Human Service Student's Preparedness for Assessing Suicidality: Recommendations for Human Services Education

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Suicide continues to be a public health concern, with suicide rates increasing. Human service professionals are among the helping professions tasked with assessing and addressing suicidality. Despite the well-documented benefits of suicide assessment and training for those within the helping professions, there remains a dearth of literature specific to suicide prevention in the preparation of human services students. To address this gap, the current study used the SIRI-2 to assess the preparedness of human services students (n = 98) to assess and address client suicidality. Findings indicated that participants' responses were less competent than area experts. Furthermore, student participants' responses were more invalidating, unhelpful, and conveyed less empathy. These results suggest that a need for increased or focused training that addresses suicidality within undergraduate human services programs. Limitations of the current study, future directions, and implications are discussed.

Introduction

Suicide is a prominent issue worldwide and is often addressed within the field of human services. According to the World Health Organization (WHO), approximately 700,000 individuals die from suicide each year, the fourth leading cause of suicide among 15-19 years old (WHO, 2021). Human Services is a broad field with a central goal of providing competent and comprehensive care through a holistic and empirically tested lens (National Organization for Human Services, 2023). Human services literature discusses suicide education and gatekeeper training programs that develop individuals' knowledge and skills to assess risks, determine levels of risks, and make referrals for teachers, faculty, school counselors, mental health counselors, resident assistants, graduate social work students, and community members (Gibbons & Studer, 2008; McAdams & Foster, 2000; Reis & Cornell, 2008; Ruth et al., 2012; Spruch-Feiner et al., 2022; Taub et al., 2013). However, there is a gap in the literature on suicide prevention as a part of the human services and counseling curriculum (Cureton et al., 2021; Morris & Minton, 2012). Human services students at the undergraduate level must be competent in addressing client suicidality, as many students enter the field

before graduation as part of their course work i.e., practicum or internship (Baird & Mollen, 2023). This study will fill in the gap by exploring human services students' ability to work with clients experiencing suicidal ideation.

Literature Review

Suicide continues to be a public health concern as suicide rates increase (Schuck et al., 2019). Suicide is the leading cause of death among youth globally (Glenn et al., 2020). In the United States, suicide is the 10th leading cause of death across age groups, with a 33% increase in the suicide rate from 1999 - 2019 (Stone et al., 2021). Current literature predicted COVID-19 pandemic would cause increased rates of suicidality due to its negative impact on mental health conditions, including anxiety, depression, and substance use, among others (Sher, 2020). Because of the ongoing increase in suicides, researchers are exploring a new diagnosis related to suicide - Suicide Crisis syndrome - to refer to the acute mental state that precedes one's suicide attempt (Schuck et al., 2019).

As explained in current literature, arming individuals with knowledge, skills, and self-efficacy in assessing and addressing suicidality is beneficial in preventing suicide (Holmes et al., 2021). Literature supports the use of suicide prevention programs to improve helping professionals' knowledge and self-efficacy in assessing suicide and their ability to respond to suicidal clients (Matthieu et al., 2008; Mitchell et al., 2020). Research by Cramer and colleagues (2017) illustrates that participation in a training program aimed at fostering students' abilities to assess and address suicidality yields the following: (a) improved ability to recognize appropriate clinical responses to clients' suicidal statements; (b) increased self-efficacy regarding suicidal assessment and response; (c) increased knowledge regarding suicide assessment and management; and (d) self-reported efficacy in assessing and addressing suicidality with clients (Cramer et al., 2017).

Despite this documented need for training in assessing and addressing suicidality, Bromley (2012) found that only one-third to one-half of psychology students received suicide prevention training. Existing literature posits that helping professionals receive limited suicide prevention training within their academic programs (Battista, 2007; Gorton et al., 2019). Furthermore, students report dissatisfaction with their limited training in this area. These students also report low levels of confidence and self-efficacy regarding their ability to assess and address client suicidality. To this end, research positively correlates the suicide prevention training students receive and their beliefs regarding their capabilities related to client suicidality.

