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The Influence of a Culturally Informed Suicide Prevention Training on School Mental Health Professionals' Beliefs

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Abstract

Youth suicide is a significant public health concern in the United States, and students from culturally minoritized groups may be at higher risk of suicidality and suicide ideation. As key stakeholders in comprehensive suicide prevention efforts, school mental health professionals need targeted professional development to help them address the mental health needs of all their students. The study aimed to pilot the Culturally Responsive Suicide Prevention in Schools (CRSPiS) professional development session and evaluate its impact on school mental health professionals' beliefs about the influence of culture on suicidal thoughts, behaviors, communication, and response. A pre-and post-training design was used. Professionals attended the pilot of a structured 3-hour professional development session. Immediately after the training school mental health professionals who participated in the CRSPiS session reported stronger beliefs in the influence of culture on suicide ideation and response. Participants' beliefs did not vary by previous hours of suicide training and years of experience. CRSPiS training may help improve professionals' ability to respond to suicide and conduct assessments in culturally relevant ways.

Keywords: suicide, culture, school mental health professionals, professional development, beliefs

1. Introduction

1.1 Youth Suicidality

Youth mental health challenges, including increasing rates of anxiety, depression, and suicidality, have been deemed a public health crisis exacerbated by the COVID-19 global pandemic (Office of the U.S. Surgeon General, 2021). Suicide was the second leading cause of death among adolescents in the United States aged 10-18 in 2019 (Centers for Disease Control and Prevention [CDC], 2020). One in five adolescents reported thinking seriously about attempting or completing suicide (Lindsey et al., 2019). Youth of color and lesbian, gay, bisexual, transgender, and queer (LGBTQ) youth may be at higher risk of suicidality than their peers. Between the years 1991 to 2017, Black youth in the United States had a 73% increase in suicide attempts (Lindsey et al., 2019), and suicide was the second leading cause of death for 10-14-year-old Black youth and the third leading cause of death for 15-18-year-old Black youth in 2018 (CDC, 2020). Suicide was the leading cause of death for American Indian and Alaskan Native adolescents ages 10-14 and the second leading cause of death for those ages 15-18 (CDC, 2020). Additionally, almost a quarter of youth ages 12 to 14 who died by suicide were sexual or gender minorities (Ream, 2019). LGBTQ adolescents without family support are eight times more likely to attempt suicide than their LGBTQ peers who have family support (Ryan et al., 2009).

School mental health professionals (including school counselors, social workers, and psychologists) need targeted professional development to enhance mental health services for all students. More specifically, statistics about suicidality among culturally diverse youth point to the need for those working to end youth suicide to recognize and respond to cultural identity and intersectionality in suicide prevention, assessment, and intervention. Indeed, the U.S. Department of Health and Human Services Office of the Surgeon General and the National Action Alliance for Suicide Prevention (2012) called for enhanced training for 'school counselors … and others who are on the frontlines of suicide prevention' (p. 46) and 'cultural competency training components specifically focused on ethnic/racial identity formation and LGBT identity development' (p. 47) for people with suicide risk. Despite these recommendations, school mental health professionals have reported gaps in suicide prevention and risk assessment training (Becnel et al., 2021; Erps et al., 2020). Furthermore, there is limited research on suicide prevention professional development for school mental health professionals

specifically focused on cultural factors and suicide response. Based on this need, we piloted a culturally informed suicide professional development program for school mental health professionals and in this study present the influence of this training on school mental health professionals' beliefs.

1.2 Attitudinal Model of Professional Development

As school mental health professionals engage in professional development, these efforts must be intentional practices that holistically further their professional attitudes, knowledge, and skills. Pulling from Day's (2002) definition, professional development can be thought of as a process through which school professionals "review, renew, and extend their commitment as change agents" (p. 4) and acquire and develop the knowledge and skills necessary to effectively fulfill their roles. Professional development is multidimensional and encompasses changes to professionals' behaviors, attitudes, intellectual capacity, and mindset (Evans, 2014).

Evans (2002) proposed a model of professional development for teachers that is applicable to the development of school mental health professionals. Evans (2002) posited that effective professional development constitutes two elements - *attitudinal development* and *functional development.* Attitudinal development is the process through which a professional's attitudes about their work are modified, and functional development involves the process of developing new ways of working and incorporating new processes into practice to improve performance (Evans, 2002, 2008). Attitudinal development incorporates two change foci: *intellectual* and *motivational,* and functional development incorporates two change foci: *procedural* and *productive.*

Evans (2008) maintained that most external professional development is focused on the functional development of a group; however, functional development without a focus on changing attitudes and beliefs is destined for limited success. Indeed, attitudinal development focused on intellectual and motivational enhancement inherently requires a change in professionalism that results in new attitudes related to practice and occurs on an individual level. Attitudinal development represents a commitment to change that cannot be imposed on a professional unlike functional development. Evans (2008) further maintains that attitudinal development is typically followed by functional development. Evans (2011) argues that an internalization process must occur within professionals to prompt a change in behavior, practice, or process. To accept a new practice or way of doing things, professionals must recognize "something as a 'better way' of 'doing' things" (Evans, 2011, p. 865).

