment and intervention training should be offered to VR counselors. Participants who had received training on suicide scored significantly higher on all measures of suicide-related competency and comfort. Encouragingly, those with more reported experience working with suicidal clients also scored higher on suicide competency and comfort measures. It may be that having experience working with suicidal clients has forced these counselors to develop more competency in suicide assessment and intervention. Alternatively, these counselors could have deliberately sought out training or intervention in response to frequently working with suicidal clients. Finally, they could be more likely to have suicidal clients referred to them by colleagues or supervisors due to having more training in the area. However, the mean SCAF overall competency score was still in the “working toward competency” range even among those who had received training on suicide. This suggests that even these trained clinicians could benefit from additional training in this area.

Implications for Training and Practice

Training toward competency in vital clinical areas is an ethical requirement of rehabilitation counselors (CRCC, 2010). Given both the high frequency of encounters with suicidal clients reported by participants in the present study and the consistently documented elevated rates of suicidality in people with diverse disabilities (Giannini et al., 2010; Lund, Nadorff, & Seader, 2016), suicide assessment and immediate intervention could be argued to be a critical clinical skillset among rehabilitation counselors.

Although VR counselors will not be performing dedicated psychotherapy with suicidal clients, knowing how to recognize and assess potential suicidality in clients, implement a safety and crisis intervention plan, and engage in appropriate follow-up and self-care would be important skills that would fall within the scope of VR counselors. As frontline counseling professionals working with individuals

with disabilities, VR counselors are well positioned to assess for, and respond to, potential suicidality in their clients. If they are able to assess suicide risk and engage in immediate risk management and crisis intervention, VR counselors can also refer a client to dedicated mental health or medical services, as appropriate, for further assessment and treatment of their suicidality. It is also important to note that neither CRC status nor years worked in VR were associated with increased suicide competency, suggesting that these skills do not simply develop over time, nor are they typically acquired during the training required to become a CRC. Similarly, having a friend or family who had attempted or died by suicide was not associated with differences in suicide knowledge perceived suicide comfort or competency, suggesting that personal exposure to suicide does not, in and of itself, either enhance or hinder comfort or competency in this area.

Hunt and Rosenthal (1997, 2000) found that greater training on issues related to client death was cited as wanted and needed by both rehabilitation counselors and rehabilitation counseling students. Furthermore, client suicide was cited as one the most pressing death-related issues, thus indicating a long-standing need for more training in this area. In addition, the recent merger of the Council on Rehabilitation Education (CORE) and Council for Accreditation of Counseling & Related Educational Programs (CACREP) may lead to great integration of suicide-related training in preservice rehabilitation counselor education. Indeed, the current CACREP (2016) education standards specifically mention “suicide prevention models and strategies” (2.5.1) and “procedures for assessing risk of aggression or danger to others, self-inflicted harm, or suicide” (2.7.c) in their required competencies. In contrast, CORE (2011) competencies only required that rehabilitation counseling students be able to “recognize and communicate a basic understanding of how to assess individuals, groups, and families who exhibit suicide ideation, psychological and emotional crisis” (C.5.6) However, counselors who are already working in the field may need additional training to develop skills related to suicide assessment and immediate intervention.

Given that the participants in our study demonstrated very good ability to distinguish suicide myths and facts, with mean knowledge scores in the mid- to high 80s, they likely would not benefit much from basic, didactic training that addresses only or primarily these issues. Instead, they may benefit from more practical, applied, and in-depth suicide training that specifically targets clinical skills and crisis intervention strategies related to suicide and brief suicide assessment. Such training could include role-plays and other opportunities to get feedback and guidance on their clinical assessment and intervention skills as they relate specifically to suicide. Gatekeeper trainings (e.g., Applied Suicide Intervention Skills Training [ASIST], Ramsay, Tanney, Tierney, & Land, 1999; SafeTALK, LivingWorks,

2010; Question, Persuade, Refer [QPR], Quinnett, 1995) have been developed to teach gatekeepers, such as teachers, college students, and school counselors to identify and intervene with individuals who are displaying warning signs for suicide. In general, they have shown to promote referrals of at-risk individuals (Condrón et al., 2015), increase skills, self-efficacy, and knowledge related to interacting with and ensuring the safety of potentially suicidal individuals (Isaac et al., 2009), and to be related to decreased suicide rates in target communities (Isaac et al., 2009).