Addressing this need, Jacobson and colleagues (2012) researched the appropriateness of the Question, Persuade, and Refer (QPR) suicide prevention program in preparing master-level social work students to assess and address suicidality. Results indicated that participants reported increased knowledge and preparedin evaluating and responding to suicidal clients (2012; Labouliere et al., 2021). Similarly, Kato and colleagues (2010) longitudinal study demonstrated the efficacy of Mental Health First Aid

(MHFA) suicide prevention training in improving students' confidence, attitudes, and behaviors regarding suicidality. The literature also demonstrates the use of suicide prevention training programs in decreasing client symptoms (Bond et al., 2021; Gould et al., 2013; Lapidos et al., 2023). For example, in one study, trained counselors working as respondents for suicide crisis hotlines completed the Applied Suicide Intervention Skills Training (ASIST). Results revealed that callers experienced a significant decrease in depression, suicidality, and feelings of hopelessness. These findings suggest that including suicide prevention training and gatekeeping in mental health programs would benefit students and the communities they serve. Researchers have also explored differences between training programs that include a role-play component and those that do not (Cross et al., 2011; Gryglewicz et al., 2020). Findings suggest that suicide assessment and response training, including a role-play component, such as ASIST (Shannonhouse et al., 2017), allows trainees to practice the specific skills they learn in training.

Neimeyer and Bonnelle (1997) also noted limited research on "suicide intervention in these professions, and still less effort...directed toward the assessment of the impact of such training" (p. 70) (Jacobson, Osteen, Sharpe, et al., 2012; McNiel et al., 2008). Thus, there is a deficit in research on human services students' preparedness to assess and address suicidality. This research study contributes to human services literature. It addresses this gap in the literature by using the SIRI-2 to assess human services students' level of preparedness in responding to and assessing suicide.

Methods

Quantitative research utilizes numerical data to identify patterns and averages, identify causal relationships, make predictions, and generalize findings to broader populations (Creswell & Creswell, 2017). Using quantitative methods, the researchers worked to examine undergraduate human services students at a southeastern university preparedness to work with clients experiencing suicidal ideation. Researchers obtained human subjects exemption through the researchers' host institution. Researchers collected data utilizing Qualtrics. An informed consent statement was issued at the beginning of the survey allowing participantopt opt in or out of participation at any time without question. Participants answered demographic questions, which included age in years, race and ethnicity, gender, academic standing, and the number of human services courses completed. In addition, participants answered whether they had training or experience in suicide prevention and whether they had experience working with suicidal clients.

SIRI 2

The Suicide Intervention Response Inventory 2 (SIRI 2), an updated version of the SIRI I, designed by Neimeyer and MacInnes in 1981 and updated in 1997, was utilized to examine students' preparedness to work with

clients experiencing suicidal ideation. According to Neimeyer & MacInnes (1981), "The Suicide Intervention Response Inventory is designed to assess the ability of paraprofessionals (as well as professionals) to recognize and respond to suicidal statements (p. 176)." The instrument includes 25 statements from counseling sessions, each with two different ways of responding. Participants ranked each response from highly appropriate (+3) to highly inappropriate (-3). The instrument was validated in 1986 (Neimeyer & Hartley, 1986). The Suicide Intervention Response Inventory (SIRI-2) is a reliable and valid 24-item questionnaire that evaluates an individual's ability to assess suicide (Neimeyer & MacInnes, 1981) appropriately. This questionnaire has high internal consistency and test-retest reliability. Using this questionnaire, individuals rate the level of appropriateness for each statement using a 7-point Likert scale (-3 = very inappropriate to 3 = very appropriate) (Scheerder et al., 2010). Neimeyer and Bonnelle (1997) studied the reliability of the SIRI-2 using a sample of master's-level students. They found the instrument reliable, easy to administer, and valuable for counselor educators training students to address suicidality. The difference between SIRI I and SIRI 2 is in the scoring. The SIRI 2 scoring compares participants' responses to the responses of the best possible answers from suicidologists. The differences are subtracted from the suicidologist's answers to each question. A lower score is considered better because it represents less deviation from the expert opinion. This instrument is currently utilized in advanced case management training and has been chosen by research due to its current use in Human Services.

