SSM - Mental Health 2 (2022) 100139

Contents lists available at ScienceDirect

SSM - Mental Health

journal homepage: www.journals.elsevier.com/ssm-mental-health

Review

# Suicide interventions for American Indian and Alaska Native populations: A systematic review of prevention strategies, logics, and rationales

Tony V Pham [a,*], Anna Kawennison Fetter [b], Andrea Wiglesworth [c], LittleDove F. Rey [d], Micah L. Prairie Chicken [e], Michael Azarani [f], Amy Riegelman [g], Joseph P. Gone [h,i]

[a] Department of Psychiatry, Massachusetts General Hospital, USA
[b] Department of Counseling Psychology, University of Wisconsin, Madison, USA
[c] Department of Psychology, University of Minnesota, Twin Cities, USA
[d] Department of Psychiatry and Behavioral Sciences, PGSP-Stanford Psy.D. Consortium, Palo Alto University, USA
[e] Department of Psychology, University of North Dakota, USA
[f] Department of Counseling Psychology, Oklahoma State University, USA
[g] University Libraries, University of Minnesota, USA
[h] Department of Global Health and Social Medicine, Harvard Medical School, USA
[i] Department of Anthropology, Harvard University, USA

ARTICLE INFO

*Keywords:*
American Indians and Alaska natives
Suicide
Program development
Preventive interventions
Mental health disparities
Community-engaged research

ABSTRACT

*Objective:* We conducted a systematic review to answer the following research question: "*What logics or rationales have structured interventions aimed at preventing suicidal behaviors among AI/AN populations?*"
*Method:* Our screening and searching process yielded 32 publications that overlapped considerably in terms of suicide prevention strategies, logics, and rationales.
*Results:* Regarding suicide prevention strategies, most studies featured interventions that sought to promote connectedness, create protective environments, identify and support people at risk, and teach coping and problem-solving skills, while others strengthened access and delivery of suicide care, lessened harms and prevented future risk, and strengthened economic support. The rationales justifying these suicide prevention strategies varied from strategy to strategy.
*Discussion:* While most program developers related their choice of suicide prevention strategy to distress at the individual level, each and every developer foregrounded their efforts in collectivist-attitudes, social relations, non-professional services, and community-driven projects rooted in decolonization efforts. This focus may reflect a need to honor Indigenous assumptions about suicide in community-based prevention programs.
*Conclusion:* Altogether, our analysis points to a multi-level ecosystem of interventions that incorporates individual-centered rationales and interventions so long as they also consider systems, contexts, and a collectivist mentality.

## 1. Introduction

According to the 2019 Centers for Disease Control and Prevention (CDC) report, suicide was the tenth leading cause of death in the United States (Center for Disease Control, 2021). To address this public health crisis, various guidelines on suicide prevention have sought to standardize treatment across a variety of settings and situations (Mann et al., 2005; Office of the Surgeon General, 2012; Stone et al., 2017; World Health Organization, 2018). By design, however, these all-encompassing approaches can overlook differences in suicide risk across diverse communities. For example, compared to other groups, American Indian and Alaska Native (AI/AN) young adults are at greatest risk for having thoughts about, making plans to attempt, and attempting suicide (Substance Abuse and Mental Health Services Administration, 2018). Furthermore, as opposed to the general US population for which suicide peaks during mid-life, rates of suicide among AI/AN peoples peak between the ages of 20–29, after which they decrease with age (Centers for Disease Control, 2020).

These startling statistics call into question whether longstanding mental health treatments have adequately addressed suicide among AI/AN communities. For example, empirically supported treatments may not generalize to AI/AN populations when it comes to which "disorders" to

* Corresponding author. 55 Fruit St. Boston, MA, 02114, USA.
*E-mail address:* tonyvpham@mgh.harvard.edu (T.V. Pham).

https://doi.org/10.1016/j.ssmmh.2022.100139
Received 26 November 2021; Received in revised form 12 July 2022; Accepted 21 July 2022
Available online 31 July 2022

treat and how to treat them (Tolin et al., 2015), as the supporting data is based primarily on Euro-American samples (Rad et al., 2018). This potential for mismatch is especially problematic given that AI/AN peoples must contend with "soul wounds" rooted in a history of Euro-American colonization that has included the systematic dispossession and assimilation of AI/AN peoples, genocide, cultural marginalization, and the effacement of cultural traditions and practices (Duran et al., 2008).

The legacy of European colonialism has thus been referred to as "historical trauma" (Brave Heart, 2003). The ongoing impacts of historical trauma have been described as multilevel and interrelated at the individual (mental health concerns, substance use issues, embodiment; see Walters et al., 2011), familial (altered interrelationships among roles, activities, and relationships; see Hamby and colleagues, 2020), communal (disrupted tribal practices related to promoting development and growth from childhood to old age; see Campbelland Evans-Campbell2011), and societal level (scarce funding and resources allocated for the economic, mental, and general well-being of Indian Country; see U.S. Commission on Civil Rights, 2020). Critically, AI/AN individuals and communities today continue to face erasure and invisibility, discrimination, microaggressions, and the consequences of structural inequity in education, healthcare, criminal justice, and employment (Findling et al., 2020; Garland, 2013; Jaramillo et al., 2016; Wexler and Gone, 2012).

In light of these historical and cultural stressors, several non-individual risk factors place AI/AN peoples at higher risk for suicide (Czyzewski, 2011; Evans-Campbell, 2008; Griffiths et al., 2016; Sotero, 2006), such as the deaths of friends and family (Leavitt et al., 2018). For example, as a testament to the intergenerational impact of colonization, the rate of suicide is higher among AI/AN youth who have had at least one parent who attended an AI/AN boarding school (Cedar Project et al., 2008). Beyond this, protective factors, like risk factors, can also draw upon the community, institutions, and society to include knowledge and practice of tribal spirituality and cultural activities, social support and enculturation from tribal leaders, and holistic connectedness to the self, family, community, and land. For example, protective factors exist on several levels: individual (e.g., self-esteem), family (e.g., parental care), community (e.g., positive adult relationships), and cultural (e.g., spiritual orientation) with influences that vary across age, sex, and geographic region (Wiglesworth et al., 2022).

In response to nuanced risk/protective factor profiles, various health actors such as the Office of the Surgeon General, Action Alliance, U.S. Department of Health and Human Services (HHS), and Institute of Medicine have called for developers of suicide prevention programs to employ comprehensive understandings of suicide (Institute of Medicine Committee on Pathophysiology and Prevention of Adolescent and Adult Suicide, 2002; U.S. Department of Health and Human Services, Office of Surgeon General, 2021). This begs the question of what suicide prevention strategies have been used in AI/AN communities and what logics and rationales have driven their adoption or promotion (Wexler and Gone, 2012). One approach to AI/AN suicide prevention would be to address suicide in these communities by delivering interventions based on state-of-the-art scientific research, albeit not yet empirically tested for efficacy among AI/AN peoples (Rad et al., 2018). Many of these interventions involve professional health providers who typically treat problems of the individual rather than address deficiencies in the broader societal context (Mann et al., 2005; Stone et al., 2017; U.S. Department of Health and Human Services, Office of Surgeon General, 2021; World Health Organization, 2018). However, this approach may fall short in that it does not account for any unique socioecological experiences of AI/AN peoples.

