



Effect of School Counselor Training on Self-Efficacy in Crisis Handling

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Abstract

We presented a 4-hour training program designed to enhance school counselors' self-efficacy in handling school crises, with a specific focus on school shootings. Employing a pretest-posttest research design using the School Counselor Response to Violent Crisis Questionnaire, we found that the training was effective in improving the self-efficacy of participants ($n = 35$) in crisis handling. We discovered, in our pilot study, that crisis training specifically tailored to school counselors can be effective in enhancing their self-efficacy in crisis handling. We discuss our study's implications for school counselors, workshop leaders, school leaders, and researchers.

Keywords: *school crisis, school counselor, crisis preparation and response, school shooting, self-efficacy*

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Introduction

The World Health Organization (WHO) announced that COVID-19 had officially become a pandemic on March 11, 2020 (Katella, 2021). The impact of the disease has since surpassed health issues alone and has affected how humans interact in daily life. This is apparent in the protocols and policies implemented by school districts in the United States immediately after WHO's declaration. For instance, schools nationwide determined that, to keep students safe, it was critical that they stay home and participate in virtual learning instead of face-to-face learning (U.S. Department of Education, 2021b). Although this approach had good intentions, there were many consequences, such as students experiencing learning loss (U.S. Department of Education, 2021a) and an increase in youth exposure to violence (SAMHSA, 2020). According to SAMHSA (2014), frequent exposure to violence is significantly related to youth trauma, anxiety, and stress.

In 2022, a year after the COVID-19 outbreak, the increased prevalence of these factors led *Education Week*, a reputable news organization, to publish a renewed call to action for the prevention of the potential rise in school shootings, as schools began switching from virtual and hybrid learning back to face-to-face education (Will, 2021). *Education Week* began tracking school shootings immediately before the pandemic (i.e., 2018). The news outlet would eventually report that the highest number of school shootings recorded ($n = 35$) had occurred during 2021, when more schools reinstated face-to-face classes, and the following year was even higher (i.e., 2022, $n = 51$; *Education Week*, 2022). Professional school counselors seem to have been cognizant of the potential rise in school crises and violence. Of the 7,000 survey responses (87% of which were returned by school counselors) regarding the state of school counseling, 83% reported desiring additional training in school crisis and violence (ASCA, 2021).

Our current study helps meet the training needs of professional school counselors by providing insight on an evidence-based training program created to enhance the self-efficacy of professional school counselors in preparation and response to school shootings. Specifically, our **study assessed school counselors' self-efficacy before and after the training program that was based on the School Counselors' Response to School Shootings: Framework of Recommendations (SCRSS-FR)**.

Literature Review

Counselor Self-Efficacy

Perceived self-**efficacy is strongly related to one's belief in** their abilities to conceptualize and perform the required tasks that result in a given goal (Bandura, 1997). Bandura (1997) explained the importance of perceived self-efficacy:

People's beliefs in their efficacy have diverse effects. Such beliefs influence the course of action people choose to pursue, how much effort they put forth in given endeavors, how long they will persevere in the face of obstacles and failures, their resilience to adversity, whether their thought patterns are self-hindering or self-aiding, how much stress and depression they experience in coping with taxing environmental demands, and the level of accomplishments they realize. (p. 3)

By the late 1990s, counseling professionals and researchers were particularly interested in counseling practice and practitioner (or counseling) self-efficacy. Larson and Daniels (1998) conducted a review of counseling self-efficacy over a 10-year period. In the review of more than 30 publications, they defined self-efficacy for counselors as a self-belief in their abilities to effectively counsel in a future situation. Findings from the review prompted them **to highlight the lack of variety in methods of measuring counselors' ability to self-evaluate** their counseling skills and that there was a need to go beyond the assessment of basic skills to more critical skills. To do so, researchers would need to operationalize an array of counselor actions and develop conceptual frameworks that address various complex actions or situations.

