Crisis Interventions in Schools: A Systematic Review

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Abstract

This systematic review synthesizes research on school-based crisis intervention protocols, descriptions, and evaluations. We performed a comprehensive literature search, and 60 studies met the inclusion criteria for this review. We found an overwhelming lack of evaluation studies (n=3), suggesting that interventions are being administered post-crises without evaluation. The most frequently named crisis intervention model was the Prevent/Prepare, Reaffirm, Evaluate, Provide and Respond, and Examine (PREPaRE) model (n=6). All evaluation studies in the sample were observational, and most adopted qualitative methods of evaluation. Future studies are needed to evaluate crisis interventions to measure the fidelity, reliability, and effectiveness of such interventions.

Keywords

crisis intervention; school safety; evaluation; systematic review

Introduction

Schools are environments that promote student learning, exploration, and self-development. A crisis or traumatic event within a school community, however, threatens students' optimal mental health and learning outcomes (Finelli & Zeanah, 2019; Schwarz & Kowalski, 1991). These crises may take a variety of forms, such as a natural disaster, student death, or mass violence event. Although communities, government agencies, and non-profit organizations have made significant advancements in preventing these crises (National Association of School Psychologists (NASP), n.d.; Sandy Hook Promise, 2013), such events still occur. For example, each decade, an average of six major hurricanes strike the mainland United States and devastate communities and their schools (National Hurricane Center and Central Pacific

Hurricane Center, 2005). Eight percent of schools report that they experienced disruptions in the past years due to death threats, bomb threats, or chemical, biological, or radiological threats (National Center for Education Statistics, 2019). Since the Columbine High School massacre in 1999, over 236,000 students have experienced gun violence at school (The Washington Post, 2018). In 2017, suicide was the leading cause of death among middle-school aged children (National Institute of Mental Health, 2019), accounting for over 47,000 student deaths (Centers for Disease Control and Prevention, 2018).

Primary and secondary prevention efforts have made significant advancements in preparing for school disruptions such as natural disasters and preventing school-based violence. Given crises continue to occur, however, we also require tertiary prevention efforts to address the sequelae of such events and promote optimal student development post-trauma. Although school-based crises are acute traumatic events, their repercussions on student well-being may be chronic. For example, mass shootings are associated with a variety of adverse psychological outcomes in survivors and members of affected communities years after the event (Lowe & Galea, 2015). Natural disasters are also associated with psychological vulnerabilities post-disaster, including post-traumatic stress disorder, anxiety, and depression (Makwana, 2019). Finally, the psychological effects of trauma can impede academic performance by interfering with students' metacognitive learning processes (Panlilio et al., 2019; Sitler, 2009). Thus, addressing students' mental health needs post-crisis may mitigate long-term trauma repercussions. School-based crisis interventions are one such tertiary prevention effort.

Presently, we define school-based crisis interventions as an intervention or approach focused on improving the well-being of the whole school community after a crisis experience, as opposed to individual-level counseling (Anewalt, 2010). Primary and secondary crisis prevention preserves student well-being through working to avoid crises and manage ongoing crises (Morrison, 2007). The focus of this paper, however, is crisis intervention that occurs after the traumatic event; thus, we do not consider preventive efforts and active crisis management within our current crisis intervention definition. Although school-based crisis interventions may improve student well-being post-crisis, we do not have systematic evidence to this effect. It is imperative to review the field of school-based crisis interventions for two primary reasons. First, these interventions require significant time and resources to design and implement (Powell & Bui, 2016); thus, we must identify extant programs as to not reinvent what already exists. Second, we need to demonstrate program effectiveness to warrant implementation. Not only might a program be ineffective at improving student well-being, but some group-based trauma interventions may have unintended negative effects, such as the romanticization of suicide that some school suicide postvention programs have reported (Callahan, 1996). Over a decade ago, Morrison (2007) observed that the school-based crisis intervention literature was saturated with "how-to" intervention publications and crisis response narratives, but the field contained very little evaluation studies. Thus, we conducted a systematic review to update this observation and:

1. Identify school-based interventions that address the psychological and/or physical well-being of students, faculty, and staff post-crisis; and

2. Examine the extent to which school-based crisis interventions are evaluated.

Methods

Search Strategy

Studies included in this review reported on a school-based crisis intervention protocol, description, and/or evaluation. We systematically reviewed the literature using a protocol informed by the Preferred Reporting Items for Systematic Reviews and Meta-Analysis (PRISMA) guidelines for searching research databases, screening published studies, applying inclusion and exclusion criteria, and selecting relevant literature for review (Moher et al., 2009). A team member with a master's degree in library science performed our comprehensive electronic search of publications using the following databases: PubMed, ERIC, PsychInfo, Socioabs, PAIS, SCOPUS, and PTSD. We restricted our search to English-only articles and collected all database results from January 1st, 1989-December 6th, 2019. Search terms addressed the main concept of the search strategy: *crisis intervention* and *school.* Appendix 1 details the complete search syntax for each database. Following the systematic database search, we identified additional articles from the reference lists of included articles. Article meta-data was saved in EndNote and uploaded to Covidence, which is a web-based tool designed to facilitate the review process.