Data Collection

The survey was emailed as an embedded link to all currently enrolled human services majors within an human services program accredited by the Council for Human Services Education at a large southeastern university. Approximately 1,761 students were e-mailed. A brief statement about the purpose of the survey, noting that the results would be anonymous, was within the body of the e-mail. Participants were asked to read and agree with an informed consent statement if they clicked the link. If the participant agreed, they were given access to the survey and asked first to answer the demographic questions, followed by the SIRI 2. Six follow-up emails were sent over two academic semesters after the initial email to encourage nonrespondents to participate. Once responses were received, demographic information was collated, and the data was analyzed.

Participants

A total of $n = 98$ human services students completed the survey and are included in the participant sample. For age in years, $n = 19$ (19.3%) indicated being between 18 and 20 years old, $n = 27$ (27.5%) were 21 to 23 years old, n = 13 (13.1%) were 24 to 27 years old, $n = 13$ (13.1) were 28 to 34 years old, n = 8 (8.1) were 35 to 40 years old, $n = 11$ (11.1%) were 41 to 50 years old, and $n = 6$ (6.1%) were 51 to 58 years old. For race and ethnicity, participants

could select more than one group and so percentages are not cumulative. Most participants identified as Black of African American (n = 49, 50%), n = 48 (49%) identified as White or European American, n = 6 (6.1%) identified as East Asian or East Asian American, n = 5 (5.1%) as Hispanic or Latinx, and n = 2 (2.1%) as First Nations or Tribal Native American. For gender, n = 88 (89%) identified as cisgender women and n = 10 (11%) as cisgender men with no participants identifying as transgender or non-binary. A total of n = 52 (53%) identified living in an urban region, n = 27 (28%) a sub-urban region, and n = 19 (19%) a rural region. For academic standing, n = 41 (42%) identified as seniors, n= 45 (46%) as juniors, n = 10 (10%) as sophomores, and n = 1 (1%) as a freshman. In terms of number of human services completed, n = 39 (39.8%) between 3 and 5, n = 22 (22.4%) completed 2 or less, n = 20 (20.4%) had completed 10 or more courses, and n = 19 (19.3%) had completed between 6 and 9 courses. For training or experience in suicide prevention, n = 12 (12.2%) indicated they'd had training and n = 15 (15.3%) had worked with clients experiencing suicidal ideation; a total of n = 38 (38.8%) felt prepared to work with clients experiencing suicidal symptoms.

Data Analysis

Descriptive statistics and correlation coefficients were calculated for study variables. Analysis of variance (ANOVA) tests were conducted to assess group differences on the SIRI total between participant demographics. Scores on each SIRI item were compared to a set of responses from expert respondents (Neimeyer & Bonnelle, 1997), and an exploratory factor analysis was conducted following a procedure for scoring the SIRI reported by Neiymeyer et al (1983). The descriptive statistics for each item, and the factor loadings, are reported in Table 1.

Factor Analysis

An exploratory factor analysis was conducted using IBM SPSS 27 with principal axis factoring and promax rotation. Items 14a and 14b were excluded from the analysis based on a recommendation from the test developer (Neimeyer & Bonnelle, 1997). The remaining 48 items were included in the preliminary analysis, which yielded a KMO value of .615 with a significant Barlett's test of sphericity at p ≤ .001. While adequate for exploratory research purposes, KMO values closer to 1 are desirable (Tabachnick & Fidell, 2019). A condition of 4 factors for extraction was input into SPSS based on Neimeyer et al. (1986), and a 4-factor solution converged after 6 iterations. Review of the communalities identified that items 12b, 19a, and 21a and 21b failed to load higher than .3 on any factor; the analysis was re-run with these items omitted on the remaining 44 items. Using the same 4-factor delimitation, a 4-factor solution associated with 40% of the variance converged after 5 iterations; the KMO value remained the same and the Barlett's test remained significant a p ≤ .001. Factor 1 accounted for 16% of the variance in items and comprised 15 items. Items associated with Factor 1 could be considered as representing unhelpful or