1.3 Current Practices for Suicide Prevention Training in Schools

School personnel play a critical role in suicide prevention and response. Suicide gatekeeper trainings are the primary suicide prevention approach to equipping educators with the knowledge and skills needed to identify and refer students at risk of suicide. Suicide gatekeeper trainings aim to help educators understand the prevalence of suicide, recognize warning signs for students at risk for suicide, and learn how to refer students to mental health supports appropriately. Suicide gatekeeper trainings represent an approach to functional development for school mental health providers (Evans, 2002, 2008, 2014). In 2020, 47 of the 50 states in the United States had laws that encouraged or required suicide prevention training for school personnel (American Foundation for Suicide Prevention [AFSP], 2020). There are several options for school district leaders seeking to meet these state requirements for gatekeeper training, including *Question, Persuade, Refer* [QPR] (QPR Institute, 2023), and Kognito's (2023) *At-Risk for PK-12 Educators* training programs. Researchers have found evidence that standardized gatekeeper trainings increase participants' suicide knowledge and response confidence (Mo et al., 2018; Timmons-Mitchell et al., 2019; Walsh et al., 2013). Changes in knowledge and response confidence reflect the enhancement of procedural and productive behaviors (Evans 2002, 2008).

However, gatekeeper trainings are only one element of comprehensive suicide prevention. The Suicide Prevention Resource Center (SPRC, 2020) promotes a comprehensive prevention model that includes identifying persons at risk, increasing mental health support, providing effective intervention and transition of care, responding to those in crisis, providing postvention efforts, reducing access to means, and enhancing resilience and connectedness. While gatekeeper training can help identify and assist students at risk, these efforts must be combined with other wrap-around services and support within the school and community for those in distress. A systematic review of suicide prevention interventions found that gatekeeper education could help reduce suicidal behavior if 'the roles of gatekeepers are formalized and pathways to treatment are readily available, such as in the military' (Mann et al., 2005, p. 2071). Providing clear pathways to intervention within school settings is critical as youth are more likely to access mental health treatment in school settings (Burns et al., 1995). To support schools' efforts to develop clear policies for suicide prevention, AFSP, the American School Counselor Association (ASCA), the National Association of School Psychologists (NASP), and The Trevor Project (2019) published a model policy outlining clear guidelines for suicide prevention built on a holistic approach to wellness. This district-level model policy recommends gatekeeper training for all school personnel and emphasizes the importance of school-based mental health services in suicide prevention.

School mental health providers are, therefore, key stakeholders in suicide prevention. These professionals are ethically

obligated to provide screening and assessment for suicidality and connect youth and families with effective intervention and treatment (ASCA, 2022; NASP, 2020). Despite their critical role in school-based suicide prevention, school counselors and psychologists may have insufficient suicide assessment and intervention training or readiness. In a recent study, nearly a quarter of school counselors reported no training in suicide risk assessment, and a third felt somewhat unprepared for crisis response and postvention (Stickl Haugen et al., 2020). Similarly, only 29.3% of school psychologists agreed that they received adequate training for suicide risk assessment during graduate school, and nearly 20% of respondents did not feel comfortable intervening with a student who has suicidal ideation (Erps et al., 2020). Across mental health disciplines, practitioner confidence when assessing youth at risk for suicide is associated with risk assessment training and preparedness (Schmidt, 2016). As such, school mental health providers may need additional professional development in suicide risk assessment and intervention to address competency gaps due to inconsistent training.

1.4 Added Focus on Cultural Competency and Beliefs

Considering Evans (2002, 2008) recommendation that effective professional development must focus on attitudinal shifts, which will ultimately lead to functional development, we maintain that an added focus on cultural competency and professionals' beliefs must be integrated into suicide prevention professional development. Indeed, school mental health professionals must use culturally responsive suicide prevention strategies for student populations with elevated risk for suicide, including Black youth, LGBTQ youth, and American Indian/Alaska Native youth (AFSP et al., 2019). In this work, school mental health professionals may help address gaps in suicide care access for various student populations, such as Black and Latinx youth at risk of suicide who are less likely than White students to access mental health services (Freedenthal, 2007). As school mental health professionals work with youth with various cultural identities (including race, ethnicity, gender, gender expression, sexual orientation, religion/spirituality, ability/disability, etc.), cultural competency is necessary for suicide prevention. Cultural competency includes awareness of personal assumptions and bias; knowledge of various cultural experiences, including prejudice, privilege, and oppression based on cultural identities; and skills for therapeutic response adapted to the client's needs (Sue et al., 1992). All of which represent professionals' attitudinal stance (Evans, 2008).

Focusing on mental health professionals' attitudes or beliefs about culture is well established within the scholarship on cultural competency training. In a systematic review of over 40 studies, Chu et al. (2022) found that cultural attitudes were the most frequently assessed outcome of cultural competency trainings for mental health professionals. Furthermore, researchers have established a clear relationship between beliefs, knowledge, and practice (e.g., Brownell et al., 2014; Lauterbach et al., 2018; Wallace & Kang, 2004). Professionals are more likely to implement new practices when they understand the need and believe they have the skills and resources to implement them (Castillo et al., 2015). Further supporting Evans' (2002, 2008) stance on the connection between attitudinal and functional development, school mental health professionals' beliefs have been linked to their implementation of effective counseling (Larson & Daniels, 1998), advocacy intention for LGBTQ youth (McCabe et al., 2013), and placement recommendations for youth following discipline infractions (Dameron et al., 2019). Thus, to enhance culturally responsive suicide prevention, it is essential first to understand school mental health professionals' beliefs about culture and suicide.