Counselor Self-Efficacy in Crisis Preparation and Response

Crisis preparation and response has been a particular area of interest for researchers of counselor self-efficacy and related conceptual frameworks. For instance, Sawyer et al. (2013) examined the self-efficacy of more than 30 counseling students taking one course in crisis preparation and response. Using an instrument specifically developed for the study, their findings illustrated the importance of high self-efficacy or confidence in their knowledge of crisis response, particularly for new counselors. Sawyer and colleagues **urged that "professional development efforts should make every effort to embed opportunities for experiences that will improve the confidence levels"** (p. 39). Subsequently, Douglas and Wachter Morris (2015) examined the self-efficacy of

more than 320 counseling students, faculty, staff, and practitioners (e.g., mental health and school counselors) in relation to suicide assessment. Again, using an instrument specifically developed for the study, they found there to be a need to measure the self-efficacy of counselors regarding specific tasks when conducting suicide assessments. One finding from their study was that counselors in training felt more capable of **assessing a client's suicidal history than other tasks, such as assessing a client's current suicidal ideation**. According to Douglas and Wachter Morris (2015), collecting this type of information (i.e., measuring self-efficacy or confidence levels of counselors) could be a factor in the evaluation of perceived deficit areas to better equip counselors in crisis preparation and interventions. Then, Greene et al. (2016) used the preparation, action, recovery (PAR) framework (McAdams & Keener, 2008) to teach crisis competencies (as dictated by the Council for Accreditation of Counseling and Related Educational Programs [CACREP], 2009) in a practicum course to counselors in training. Greene and colleagues claimed to be the first to conduct an empirical study using the PAR framework to assess the self-efficacy of 24 practicum students before, during, and after the course. The results showed increases in student crisis counseling self-efficacy throughout the course progression. In addition, Peters et al. (2017) followed up their previous study (Sawyers et al., 2013) by examining the self-efficacy of more than 170 counseling students taking coursework in crisis preparation and intervention. Using an instrument specifically developed for the study, they found that more targeted and specific crisis training can significantly impact feelings of inadequacy related to preparation and performance in various crisis situations. Although this was a meaningful study, Peters and colleagues insisted that counselors should engage in professional development that will improve their self-efficacy or confidence levels with respect to specific crisis situations.

Counselor Self-Efficacy in Preparation and Response to School Shootings

Professional school counselors (PSCs) are not only ethically required to make reasonable efforts to curb school violence (Hermann & Finn, 2002), but should also, according to the ASCA professional competencies and standards, be knowledgeable and competent in responding to a school crisis situation (ASCA, 2012, 2019). In **fact, PSCs are expected to “meet the needs of the individual, group, or school community before, during, and after crisis response” by using a myriad of appropriate strategies and interventions (ASCA, 2019, p. 99)**. Although PSCs must be competent in responding to school crises, it is evident that not all crises are the same. School shootings are considered situational crises (Brammer, 1979), as they are random events that often result in significant loss (Böckler et al., 2013), and they happen in phases: before, during, and after the event (U.S. Department of Education, 2013; U.S. Department of Justice, 2012). Thus, it is important that school counselors are competent in knowing how to appropriately prepare, respond, and recover from school shootings.

Although many existing counseling education programs meet the CACREP recommendation that responding to crises be included in the counselor education curriculum (CACREP, 2022), researchers and practitioners have found this to be a good, but insufficient, starting point (ASCA, 2021; Dupre et al., 2014; Minton & Pease-Carter, 2011). Additional training should include a more practical and comprehensive framework to help PSCs further develop their knowledge of crisis response (Dupre et al., 2014; Greene et al., 2016; Steeves et al., 2017).

School Counselors' Response to School Shootings: Framework of Recommendations (SCRSS-FR)

Although there are published models that focus on preparing an array of school-based mental health practitioners (Brock et al., 2009; McAdams & Keener, 2009), the SCRSS-FR is the only evidence-based conceptual framework solely intended to prepare school counselors to respond to a school shooting (Brown, 2020; Katsiyannis et al., 2022). The SCRSS-FR is grounded in a theoretical foundation and includes a sequential phase progression. The phases provide explanation and application to prepare school counselors for precrisis, in-crisis, and postcrisis response and intervention. A more in-depth description of the framework can be found in the work of Brown (2020). Brown recommends that educators use the framework

during training as an instrument to assess school **counselors'** needs or limitations. We **used Brown's (2020)** recommendations for our study.