invalidating responses relating to suicidality. Items loading negatively on Factor 1 correspond to items from Factor 3 and 4 of Neimeyer (1986), identified as overly professional or minimizing responses. Factor 2 accounted for 10% of the variance and was composed of 17 items; these items all represent helpful responses that demonstrate empathy. Factor 2 and the items that comprise it correspond most closely to Factor 1 as identified by Neimeyer et al. (1986). Factor 3 accounted for 5% of the variance and was composed of 6 items. Items associated with this factor included both helpful and unhelpful responses, and share the common theme of seeking more information, which corresponds most closely to Factors 4 of Neimeyer et al. (1986). Factor 4 accounted for 4% of the variance and was composed of 5 items, all characterized by their directive nature. Items loading on Factor 4 correspond to Factor 2 of Neimeyer et al. (1986), labeled as exploring suicidality and composed of facilitative and confrontational statements. It should be noted that no combination of items and factor loadings corresponded perfectly with the analysis conducted by Neimeyer et al. (1986). See Table 1 for factor loadings of items from the present study.

SIRI 2 scores

Descriptive statistics for the SIRI 2 total scores were calculated. Total scores were calculated from the ratings provided by participants, with lower scores indicating a higher degree of competency for responding to suicidality (Neimeyer & Bonnelle, 1997). The mean score on the SIRI 2 was M = 186 with a standard deviation of SD = 23. The lowest score was 110 and the highest was 247. The modal score was 178, and the median score was 187.5. Scores were also analyzed using ANOVA, comparing total SIRI 2 scores by race and ethnicity, gender identity, geographic region, and preparedness for working with suicidal clients; no significant differences in SIRI 2 scores were noted based on these grouping variables. Deviation scores were also calculated for each item, subtracting the expert means per item from the sample means per item; these values are reported in Table 1. The average mean difference for any sample item mean from the expert item means was plus or minus .84, and the mean standard deviation was plus or minus .71. The mode of the sample and expert mean deviations was tri-modal, with values of plus or minus .4, 1.0, and 1.8. Descriptively, and based on comparing the expert means to the sample means, the study participants generally rated themselves as less able than experts to recognize clinically appropriate responses to suicidal behavior.

Discussion

Human services students often become first responders in addressing mental health crises, holding positions as operators of suicide hotlines, intake workers, as well as mental health processing group leaders within the final years of their program or upon graduation. In addition, they are often involved in directly combating the suicide epidemic. The findings of this study indicate that participants responded with less competent responses no matter the question being asked when compared to experts. Participants

Table 1. Item means, standard deviations, deviation scores, factor loadings, and expert means

Item	Sample Mean (SD)	DS**	Factor (Loading)	Expert Mean	Item	Sample Mean (SD)	DS**	Factor (Loading)	Expert Mean
1a	-.81 (1.8)	-.54	1	-2.71	12a*	1.0 (1.7)	-1.0	2	2.0
1b*	2.17 (.9)	.31	2	1.86	13a	-2.1 (1.1)	.44	1	-2.57
2a	-2.0 (1.2)	.71	1	-2.71	13b*	1.6 (1.4)	-.71	2	2.29
2b*	1.4 (1.5)	-.44	2	1.86	15a	-.41 (1.9)	2.2	1	-2.57
3a	.32 (1.9)	2.5	4	-2.14	15b*	1.9 (1.4)	-.23	4	2.14
3b*	1.1 (1.7)	-1.1	2	2.14	16a*	.06 (1.8)	-2.1	2	2.14
4a*	1.2 (1.6)	-.07	2	1.29	16b	-2.4 (1.0)	.45	1	-2.86
4b	-1.9 (1.6)	.96	1	-2.71	17a*	1.5 (1.4)	-.08	3	1.57
5a*	1.9 (1.1)	-.56	3	2.43	17b	-1.1 (1.9)	.60	3	-1.71
5b	-2.1 (1.5)	.60	1	-2.71	18a	-1.6 (1.6)	.38	2	-2.0
6a	.41 (1.5)	2.4	1	-2.0	18b*	1.7 (1.3)	.31	4	1.43
6b*	1.8 (1.8)	-.77	2	2.57	19b*	1.4 (1.7)	-.17	2	-1.57
7a*	1.9 (1.3)	-.14	2	2.0	20a*	1.8 (1.1)	-.17	2	2.0
7b	1.2 (1.8)	2.5	4	-1.29	20b	-2.13 (1.2)	.73	1	-2.86
8a	-1.4 (1.7)	.94	1	-2.29	22a	-.95 (1.6)	1.8	1	-2.71
8b*	1.9 (1.3)	-.27	4	2.14	22b*	1.8 (1.2)	.38	2	1.43
9a	-.3 (1.6)	.99	2	-1.29	23a*	1.7 (1.2)	.11	2	1.57
9b*	.47 (1.9)	-.82	2	1.29	23b	-1.1 (1.6)	1.5	1	-2.57
10a*	1.9 (.96)	-.42	2	2.29	24a	-.62 (1.7)	1.8	1	-2.43
10b	-1.7 (1.5)	.73	1	-2.43	24b*	1.8 (1.3)	-.37	2	2.14
11a	-1.1 (1.5)	1.3	1	-2.42	25a	-1.6 (1.7)	.97	3	-2.57
11b*	1.4 (1.5)	-1.1	2	2.43	25b*	1.6 (1.4)	-.86	3	2.43