Inclusion Criteria

We included articles that reported on a school-based crisis intervention protocol, description, or evaluation. To be included in this review, articles had to report on a school-based crisis intervention or approach focused on improving the well-being of the school community after the crisis experience. Articles also had to be conducted within the U.S. and published in English. Following these inclusion criteria, we excluded articles that: 1) Did not report on a school-based crisis intervention protocol, description, or evaluation; 2) Focused solely on improving well-being as a means for crisis prevention; 3) Focused solely on dealing with an active crisis rather than as a response to a crisis; 4) Focused on individual responses to crisis/ perceptions of crisis responses rather than a coordinated crisis response effort; 5) Focused on addressing individual trauma or crises for a specific student rather than addressing school-wide crises for the larger school community; 6) Did not focus on the school community (i.e., students, faculty, staff, and/or administrators) specifically; 7) Was conducted outside of the United States; 8) Was not published in English; and/or 9) Was a review, editorial, opinion piece, commentary, book, or book review. We included studies within the gray literature-- articles did not need to be peer-reviewed to be included in this review.

Study Selection and Data Extraction

For the title and abstract screening, two authors independently and blindly screened each reference and abstract for full text inclusion and exclusion, and the study team met to resolve discrepancies. The team followed this same procedure for the full text review, whereby two authors independently and blindly reviewed the full texts of each reference that passed title and abstract screening, and the study team met to resolve discrepancies.

After reviewing the full texts of studies to determine final study inclusion, the research team developed data extraction procedures to extract information from the full text of articles that met the inclusion criteria. We extracted different information from articles depending on the

article type: 1) intervention description only (i.e., no evaluation), or 2) intervention evaluation. From both description and evaluation studies we extracted study characteristics, including: author and publication year, setting (i.e., urban, rural, suburban), sample size of students, percent male of students, and race/ethnicity of students. We extracted crisis-intervention program characteristics from both description and evaluations studies, including the crisis intervention name, crisis type, intervention description, individuals served (e.g., teachers, students), and school type (i.e., Elementary, Middle, or High School). For evaluation studies, we also extracted information regarding study design (i.e., observational or experimental), evaluation methods (i.e., focus groups, interviews, surveys), and evaluation results. A member of the study team performed the initial extraction of information, which was then reviewed for quality and accuracy by a secondary reviewer. The team resolved discrepancies through discussion and consensus.

Results

Figure 1 depicts our systematic review process. Our initial database search identified 4,597 unique articles. We excluded 4,278 articles during our initial title and abstract screening phase. Among the 319 articles remaining after the title and abstract screen, 60 studies met our full inclusion criteria during the full text review stage. Below, we report on these 60 school-based crisis intervention studies. In total, we identified 57 intervention protocols/ description studies that represented 17 distinct named interventions (four interventions were included in multiple studies) and 31 unnamed interventions. We identified only 3 evaluation studies that represented 4 distinct interventions (one study contained evaluations for two different interventions). Our search spanned three decades (i.e., 1989–2019), but only 14 studies (23%) were from the most recent decade (i.e., 2009–2019).

Intervention Description Studies

Table 1 details the 57 studies that provided school-based crisis intervention descriptions or protocols with no evaluation component. Among these intervention description studies, the most frequently named crisis intervention model was the Prevent/Prepare, Reaffirm, Evaluate, Provide and Respond, and Examine (PREPaRE) model (n=6) (Brock et al., 2009). PREPaRE integrates the U.S. Department of Education's four crisis phases (prevention/ mitigation, preparedness, response, and recovery) through combining the crisis team development, crisis plan creation, and community collaboration activities with training on the mental health implications of crises.

The majority of intervention protocols or descriptions (n=37) did not specify if the study was conducted in a rural, urban, or suburban setting. Among the 20 studies that did specify the setting, the most common setting was urban (n=14), followed by suburban (n=3), rural (n=2), and one suburban/rural setting. No studies that strictly described intervention protocols provided details on the number of students receiving the intervention nor demographic information of the intervention population.

Among studies that described intervention protocols and descriptions, the most common crisis type was student suicide (n=20), followed by student death (n=18), school-based mass violence (n=17), natural disaster (n=16), community violence (n=14), faculty/staff death

(n=13), and other (n=6). The other category included terrorist bombing, industrial disaster, assault towards faculty/staff, student/faculty injury, and family violence. Twenty studies did not specify crisis type. The most common school type was High School (n=34), followed by Elementary School (n=27), Middle School (n=24), and Pre-K (n=16). Seventeen studies did not specify school type. Among studies exclusively implemented within High Schools, the most common crisis type was student suicide.

Intervention content

Among description studies, 86% described the general crisis team function and 46% identified the members that made up the crisis team. The most common crisis team members included School-Based Mental Health Providers (n=20), Administrators (n=14), Teachers (n=13), School-Based Medical Personnel (n=13), and Support Staff (n=10). Less common crisis team members included Community-Based Mental Health Providers (n=6), School-Based Security Personnel (e.g., School Security Officer; n=5), Community-Based Security Personnel (e.g., Police Officer; n=4), First Responders (n=3), Community Leaders (n=2), Community-Based Medical Personnel (n=2), and Parents (n=2). Only 40% of intervention descriptions, however, described the specific roles of different crisis team intervention members. Finally, 19% of description studies provided examples of day-to-day activities carried out by the crisis team. In many instances, these example activities followed a coping process that mirrored Maslow's Hierarchy of Needs (Maslow, 1943) by first establishing safety prior to addressing psychological needs. For example, in the intervention described by Crepeau-Hobson et al. (Crepeau-Hobson et al., 2012), key components of the planned crisis intervention response following a school shooting included: 1) reunifying students with loved ones and ensuring a sense of control and safety; 2) providing opportunities for students and staff to tell their stories (i.e., ventilation) while normalizing their reactions and feelings (i.e., validation); and 3) anticipating future issues and reactions and helping individuals prepare for those psychological needs.