Purpose

Our pilot study aims to help bridge the gap in the training and developmental needs of PSCs in the field of crisis training. It follows the recommendation of previous similar studies to use a research-informed framework to train and **assess school counselors' self-efficacy** related to a specific area in school crisis: school shootings (Douglas & Wachter Morris, 2015; Greene et al., 2016; Sawyer et al., 2013). The primary author, in collaboration with a colleague whose expertise in research also focuses on crisis intervention and response, developed a 4-hour, two-stage training program based on current research and federal guidelines. Stage 1 of the training educates participants on best practices and processes related to crisis planning. Stage 2 of the **training educates participants on the counselors' role in crisis planning and situations related to school shootings**. Pretraining and posttraining, **participants' self-efficacy** was assessed related to their competencies in preparing for and responding to a school shooting. The following research question was investigated:

Is there a significant difference between school counselors' perceptions of self-efficacy in any of the dimensions of school violent crisis handling, as indicated by the School Counselor Response to Violent Crisis Questionnaire (SRC-Q), before and after receiving a training program?

Overall, we hypothesized that participation in the training program based on the SCRSS-FR would result in **increases in school counselors' self-efficacy** in handling violent school crises.

Methods

Our **study aimed to investigate the impact of a training program on school counselors' perceptions of self-efficacy** in handling violent school crises. The SCRSS-FR was used as a guide to educate and assess **counselors' self-efficacy** in six subdomains of crisis handling, including Precrisis Preparation, Precrisis Awareness, In-Crisis Protocol, In-Crisis Awareness, Postcrisis Recovery, and Postcrisis Awareness. We used a pretest and posttest design to compare **school counselors' self-efficacy** in crisis handling before and after the training program.

The participants of the study were school counselors who were recruited from different schools in the same region. The counselors completed the SRC-Q questionnaire twice, once before and once after the training program. The data were analyzed using paired-sample *t*-tests and Wilcoxon signed-rank tests to compare the means of the two sets of scores. The paired-sample *t*-test is one of the most widely used tests to examine the comparison of mean values between two matched samples (Xu et al., 2017). The *t*-test can be used for comparing pretest and posttest data in intervention research to investigate if the intervention or training impacts a change in the outcome scores (Watson et al., 2021). G-Power software was used to determine the sample size, and data cleaning was conducted before analysis to remove outliers and incomplete data.

We present a detailed description of the methods used in the study, including the participant selection, the research instrument, the procedures used, the data analysis plan, and the results. By providing a comprehensive account of the study methods, we aim to enhance the transparency and reproducibility of the research, as well as to facilitate future research in the area of school counselor training and crisis handling.

Participants

We recruited 41 school counselors across grade levels from four different school districts in the El Paso area to participate in the crisis training workshop. After data verification, we removed six potential participants who

did not respond to more than 80% of the questions across the measurement. The demographic characteristics of the participants (a total of 35 school counselors) were reported as follows: the participants were predominantly female ($n = 27$; 77.1%) and Hispanic ($n = 30$; 85.7%), with the most frequent age groups being 36–45 years old ($n = 10$; 28.6%) and 46–55 years old ($n = 10$; 28.5%). In terms of school counseling experience, the majority of participants ($n = 11$; 31.4%) had 7–10 years of experience followed by 0–3 years ($n = 9$; 25.7%). The most common type of crisis team with which participants currently worked was the building-level school crisis management team ($n = 10$; 28.6%), followed by the building-level school crisis response team ($n = 7$; 20%). Participants came from different school districts, including (pseudonyms) AISD (24), BISD (3), CIRD (2), and DISD (6). The number of enrolled students, number of school counselors, and the general ethnicity breakdown for each school district for the academic year were also collected and are presented in Table 1.

Table 1. *District Demographics*

District	Type	Enrollment	Total PSCs	Race/Ethnicity
AISD	Major Suburban District	11,510	30	Black or African American (43) American Indian or Alaska Native (32) Asian (11) Hispanic (10,958) White (401) Two or More Races (65)
BISD	Major Suburban District	3,874	10	Black or African American (0) American Indian or Alaska Native (0) Asian (0) Hispanic (3,858) White (16) Two or More Races (0)
CIRD	Rural District	863	2	Black or African American (0) American Indian or Alaska Native (0) Asian (0) Hispanic (837) White (26) Two or More Races (0)
DISD	Major Suburban District	6,062	17	Black or African American (34) American Indian or Alaska Native (7) Asian (24) Hispanic (5,723) White (246) Two or More Races (28)

For each school district, the number of credentialed counselors employed during the academic year was collected, with AISD having the highest number (30) and CIRD having the lowest (2). The sampling method involved disseminating announcements about the crisis training workshop to school counselors through district supervisors. Participants who met the approval process criteria were given the opportunity to attend the workshop during school hours. Participants were asked about their expectations for the training in an

email sent by the district supervisors at the request of the workshop leaders. Responses included the following: best practices when creating/implementing a crisis plan, crisis team members roles and responsibilities, crisis plan components, expected crisis plan protocol for school counselors, school counselor role in a crisis (preparation/planning).