In keeping with the AI/AN risk/protective factor profile, intervention and prevention efforts can be tailored to address unique multi-level (Zalsman et al., 2016; Robinson et al., 2018; Hofstra et al., 2020) individual and community-level risk and resilience profiles present in AI/AN communities (Allen et al., 2021; Gray et al., 2016; Kirmayer et al., 1999; Redvers et al., 2015; Weniger et al., 2020; Wexler et al., 2015; Wexler and Gone, 2012). Intervention development also need not be unidimensional nor entirely reliant on professional mental health services. For example, many projects originating from community-based participatory research (CBPR) have developed interventions that draw from Indigenous ways of knowing, being, and doing (Merzel & D'Afflitti, 2003; Smith, 1999; Walter and Andersen, 2013) such as AI/AN cultural, linguistic, and spiritual practices (Echo-Hawk, 2011). These practices have been essential to AI/AN wellbeing for centuries prior to colonization (Gone, 2013; Gone and Calf Looking, 2011), and "Culture-as-treatment," an approach to health equity and interventions advanced by Indigenous scholars in the 1970s, has since persisted (see CULTURE FORWARD; O'Keefe et al., 2022) despite longstanding Euro-American attempts at cultural assimilation and lack of recognition within established helping professions. Unfortunately, distilling AI/AN culture-as-treatment into a universal set of prescribed approaches and practices is challenging given the great diversity in social structures and values across tribal communities (Novins et al., 1999).

While many systematic reviews on suicide interventions exist (not including scoping and more casual reviews), only three have specifically targeted Indigenous populations, including AI/ANs (Clifford et al., 2013; Harlow et al., 2014; Pham et al., 2021). All covered the methodological quality, intervention characteristics, and outcomes from interventions within Canada, Australia, New Zealand, and the USA. The systematic review by Harlow and colleagues focused on the characteristics of nine interventions designed for Indigenous youth. They concluded that promising interventions involved youth and community-driven development. Clifford and colleagues (2013) focused heavily on methodological quality, covering nine papers ranging from 1981 to 2012 that included all age groups. Their review identified three intervention strategies: Community Prevention, Gatekeeper Training, and Education. Finally, our research team conducted a systematic review that updated and elaborated upon these 2013 and 2014 systematic reviews by exploring how interventions have addressed suicide among AI/AN populations using broader inclusion criteria that did not omit studies based on narrow demographics. We found that each study reported improvement on at least one of their targeted outcomes (Pham et al., 2021).

All three systematic reviews noted rich cultural adaptation, diversity, and flexibility among the reviewed interventions while noting challenges with drawing overall conclusions about efficacy due to adoption of non-experimental research designs. Nevertheless, these findings shed light on the need to further unpack the logics and rationales that led to such a heterogeneous literature base. For example, what might motivate a pattern of methodological trade-offs that prioritizes community responsiveness over tightly controlled scientific research designs? Furthermore, what can an intervention's underlying logics and rationales inform us about AI/AN commitments in addressing post-colonial problems such as suicide? Systematically reviewing the logics and rationales of suicide interventions among AI/AN populations is a critical step for guiding the development of future prevention programs (and to the best of our knowledge, no existing systematic review has sought to address this issue). Thus, as a companion to our recently published systematic review (Pham et al., 2021) that focused on AI/AN suicide intervention outcomes, we conducted a narrative systematic review to answer the following research question: *What logics or rationales have structured interventions aimed at preventing suicidal behaviors among AI/AN populations?*

## 2. Method

Our research team comprised a cross-country multi-disciplinary collaboration that spanned the University of Minnesota, University of Wisconsin, Harvard University, Massachusetts General Hospital, Oklahoma State University, University of North Dakota, and Stanford University. We defined our research priorities and question *a priori* to inform and justify subsequent decisions about definitions, concepts, scope, and the overall research design (e.g., level of inclusionary flexibility). The research team met weekly to discuss each stage of our systematic review in accordance with detailed guidance by Siddaway and colleagues (2019).

### 2.1. Search strategy

A social sciences librarian (author AR) devised a primary search string that would capture a broad body of literature relevant to the research question (Appendix A). Relevant keywords and subject headings such as "self-destructive behavior," "suicide", suicidality, "American Indian," and "Alaska Natives" were used to retrieve studies meeting the criteria. On June 29th, 2020, Author AR then adapted this search string across twelve databases: PsycINFO, Ovid Medline, EMBASE, CINAHL, ERIC via EBSCO, Bibliography of Native North Americans, Sociological Abstracts, Academic Search Premier, ProQuest Dissertations and Theses, PsyArXiv, SocArXiv, and SSRN. Ultimately, the search strategy returned 1605 unique citations.

Author AW then exported these 1605 items into Rayyan, a cloud-based tool for managing systematic reviews (Ouzzani et al., 2016). We relied on Rayyan for three functions: (1) to facilitate a clear record system, (2) to generate a uniform but independent work environment for each collaborator, and (3) to mask and unmask decisions within this uniform work environment. To systematize the screening process, several inclusion/exclusion criteria were developed around key research priorities.

### 2.2. Article screening

**2.2.1. Screening Criteria.** Several inclusion/exclusion criteria guided our screening process in Rayyan. Specifically, we included studies if they (1) featured a sample that was at least 90% AI/AN OR reported separate analyses for AI/AN individuals (including between group comparisons); (2) implemented an intervention (i.e., took action that was designed to bring about behavioral change in people) that was *a priori* described as targeting suicide (mention of which was therefore expected to appear in the early sections of the article); (3) reported findings as a result of or in association with the *implementation* of the intervention (i.e., not process descriptions about previous or forthcoming studies, literature reviews, systematic reviews, meta-analyses, book chapters, theories, poems, law briefs, introductions to a journal issue, commentaries, corrections); and (4) appeared in a published peer-reviewed journal to assure baseline quality in study reporting.

Given that a number of articles with well-reasoned rationales have been excluded from previous systematic reviews because of their study design (i.e., case reports, see Burt, 1993; Gray and Muehlenkamp, 2010) and intervention type (i.e., discussion groups, see Fleming, 1994, and care service integration, see Nebelkopf and Wright, 2011), we did not exclude articles based on methodological quality or intervention characteristics. In order to provide the most expansive review of strategies, logics, and rationales in a limited literature base, we sought to ensure that our analysis remained both psychologically and historically informative. Thus, we did not exclude articles based on dated information concerning intervention delivery or assessment, while recognizing that the logics and rationales behind certain older suicide prevention programs may seem culturally insensitive or misinformed with respect to current sensibilities.