Evaluation Studies

Table 2 details the school-based crisis intervention studies that included an evaluation component. The three included studies described four distinct intervention evaluations; the study by Blackwelder (1995) compared two different interventions, referred to as "District 1" and "District 2." The two evaluations that provided information regarding study setting were conducted in an urban location. Among the evaluation studies, the sample size ranged from 27 to 140. All evaluations were observational, and most (n=3) included a qualitative evaluation method (i.e., focus group or key informant interview).

Blackwelder (1995) evaluated two interventions through staff and crisis team surveys and interviews on perceived effectiveness of the school district's crisis response policy or protocol in addressing the emotional and psychological needs of staff involved in a crisis. In response to a school shooting that resulted in the death of an administrator, District 1 utilized a crisis team consisting of school personnel to provide the majority of services and coordination including faculty meetings to inform, debriefing sessions, and counseling. Community-based organizations and the local police department provided additional assistance in the form of counseling, victim assistance, and other follow-up services. The

District 1 evaluation included 70 staff surveys and 21 crisis team surveys. The majority of staff (72%) perceived that the crisis intervention provided to staff was ineffective at addressing the needs of staff. The staff expressed anger and frustration with the response, and the majority felt a lack of support from the district. Additionally, two-thirds of crisis team members (67%) felt the intervention provided to staff members was ineffective, expressing concerns related to lack of prior training, unrealistic planning, lack of follow-up, ineffective debriefing meetings, and lack of central administration support. In response to a student death, District 2 used a crisis response team led by the school psychologist and consisting of school personnel to provide counseling, debriefing, and mental health referrals. While the response focused on the students, the staff were informed that the services were available to them, as well. The intervention evaluation included 27 staff surveys and 16 crisis team surveys. The evaluation indicated that the majority of staff (65%) perceived that the crisis intervention was effective at addressing the emotional and psychological needs of staff, citing availability of a crisis team, unity of staff, and the quickness of the crisis team's response as strengths of the intervention. Additionally, the majority of crisis team members (75%) perceived the intervention as effective.

In another of the evaluation studies we identified, Morrison and colleagues evaluated the Critical Incident Stress Management (CISM) Model within schools. CISM is a comprehensive, systematic, and multi-tactic approach to reduce emotional distress, prevent severe psychological responses, promote emotional processing, and normalize traumatic emotional responses (Morrison, 2007). Mitchell (1983) originally developed the CISM model for crisis intervention among emergency service personnel, and Morrison evaluated the effectiveness of CISM in addressing the needs of students, faculty, and staff of schools. School personnel from a Midwestern school district received CISM training through three two-day courses to become crisis counselors and assist in implementing the CISM model within their schools. Principals, teachers, and staff members completed surveys regarding their perceptions of the effectiveness of school-based crisis intervention services prior to CISM training and implementation (1998–99 to 2000–01) and following the implementation of the CISM model (2003–04 and 2004–05). During the baseline and follow-up period, fifteen distinct crisis events occurred (i.e., student deaths, teacher suicide, death of staff member, firearm at school). After CISM training, school faculty and staff reported higher rates of crisis counselors assisting the school in informing students about different crises and higher rates of crisis intervention service delivery. Yet, the evaluation indicated little to no effect of CISM on faculty and staff perceptions of whether crisis intervention providers actually assisted students in dealing with crises.

Powell and Bui (2016) evaluated the Journey of Hope intervention using both quantitative surveys and qualitative semi-structured interviews among 110 students. The intervention and evaluation occurred after a natural disaster in Moore, Oklahoma. The intervention included eight one-hour sessions delivered in a school-based setting to groups of 8–10 children to reduce the effects of a disaster by enhancing protective factors, such as social support, coping skills, and psychoeducation. Curriculum topics included safety, fear, anger, aggression, grief, anxiety, and self-esteem, and the curriculum taught techniques to address, process, and cope with emotions. The intervention outcomes indicated, relative to baseline, a significant increase in students' communication management and prosocial behaviors

following the Journey of Hope intervention. Powell and Bui reported no significant differences, however, in students' general sense of perceived self-efficacy, problem solving, personal development, and overall distress.

Discussion

Our review demonstrates that the field has made little progress in the area of school-based crisis intervention evaluation since Morrison's (2007) observations over a decade ago that the field had many descriptions of crisis intervention strategies and few evaluations of them. Although we identified 60 articles that met inclusion criteria, only three of the studies included any kind of outcome evaluation component to assess if interventions accomplished what the intervention designers and implementers sought to achieve. The majority of studies in our review either described the general crisis team function, crisis team roles, and/or day-to-day activities. These descriptions illustrated that school-based crisis interventions can be time and resource-intensive, often requiring the involvement of many different crisis-team members within the school community (e.g., administrators, counselors, teachers) (Anewalt, 2010). This time and resource constraint is not only a barrier to intervention implementation, but also evaluation. For the most common crisis intervention model, PREPaRE, we only identified training evaluations, not evaluations of school-based implementation. Although a key piece of the PREPaRE conceptual framework is to "examine the effectiveness of crisis prevention and intervention," we did not find any evaluation studies of the PREPaRE model in school-settings.