Of the possible participants, 41 of 59 counselors (69%) participated in the workshop. The total number of submitted presurveys and postsurveys was 41, but six surveys were removed due to incomplete data (i.e., more than 20% missing some responses to questions), resulting in a total of 35 responses to analyze. A priori power analysis using G-Power 3.1 suggested that a sample size of more than 31 would **be necessary** ($\alpha = .05$, Power = .85) to detect a small to moderate effect size. Based on the available data, we had a sample size of 35, which exceeded the recommended sample size.

Instrument

We used the SRC-Q, with permission, to assess the self-efficacy of PSCs in handling violent school crises. The SRC-Q is research based and aligns with the SCRSS-FR. Both were developed by the same author (Brown, 2020) and are grounded in theoretical basis, school crisis research, and research-informed federal guidelines.

The purpose of the instrument was to measure school counselors' self-efficacy in crisis management. The instrument had a total of 33 items divided into six sections. Each item was rated on a 5-point Likert scale, ranging from 1 indicating **“not confident”** to 5 indicating **“very confident.”**

The nature of the items varied across the six sections of the questionnaire. The first section had seven items related to the self-**efficacy of PSCs' abilities in preparing for a violent school crisis**. The second section had five items related to the self-**efficacy of PSCs' knowledge of how to prepare for a violent school crisis**. The third section had five items related to the self-**efficacy of PSCs' abilities in responding during a violent school crisis**. The fourth section had four items related to the self-**efficacy of PSCs' knowledge of how to respond during a violent school crisis**. The fifth section had eight items related to the self-**efficacy of PSCs' abilities in responding after a violent school crisis**. The sixth section had four items related to the self-**efficacy of PSCs' knowledge of how to respond after a violent school crisis**.

The instrument's validity was established by grounding it in theoretical basis, school crisis research, and research-informed federal guidelines. The instrument's face and content validity were established by an expert panel (Brown, 2020). With the assistance of the panel and review of the instrument by more than 30 preservice counselors, the questionnaire has progressed through five versions before reaching the current version (Form E). To date, the questionnaire has undergone changes in structure, emphasis, specificity, and content. For example, in respect to the structure, the sentence stems have changed to **emphasize “confidence” over “doing.” Specifically, a previous version sentence stem included “Precrisis Preparation: Preparation for a school shooting includes ...,” whereas the current version was changed to “Phase One—Precrisis—Preparation: I am confident in my ability to” Thus, the emphasis changed to better assess self-efficacy in articulating crisis-counseling strategies and interventions, implementing crisis expectations, and being aware of personal limitations and the emotional impact of a crisis.** The current questionnaire is more specifically focused on **overall confidence in one's abilities and knowledge in crisis situations; this is evident in the content questions, which precisely assess the participant's confidence in their ability to handle crisis situations and their overall knowledge of crisis counseling and recovery.** Another example of the specificity and content change is as follows: **“Postcrisis Recovery: Responding after a school shooting includes ... [item] performing psychological triage” was changed to (in the latest version) “Phase Five—Postcrisis Recovery: I am confident in my ability to ... [item] implement psychological triage.”**

Our study was a pilot study that assists with further refining the questionnaire. The instrument's reliability was calculated using Cronbach's alpha, which was $\alpha = .95$, $\alpha = .90$, $\alpha = .95$, $\alpha = .97$, $\alpha = .97$, and $\alpha = .96$, respectively, for the first to the sixth subfactors.

Procedures

The workshop was 4 hours. The leader and directors of school counselors from four regional school districts assisted with organizing the workshop. Before the workshop, school counselors who had expressed interest in attending were asked what they would like from the training. There were 18 responses, and two main themes emerged in the requests: best practices and/or process for creating and/or developing a crisis plan and the school counselor's role in crisis planning and a crisis situation (other than suicide).