1.5 The Cultural Model of Suicide

While scholars in the field of suicide have noted disparities in suicidal behaviors among communities of color and LGBTQ+ individuals, there is a need for a more theoretically grounded understanding of community and cultural risk factors for suicide (Joe et al., 2008). The seminal work in this field is Chu et al.'s (2010) Cultural Model of Suicide. This theory was developed from a systematic literature review focusing on four major cultural minority groups in North America: African American, Asian American, Latino, and LGBTQ. Chu et al. (2010) found four common cultural factors that accounted for high suicide risk: cultural sanctions, idioms of distress, minority stress, and social discord. These risk factors were integrated into a theoretical framework for suicidal behavior with three theoretical principles: (1) culture affects the types of stressors that lead to suicidal behavior; (2) culture affects how suicidal thoughts, plans, and behaviors are expressed; and (3) cultural meanings associated with stressors and suicide affect suicidal tendencies (Chu et al., 2010). The Cultural Model of Suicide was designed to provide a framework for exploring the cultural influence on suicide risk. Several studies have advanced empirical support for the model's constructs since its inception (e.g., Chu et al., 2017; Chu et al., 2020; Klibert et al., 2015; Yang et al., 2018). A focus on attitudinal shift (Evans, 2014) and the importance of cultural considerations in suicide risk assessment (Chu et al., 2017) guided our approach to the professional development session described in this study.

1.6 Study Aims

We developed and piloted the Culturally Responsive Suicide Prevention in Schools (CRSPiS) professional development program to investigate its impact on school mental health professionals' beliefs about the importance and influence of

culture on students' suicidal ideation and stakeholder response to suicide. A secondary aim of this study was to examine associations between professionals' beliefs about culture on suicide and previous years of suicide training received and years of professional experience.

2. Method

2.1 Participants

Participants in this study were 32 practicing school mental health professionals in a single school district who made up the statistical sample. Of the participants who attended the training, 81.3% (n = 26) were school counselors and 18.8% (n = 6) were social workers. Most participants (n = 21, 65.6%) identified as White, non-Hispanic, 28.1% identified as Black/African American (n = 9), and 6.3% identified as multiracial (n = 2). Most identified as female (n = 26; 92.9%), with two identifying as male (7.1%). Finally, the range of years of experience as a school mental health professional was 1 to 31 years (M = 12.23, SD = 8.34). Participants reported hours of suicide training received from 0 to 45 hours (M = 13.52, SD = 11.89).

2.2 Procedure

After receiving Institutional Review Board approval, we contacted three school districts in a midwestern U.S. state about implementing a culturally informed suicide intervention with their school mental health providers in the school year preceding the study. Of the three school districts, one school administrator accepted the invitation and allowed us to provide the training to fulfill the requirement for a suicide professional development opportunity during the 2019-2020 school year. This was potentially due to the short notice we provided district leaders to engage their service providers in the training. Though a 6-month follow-up was planned, we could not complete it due to disruptions in the school year with COVID-19. Participants were a convenience sample of practicing school mental health professionals who attended the in-person professional development session, signed an informed consent form at the beginning of the session, and completed the pre- and post-training survey. We recruited participants from a metro suburban school district in a midwestern U.S. state. This school district had 9,945 students enrolled in 2019. Racial and ethnic demographics for students in the district were 82.8% Black, 8.8% White, 4.5% Multi-Race, 3.5% Hispanic, and 0.3% Asian, and all students received free or reduced-priced lunches.

The CRSPiS training was designed to provide school mental health professionals with information and skills to consider and integrate awareness of their own and students' cultures on suicidal ideation, communication, and behavior. The professional development session was three hours with two parts - *Question, Persuade, Refer Gatekeeper Training,* and *Culturally Informed Suicide Assessment and Prevention Training* - and was co-led by two counselor educators. The three-hour professional development session provided enough time for a combination of lecture, discussion, and role-play and was presented in a live, group format.

2.2.1 CPSPiS Training Part 1, Suicide Information

The professional development session began with discussing statistics about suicide, specific to youth suicide and relevant state data, and information about person-first language to use when talking about suicide. The statistics discussion was followed by the delivery of the *Question, Persuade, Refer Gatekeeper Training* ([QPR]; QPR Institute, 2023). The QPR training covered myths about suicide, verbal, behavioral, and situational suicidal ideation clues, and strategies for asking directly about suicide. Participants were taught the QPR method to screen for suicidal ideation and make a referral when necessary. The CRSPiS professional development session embedded the QPR training to ensure that participants had foundational knowledge about suicide ideation, communication, and response before exploring the impact of culture on suicide and suicide response. This component of the session focused on supporting participants' functional development (Evans, 2008) related to suicide assessment. Much of this part of the professional development session involved a lecture – following QPR's established presentation format – with several discussion questions. Participants were encouraged to ask questions throughout the training. The trainers for this study had completed the QPR instructor training and became certified QPR instructors before the professional development.

2.2.2 CPSPiS Training Part 2, Culturally Informed Suicide Response

Following the suicide information phase, participants received the *Culturally Informed Suicide Assessment and Prevention Training* (CISAP). The authors created the new CISAP training guided by Evans's (2002, 2008) Attitudinal Component of the Professional Development Model and Chu et al.'s (2010) Cultural Model of Suicide. This part of the professional development session included four components: (1) culturally informed suicide practices, (2) culturally informed suicide assessment, (3) small group role-plays with large-group processing, and (4) culturally informed suicide prevention and intervention in schools. Evans (2014) maintained that professional development must also be focused on professionals' process, as opposed to solely student outcomes. As such, taking time to integrate professionals' thoughts, attitudes, and beliefs during professional development is crucial for attitudinal development. Following Evans'