A primary barrier to crisis intervention evaluation involves schools developing a crisis intervention plan without the immediate need to deploy it (Callahan, 1976). Unfortunately, most schools will eventually experience a crisis--a natural disaster, a student death, or a violent event--that may require the implementation of their crisis intervention. To ensure that the crisis intervention appropriately addresses the crisis and improves the school's wellbeing, we recommend that future research evaluates outcomes associated with the different crisis interventions identified in this review. Given the nature of a school-based crisis, it is unfeasible and perhaps unethical for such evaluations to incorporate a randomized controlled trial (RCT) design. Yet, alternative strategies to assess effectiveness may be feasible. Researchers could, for example, compare schools experiencing a similar crisis that implement different crisis intervention strategies. Similarly, evaluations could also compare schools that have an established crisis intervention team versus those that do not to determine if outcomes differ with and without team forethought. This latter design may not be able to determine which intervention may be most effective, but it can inform the need to create a team and tailor a potential response to the particular school context. Another possible design to assess effectiveness could be a time series design that examines social emotional outcomes among students before and after a crisis to see how long it takes for students to return to pre-event levels. This quasi-experimental design could improve internal validity by incorporating a comparative times series design from another school (either experiencing a similar event or not). Notably, however, this approach would require a district (or individual schools) to invest in regular assessments of the social emotional well-being of their students. In addition, qualitative approaches can also be comparative in nature as the studies by Blackwelder (1995) and Powell and Bui (2016) illustrate in the present review.

Among the four evaluation studies that we did identify, intervention content and evaluation measures and methods were too disparate to make comparisons across studies. Yet, we do recognize that only one evaluation study demonstrated that a school-based crisis intervention had positive effects on student well-being (Powell & Bui, 2016). Crisis interventions have the explicit goal of providing immediate support to: 1) reduce the initial harm of trauma; 2) promote positive coping strategies; and 3) prevent long-term impairment (Richards, 2001). No evaluation studies, however, followed students over a long enough time period to evaluate the effect of school-based crisis interventions on these well-being domains. We recommend that future school-based crisis intervention evaluations hold students as the focal point of evaluation and assess the immediate, mid-term, and long-term well-being outcomes associated with intervention.

Despite the continuation of crises that influence school communities--and the changing form of some of these crises--innovation in school-based crisis interventions has slowed in the past decade. For example, between 2009 and 2019, social media and online bullying became more prevalent (Zych et al., 2019). Yet, our review found that only 23% of crisis intervention studies published between 1989–2019 occurred between 2009–2019. Although numerous school-based crisis interventions exist and are likely being implemented within schools, a paucity of recent research on them thwarts advancement in this area.

Our current review contains various strengths and limitations. First, we developed a comprehensive search that spanned multiple disciplines and years to identify all possible school-based crisis intervention descriptions and evaluations. The large number of studies that we identified, however, precluded our ability to provide in-text descriptions of all crisis interventions. Therefore, we refer the interested reader to the citations we provided in Table 1. Additionally, we included both peer-reviewed and gray literature to assure full coverage of school-based crisis intervention descriptions. This process, however, introduced greater heterogeneity in the quality and rigor of included studies. Due to this heterogeneity in quality--combined with the paucity in evaluation studies--this review is unable to endorse any specific intervention. Instead, we have identified the need for future rigorous evaluations of school-based crisis intervention models. Finally, school districts may complete in-house evaluations of their crisis interventions without disseminating findings; as our review was based on the peer-reviewed and gray literature, we did not include informal, unpublished evaluations.

Current Recommendations for School-Based Crisis Interventions

Various factors may prevent schools from conducting evaluations, and if schools are able to conduct in-house evaluations, other barriers may prevent them from disseminating findings. Such barriers may include limited time and resources, fear of litigation, and lack of training in evaluation methods. Building partnerships between school and researchers is a critical step to evaluating current crisis intervention programs and identifying best practices.

Although the present review of the literature and lack of evaluation studies precludes our ability to endorse any specific model as an evidence-based practice, we have gleaned a set of recommendations for school-based crisis interventions to suggest being the subject of future interventions and evaluation. Namely, we recommend that school-based crisis intervention

teams include various actors both within and outside the immediate school context (e.g., teachers, school counselors, parents, mental health providers, law enforcement). We expect that such a multi-disciplinary team would allow the crisis intervention to better respond to the diversity of needs among the school-community post-crisis--including both safety and psychological needs. We also recommend that intervention plans explicitly state team roles for each crisis team member. Although a minority of studies in the present review described specific team members' roles, we expect that clear delineation of roles can protect against diffusion of responsibility post-crisis. Finally, we recommend that crisis intervention plans view crisis intervention as an ongoing and evolving process. Specific activities should change along steps of this process to help the school community return to safety, engage in productive and adaptive coping, heal what can physically and psychologically be repaired, and prevent long-term trauma.

Conclusion

Limitations notwithstanding, we know of no review of crisis intervention in schools over the past decade. It is notable that our review revealed how little progress we have made in the empirical evidence for what approaches to address different crises may be most effective. While classic designs for ensuring internal validity and, therefore, increased confidence in our outcome studies may not be feasible, several alternative designs and programmatic repeated studies can add to our confidence about what is working. Finally, it is also worth noting that although prevention is vital so that crises do not occur in the first place, having a crisis intervention plan and team in place may be vital to help school communities cope with the negative effects of trauma so that teaching and learning remain the focus.