Workshop leaders were assigned to facilitate the learning of each theme. Workshop Leader 1, a scholar of crisis preparation and planning, has taught crisis counseling courses, workshops, and presentations and has published on the topic for more than 3 decades. Workshop Leader 1 facilitated the learning of the first theme. Workshop Leader 2 is a scholar of crisis preparation and planning with a particular focus on school counseling and has more than a decade of experience teaching crisis counseling courses, workshops, and presentations, and has published on the topic. Workshop Leader 2 facilitated the learning of the second theme. Before either part of the workshop began, participants signed their informed consent and completed a presurvey. Simultaneously, Workshop Leader 1 proceeded with introductions before beginning the interactive workshop.

Part 1

Workshop Leader 1 facilitated Part 1 of the training, which was aligned with the Federal Emergency Management Agency's (FEMA) steps for developing a crisis plan (FEMA, n.d.). These included identifying, defining, and forming types of crisis teams; exploring and customizing the crisis team's purpose via the situation; determining the end goal and objectives and identifying decision points (and/or probable courses of action); formatting, writing, reviewing, and obtaining approval for the overall plan; and implementing, practicing, assessing, revising, and maintaining a flexible plan.

Workshop Leader 1 allowed participants to stay within their district teams to determine where their districts were in the five-stage process, ideas for filling the gaps, and planning for moving forward. Workshop Leader 1 also provided scenarios to consider that might assist with planning, using specific questions, **such as "what might be the actions taken when an intruder enters a classroom or is observed lighting fires?"** Throughout these small- and large-group discussions, key concepts were explored further, including threat assessments, fast and frugal decision trees for safety, various exercises (e.g., tabletop [critical discussion of various hypothetical possibilities], drill [coordinated and supervised operation for practice and maintaining skills], full scale [multilevel coordination deployed as if responding to a real situation]), as well as communication and coordination.

Part 2

Workshop Leader 2 was specifically focused on the school counselor's role not only in the five steps aligned in Part 1 but also in using school shootings as example scenarios. Workshop Leader 2 guided the participants through the SCRSS-FR. The workshop leader discussed the background, research, and development of the framework and explained each phase, afterward describing how to activate or perform each phase (see Brown, 2020).

Throughout the activation sections of the training, participants discussed ways of implementing recommendations at their sites in small and large groups. Toward the end of the workshop, participants had the opportunity to highlight central themes and lessons they had learned and would take to their campus. For **example, one district team shared ways to get more school counselors on their school's crisis teams.**

Data Analysis

Our study aimed to assess the effectiveness of an intervention training program on school counselors' self-efficacy in handling violent school crises. Self-efficacy was measured using the SRC-Q in six dimensions. Data were analyzed by using IBM SPSS Statistics (Version 27) with paired-sample *t*-tests, with a sample size of 35 participants. Using statistical power analysis a sample size of at least 31 participants ($\alpha = .05$, Power = .85) was recommended. The analysis method was supported by previous studies, such as Greene et al. (2016), Lenz et al. (2020), and Watson et al. (2021). The normality test for the difference scores between the pre- and postintervention subscores was examined to ensure that assumptions of the paired-sample *t*-test analysis were met. Based on the Shapiro-Wilk Test of normality, the *t*-tests of three subdomains of Precrisis Preparation, In-Crisis Protocol, and Postcrisis Recovery ($p > .05$) were interpreted as normally distributed, while the Wilcoxon signed-rank tests of three subdomains of Precrisis Awareness, In-Crisis Awareness, and Postcrisis Awareness were interpreted as nonnormally distributed ($p < .05$).

Results

Descriptive Statistics

The means and standard deviations of the six subdomains of self-efficacy in crisis handling, as indicated by the SRC-Q, were computed before and after the training program. The mean and standard deviation of each subdomain before the intervention are as follows: (a) Precrisis Preparation ($M = 18.17$, $SD = 6.38$), (b) Precrisis Awareness ($M = 13.43$, $SD = 4.29$), (c) In-Crisis Protocol ($M = 13.89$, $SD = 4.65$), (d) In-Crisis Awareness ($M = 13.40$, $SD = 4.15$), (e) Postcrisis Recovery ($M = 21.66$, $SD = 7.61$), and (f) Postcrisis Awareness ($M = 12.43$, $SD = 4.32$). The values before and after the intervention are displayed in Table 2.

Main Analysis

A total of 35 responses were used for the main analysis. Paired sample *t*-tests and Wilcoxon signed-rank tests were conducted to compare self-efficacy in crisis handling before and after the training, based on the SCRSS-FR. There were significant differences in the six subscores of self-efficacy in crisis handling.