recommendation, we guided participants in an extensive discussion about how suicide is viewed in their individual and collective cultures and the impact of those beliefs on their work. Then, participants were taught the four common cultural factors that account for high suicide risk (Chu et al., 2010) – cultural sanctions, idioms of distress, minority stress, and social discord – and how students from various cultural backgrounds may present or communicate these factors. Finally, participants were taught the three theoretical principles for suicidal behavior: (1) culture affects the types of stressors that lead to suicidal behavior; (2) culture affects how suicidal thoughts, plans, and behaviors are expressed; and (3) cultural meanings associated with stressors and suicide affect suicidal tendencies (Chu et al., 2010). In the second component – culturally informed suicide assessment – participants were taught how to ask assessment questions that address the four cultural factors in assessing for risk and protective factors. A modification of the SLAP mnemonic (Morris, 1998) – SLAPP DIRT (Specifics, Lethality, Availability, Proximity, Prior Attempt: Dangerousness, Impression, Rescue, and Timing) – was used to teach participants about conducting a suicide risk assessment. Counselors use this mnemonic as a guiding tool for asking questions about each aspect of a client's plans for suicide (e.g., Lethality: *How deadly is the suicide plan*?).

The third component involved culturally informed suicide assessment practice and discussion. This portion involved discussing multiple case studies in which the clients' intersecting identities were explored concerning suicidal thoughts, behavior, and ideation. During this session, participants in small groups practiced asking assessment questions that address cultural risk and protective factors. The role plays were followed with a large-group discussion and processing. In the final training component, participants were taught culturally responsive suicide prevention strategies, district and state-level considerations, and suicide intervention and postvention strategies. Participants were encouraged to ask questions throughout the session, and the professional development session ended with a formal question-and-answer session. Participants were provided QPR and CISAP training materials that could be used in their schools and shared with other stakeholders.

2.3 Measures

Participants completed paper and pencil versions of the Counselor Suicide Assessment Efficacy Survey (CSAES; Douglas & Wachter Morris, 2015) and the Beliefs about Culture's Influence on Suicide Scale (BaCISS), a measure created by the authors and based on Chu et al.'s (2010) cultural theory and model of suicide, immediately before and after the professional development session. Due to an inability to conduct a 6-month follow-up due to COVID-19, the present study only reports data from the BaCISS and excludes data from the CSAES.

2.3.1 Beliefs about Culture's Influence on Suicide Scale

To examine participants' beliefs about the impact of culture on suicidal ideation and response (the attitudinal development component), we developed the Beliefs about Culture's Influence on Suicide Scale (BaCISS) based on The Cultural Model of Suicide (Chu et al., 2010). The Cultural Model of Suicide provides an empirically grounded theoretical approach for informing culturally competent suicide assessment and prevention efforts based on the three theoretical principles: idioms of distress, life stressors, and cultural meanings. To design the BaCISS, we created items that examined participants' beliefs about the impact of culture on suicidal ideation and response based on the four common factors for suicide risk: cultural sanctions, idioms of distress, minority stress, and social discord. For example, the item '*Culture impacts events that are labelled as shameful which can lead to suicidal ideation*' was developed to examine participants' beliefs about cultural sanctions. To examine beliefs about minority stress, the item '*Culture affects the types of life stressors that lead to suicide*' was developed. The final version of the BaCISS had good internal consistency (Cronbach's $\alpha = 0.88$, 12 items). The BaCISS examined cultural meaning by asking three questions about the impact of culture on response to suicide and suicidal ideation. The survey examined life stressors by asking five questions about the impact of culture on how students experience life stressors. Additionally, the survey examined idioms of distress by asking two questions about how students express suicidal ideation. The survey examined participants' behaviors by asking two questions about participants' culture and modification of suicide assessments based on culture.

To better understand the psychometrics of the scale, we conducted an exploratory factor analysis (EFA) on the 12 items. The EFA on 12 items suggested that two components with eigenvalues greater than one provided a good statistical fit. The first category had nine items (Cronbach $\alpha = .96$) and included items focused on students' experience of suicidal ideation. The second category had three items (Cronbach $\alpha = .78$) and included items focused on mental health professionals' and parents' responses to students' suicidal ideation. The correlation between the two factors was .116.

3. Results

3.1 Data Analysis

We conducted data analysis using IBM SPSS Statistics 26. To investigate the impact of the professional development session on school mental health professionals' beliefs about the importance and influence of culture on students' suicidal

ideation and stakeholder response to suicide, we used a paired samples *t*-test to examine the mean differences in participants' cultural beliefs about suicide (i.e., pre- and post-survey CBCISA scores) before and after the professional development session. Cohen's *d* was used to calculate the effect sizes (Cohen, 1988; .2 = small effect size, .5 = medium effect size, .8 = large effect size) and determine the practical significance for the *t*-test results.

To investigate associations between professionals' beliefs about culture on suicide and previous years of suicide training received and years of professional experience, we conducted separate univariate analyses of covariance (ANCOVA) to determine the mean differences in post-survey cultural beliefs about suicide responses across participants' years of professional experience (Group 1 = 0-5 years; Group 2 = 6-10 years; Group 3 = 11 or more years), and the previous number of hours of suicide training received (Group 1 = 0-9 hours; Group 2 = 10-15 hours; Group 3 = 16 or more hours). We created groups for years of experience and the number of hours of suicide training to allow for comparison between more equally sized groups. Partial eta squared (η^2_p) was used to calculate the effect sizes (.01 = small, .06 = medium, .14 = large) for the ANCOVA results.