Appendix 1

SEARCHES

Pubmed

Pubmed (Sensitive/Balanced) - 1,244—((crisis intervention[MeSH Terms] OR ((crisis[title/abstract] OR crises[title/abstract] OR "critical incident"[Title/Abstract] OR post-traumatic[Title/Abstract] OR post-trauma[Title/Abstract] OR posttrauma[Title/Abstract]) AND (intervention*[title/abstract] OR program*[title/abstract] OR response*[title/abstract])))) AND (school-based[title/abstract] OR school*[Title/Abstract] OR schools[mesh] OR student*[title/abstract] OR "middle school"[title/abstract] OR "high school"[title/abstract] OR students[mesh] OR elementary[title/abstract])

Best Match Filters: Publication date from 1989/01/01 to 2020/12/31; Language: English

ERIC

ERIC - Balanced - 655

su(crisis intervention) AND noft((youth OR child* OR school OR educational environment OR parent OR school safety OR elementary OR secondary));

Date: From 1989 to 2019; Language: English

PSYCINFO

Balanced- 2086

TX ((crisis intervention OR crisis response OR crises OR emotional trauma)) AND SU school*

Limiters- Publication Year: 19892020 Expanders- Apply related words; Appy equivalent subjects Narrow by Language: -english Search modes – Boolean/Phrase

SocioAbs (Proquest)

778- Balanced

noft(crisis intervention OR crisis response) AND school*

1989–2019

Language: English

PAIS

77

noft(crisis intervention OR crisis response) AND su(school)

SCOPUS

46

(TITLE-ABS-KEY ("crisis management" OR "crisis response" OR crises OR crisis) AND TITLE-ABS-KEY ("school safety" OR "school violence")) AND PUBYEAR, > 1988 AND (LIMIT-TO (AFFILCOUNTRY, "United States")) AND (LIMIT-TO (LANGUAGE, "English"))

PTSD pubs (Proquest)

194

Text word: (crisis intervention OR crisis response) AND school*

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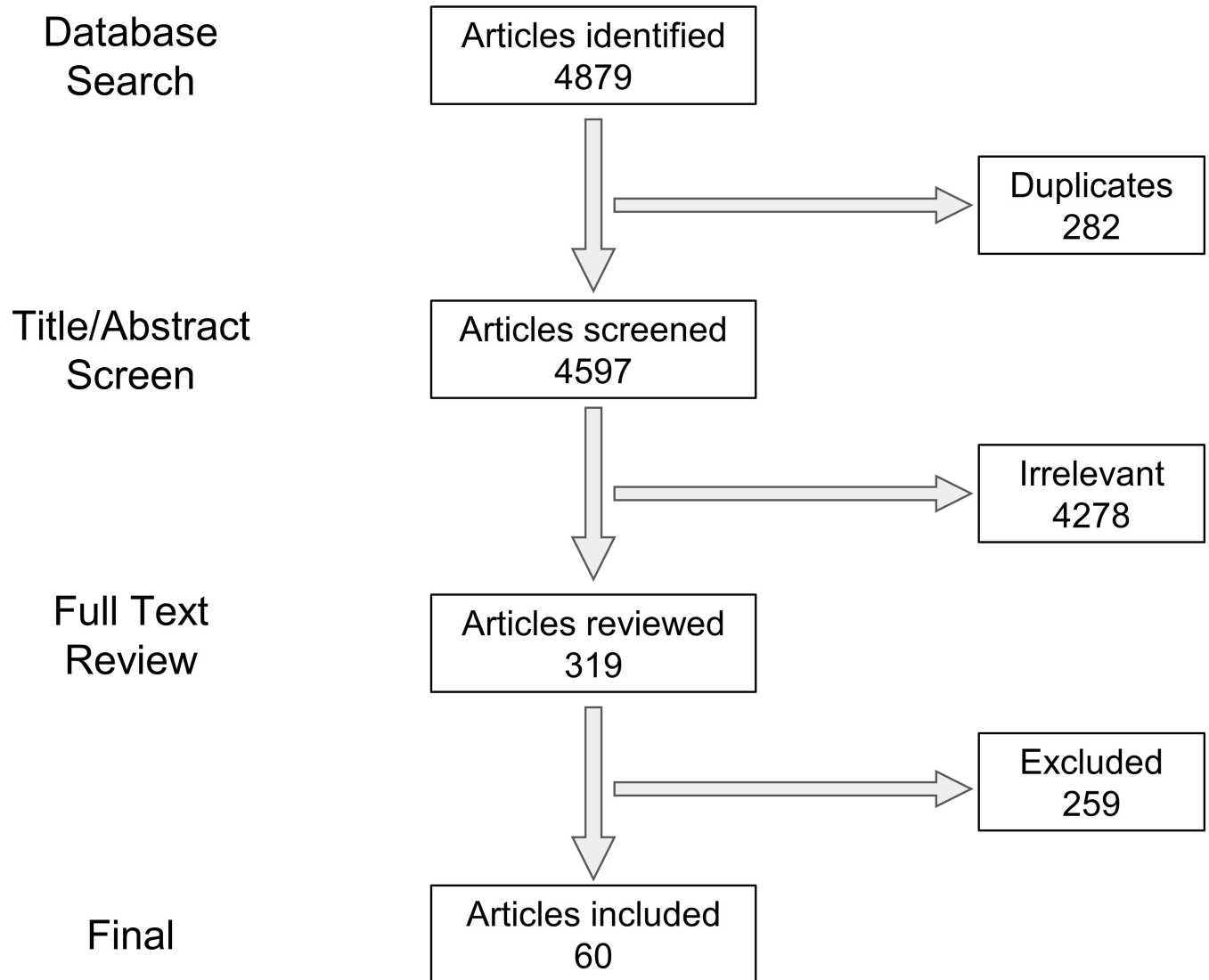Database Search

Articles identified 4879

Duplicates 282

Title/Abstract Screen

Articles screened 4597

Irrelevant 4278

Full Text Review

Articles reviewed 319

Excluded 259

Final

Articles included 60

Figure 1.
PRISMA flow diagram

Table 1.