**2.2.2. Screening Process.** Overall, screening occurred in two phases: (1) title/abstract screening and (2) full-text review for eligibility. Between July and August 2020, authors AKF, AW, and LFR completed title/abstract screening of the 1605 unique items. Altogether, title/abstract screening yielded 683 items (k = 0.83). During September 2020, authors TVP, AKF, AW, and LFR completed a full-text review for eligibility among these 684 items. Altogether, full-text screening yielded 31 items (k = 0.80). We resolved all disagreements through weekly team meetings (kappa statistics were calculated prior to resolution of disagreements). For example, although one borderline case discussed a program that did not develop an intervention that targeted suicide directly, we included the article on the grounds that the program fostered community development of suicide interventions (DeBruyn et al., 1988). Once we resolved all disagreements, we reviewed the final corpus to confirm that each included publication reflected our inclusion and exclusion criteria. Finally, we followed up on any study protocol that hinted at a future study not yet captured by our search and screening process. This yielded one additional study, increasing the total corpus to 32 items. Author AW then exported this final corpus into Zotero, an open-source citation manager. We documented each step in the searching and screening process using the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA; see Fig. 1).

### 2.3. Data extraction

To extract data from the final corpus, we developed an extraction template as outlined by both Siddaway et al. (2019) and the Cochrane Handbook for Systematic Reviews of Interventions (Cochrane, 2020). Given our focus on strategies, logics, and rationales for suicide interventions, we focused on attributes or characteristics of these programs in our narrative systemic review (for a separate report addressed to outcomes and efficacy for this corpus, see Pham et al., 2021).

There is a limited evidence base in part due to chronic underfunding for suicide. What available evidence there is attempts to balance at times competing interests. As a result, many past researchers have instead turned to ethnographic, qualitative, and other social science methods that are judged as having "poor" quality and "low evidence levels" per rigorous biomedical rubrics for assessing outcome evidence (e.g., the GRADE criteria [Schünemann et al., 2013]). Based on prior systematic reviews, we anticipated that these assessments of study quality would designate all but a tiny fraction of the available literature as exhibiting low strength of evidence, and thus, we did not apply them as part of our data extraction process.

As mentioned above, the first and senior authors coded each intervention by engaging in a reflexive dialogue about the strategies, logics, or rationales of each suicide prevention strategy. To guide this process, author TVP first sought to adopt a framework for classifying suicide interventions. Although similar frameworks have been promoted by the Office of the Surgeon General, Action Alliance, U.S. Department of Health and Human Services (U.S. Department of Health and Human Services, Office of Surgeon General, 2021), Journal of the American Medical Association (Mann et al., 2005), and the World Health Organization (WHO 2018), as well as a number of other publications previously funded by SAMHSA (Godoy Garraza et al., 2019; Goldston et al., 2010; Walrath et al., 2015), they chose to adopt the classification promoted by the CDC, which includes seven categories defined by suicide prevention strategy (Stone et al., 2017).

The CDC's comprehensive manual is a framework that "highlights strategies based on the best available evidence to help states and communities prevent suicide" (Stone et al., 2017; for a brief summary see Table 1). Authors TVP and JPG chose to adopt the CDC suicide prevention strategies as these represent a government sanctioned framework with a comprehensive, well-organized, and clear manual that lends itself to coding interventions (Stone et al., 2017). Using the CDC framework for classifying suicide prevention strategies, authors TVP and JPG then independently coded each intervention and discussed any disagreements before coming to a consensus.

## 3. Results

In this systematic review, we asked the following research question, *What logics or rationales have structured interventions aimed at preventing suicidal behaviors among AI/AN populations?* The corpus of studies that met inclusion criteria for this review were quite heterogeneous. Thus, to unpack this heterogeneity we first provide a general overview of these interventions prior to categorizing interventions based on a reigning classification of suicide prevention strategies. All counts refer to the number of distinct interventions (not distinct studies, as some interventions spanned multiple publications) unless otherwise specified. When an intervention name was not provided, we named the intervention within the text to increase readability. While we offer counts across

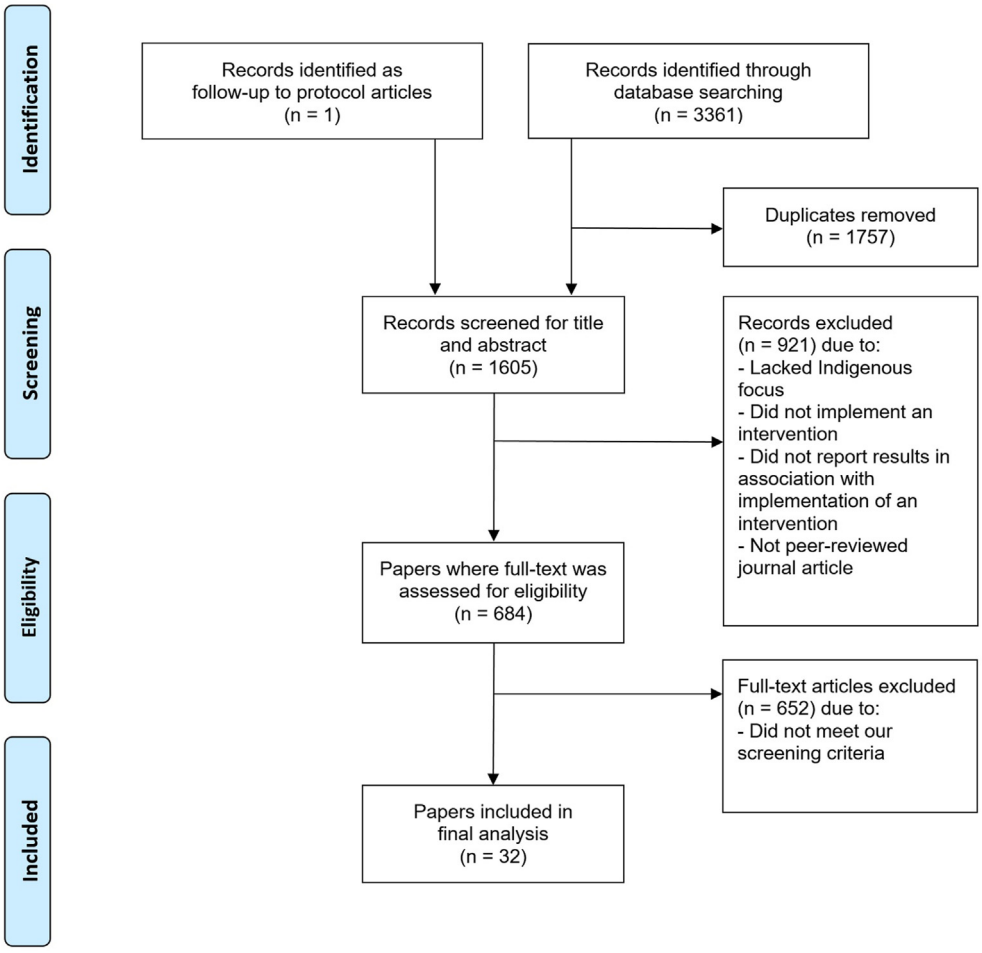


**Fig. 1.** PRISMA Flow Diagram.

the corpus' overarching features, we do not specify which studies comprise these counts to improve readability.