First, there was a statistically significant increase ($t [33] = 5.29$, $p < .001$) in the posttraining scores in self-efficacy of Precrisis Preparation ($M = 22.44$, $SD = 5.904$) compared with the pretraining scores in self-efficacy of Precrisis Preparation ($M = 17.91$, $SD = 6.283$). **Cohen's *d*** was 0.92, which was interpreted as large (Cohen, 1988).

Second, a Wilcoxon signed-rank test indicated that posttraining scores in self-efficacy of Precrisis Awareness ($M = 16.71$, $SD = 4.116$, $Mdn = 17$) were statistically significantly higher ($Z = -3.963$, $p < .05$) than pretraining scores in self-efficacy of Precrisis Awareness ($M = 13.44$, $SD = 4.357$, $Mdn = 13$). The effect size of calculated *r* was -0.48 , which was interpreted as medium.

Third, there was a statistically significant increase ($t [34] = 4.52$, $p < .001$) in the posttraining scores in self-efficacy of In-Crisis Protocol ($M = 17.11$, $SD = 4.391$) compared with the pretraining scores in self-efficacy of In-Crisis Protocol ($M = 13.89$, $SD = 4.645$). **Cohen's *d*** was 0.73, which was interpreted as medium (Cohen, 1988).

Fourth, a Wilcoxon signed-rank test indicated that, after training, scores in self-efficacy of In-Crisis Awareness ($M = 14.69$, $SD = 3.529$, $Mdn = 16$) were statistically significantly higher ($Z = -2.070$, $p < .05$) than before-training scores in self-efficacy of In-Crisis Awareness ($M = 13.40$, $SD = 4.153$, $Mdn = 14$). The effect size of calculated *r* was -0.25 , which was interpreted as small.

Fifth, there was a statistically significant increase ($t [34] = 4.819, p < .001$) in the posttraining scores in self-efficacy of the Postcrisis Recovery ($M = 25.66, SD = 6.544$) compared with the pretraining scores in self-efficacy of the Postcrisis Recovery ($M = 21.66, SD = 7.608$). **Cohen's d** was 0.83, which was interpreted as large (Cohen, 1988).

Last, a Wilcoxon signed-rank test indicated that posttraining scores in self-efficacy of Postcrisis Awareness ($Mdn = 16$) were statistically significantly higher ($Z = -3.792, p < .05$) than before-training scores in self-efficacy of Postcrisis Awareness ($Mdn = 12$). The effect size of calculated r was -0.45 , which was interpreted as small.

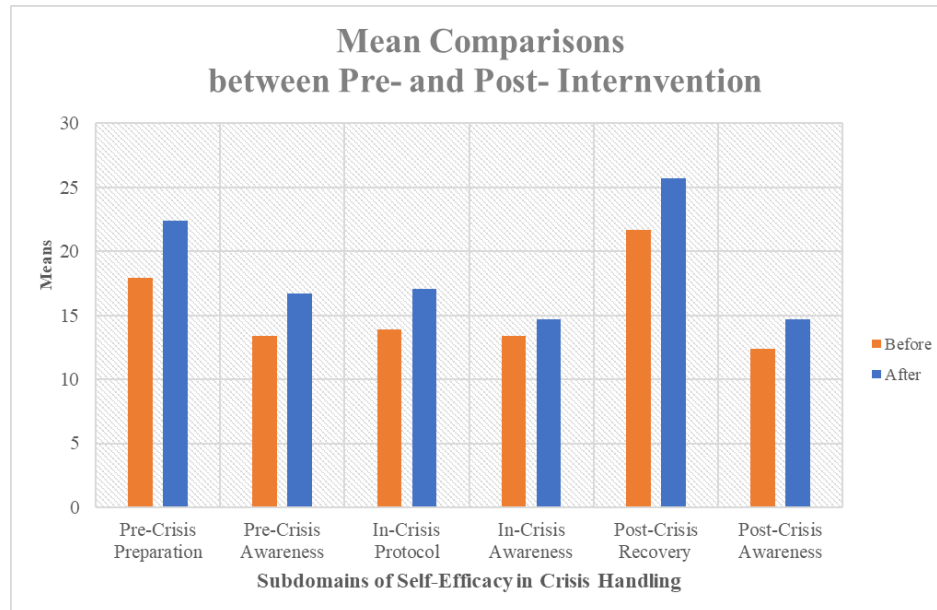
In summary, paired-sample t -tests and Wilcoxon signed-rank tests were conducted to compare the self-efficacy in crisis handling before and after the training program. The results of the statistical analyses are presented in Table 2. The results showed a significant increase in self-efficacy scores in all six subdomains of crisis handling after the training program. Specifically, the mean scores of Precrisis Preparation, In-Crisis Protocol, and Postcrisis Recovery were significantly higher after the training program than before, as indicated by paired-sample t -tests ($p < .001$). Similarly, the mean scores of Precrisis Awareness, In-Crisis Awareness, and Postcrisis Awareness were significantly higher after the training program than before, as indicated by Wilcoxon signed-rank tests ($p < .05$) (see Figure 1). Cohen's d was calculated for each subdomain to determine the effect size of the training program. The results showed small-to-medium effect sizes across **all six subdomains of crisis handling, as indicated by Cohen's d** values ranging from 0.73 to 0.92 and calculated r ranging from -0.25 to -0.48 .