Study and intervention characteristics, intervention protocols and descriptions (n=57)

Author, year	Crisis intervention	Setting	Crisis type	School type	Individuals served	Describes general crisis team function	Identifies the professionals that make up the crisis team	Crisis team members	Describes crisis team roles, by member	Describes day-to-day activities
Cornell, 1989	The School Crisis Network	Urban	Student Death (excluding suicide); Faculty/Staff Death; Natural Disaster; Student suicide; Other: Injury of student/faculty	Preschool/Pre-K; Elementary School; Middle School; High School	Students; Teachers; Staff; Administrators	Yes	Yes	Mental Health Providers-School; Mental Health Providers-Community	No	No
Shulman, 1990	NR	Urban	Faculty/Staff Death; School-Based Mass; Violence	High School	Students; Teachers; Staff; Administrators	Yes	Yes	Administrators; Teachers; Medical Personnel-School; Medical Personnel-Community; Community Leaders; Parents; Other: Volunteers	Yes	Yes
Weinberg, 1990	NR	NR	NR	High School	Students	No	No	NR	No	No
Catone, 1991	NR	Suburban	Student suicide	High School	Students	Yes	Yes	Administrators; Teachers; Support Staff; Mental Health Providers-School; Mental Health Providers-Community	No	No
Silver, 1992	Community Crisis Intervention Team	Urban	Student Death (excluding suicide)	Preschool/Pre-K; Elementary School; Middle School; High School	Students; Teachers; Staff;	Yes	No	NR	No	No
Graefe, 1992	NR	Rural, Suburban	Student Death (excluding suicide); Natural Disaster	Elementary School	Students; Teachers; Staff; Administrators; Other: Parents Community members Friends of victims and their families	Yes	Yes	Mental Health Providers-Community	No	Yes
Jones, 1992	NR	NR	Student Death (excluding suicide); Faculty/Staff	NR	Students	Yes	Yes	Administrators; Teachers; Support Staff; Medical	Yes	Yes

Author, year	Crisis intervention	Setting	Crisis type	School type	Individuals served	Describes general crisis team function	Identifies the professionals that make up the crisis team	Crisis team members	Describes crisis team roles, by member	Describes day-to-day activities
Klingman, 1993	NR	NR	Death; Natural Disaster; Community Violence; School-Based Mass Violence; Student suicide	NR	Students	Yes	No	Personnel-School; Mental Health Providers-School	No	No
Mauk, 1994	CDC Community Framework	NR	NR	Preschool/Pre-K; Elementary School; Middle School; High School	Students; Teachers; Staff; Administrators	Yes	No	NR	No	No
Celotta, 1995	NR	NR	Student suicide	NR	Students; Teachers; Staff	Yes	Yes	Mental Health Providers-School	Yes	Yes
Errington, 1995	NR	NR	NR	Preschool/Pre-K; Elementary School; Middle School; High School	Students; Teachers; Staff	Yes	Yes	Administrators; Teachers; Medical personnel-School; Mental Health Providers-School	Yes	No
Owens, 2015	NR	NR	Student Death (excluding suicide); Natural Disaster; Community Violence; School-Based Mass Violence; Student suicide	High School	Students	Yes	No	NR	Yes	No
Roberts, 1995	NR	Rural	Student suicide	Middle School; High School	Students; Teachers; Staff	Yes	No	NR	No	No
Hilgendorf, 1996	NR	NR	Student Death (excluding suicide); Faculty/Staff Death; Student suicide	NR	Students; Teachers; Staff	Yes	No	NR	No	No
LaPointe, 1996	NR	NR	Student Death (excluding suicide); Faculty/Staff Death; Natural Disaster; Community Violence; School-Based Mass Violence	NR	Students	Yes	Yes	Administrators; Teachers; Support Staff; Medical personnel-School; Mental Health Providers-School; Security-School; Mental Health	Yes	Yes

Author, year	Crisis intervention	Setting	Crisis type	School type	Individuals served	Describes general crisis team function	Identifies the professionals that make up the crisis team	Crisis team members	Describes crisis team roles, by member	Describes day-to-day activities
			Violence; Student suicide; Other: Student Injury					Personnel-Community; Security-Community; First Responders		
Newgass, 1996	NR	Urban	School-Based Mass Violence	Elementary School	Students; Teachers; Staff	Yes	No	NR	Yes	No
Poland, 1997	NR	NR	NR	NR	Students; Teachers; Staff; Administrators	Yes	Yes	Medical Personnel-School; Mental Health Providers-School; Security-School; Medical Personnel-Community; Mental Health Providers-Community; Security-Community	Yes	No
Shaw, 1997	NR	Urban	Natural Disaster	Elementary School	Students; Teachers	Yes	Yes	Teacher; Mental Health Providers-School	No	No
Brock, 1998	Classroom Crisis Intervention (CCI)	Urban	NR	Elementary School; Middle School; High School	Students	Yes	Yes	NR	Yes	Yes
Roberts, 1998	TEAM	NR	Student suicide	Elementary School	Students; Teachers; Staff	No	No	NR	No	Yes
UCLA, 1998	NR	NR	Student Death (excluding suicide); Natural Disaster; Community Violence; School-Based Mass Violence; Student suicide; Other: Family Violence	Preschool/Pre-K; Elementary School; Middle School; High School	Students; Teachers; Staff; Administrators	Yes	Yes	Administrators; Teachers; Medical Personnel-School; Mental Health Providers-School	Yes	No
Paris, 1999	Mini-Marathon Groups	NR	NR	Preschool/Pre-K; Elementary School; Middle School; High School	Students	Yes	No	NR	No	No
Tramonte, 1999	National Organization for Victim	NR	Natural Disaster; Community Violence; School-	Preschool/Pre-K; Elementary School; Middle	Students	No	No	NR	No	No