3.2 Analysis Results

A paired-samples *t*-test indicated a statistically and practically significant increase in cultural beliefs about suicide scores. Considering participants' beliefs about the impact of culture on suicide, an inspection of a boxplot revealed three outliers. The three cases were deleted because we determined that the three cases did not fully complete the BaCISS post-test. The assumption of normality was not violated, as assessed by Shapiro-Wilk's test (p = .367). There was a statistically significant overall mean increase of 4.92 (SE = 6.02, $t(24) = 4.09$, $p < .001$, d = .82) in participants' beliefs about the importance and influence of culture on students' suicidal ideation and response. Additionally, there was a significant increase in beliefs on eight of the 12 items on the BaCISS (see Table 1). Power analyses and sample size estimation using G*Power 3.197 software indicated that these results have a statistical power value of 0.99.

Table 1. Self-reported beliefs on BaCISS

Items	M_{pre} (SD)[a]	M_{post} (SD)[a]	Pre- to post-training t
My culture influences the way I think about suicide.	3.25 (1.24)	4.11 (1.03)	*-4.46****
Culture influences how a family responds to student suicidality.	4.38 (.79)	4.64 (.83)	*-1.51*
Culture affects the types of life stressors that lead to suicide.	4.318 (.64)	4.71 (.46)	*-2.87***
Students' minority status influences the types of stressors that lead to suicide.	4.068 (.76)	4.68 (.48)	*-3.67***
Social support (e.g., family conflict, community, etc.) is a culturally relevant stressor for students.	4.44 (.56)	4.62 (.49)	*-1.73*
Culture impacts events that are labeled as shameful which can lead to suicidal ideation.	4.31 (.59)	4.62 (.49)	*-2.06*
Culture affects how students experience life stressors.	4.41 (.56)	4.69 (.47)	*-2.31**
Culture influences how students' suicidal thoughts, intent, plans, and attempts are expressed.	4.19 (.82)	4.69 (.47)	*-2.56**
Culture influences what students believe about suicide.	4.38 (.61)	4.62 (.49)	*-1.81*
Culture influences a student's tolerance for psychological pain.	3.97 (.90)	4.56 (.51)	*-2.70**
Culture influences the potential for a student to attempt or re-attempt suicide.	3.84 (1.0)	4.60 (.50)	*-2.96***
I modify suicide assessment procedures based on the culture of the student and family.	2.78 (1.10)	*4.11 (.88)*	*-5.51****

[a]Five-point scale: 1 = strongly disagree, 2 = disagree, 3=not sure, 4=agree, and 5 = strongly agree.

****p*<0.001, ***p*<0.01, **p*<0.05

3.2.1 Relations Between Years of Experience, Previous Suicide Training, and Cultural Beliefs

To determine relations between years of experience and cultural beliefs about suicide, a univariate ANCOVA using the cultural beliefs presurvey scores as the covariate resulted in a nonsignificant covariate and a nonsignificant result across the mean for the categorical variable of the three years of experience levels, $F(2, 19) = 0.68$, $p > 0.50$, $\eta^2_p = .07$. The homogeneity of variances assumption was met using Levene's test, $F(2, 20) = 0.31$, $p = 0.71$. Table 2 provides cultural beliefs score differences across participants' years of experience and hours of previous suicide training received. To

determine relations between hours of previous suicide training and cultural beliefs about suicide, a univariate ANCOVA using the cultural beliefs presurvey scores as the covariate resulted in a nonsignificant covariate and a nonsignificant result across the mean for the categorical variable of the three hours of training levels, $F(2, 21) = 0.04$, $p > 0.50$, $\eta^2_p < .01$. The homogeneity of variances assumption was met using Levene's test, $F(2, 22) = 0.37$, $p = 0.70$.

Table 2. Cultural Beliefs out Suicide Ideation and Response with Years of Experience and Hours of Training

Measure/Group	*N*	*M*	*SD*
Years of Experience Difference/Gain			
Less than 5 years	6	53.30	6.12
6 to 10 years	8	52.75	7.72
More than 11 Years	9	54.55	4.53
Hours of Previous Suicide Training			
Less than 9 hours	10	53.80	4.66
10 to 15 hours	9	54.56	7.73
16 hours or more	6	53.67	5.53

4. Discussion

4.1 Significance of Findings

As youth suicide continues to be a major public health concern, school mental health professionals' role in preventing, assessing, and intervening with students with suicidal ideation is crucial. Moreover, disparities in suicide rates and mental health services for youth across various cultural groups point to the need for culturally informed suicide prevention and response (Lindsey et al., 2019; Ream, 2019). Using a within-group, pretest-posttest design, we investigated the feasibility of leveraging the Culturally Responsive Suicide Prevention in Schools (CRSPiS) professional development training to influence school mental health professionals' beliefs about culture's impact on suicide. Additionally, we examined differences in outcomes across the years of professional experience and the number of hours of previous suicide training received.

To our knowledge, this pilot study is one of the first to examine school mental health professionals' beliefs about culture following a culturally informed suicide prevention professional development program. Our findings suggest that the CRSPiS training is a feasible intervention for increasing participant awareness of culture and suicide. Furthermore, our findings suggest a benefit in using culturally informed suicide prevention training to impact school mental health professionals' beliefs about the influence of culture on suicidal ideation, communication, and behavior. Accounting for culture when conducting suicide assessments and implementing suicide interventions is critical, given Chu et al.'s (2010) findings that culture affects stressors related to suicidal behavior, expressions of suicidality, and meanings associated with stressors and suicide. Additional focus on culture in suicide prevention training is also vital, given the cross-cultural work of mental health professionals in diverse schools. The statistically significant mean increase in beliefs about the cultural impact on suicide in our study provides support for including a targeted focus on culture within other suicide prevention and assessment professional development.