### 3.1. Overview

Our systematic review yielded 32 publications comprising 24 distinct interventions studied by 21 research teams (see Table 2 and Table 3). Featuring in publications appearing between 1976 and 2020, these interventions were mainly implemented in a few regions throughout the USA, namely seven from the Southwestern region, five in Alaska, three along the Pacific Coast, and two in the Rocky Mountain region. Similarly, interventions generally took place in a few setting types with eight taking place in community settings and nine in schools. Furthermore, 16 interventions focused on youth. Of the interventions that listed a specific tribe or Nation, five interventions were undertaken with Apache peoples, one with Yup' ik peoples, one with Omaha peoples, one with Zuni peoples, one with Lumbee peoples, and one with Athabaskan peoples (see Table 2). The remaining studies did not indicate which Tribes or Nations were represented among the study samples.

During development and implementation of these programs, researchers engaged in a variety of safeguards to ensure the systematic and ethical implementation of their interventions. To ensure systematic implementation, researchers for five interventions assessed their implementation for fidelity (i.e., by assessing hired facilitators for adherence to training protocols and/or coding and assessing recordings of program implementation; Allen et al., 2018; Bartgis and Albright, 2016; Cwik et al., 2016b; Henry et al., 2012; LaFromboise and Howard-Pitney, 1994, 1995, 2008; Mohatt et al., 2014; Wexler et al., 2017). Furthermore, researchers for two programs manualized their interventions and made them available online either for free or for purchase (Alakanuk Community Planning Group et al., 2012; LaFromboise, 1996). To ensure ethical implementation, researchers for 15 interventions reported obtaining approval from tribal IRBs prior to implementing their interventions, although it is unclear why other interventions did not report this information or attain tribal IRB approval. Interventions were supported by a wide variety of partners and providers (Table 3). Fifteen interventions reported consulting with community members for input and support, of which, four specifically described their efforts as CBPR (see Table 3).

We now provide a sectioned review of intervention strategies, logics, and rationales as structured by the CDC classification and in doing so, highlight one or more representative interventions that fall within that category in detail. Note that interventions reviewed across CDC strategies do not sum to 24 because several interventions incorporated multiple components that span more than one CDC domain (comprehensive information concerning intervention strategies is included in Table 2).

### 3.2. Promote connectedness (connect)

Fifteen interventions (63%) focused on promoting connectedness, defined by the CDC as delivering peer norm programs and community engagement activities (ASIST, Camp Pigaaq, Celebrating Life, Elders' Resilience, Holistic System of Care, Mental Health Indian Studies Group, PC CARES, Spiritual Advisory Committee, Qungasvik Toolbox, Youth Leaders Program, Zuni Life Skills Development, Youth Treatment Center Services in Western Canada, University Culturally Integrated Suicide

**Table 1**
Frequency of American Indian/Alaska native suicide interventions classified by CDC suicide prevention strategies.

| Strategy | Approach | # of Interventions |
|---|---|---|
| Promote connectedness (Connect) | • Peer norm programs<br>• Community engagement activities | 15 |
| Identify and support people at-risk (ID/Support) | • Gatekeeper training<br>• Crisis intervention<br>• Treatment for people at risk of suicide<br>• Treatment to prevent re-attempts | 12 |
| Create protective environments (ENV) | • Reduce access to lethal means among persons at risk of suicide<br>• Organizational policies and culture<br>• Community-based policies to reduce excessive alcohol use | 11 |
| Teach coping and problem-solving skills (Skills) | • Social-emotional learning programs<br>• Parenting skill and family relationship programs | 10 |
| Strengthen access and delivery of suicide care (Access) | • Coverage of mental health conditions in health insurance policies<br>• Reduce provider shortages in underserved areas<br>• Safer suicide care through systems change | 6 |
| Strengthen economic supports (ECO) | • Strengthen household financial security<br>• Housing stabilization policies | 3 |
| Lessen harms and prevent future risk (↓ Harms) | • Postvention<br>• Safe reporting and messaging about suicide | 2 |

Prevention, Mt. Edgecumbe School Psychiatric and Social Work Consultation, Inpatient DBT Skills; see Tables 2 and 3). One sub-approach directly fostered cultural connections between participants and their own communities (see Table 2). For example, to address suicide among youth from the White Mountain Apache Tribe (WMAT), the community stakeholders and Elders from the WMAT teamed up with the Johns Hopkins Center for American Indian Health to initiate the Elder's Resilience Curriculum. The Elder's Resilience Curriculum had an upstream, strengths-based approach to sidestep the issue of stigma surrounding mental health and help-seeking. After four and a half years of development, their collaborative efforts yielded the curriculum, a program in which Elders visited classrooms across eight reservation schools to connect youth with their heritage, traditions, and culture (Cwik et al., 2019; O'Keefe et al., 2019).

In another example, the San Francisco Native American Health Center collaborated with Nebelkopf and Wright (2011) to implement the Holistic System of Care (HSOC). This team sought to strengthen community relationships and critical life skills among students on the premise that oppressive histories (e.g., forced assimilation and rupture of Indigenous communities) could lead to health problems. Thus, the HSOC sought to link at-risk (e.g., how do they define this) AI students to social networks centered on traditional practices and/or mainstream suicide prevention strategies (e.g., "Positive Indian Parenting," "Gathering of Native Americans"). In terms of the CDC classifications, the HSOC strengthened access and delivery of suicide care, created protective environments, identified and supported people at risk, and most notably, promoted connectedness.

Similar to the HSOC, the University of North Dakota in collaboration with Muehlenkamp and colleagues (2009) developed the Spiritual Advisory Committee (SAC). This project focused the SAC on enculturation because of the known relationship between suicidal ideation/-attempts among AI youth and a lack of spirituality, cultural traditions, and positive ethnoracial identity. Under the SAC, students could request access to specific tribal ceremonies (e.g., sweat lodge ceremonies, cleansing ceremonies). When students requested ceremonies that the SAC could not directly provide, committee members worked with the student to identify an individual who could perform the requested services.

While programs such as the Elder's Resilience Curriculum, HSOC, and SAC directly connected participants with their own communities, other programs took a more indirect sub-approach, namely by convening discussion groups and sponsoring activities about the importance of connection and interaction (see Table 2). For example, Barnett et al. (2020) partnered with remote communities in Alaska to implement Camp *Pigaaq*, a youth culture camp, based on the premise that suicide among AN youth can stem from cultural disruptions brought about by colonial oppression. By this logic, a culture camp would reduce the rate of suicide by revitalizing and connecting youth to their culture (while also creating protective environments and teaching coping and problem-solving skills, per the CDC classification). Thus, the developers of Camp *Pigaaq* structured camp discussion and activities around culture, community, suicide prevention, and life skills.