Author, year	Crisis intervention	Setting	Crisis type	School type	Individuals served	Describes general crisis team function	Identifies the professionals that make up the crisis team	Crisis team members	Describes crisis team roles, by member	Describes day-to-day activities
	Assistance (NOVA)		Based Mass Violence	School; High School						
Tramonte, 2000	NOVA	Urban	Student Death (excluding suicide); Faculty/Staff Death; Natural Disaster; Community Violence; School-Based Mass Violence	Preschool/Pre-K; Elementary School; Middle School; High School	Students	Yes	No	NR	No	No
Levenson, 2000	Assaulted Staff Action Program (ASAP)	NR	Other: Assault towards faculty/staff	NR	Teachers; Staff	Yes	Yes	Administrators; Mental Health Providers-School; First Responders	Yes	No
Luna, 2000	Critical Incident Stress Management (CISM)	Urban	Community Violence	High School	Students; Teachers; Staff; Administrators	Yes	Yes	Mental Health Providers-School; Mental Health Providers-Community; Security-Community; Community Leaders	Yes	No
Seebold, 2003	CISM	Rural	School-Based Mass Violence; Student suicide	Middle School	Students; Teachers; Other: Families Community Members	No	No	NR	No	Yes
Tortorici, 2004	CISM	Urban	Student Death (excluding suicide); Faculty/Staff Death; Natural Disaster; Community Violence; School-Based Mass Violence	Elementary School; Middle School; High School	Students	Yes	Yes	Teachers; Support Staff; Medical Personnel-School; Mental Health Providers-School	No	No
Newman, 2000	Crisis Management Briefing	NR	Student suicide	High School	Students	No	No	NR	No	No
Schonfeld, 2000	School Crisis Prevention and Response Program	NR	Student Death (excluding suicide); Faculty/Staff Death; Natural	High School	Students; Teachers; Staff; Other: Parents	Yes	Yes	Administrators; Support Staff; Medical Personnel-School; Mental	Yes	No

Author, year	Crisis intervention	Setting	Crisis type	School type	Individuals served	Describes general crisis team function	Identifies the professionals that make up the crisis team	Crisis team members	Describes crisis team roles, by member	Describes day-to-day activities
			Disaster School-Based Mass Violence					Health Providers-School; Security-School; Mental Health Providers-Community; First Responders; Other: Volunteers		
Underwood, 2000	The New Jersey Adolescent Suicide Prevention Project	Urban	Student Death (excluding suicide); Faculty/Staff Death;Student suicide	Preschool/Pre-K; Elementary School; Middle School; High School	Students; Teachers; Staff	Yes	No	NR	No	Yes
Paine, 2000	NR	NR	Student Death (excluding suicide); Faculty/Staff Death; Natural Disaster; Community Violence; School-Based Mass Violence; Student suicide	Preschool/Pre-K; Elementary School; Middle School; High School	Students; Teachers; Staff	Yes	No	NR	Yes	No
Kerr, 2001	NR	NR	Student Death (excluding suicide); Faculty/Staff Death; Student suicide	NR	Students	Yes	No	NR	No	No
Paine, 2002	NR	NR	Student Death (excluding suicide); Faculty/Staff Death; Natural Disaster; Community Violence; School-Based Mass Violence; Student suicide	Preschool/Pre-K; Elementary School; Middle School; High School	Students; Teachers; Staff	Yes	Yes	Administrators; Teachers; Support Staff; Mental Health Providers-School	Yes	No
Poland, 2002	NR	NR	NR	NR	Students; Teachers; Staff; Administrators	Yes	Yes	Administrators; Teachers; Support Staff; Medical Personnel-School; Mental Health Providers-School; Security-School; Parents	Yes	No

Author, year	Crisis intervention	Setting	Crisis type	School type	Individuals served	Describes general crisis team function	Identifies the professionals that make up the crisis team	Crisis team members	Describes crisis team roles, by member	Describes day-to-day activities
UCLA, 2002	NR	NR	NR	Preschool/Pre-K; Elementary School; Middle School; High School	Students; Teachers; Staff; Administrators	No	No	NR	No	No
Kerr, 2003	NR	NR	Student Death (excluding suicide); Faculty/Staff Death; Student suicide	NR	Students	Yes	Yes	Medical personnel-School; Mental Health Providers-School	Yes	No
Pfefferbaum, 1999	NR	Urban	Community Violence; Other: Terrorist Bombing	Elementary School; Middle School; High School	Students	Yes	No	NR	No	No
McGlenn, 2004	NR	NR	Natural Disaster; Community Violence; School-Based Mass Violence	High School	Students; Teachers; Staff	Yes	No	NR	No	No
Poland, 2004	NR	NR	NR	NR	Students; Teachers; Staff; Administrators	Yes	No	NR	Yes	No
Tosone, 2005	NR	Urban	Community Violence	High School	Students	No	No	NR	No	No
Brock, 2006	National Incident Management System (NIMS)/ Incident Command System (ICS)	NR	NR	NR	Students; Teachers; Staff; Administrators	Yes	Yes	Administrators; Medical Personnel-School; Mental Health Providers-School Security-School; Security-Community	Yes	No
Nickerson, 2006	ICS	NR	NR	Elementary School; Middle School; High School	Students; Teachers; Staff	Yes	No	NR	Yes	No
Morrison, 2006	NR	NR	NR	Preschool/Pre-K; Elementary School; Middle School; High School	Students; Teachers; Staff; Administrators	Yes	No	NR	No	No
Mingo, 2009	Prevent/ Prepare,	NR	Student suicide	High School	Students; Teachers; Staff	Yes	No	NR	No	No