Table 2. Means, Standard Deviations, and Significance Levels of Paired-Sample t -Tests and Wilcoxon Signed-Rank Tests

Subdomain	Before Intervention		After Intervention		Effect Size	p
	Mean	Standard Deviation	Mean	Standard Deviation		
Precrisis Preparation	17.9	6.3	22.4	5.9	0.92	$p < .001$
Precrisis Awareness	13.4	4.4	16.7	4.1	-0.48	$p < .001$
In-Crisis Protocol	13.9	4.6	17.1	4.4	0.73	$p < .001$
In-Crisis Awareness	13.4	4.2	14.7	3.5	-0.25	$p < .05$
Postcrisis Recovery	21.7	7.6	25.7	6.5	0.83	$p < .001$
Postcrisis Awareness	12.4	4.3	14.7	3.0	-0.45	$p < .001$

Note: p values of three subdomains of Precrisis Preparation, In-Crisis Protocol, and Postcrisis Recovery are based on t -tests; three subdomains of Precrisis Awareness, In-Crisis Awareness, and Postcrisis Awareness are based on Wilcoxon signed-rank tests. Accordingly, the effect size numbers for t -tests are based on Cohen's d and the effect size numbers for Wilcoxon signed-rank tests are based on calculated $r = Z/\sqrt{N}$.

Figure 1. Mean Comparisons Between Pre- and Postintervention



Discussion

The hypothesis was that a training program would improve school counselors' self-efficacy in handling violent crises. The results of the analyses indicate that this specific training program was effective in improving the self-efficacy of school counselors in the six subdomains of crisis handling, including precrisis preparation, precrisis awareness, in-crisis protocol, in-crisis awareness, postcrisis recovery, and postcrisis awareness. These findings are consistent with previous research on the effectiveness of training programs in enhancing the self-efficacy of school counselors in crisis handling (Douglas & Wachter Morris, 2015; Greene et al., 2016; Peters et al., 2017; Sawyer et al., 2013).

Considering the lack of instruments designed to assess the self-efficacy of a school counselor's perception of crisis handling, the current study used a research-based instrument specifically designed for the study. This approach aligns with other researchers who emphasized that this is appropriate when addressing targeted and specific crisis-handling situations (Douglas & Wachter Morris, 2015; Peters et al., 2017; Sawyer et al., 2013). Greene et al. (2016) were the first to conduct an empirical study using the PAR framework to assess 24 practicum students' self-efficacy before, during, and after the course. In developing crisis-counseling training, previous researchers have recommended (Morris & Minton, 2012) and used (Greene et al., 2016) the research-informed mental health crisis phase progression dimensions developed by McAdams and Keener (2008). Brown (2020) used this same sequential six-phase progression (i.e., precrisis preparation, precrisis awareness, in-crisis protocol, in-crisis awareness, postcrisis recovery, and postcrisis awareness) in a mental health crisis as the foundation for developing the SCRSS-FR. Although Greene et al. (2016) were the first to conduct an empirical study using the six-phase progression, our study builds upon their research by using not only the six-phase progression, but adding specificity, and extending the notion of training from individuals in graduate school (i.e., preservice school counselors) to training them as professional school counselors (i.e., professional development).