4.2 Implications for an Attitudinal Focus in Professional Development

Our study highlights the importance and benefit of culturally responsive suicide prevention training for school mental health professionals. This benefit is particularly salient for those working in schools with student populations with elevated risk for suicide, including Black youth, LGBTQ youth, and American Indian/Alaska Native youth (American Foundation for Suicide Prevention et al. [AFSP], 2019). Providing targeted professional development for school mental health professionals' beliefs about culture and suicide may lead to changes in their suicide assessment and intervention practices (Castillo et al., 2015). Change in beliefs could ultimately help address gaps in suicide care access for various student populations, such as Black and Latinx youth at risk of suicide who are less likely than White students to access mental health services (Freedenthal, 2007). Our findings show professional development can be important for changing professionals' beliefs, which is supported by Evans' multidimensional approach to professional development (2014).

Professional development facilitators offering similar trainings should guide school mental health professionals to consider how suicide is perceived within their own culture. Examining personal assumptions and beliefs about suicide from a cultural lens allows for a deeper awareness of how cultural beliefs and attitudes might influence this work with students and families. Providing time and space for school mental health professionals to reflect and process within the session is an important aspect of Evan's (2014) approach to professional development, as it moves away from a solely

functional development focus for deeper awareness and internal change. Additionally, professional development facilitators should help school mental health professionals consider the culture of students to provide a more comprehensive response, as scholars suggest one size does not fit all in suicide response (Meza & Bath, 2021). School mental health professionals should have knowledge of cultural stressors and risk factors for suicide that may differ for marginalized youth (Chu et al., 2010). Finally, school mental health professionals must continuously learn about cultural competence to provide culturally responsive suicide assessment, prevention, and intervention services. An attitudinal stance of commitment to continuous learning is critical as culturally specific interventions can improve clients' clinical outcomes, and mental health professionals are advised to consider community contexts, risks, and resilience (Nagayama Hall et al., 2016). Cultural competence is necessary for all aspects of suicide prevention and intervention and should be a central focus of professional development.

Within school systems, school mental health professionals are identified as the experts and are often called upon to provide suicide prevention professional development for other educators. However, they may have training gaps (Erps et al., 2020; Stickl Haugen et al, 2020) that are not addressed if school district leaders do not prioritize targeted professional development about suicide prevention. It is incumbent upon professional development facilitators to identify these training needs and equip school mental health professionals with the attitudes, knowledge, and skills to lead suicide prevention efforts to protect the lives of students at risk for suicide.

4.3 Limitations

There were several limitations to our study including project design and data collection. First, the use of a within-group pretest-posttest design resulted in the lack of a randomized control trial. Furthermore, we collected self-report data on attitudes and beliefs, which may impact the reliability of our findings when accounting for self-report bias. Our small sample size was considered adequate for this study; however, the lack of post-intervention follow-up presents a limitation. Our plans for a six-month follow-up survey to evaluate the longer-term effects of the training were impacted by COVID-19; as such, we were unable to analyze the long-term functional development impacts of the training. Moreover, the small sample size limits the generalizability of our findings. Finally, the BaCISS measure developed for this study based on Chu et al.'s (2010) theory needs further examination with a larger sample size to further validate the measure's psychometric properties.

5. Conclusion

The results of this pilot study indicate that the CRSPiS training may be beneficial in improving school mental health providers' beliefs about and integration of culturally responsive practices in suicide response. Therefore, school leaders should provide opportunities for culturally informed suicide prevention professional development, given the importance of building knowledge and skills in this area. While additional research is needed to further establish its long-term effectiveness in improving beliefs about culture and suicide, initial data indicate that the CRSPiS training effectively shifts beliefs in the short term. Future research can address some of the limitations of the current study. Specifically, future research can investigate the relationship between attitudinal and functional development after professionals complete the CRSPiS training. The readiness of mental health professionals for culturally informed suicide assessment is particularly relevant, given concerns about youth mental health and suicide risk connected to COVID-19 (Hill et al., 2021). Overall, this study provides an essential initial inquiry into the effectiveness of culturally informed suicide prevention training for school mental health professionals. The CRSPiS training offers a tailored approach to mental health professionals' suicide training for school buildings.

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Authors contributions

Dr. Brown and Dr. Edwin contributed equally to the study.

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Competing interests

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

Informed consent

Obtained.

Ethics approval

The Publication Ethics Committee of the Redfame Publishing.

The journal's policies adhere to the Core Practices established by the Committee on Publication Ethics (COPE).

Provenance and peer review

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Data availability statement

The data that support the findings of this study are available on request from the corresponding author. The data are not publicly available due to privacy or ethical restrictions.

Data sharing statement

No additional data are available.

References

American Foundation for Suicide Prevention, American School Counselor Association, National Association of School Psychologists & The Trevor Project (2019). *Model school district policy on suicide prevention: Model language, commentary, and resources* (2nd ed.). https://afsp.org/modelschoolpolicy

American Foundation for Suicide Prevention. (2020). *State laws: Suicide prevention in schools (K-12)*. https://www.datocms-assets.com/12810/1592504862-k-12-schools-issue-brief-6-18-20.pdf

American School Counselor Association. (2022). *ASCA Ethical standards for school counselors*. https://schoolcounselor.org/getmedia/44f30280-ffe8-4b41-9ad8-f15909c3d164/EthicalStandards.pdf

Becnel, A. T., Range, L., & Remley, J. (2021). Suicide, suicide assessment self-efficacy, and workplace anxiety: Implications for training, practice, and research. *The Professional Counselor, 11*(3), 327-339. https://doi.org/10.15241/atb.11.3.327

Brownell, M. T., Steinbrecher, T., Kimerling, J., Park, Y., Bae, J., & Benedict, A. (2014). Dimensions of teacher quality in general and special education. In P. T. Sindelar, E. McCray, M. T. Brownell, & B. Lignugaris-Kraft (Eds.), *Handbook of research on special education teacher preparation* (pp. 423-444). Routledge.