Author, year	Crisis intervention	Setting	Crisis type	School type	Individuals served	Describes general crisis team function	Identifies the professionals that make up the crisis team	Crisis team members	Describes crisis team roles, by member	Describes day-to-day activities
Bernard, 2011	PREPaRE	NR	Student suicide	High School	Students; Teachers; Staff; Administrators	Yes	No	NR	No	Yes
Brock, 2013a	PREPaRE	NR	Natural Disaster; Other: Industrial Disaster	NR	Students	Yes	Yes	NR	Yes	No
Brock, 2013b	PREPaRE	NR	NR	NR	Students; Teachers; Staff	Yes	Yes	Administrators; Teachers; Support Staff; Mental Health Providers-School	Yes	No
Jimerson, 2013	PREPaRE	NR	NR	NR	Students	Yes	No	NR	No	No
Nickerson, 2015	PREPaRE	NR	NR	NR	Students; Teachers; Staff	Yes	No	NR	No	No
Openshaw, 2011	NR	NR	NR	NR	Students; Teachers; Staff	No	No	NR	No	No
Crepeau-Hobson, 2012	NR	NR	Student Death (excluding suicide); School-Based Mass Violence	Elementary School; Middle School; High School	Students; Other: Parents	Yes	Yes	Administrators; Teachers; Support Staff; Medical Personnel-School; Mental Health Providers-School	No	Yes
Liou, 2015	Dynamic Crisis Life Cycle Model	Suburban	NR	Preschool/Pre-K; Elementary School; Middle School; High School	Students; Teachers; Staff; Administrators	Yes	Yes	Administrators; Teachers; Support Staff; Medical Personnel-School; Mental Health Providers-School	No	No
Newgass, 2015	School Crisis Response Initiative	Urban	NR	Preschool/Pre-K; Elementary School; Middle School; High School	Students; Teachers; Staff	Yes	No	NR	Yes	No
Kelley, 2015	NR	Urban	NR	Elementary School; Middle	Students; Teachers; Staff	Yes	No	NR	No	No

Reaffirm, Evaluate, Provide and Respond, and Examine (PREPaRE)

Author, year	Crisis intervention	Setting	Crisis type	School type	Individuals served	Describes general crisis team function	Identifies the professionals that make up the crisis team	Crisis team members	Describes crisis team roles, by member	Describes day-to-day activities
DiLeo, 2018	NR	Suburban	School-Based Mass Violence	Elementary School	Students; Teachers; Staff; Administrators; Other: Victim's Family Members	Yes	No	NR	No	No
Mascari, 2018	Psychological First Aid	NR	Student Death (excluding suicide); Natural Disaster; Community Violence; School-Based Mass Violence; Student suicide	Preschool/Pre-K; Elementary School; Middle School; High School	Students; Teachers; Staff; Administrators	Yes	No	NR	No	No

Note: NR = not reported

Table 2.

Intervention characteristics, evaluation studies (n=4)

Author, year	Crisis intervention	Crisis type	School type	Individuals served	Describes general crisis team function	Identifies crisis team members	Crisis team members	Describes crisis team roles, by member	Describes day-to-day activities	Study design	Evaluation method	Setting	Sample Size	Percent Male
Blackwelder, 1995a	Crisis Intervention: District 1	Faculty/ Staff Death; School-Based Mass Violence	NR	Teachers; Staff	Yes	No	NR	No	Yes	Observational	Key Informant Interviews; Surveys	NR	91	34.3%
Blackwelder, 1995b	Crisis Intervention: District 2	Student Death (excluding suicide)	NR	Students; Teachers; Staff	Yes	Yes	Support Staff; Security - School; Community Leaders; Other: Occupational Specialist	No	No	Observational	Key Informant Interviews; Surveys	NR	43	7.4%
Morrison, 2007	Critical Incident Stress Management (CISM)	NR	Elementary School; High School	Teachers; Staff; Administrators	No	No	NR	No	No	Observational	Surveys	Urban	140	NR
Powell, 2016	Journey of Hope	Natural Disaster	Middle School; High School	Students	No	No	NR	No	No	Observational	Surveys; Key Informant Interviews	Urban	110	55%

Note: NR = not reported

Table 3.

Intervention characteristics, evaluation studies, intervention outcomes (n=4)

Author, year	Intervention outcomes
Blackwelder, 1995a	The majority of staff (72%) felt that the crisis intervention provided to staff was ineffective. The staff expressed anger and frustration with the response. The majority felt there was a lack of support and that the district should have done more to support teachers. The majority of the crisis team members (67%) felt the intervention provided to staff members was ineffective, expressing concerns related to lack of prior training, unrealistic planning, lack of follow-up, ineffective debriefing meetings, and lack of central administration support.
Blackwelder, 1995b	The majority of the staff (65%) felt that the crisis intervention provided to staff was effective. The respondents mentioned several strengths that facilitated effectiveness including availability of a crisis team, unity of staff, and the quickness of the crisis team's response. The majority of crisis team members (75%) felt the intervention provided to staff was effective.
Morrison, 2007	After CISM training, school faculty and staff reported higher rates of crisis counselors assisting the school in informing students about different crises and higher rates of crisis intervention service delivery. There was little to no effect of CISM on faculty and staff perceptions of whether crisis intervention providers actually assisted students in dealing with crises.
Powell, 2016	From baseline to posttest, there was a significant increase in students' communication management and prosocial behaviors. No significant differences found in students' general self-efficacy, problem solving, personal development, and overall distress.