### 3.3. Identify and support people at risk (ID/support)

Twelve interventions (50%) examined interventions that identified and supported at risk individuals, defined by the CDC as delivering gatekeeper training and crisis intervention and treating people at risk for suicide (Adolescent Suicide Prevention Project; ASIST, Celebrating Life, Holistic System of Care, Kognito Gatekeeper Training, Mental Health Indian Studies Group, Viewer Care Plan, Youth Leaders Program, Zuni Life Skills Development, Youth Treatment Center Services in Western Canada, University Culturally Integrated Suicide Prevention, Mt. Edgecumbe School Psychiatric and Social Work Consultation, Inpatient DBT Skills; see Table 2). In general, these identification and support interventions trained youth/gatekeepers, engaged at risk individuals through educational activities/formal psychotherapy, and mobilized care resources/persons.

One sub-approach focused on training youth and/or gatekeepers on how to identify and mitigate suicide risk factors (see Table 2). For example, May et al. (2005) worked with the Western Athabaskan Tribal Nation to develop the Adolescent Suicide Prevention Project. The Adolescent Suicide Prevention Project sought to deliver a variety of suicide prevention services (e.g., referral services, training in coping/-parenting skills) within naturalistic settings (e.g., the community, outside people's cars), while also strengthening access and delivery of suicide care and creating protective environments (per the CDC classification). To achieve this, the project trained volunteer "natural helpers" to work with professional mental health providers. Natural helpers would better reach "people who preferred to seek help and assistance from knowledgeable and trusted laypersons in less formal settings" (p. 1239).

Alternatively, another sub-approach focused on engaging at-risk individuals through educational activities and/or formal psychotherapy (see Table 2). For example, Kohrt et al. (2017) collaborated with a hospital to culturally adapt Dialectical Behavioral Therapy for Adolescents (DBT-A) and delivered it ("Inpatient DBT") to a 14-year-old Navajo girl admitted for a suicide attempt in the context of major depressive disorder. The team chose DBT-A because of its well-established indication for regulating maladaptive emotions and self-destructive behaviors among suicidal adolescents. Furthermore, the team embedded DBT-A within a "transactional-ecological" framework and conceived of her suicidal behaviors as a product of dysfunctional interactions between post-colonial issues and cultural identity development (Alcántara and Gone, 2008), an element that contributed to creating a protective environment and connectedness (per the CDC classification). To fully promote the patient's engagement, the intervention highlighted the patient's strengths rather than her weaknesses.

Lastly, another sub-approach focused on engaging at-risk individuals by mobilizing care resources/persons (see Table 2). One example

**Table 2**
Key characteristics of American Indian/Alaska native suicide interventions.

| Intervention Name | Author (Year) | Setting (State/Country) | CDC Prevention Strategies | Intervention Characteristics |
|---|---|---|---|---|
| Camp Pigaaq | Barnett et al. (2020) | NS (AK) | ENV, Skills, Connect | Connects youth to culture/mentors/Elders through activity and skill building camp |
| Viewer Care Plan | Kerr et al. (2020) | Various | ID/Support | Prepare adults for concerning social media; teach 3-step planning/response tool |
| Elders' Resilience Curriculum | Cwik et al. (2019)<br>O'Keefe et al. (2019) | Apache Tribe Schools (AZ) | Connect | Teach SUI prevention and connect youth with their CULT traditions, knowledge, and values through Elder taught classes |
| PC CARES | Wexler et al. (2019) | 10 Villages (AK) | Connect, ENV, Skills | Facilitate learning circles and communities of practice that discuss the local/relevance/application of research |
| *Inpatient DBT Skills | Kohrt et al. (2017) | Psych hospital (CO) | ENV, Skills, ID/Support | Deliver DBT that incorporates Navajo worldviews and healing practices |
| Youth Leaders Program | Wexler et al. (2017) | Rural schools (AK) | ENV, Connect, ID/Support | Teach a curriculum that addresses substance abuse, bullying, cultural identity, and the overall school climate |
| ASIST | Cwik et al. (2016c) | Apache Reservation (AZ) | Access, ENV, Connect, ID/Support | Teach SUI first-aid skills through lectures, discussions, group simulations, and role-plays |
| Kognito Gatekeeper Training | Bartgis and Albright (2016) | Middle/high schools, colleges | ENV, ID/Support | Train GK on identifying signs and symptoms of SUI through emotionally responsive online avatars |
| Lumbee Rite of Passage | Langdon et al. (2016) | Lumbee community (NC) | Skills | Address SUI ideation and RF through a Lumbee CULT enrichment program |
| New Hope | Cwik et al. (2016b)<br>O'Keefe et al. (2019) | Apache Reservation (AZ) | Access, Skills | Visit youth/family following a SUI attempt and offer PSYCHOED, skills, and assistance with Tx barriers |
| Youth Entrepreneur Program | Tingey et al. (2016, 2020) | Apache Reservation (AZ) | ECO | Teach entrepreneurship, life skills, and self-efficacy through multi-level, hands-on lessons, activities, and discussions |
| Restoring the NA Spirit | Le and Gobert (2015) | AI School | Skills | Deliver a mindfulness-based intervention |
| Celebrating Life | Cwik et al. (2014, 2016a) | Apache Reservation (AZ) | Access, ID/Support, ↓ Harms, Connect | Provide support and referrals through a SUI surveillance system |
| Project HOPE | Doll and Brady (2013) | Omaha Tribe schools (NE) | Skills | Sensory-based curriculum and activities that promote stress management for the purpose of suicide prevention |
| Holistic System of Care | Nebelkopf and Wright (2011) | AI Health Center (CA) | Connect, ID/Support | Connect students, campuses, and communities to CULT and spirituality through a medicine wheel/circle-of-care approach |
| *Circle of Strength | Gray and Muehlenkamp (2010) | NS University | Connect, ID/Support | Connect students with CULT & spirituality; reduce RF through support, GK training, & SUI team |
| Spiritual Advisory Committee | Muehlenkamp et al. (2009) | University of ND (ND) | Connect | Connect students to tribal ceremonies based on their preference |
| Qungasvik Toolbox | Allen et al. (2009, 2018)<br>Henry et al. (2012)<br>Mohatt et al. (2014) | Yup' ik, Yukon–Kuskokwim community (AK) | ECO, ENV, Connect, Skills | ↑ individual, family, and CULT protective factors and sense of community ownership with SUI prevention activities and skill building |
| Adolescent Suicide Prevention Project | May et al. (2005) | Western Athabaskan Tribal Nation (NM) | Access, ENV, ID/Support | Identify RF and at-risk individuals/families, deliver prevention activities and services, and enhance knowledge and awareness |
| Mental Health Indian Studies Group | Fleming (1994) | Flathead Healing Center (MT) | ENV, Connect, Skills, ID/Support | Discuss various MH issues through group discussions, CULT/community activities, and formal presentations |
| Zuni Life Skills Development | LaFromboise and Howard-Pitney (1994, 1995, 2008) | Pueblo of Zuni High School (NM) | ENV, Connect, Skills, ID/Support | Deliver interactive scenarios that describe problematic life situations typical for AI adolescents |
| *Youth Tx Center | Burt (1993) | Youth Tx Center (CAN) | ENV, Connect, ID/Support | Integrate self-perception, social context, and feminine experience through CULT art therapy |
| SIT | DeBruyn et al. (1988) | Various | Access | Assist SUI prevention programs through development and resource mobilization |
| *Mt. Edgecumbe School | Harvey et al. (1976) | Boarding school (AK) | ECO, Access, ID/Support, ↓ Harms | Provide psychiatric consultation and social work services |