Burns, B. J., Costello, E. J., Angold, A., Tweed, D., Stangl, D., Farmer, E. M., & Erkanli, A. (1995). Children's mental health service use across service sectors. *Health Affairs, 14*(3), 147-159. https://doi.org/10.1377/hlthaff.14.3.147

Castillo, J. M., Dedrick, R. F., Stockslager, K. M., March, A. L., Hines, C. V., & Tan, S. Y. (2015). Development and initial validation of a scale measuring the beliefs of educators regarding response to intervention. *Journal of Applied School Psychology, 31*, 1-30. https://doi.org/10.1080/15377903.2014.938282

Centers for Disease Control and Prevention (CDC). (2020). *Leading causes of death reports, national and regional, 1999–2018*. https://webappa.cdc.gov/sasweb/ncipc/leadcause.html

Chu, J. P., Goldblum, P., Floyd, R., & Bongar, B. (2010). The cultural theory and model of suicide. *Applied and Preventive Psychology, 14*, 25-40. https://doi.org/10.1016/j.appsy.2011.11.001

Chu, J., Khoury, O., Ma, J., Bahn, F., Bongar, B., & Goldblum, P. (2017). An empirical model and ethnic differences in cultural meanings via motives for suicide. *Journal of Clinical Psychology, 73*(10), 1343-1359. https://doi.org/10.1002/jclp.22425

Chu, J., Maruyama, B., Batchelder, H., Goldblum, P., Bongar, B., & Wickham, R. E. (2020). Cultural pathways for suicidal ideation and behaviors. *Cultural Diversity & Ethnic Minority Psychology, 26*(3), 367-377. https://doi.org/10.1037/cdp0000307

Chu, W., Wippold, G., & Becker, K. D. (2022). A systematic review of cultural competence trainings for mental health

providers. *Professional Psychology: Research and Practice, 53*(4), 362-371. https://doi.org/10.1037/pro0000469

Cohen, J. (1988). *Statistical power analysis for the behavioral sciences* (2nd ed.). Lawrence Erlbaum Associates.

Dameron, M. L., Foxx, S. P., & Flowers, C. (2019). The impact of race, gender, and socioeconomic status on school counselors' alternative learning program placement decisions: An experimental study. *The Urban Review, 51*(5), 699-723. https://doi.org/10.1007/s11256-019-00502-9

Day, C. (2002). *Developing teachers: The challenges of lifelong learning* (1st ed.). Routledge. https://doi.org/10.4324/9780203021316

Douglas, K. A., & Morris, C. A. W. (2015). Assessing counselors' self-efficacy in suicide assessment and intervention. *Counseling Outcome Research and Evaluation, 6*(1), 58-69. https://doi.org/10.1177/2150137814567471

Erps, K. H., Ochs, S., & Myers, C. L. (2020). School psychologists and suicide risk assessment: Role perception and competency. *Psychology in the Schools, 57*(6), 884-900. https://doi.org/10.1002/pits.22367

Evans, L. (2002). What is teacher development?. *Oxford Review of Education, 28*(1), 123-137. https://doi.org/10.1080/03054980120113670

Evans, L. (2008). Professionalism, professionality and the development of education professionals. *British Journal of Educational Studies, 56*(1), 20-38. https://doi.org/10.1111/j.1467-8527.2007.00392.x

Evans, L. (2014). Leadership for professional development and learning: Enhancing our understanding of how teachers develop. *Cambridge Journal of Education, 44*(2), 179-198. https://doi.org/10.1080/0305764x.2013.860083

Freedenthal, S. (2007). Racial disparities in mental health service use by adolescents who thought about or attempted suicide. *Suicide and Life-Threatening Behavior, 37*(1), 22-34. https://doi.org/10.1521/suli.2007.37.1.22

Hill, R. M., Rufino, K., Kurian, S., Saxena, J., Saxena, K., & Williams, L. (2021). Suicide ideation and attempts in a pediatric emergency department before and during COVID-19. *Pediatrics, 147*(3), e2020029280. https://doi.org/10.1542/peds.2020-029280

Joe, S., Canetto, S. S., & Romer, D. (2008). Advancing prevention research on the role of culture in suicide prevention. *Suicide and Life-Threatening Behavior, 38*(3), 354-362. https://doi.org/10.1521/suli.2008.38.3.354

Klibert, J., Barefoot, K. N., Langhinrichsen-Rohling, J., Warren, J. C., & Smalley, K. B. (2015). Cross-cultural and cognitive-affective models of suicide risk. *Journal of Black Psychology, 41*(3), 272-295. https://doi.org/10.1177/0095798414525967

Kognito. (2023). *At-risk for PK-12 educators*. https://kognito.com/products/at-risk-for-high-school-educators

Larson, L. M., & Daniels, J. A. (1998). Review of the counseling self-efficacy literature. *Counseling Psychologist, 26*, 179-218.