Note: Expert Mean = As reported in Neimeyer & Bonnelle, 1997; * = items which facilitate appropriate suicide response interventions. DS** = average discrepancy score for each item

in this study demonstrated being less prepared than experts to respond to suicidal ideation. Overall, participants were more likely to respond with unhelpful or invalidating responses. They were less likely to respond with helpful responses that demonstrated empathy. They were also less able to respond in a way that would elicit information from the clients and were less

likely to be direct in their responses. As a result, these findings indicate that undergraduate human services students are ill-prepared to be first responders when attending to or recognizing suicidality.

Human services education programs must respond to the field's expectation that entry level human services practitioners be prepared to work with vulnerable populations such as those experiencing suicidal ideation. Therefore, we recommend that educators are intentional in embedding suicide assessment and prevention into course curricula. The current curricular requirements outlined by the Council for Standards of Human Services Education (CSHSE) does not currently focus on suicidal ideation preparation or specific requirement for preparing human services students to comprehend their role as first responders. The results of this study indicate that there may be a need for such training. It is recommended that undergraduate programs embed suicidality training within the human services curriculum and assess student training effectiveness and competence. It is recommended that accreditation bodies consider adding a standard that requires human services programs to prepare human services students to address suicidal ideation and other aspects of first responder roles adequately. In addition, it is recommended that human services agencies deliver suicidality training to all new human services practitioners. This includes providing such training to practicum and internship students entering the agencies, as well as new hires. By taking a multisystemic approach in which educators, human services programs, accrediting bodies, and agencies are all intentionally providing education on the assessment of and response to suicidality, it may increase the likelihood that clients experiencing suicidality and suicidal ideation are met with empathic curiosity and access to the necessary resources. In doing so, the societal phenomenon of suicidality may be better addressed. This may also allow for new avenues of research regarding how such training is provided to ensure this is being done in a more efficacious manner.

Limitations/Recommendations for Future Research

The SIRI 2 evaluates an individual's ability to assess for suicide appropriately. There is a continued need for research indicating best practices for educating human services students on suicide to increase competency and confidence in working with this vulnerable population. There are also some methodological limitations to this study. This study was completed with participants from one large human services program. Data was collected during the pandemic lockdown, which impacted the participant response, leading to a smaller sample. Future researchers should expand the current study to determine the effectiveness within a more extensive and diverse data pool to make the results more generalizable.

This study is limited to human services students trained in accredited human services programs. Due to the generalist nature of the field and the possibility for individuals from other helping professions to practice in the field of human services, future research should consider examining

preparation of those students in non accredited human services programs and other helping professional fields that have the possibility of working directly with clients experiencing suicidality. Future research should also include an examination of the types of training that would be appropriate in preparing human services students to work directly with clients experiencing suicidality.

Furthermore, the current study only assessed the effectiveness of the SIRI2; there was no direct education or intervention on suicidality. To increase the richness and quality of the research, future research should consider the use of the questionnaire in addition to a specific educational praxis. Additionally, researchers should explore the effectiveness of gatekeeper training on suicide competency and reassessing participant competence with the SIRI-2.

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