*Note.* * = name assigned by systematic review authors; *AI* = American Indian; *CAN* = Canada; *CULT* = cultural; ↓ = decrease; *ECO* = economic; *ENV* = environment; *RF* = risk factors; *GK* = gatekeepers; ↑ = increase; *MH* = mental health; *NA* = Native American; *NS* = not specified; *PSYCHOED* = psychoeducation; *SIT* = Special Initiatives Team; *SUI* = suicide; *RF* = risk factors; *Tx* = treatment.

**Table 3**
Personnel, partners, and agencies involved with the development of American Indian/Alaska native suicide interventions.

| Intervention | Author (Year) | Personnel | Partner/Agency Support |
|---|---|---|---|
| Camp Pigaaq | Barnett et al. (2020) | Elders, research/program staff | SAMHSA Garrett Lee Grant, University of Alaska Anchorage IRB, Alaska Area IRB |
| Viewer Care Plan | Kerr et al. (2020) | Research/program staff | The Northwest Portland Area Indian Health Board, SAMHSA, Seattle Children's Research Institute IRB, Portland Area Indian Health Service IRB |
| Elders' Resilience Curriculum | Cwik et al. (2019)<br>O'Keefe et al. (2019) | Elders | SAMHSA, WMAT Council |
| PC CARES | Wexler et al. (2019) | Trained local facilitators | Indigenous leaders, educational experts, NIMH, the Substance Abuse and Mental Health Administration Maniilaq Association, NANA Corporation, Kawerak, Inc. |
| *Inpatient DBT | Kohrt et al. (2017) | Research/program staff | State inpatient psychiatric hospital |
| Youth Leaders Program | Wexler et al. (2017) | Youth leaders, advisor teachers and adults from the community | SAMHSA Service to Science Initiative, Canadian Institutes of Health Research's Team Grant, IHS, University research review boards, Apache Tribal Council and Health Advisory Board |
| ASIST | Cwik et al. (2016c) | Research/program staff | WMAT |
| Kognito Gatekeeper Training | Bartgis and Albright (2016) | Emotionally responsive online avatars with memory and personality | Mr. Seprieono Locario (private funder) |
| Lumbee Rite of Passage | Langdon et al. (2016) | Research/program staff | Lumbee Tribe, NIMH, Wake Forest School of Medicine IRB |
| New Hope | Cwik et al. (2016b)<br>O'Keefe et al. (2019) | Locally trained WMAT paraprofessional community mental health workers | JHU Center for American Indian Health, WMAT Tribal Council, IHS Phoenix Area IRB, Apache Health Advisory Board and Tribal Council |
| Youth Entrepreneur Program | Tingey et al. (2016, 2020) | Research/program staff | National Institutes of Health: National Institute of General Medical Sciences, Barclays Bank, WMAT, the CAB, Apache Tribal Council and Health Advisory Board, Indian Health Service, Tribal Council and Health Advisory Board. |
| Restoring the Native American Spirit | Le and Gobert (2015) | Research/program staff, a "tribal champion," facilitators from the CSKT | Community practitioners, American Psychological Foundation, Colorado Injury Control Research Center, CSKT Council, Tribal Social Services Department, Circle of Trust Suicide Prevention Program, Tribal Elders, Cultural Committees, Two Eagle River School, Mind Body Awareness Project, University of Hawai'i at Manoa IRB |
| Celebrating Life | Cwik et al. (2014, 2016a) | Celebrating Life Team (Tribal Council established) | JHU Center for American Indian Health, WMAT Council and Health Board, SAMHSA Garret Lee Smith Grant, CAB and Elders' Council, NA Research Centers in Health, National Institute of General Medical Science, IHS, Tribal IRB |
| Project HOPE | Doll (2013) | Occupational therapists, research/program staff | SAMHSA, US Department of HHS |
| Holistic System of Care | Nebelkopf and Wright (2011) | Research/program staff, clinic staff | Center for Mental Health Service Circle of Care, SAMHSA Projects (Native Women and Native Men, Native Voices, Urban Trails) |
| Spiritual Advisory Committee | Muehlenkamp et al. (2009) | Program/research staff | AI Campus Suicide Prevention Project, University of North Dakota, AI Campus Suicide Prevention Project, Garrett Lee Smith Campus Suicide Prevent Grant, Department of HHS, SAMHSA |
| Qungasvik Toolbox | Allen et al. (2009, 2018)<br>Henry et al. (2012)<br>Mohatt et al. (2014) | Research/program staff | People Awakening Team (Ellangneq Councils, Yup'ik Regional Coordinating Council, Ellangneq Advisory Group, Ellangneq Project Staff), National Institute on Drug Abuse, National Institute on Alcohol Abuse and Alcoholism, National Institute on Minority Health and Health Disparities, National Institute of General Medical Sciences, The University of Alaska Fairbanks, University of Minnesota IRB, the Yukon-Kuskokwim Health Corporation Human Studies Committee |
| Adolescent Suicide Prevention Project | May (2005 | Professional mental health staff, neighborhood volunteers | Western Athabaskan Tribal Nation, Council, and Health Board, US IHS Albuquerque Area, CDC |
| Mental Health Indian Studies Group | Fleming (1994) | Research/program staff | Flathead Tribal Coordinating Committee, Office for Substance Abuse Prevention |
| Zuni Life Skills Development | LaFromboise and Howard-Pitney (1994, 1995, 2008) | Non-Zuni female teacher, Zuni male cultural resource person | Superintendent and staff of the Zuni Public Schools, Henry J. Kaiser Family Foundation, NIH, University of Wisconsin, Zuni-Stanford Committee |
| *Youth Tx Center | Burt (1993) | Research/program staff | NS |
| SIT | DeBruyn et al. (1988) | Research/program staff | Mental Health Programs Branch, IHS |
| *Mt. Edgecumbe School | Harvey et al. (1976) | Psychiatrist, social worker | Alaska Native Health Service |

*Note. AI* = American Indian; *CAB* = Community Advisory Board; CDC = Centers for Disease Control and Prevention; *CSKT* = Confederated Salish and Kootenai Tribes; *HHS* = Health and Human Services; *JHU* = Johns Hopkins University; *IHS* = Indian Health Service; *IRB* = Institutional Review Board; *NA* = Native American; *NIH* = National Institute of Health; *NIMH* = National Institute of Mental Health; *NS* = not specified; *Tx* = Treatment; *SAMHSA* = Substance Abuse and Mental Health Services Administration; *UCISP* = University Culturally Integrated Suicide Prevention; *WMAT* = White Mountain Apache Tribe.

described by Gray and Muehlenkamp (2010) stressed an integrative model ("Circle of Strength") that included care mobilization and follow-up. Like Kohrt et al. (2017), this project developed the Circle of Strength based on a transactional-ecological model. Whereas Kohrt and colleagues designed their intervention around the inpatient setting, Grey and colleagues designed their intervention around the college setting and sought to create a safety net for at-risk individuals by coordinating a variety of otherwise disparate care systems (and, per the CDC classification, this approach also promoted connectedness).