Lauterbach, A. A., Harrington, K., Yakut, A. D., & Krezmien, M. (2018). School counselor knowledge, beliefs, and practices related to the implementation of standards-based comprehensive school counseling in the United States. *Journal of School-Based Counseling Policy and Evaluation, 1*(1), 1-16. https://doi.org/10.25774/7hhc-x195

Lindsey, M. A., Sheftall, A. H., Xiao, Y., & Joe, S. (2019). Trends of suicidal behaviors among high school students in the United States: 1991–2017. *Pediatrics, 144*(5), e20191187. https://doi.org/10.1542/peds.2019-1187

Mann, J. J., Apter, A., Bertolote, J., Beautrais, A., Currier, D., Haas, A., ... & Hendin, H. (2005). Suicide prevention strategies: A systematic review. *JAMA: The Journal of the American Medical Association, 294*(16), 2064-2074. https://doi.org/10.1001/jama.294.16.2064

McCabe, P. C., Rubinson, F., Dragowski, E. A., & Elizalde-Utnick, G. (2013). Behavioral intention of teachers, school psychologists, and counselors to intervene and prevent harassment of LGBTQ youth: Preventing LGBTQ harassment in schools. *Psychology in the Schools, 50*(7), 672-688. https://doi.org/10.1002/pits.21702

Meza, J. I., & Bath, E. (2021). One size does not fit all: Making suicide prevention and interventions equitable for our increasingly diverse communities. *Journal of the American Academy of Child and Adolescent Psychiatry, 60*(2), 209-212. https://doi.org/10.1016/j.jaac.2020.09.019

Mo, P. K. H., Ko, T. T., & Xin, M. Q. (2018). School-based gatekeeper training programmes in enhancing gatekeepers' cognitions and behaviours for adolescent suicide prevention: A systematic review. *Child and Adolescent Psychiatry and Mental Health, 12*(29). https://doi.org/10.1186/s13034-018-0233-4

Morris, K. (1998). *Suicide Lethality Assessment Profile, Revised*. Saginaw Community Mental Health.

Nagayama Hall, G. C., Ibarki, A. E., Huang, E. R., Marti, N., & Stice, E. (2016). A meta-analysis of cultural adaptations

of psychological interventions. *Behavior Therapy, 47*, 993-1014. https://doi.org/10.1016/j.beth.2016.09.005

National Association of School Psychologists. (2020). *The professional standards of the National Association of School Psychologists*. https://www.nasponline.org/standards-and-certification/professional-ethics

Office of the U.S. Surgeon General. (2021). *Protecting youth mental health: The U.S. Surgeon General's advisory*. U.S. Department of Health and Human Services. https://www.hhs.gov/sites/default/files/surgeon-general-youth-mental-health-advisory.pdf

QPR Institute. (2023*). QPR (Question, Persuade, Refer)*. QPR Institute. http://www.qprinstitute.com/

Ream, G. L. (2019). What's unique about lesbian, gay, bisexual, and transgender (LGBT) youth and young adult suicides? Findings from the National Violent Death Reporting System. *Journal of Adolescent Health, 64*(5), 602-607. https://doi.org/10.1016/j.jadohealth.2018.10.303

Ryan, C., Huebner, D., Diaz, R. M., & Sanchez, J. (2009). Family rejection as a predictor of negative health outcomes in white and Latino lesbian, gay, and bisexual young adults. *Pediatrics, 123*(1), 346-352. https://doi.org/10.1542/peds.2007-3524

Schmidt, R. C. (2016). Mental health practitioners' perceived levels of preparedness, levels of confidence and methods used in the assessment of youth suicide risk. *The Professional Counselor, 6*(1), 76-88. https://doi.org/10.15241/rs.6.1.76

Stickl Haugen, J., Waalkes, P. L., & Lambie, G. W. (2020). *School counselors and youth suicide: School counselors' experiences with suicide risk assessments, postvention, and student death by suicide* [Research report]. https://www.multibriefs.com/briefs/psca/ResearchReportSuicide.pdf

Sue, D. W., Arredondo, P., & McDavis, R. J. (1992). Multicultural counseling competencies and standards: A call to the profession. *Journal of Counseling and Development, 70*, 477-486. https://doi.org/10.1002/j.1556-6676.1992.tb01642.x

Suicide Prevention Resource Center. (2020). *A comprehensive approach to suicide prevention*. http://www.sprc.org/effective-prevention/comprehensive-approach

Timmons-Mitchell, J., Albright, G., McMillan, J., Shockley, K., & Cho, S. (2019). Virtual role-play: Middle school educators addressing student mental health. *Health Behavior and Policy Review, 6*(6), 546-557. https://doi.org/10.14485/hbpr.6.6.1

U.S. Department of Health and Human Services (HHS) Office of the Surgeon General and National Action Alliance for Suicide Prevention. (2012). *2012 National strategy for suicide prevention: Goals and objectives for action*. https://theactionalliance.org/resource/revised-national-strategy-suicide-prevention-2012

Wallace, C. S., & Kang, N. (2004). An investigation of experienced secondary science teachers' beliefs about inquiry: An examination of competing belief sets. *Journal of Research in Science Teaching, 41*(9), 936-960.

Walsh, E., Hooven, C., & Kronick, B. (2013). School-wide staff and faculty training in suicide risk awareness: Successes and challenges. *Journal of Child and Adolescent Psychiatric Nursing, 26*(1), 53-61. https://doi.org/10.1111/jcap.12011

Yang, L. H., Lam, J., Vega, E., Martinez, M., Botcheva, L., Hong, J. E., Chu, J., & Lewis, S. E. (2018). Understanding the impact of community on the experience of suicide within the Lao community: An expansion of the cultural model of suicide. *Asian American Journal of Psychology, 9*(4), 284-295. https://doi.org/10.1037/aap0000131