VR counselors may benefit from gatekeeper prevention trainings. These trainings could then be enhanced by additional, more intensive clinical training that reflects the status of VR counselors as counseling professionals with skills and professional obligations that go beyond those of the noncounseling professionals and lay audiences for whom gatekeeper trainings are often targeted (Condrón et al., 2015; Isaac et al., 2009). In a pilot study of one such training, Cramer et al. (2016) found that a 4-hr workshop led to modest to large gains in clinicians' self-rated suicide-related assessment and intervention competencies. VR agencies may wish to partner with local universities, health departments, or mental health service centers to develop and access such trainings.

Another facet of training and practice that warrants attention is the preparation of counselor supervisors to effectively facilitate a counselor's work when suicidality becomes an issue. Supervisors are the first line of counselor training in applied settings, and have the responsibility to ensure that counselors are prepared to effectively identify and deal with suicidality. They should be able to demonstrate and model competencies in the recognition and assessment of suicidality, implementing safety and crisis intervention plans, and identifying appropriate referral and follow-up services (Cramer et al., 2013). They also need to be adept at monitoring counselors' emotional reactions during and following the incident to ensure that the counselor's needs are addressed appropriately. Supervisors have an ethical and legal responsibility to be fully engaged in the process of identifying and intervening with consumers who experience suicidality. Working with suicidal clients can be clinically and emotionally challenging, and positive supervision experiences can help enhance counselors' clinical competency, self-efficacy, and emotional well-being (Knox, Burkard, Jackson, Schaack, and Hess, 2006). In addition, good ongoing supervision can reinforce and enhance the knowledge and skills gained during formal education and training.

Limitations and Directions for Future Research

There are some limitations that should be noted regarding the current study: First of all, our sample, although a multi-state sample, is not a national sample, which potentially

limits the generalizability of the results. In addition, more than half of our participants were from one state (Texas), further placing limitations on the generalizability of our results. This study should be replicated with a truly national sample, VR counselors from other states, or both. It should also be replicated with rehabilitation counselors who work in non-VR settings to see if their experiences with and perceived comfort and competency with suicide differ from those of public sector VR counselors. Relatedly, this sample was self-selected, and thus may have leaned more heavily toward participants with experience or interest in working with suicidal clients; this may be reflected in the large percentage of respondents who reported receiving training in working with suicidal clients. However, even if this was the case, most participants still did not perceive themselves as competent in working with suicidal clients, suggesting that more training in this area is needed even among highly interested individuals.

In addition, the use of the word *treat* on the SCI may have potentially confused some participants who see their role as providing referral rather than treatment. However, it is also notable that a sizable majority of participants still rated themselves as willing to "treat" clients with a history of suicide attempts or thoughts, suggesting that they may have interpreted the term broadly to refer to their counseling duties within the scope of VR. Indeed, participants were very willing to engage with suicidal clients and to address suicide but seemed unsure of their ability to competently do so, both in general and regarding specific competencies, including referral and involvement of other professionals.

In addition, we assessed only self-perceived, not objectively rated or supervisor-perceived, competency with suicide assessment and intervention. It is possible that some respondents may have overly positive or negative views of their own suicide assessment and intervention competencies. Thus, researchers should examine the concurrent validity of the SCAF and SCI with other non-self-report measures of suicide assessment competency. Also, we did not ask about the type of or intensity training on suicide that participants received. As Schmitz and colleagues (2012) noted, the type, intensity, and effectiveness of the suicide-related training provided by training programs can vary widely. It may be that different types or levels of training are linked to different levels of perceived competency and comfort. Finally, the item about disclosure of suicidal thoughts on the suicide knowledge questionnaire may have been unclearly worded, and should be clarified to include both direct and indirect statements about suicide.

Conclusion

The VR counselors in our sample reported that they commonly work with suicidal clients. They also demonstrated a good factual knowledge of suicide myths and facts, and a

high level of willingness to ask about suicide and work with suicidal clients. However, they also reported that they did not feel particularly competent to assess or intervene with suicidal or potentially suicidal clients. These results point to the need for more training on suicide assessment and intervention in rehabilitation counselors.

Acknowledgment

The authors express their gratitude to the state vocational rehabilitation (VR) offices, regional technical assistance centers, and VR counselors who participated in this study.

Declaration of Conflicting Interests

The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

Funding

The author(s) received no financial support for the research, authorship, and/or publication of this article.

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