### 3.4. Create protective environments (ENV)

Eleven interventions (46%) focused on creating protective environments, defined by the CDC as reducing access to lethal means among persons at risk of suicide, improving organizational policies and culture, and implementing community-based policies to reduce excessive alcohol use (Adolescent Suicide Prevention Project, ASIST, Camp Pigaaq, Kognito Gatekeeper Training, Mental Health Indian Studies Group, PC CARES, Qungasvik Toolbox, Youth Leaders Program, Zuni Life Skills Development, Youth Treatment Center Services in Western Canada, Inpatient DBT Skills; see Table 2). Developers of these interventions generally focused on promoting cultural protective factors in the home or school environment by training participants and/or engaging participants in interactive activities. For example, Wexler et al. (2017) partnered with Northwestern Alaska communities to launch the Youth Leaders Program (YLP). Because youth spend most of their time in schools, the developers sought to re-engage these youth with their school and cultural identities, create an overall positive school environment, and decrease maladaptive behaviors within the school setting that could lead to suicide (e.g., substance use, bullying). They trained "natural helpers" and peer leaders to deliver the intervention using the Comprehensive Health Education Foundation's Natural Helper curriculum. The developers followed the rationale that peers could connect with at risk youth on sensitive subjects such as suicide better than health professionals could (while also creating protective environments and identifying and supporting people at risk, per the CDC classification).

Another example was the *Qungasvik* Toolbox (Allen et al., 2009, 2018; Henry et al., 2012; Mohatt et al., 2014), a multi-level, community based training and activities intervention that sought to reduce alcohol use and suicide among Yup'ik AN youth (for a copy of the manual, see Alakanuk Community Planning Group et al., 2012). To effectively work with the seasonal lifestyles, values, and practices of Yup'ik circumpolar AN communities, the developers adopted a CBPR approach. Thus, a diverse range of community members developed the *Qungasvik* Toolbox over the course of 90 planning meetings. During these meetings, program developers decided to focus the *Qungasvik* Toolbox on the Yup'ik youth given their higher rates of suicide relative to adults. Furthermore, the developers specifically targeted alcohol use, given its especially high rate of co-occurrence with suicide among Yup'ik youth. They avoided a victim-blaming, deficit-based framework and instead adopted a strengths-based approach. Ultimately, the *Qungasavik* Toolbox is a 36-module curriculum that focuses on strengthening individual, and more importantly, family and community level protective factors to curb access to and rates of substance use and related issues (while also promoting connectedness, per the CDC classification).

### 3.5. Teach coping and problem-solving skills (skills)

Ten interventions (42%) focused on teaching coping and problem-solving skills, defined by the CDC as delivering social-emotional learning programs and parenting skill and family relationship programs (Camp Pigaaq, Lumbee Rite of Passage, Mental Health Indian Studies Group, New Hope, PC CARES, Project HOPE, Restoring the North American Spirit, Qungasvik Toolbox, Zuni Life Skills Development, Inpatient DBT Skills; see Table 2). One sub-approach trained participants in groups. For example, LaFromboise and colleagues (1994, 1995, 2008), in collaboration with the New Mexico Zuni community, developed the Zuni Life Skills Development (ZLSD) program for the high school classroom setting. Several rationales informed their decision to focus on skills training. First, skills training could directly address issues identified among Zuni youth. Second, in keeping with community request, skills training would offer solutions that tackle behavioral issues *before* rather than after they arise (while also creating protective environments and promoting connectedness, per the CDC classification). Third, skills training would reflect role modeling, an intervention "style compatible with Indian styles of helping" (p. 100). Ultimately, the ZLSD program featured a curriculum that included 28 lesson plans sectioned into six major units: (1) information about suicide, (2) suicide intervention skills, (3) communication skills, (4) coping with oppression, (5) anger and stress management, and (6) personal and community goal setting (the curriculum is available for purchase online; see LaFromboise, 1996).

While the ZLSD program taught coping and problem-solving skills within the group setting, another component focused on teaching coping and problem-solving skills by delivering psychoeducation primarily at an individual level (see Table 2). One example, New Hope, came about from a series of focus group discussions that sought to decrease the high rate of suicide among Apache youth (Cwik et al., 2016b). As a part of these focus group discussions, emergency room providers, Apache parents, youth, and tribal leaders elected to connect with at-risk youth routinely in the emergency room, where many would present following a suicide related event. After establishing contact, community mental health workers from the New Hope team would schedule a follow-up visit to meet with patients and, if possible, their families. To avoid any associated anxiety or stigma related to a healthcare visit, the team elected to visit the patient within a patient and family-preferred setting. A typical follow-up visit involved training the at-risk youth on how to cope, emotionally regulate, and cognitively restructure thoughts, behaviors, and feelings that could lead to self-injury. The New Hope team also addressed treatment adherence, created safety plans, and facilitated social support and care provider contacts to ensure continuity of care, thus also strengthening access and delivery of suicide care, per the CDC classification (Cwik et al., 2016b; O'Keefe et al., 2019).

### 3.6. Strengthen access and delivery of suicide care (access)

Six interventions (25%) focused on strengthening access and delivery of suicide care, defined by the CDC as covering mental health conditions in health insurance policies, reducing provider shortages in under-served areas, and ensuring safer suicide care through systems change. One component focused on directly training the community on how to access available care pathways (Adolescent Suicide Prevention Project; ASIST, Celebrating Life, New Hope, Special Initiatives Team, Mt. Edgecumbe School Psychiatric and Social Work Consultation; see Table 2). For example, one intervention mobilized various unspecified communities (mostly along the West Coast) to develop and implement suicide prevention strategies of their own (described by DeBruyn et al., 1988). This intervention was composed of a multi-disciplinary Special Initiatives Team (SIT) that operated under the Mental Health Programs Branch of IHS. To foster sustainability and a positive sense of community responsibility and ownership, the development team centered each stage of development and maintenance around the community's constituents. Thus, rather than directly developing, managing, and evaluating interventions themselves, the SIT program offered assistance, consultation, and referrals.