Consistent with the recommendations of previous researchers such as Sawyer et al. (2013), our study reiterates suggestions to “embed opportunities for experiences that will improve the confidence levels” of counselors (p. 39). During the workshops conducted in our study, participants were provided the opportunity

to apply the education they were receiving to real-life scenarios. As participants progressed in considering the activation of the SCRSS-FR at their local districts, their confidence and self-efficacy evidently increased in each of the six-phase progression dimensions (as assessed by the SRC-Q). Since the SRC-Q is aligned with the SCRSS-FR, it was designed to assess the technical and emotional limitations of professional school counselors in handling crises (Brown, 2020). Therefore, the use of the SRC-Q and workshop activities (e.g., practice using decision trees, and discussing whether a school counselor is prepared to be on a crisis team) aligns with previous research findings, which stated that by conducting professional development that focuses on specific crises (such as school shootings), counselors can better assess feelings of inadequacy and improve their self-efficacy and confidence levels for those specific crises (Peters et al., 2017). Furthermore, collecting self-efficacy or confidence-level information could be a factor in evaluating perceived deficit areas.

Altogether, the results of our current study supported prior literature suggesting that training programs are effective in improving school **counselors'** self-efficacy in crisis handling. The significant increases in self-efficacy scores after the intervention suggested that the training program was successful in enhancing the participants' perceived self-efficacy in handling school crises.

Implications and Recommendations

Our study has several implications and recommendations for school counselors, workshop and school leaders, as well as researchers. The significant improvements in self-efficacy scores suggest that school counselors can benefit from crisis-handling training programs. As such, school counselors should be encouraged to participate in professional development opportunities that focus on crisis handling to improve their confidence and competence in handling crises. Similar to recommendations from previous studies, we suggest that crisis-handling training programs be integrated into school counselor preparation programs to ensure that school counselors are adequately prepared to handle crises (Peters et al., 2017; Sawyer et al., 2013).

Additionally, we recommend that workshop leaders consider using research-informed instruments specifically designed to assess the self-efficacy of school counselors' perceptions of crisis handling, such as the SRC-Q used in this study. Furthermore, workshop leaders should consider embedding opportunities for experiences that will improve the confidence levels of school counselors, such as applying the education they receive to real-life scenarios (Sawyer et al., 2013). School leaders should ensure that their school counselors receive adequate training and support to handle crises effectively, and they should encourage participation in professional development opportunities focused on crisis handling (Sawyer et al., 2013; Steeves et al., 2017).

Finally, the use of a research-informed instrument specifically designed for this study aligns with previous studies that have developed instruments for targeted and specific crisis-handling situations (Douglas & Wachter Morris, 2015; Peters et al., 2017; Sawyer et al., 2013). Future research should continue to develop and use appropriate instruments to assess the effectiveness of differing crisis-handling training programs for school counselors. It would also be valuable to investigate the effectiveness of the SCRSS-FR in crisis situations as well as the impact of such training on the mental health and well-being of school counselors. Additionally, as our current study is a pilot study, future research could investigate the impact of workshop leaders' experience with crisis-counseling training as well as the long-term effects of crisis-handling training programs on school counselors' self-efficacy and competence. Further research could also explore the impact of crisis-handling training on school staff and students and their perception of the school counselor's ability to handle crises.

In summary, the findings of our study underscore the importance of targeted and specific training programs for school counselors in crisis handling. Such programs can improve **school counselors'** confidence and competence in crisis management, ultimately benefiting the mental health and well-being of students and the school community as a whole.

Limitations and Conclusion

Limitations notwithstanding, our current study provides valuable insights into the effectiveness of training programs at improving school counselors' self-efficacy in handling violent crises. While the sample size was relatively small and limited to one geographic region, considering this is a pilot study for further investigation, the use of a research-based instrument specifically designed for this study and the inclusion of a pre- and posttest design supports the credibility of the findings in spurring more rigorous studies. Future studies could address the limitations of our study by including larger sample sizes from additional geographic regions and employing more diverse participant populations. Furthermore, we caution that an increase in perceptions of self-efficacy, although important, does not necessarily equate to predictive behavior in an actual violent crisis situation.

Overall, the findings of our study have important implications for school counselors, workshop and school leaders, and researchers working in the field of crisis intervention. By highlighting the importance of training programs in improving self-efficacy and preparedness in handling crises, our study can contribute to the development of more effective interventions and help schools better prepare for and respond to crisis situations, ultimately creating a safer and more supportive learning environment for students.

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