### 3.7. Strengthen economic support (ECO)

Three interventions (13%) focused on strengthening economic support, defined by the CDC as strengthening household financial security and housing stabilization policies (Qungasvik Toolbox, Youth Entrepreneur Program, Mt. Edgecumbe School Psychiatric and Social Work Consultation; see Table 2 for details). These interventions, however,

differed in how they sought to bolster economic support. For the first intervention, Harvey and colleagues studied a pre-existing psychiatric and social work consultation service that helped to mobilize economic resources at a boarding school (while also strengthening access and delivery of suicide care, identifying and supporting people at risk, and lessening harms and prevent future risk, per the CDC classification). For the second intervention, Tingey and colleagues (2016; 2020) partnered with the Fort Apache Indian Reservation in Northeast Arizona to pilot and implement the Arrowhead Business Group Apache Youth Entrepreneurship Program, a program that engaged participants in educational activities and lessons about successful entrepreneurship (while also creating protective environments, promoting connectedness, and teaching coping and problem-solving skills, per the CDC classification). For the last intervention, the *Qungasvik* developers (Allen et al., 2009; 2018; Henry et al., 2012; Mohatt et al., 2014) sought to strengthen subsistence skills (e.g., hunting, gathering) given, among other reasons, the high costs of consumer goods in rural Alaska. Altogether, developers from these programs chose to reconnect AI/AN individuals with socioeconomic resources and/or culturally relevant skills under the assumption that colonialism disrupted how AI/AN families typically sustained themselves, thus bolstering critical economic resources and family dynamics that protect against suicide.

### 3.8. Lessen harms and prevent future risk (↓ harms)

Two interventions (8%), described in three reports (Celebrating Life, Mt. Edgecumbe School Psychiatric and Social Work Consultation; see Table 2 for details), prevented future risk in the immediate aftermath of a suicide attempt by lessening harms (e.g., de-briefing sessions, psychological counseling) and expeditiously reporting outcomes to the public (e.g., local school officials/assemblies, suicide surveillance agencies, and behavioral health services). The developers from these programs chose to lessen harms and prevent future risk based on the premise that suicide related events can affect not just the suicidal individual but those known to them (e.g., suicide contagion). To best reach out to these affected individuals, program developers sought help from not just social work services and psychiatry consultation services but community members as well.

In the first intervention, a continuous psychiatric consultation and social work service assisted American Indian students from various tribal backgrounds at Mt. Edgecumbe, a boarding school in Alaska. Children at this school were known at the time to suffer from considerable psychological distress from cultural alienation and Western assimilation, sometimes amounting to two suicide attempts per week at the school (Harvey et al., 1976). To address the high rate of suicide at Mt. Edgecumbe, the Alaska Native Health Service first developed the psychiatric-social work program in 1968. The consultation service, composed of an in-service training program, included a part-time psychiatric consultant to tackle the student's mental health issues (e.g., depression, anxiety) related to suicide and two social workers to tackle the socio-cultural roots of mental illness and suicide. In addition to strengthening economic support, strengthening access and delivery of suicide care, and identifying and supporting people at risk (per the CDC classification), Harvey and colleagues took a culturally informed approach and worked one-on-one with at-risk students seven days a week. Since the program's inception, the Alaska regional office of the Bureau of Indian Affairs and the school superintendent have gone on to maintain the psychiatric consultation and social work service.

In the second, more current intervention, Cwik and colleagues (2014, 2016a) described how the Fort Apache Indian Reservation tribal government mandated the Celebrating Life intervention, a local surveillance and follow-up system across Northeastern Arizona. At that time, the reservation contended with an anecdotal rate of suicide higher than what had been reported by the IHS and CDC. To address this discrepancy, ensure timely follow-up services, generate community data for prevention and research programs not typically permissible through national and regional surveillance systems, (while also strengthening access and delivery of suicide care and identifying and supporting people at risk, per the CDC classification), the tribal council worked in collaboration with Cwik and colleagues to design and implement the Celebrating Life intervention. Between 2007 and 2012, the Celebrating Life program measured the prevalence of suicide ideation, attempts, and deaths sent to them by community individuals working with the White River Service Unit on the reservation. Afterwards, the Celebrating Life team supported any at-risk individuals by connecting them to appropriate care services.

## 4. Discussion

We conducted a systematic review to address our research question, *What logics or rationales have structured interventions aimed at preventing suicidal behaviors among AI/AN populations?* We employed broad inclusion criteria to focus on the field as a whole, rather than a few select populations and study types. This inclusive approach to searching, screening, and data extraction yielded 32 articles, comprising 24 unique interventions. As a result, the answer to our research question is complex and nuanced and includes the following observations.

Each of the seven CDC suicide prevention strategies were represented across the diverse reviewed corpus. Most frequently, developers from these studies sought to (1) promote connectedness, (2) identify and support people at-risk, and/or (3) create protective environments. These three strategies also predominated among the 17 interventions that featured multiple CDC suicide prevention strategies. Of the eight interventions that solely featured one CDC suicide prevention strategy, none focused exclusively on (1) creating protective environments or (2) lessening harms and preventing future risk.

We then asked how and why the collective corpus incorporated each of the strategies based on the seven CDC prevention strategies. Ultimately, two trends emerged. First, in light of the presumed need to accord with the recommendations of the scientific community, developers from most (but not all) interventions incorporated conventional suicide prevention practices as the backbone of their programs (e.g., delivering psychotherapy to manage risk factors that can lead to suicide; teaching life skills to help regulate suicidal thoughts, emotions, and behaviors; offering psychoeducation to ensure steady and continuous access to care).

Second, in light of the negative, ongoing impact of Euro-American colonialism on these communities, each program developed and implemented their interventions to accurately understand and address community needs and sensibilities (e.g., focusing on collectivist orientations to well-being, delivering culture-as-treatment, adhering to a transactional-ecological approach), many of which included the community during development and implementation (e.g., CBPR). As a result, developers from the reviewed corpus blended both individual-centered rationales (e.g., rationales designed to alter or ameliorate attributes or characteristics of the individual) and systems-centered rationales (e.g., rationales designed to alter or ameliorate attributes or characteristics of the setting) to form multi-faceted interventions.

Of note, despite shifting politics, cultures, institutions (e.g., the closing of boarding schools to institutionalize AI/AN youth), and movements (e.g., CULTURE FORWARD; O'Keefe et al., 2022), this focus on systems-centered rationales and logics did not suddenly emerge in recent years. For example, the psychiatric and social work service at Mt Edgecumbe's boarding school, evaluated by Harvey et al. (1976), included two social workers who sought to address the socio-cultural roots of mental illness and suicide. While this offered a rich diversity of options for suicide prevention within AI/AN communities, how do these interventions compare with the predominant practices for preventing suicide in the USA?

### 4.1. Comparison to predominant suicide prevention practices

Although no singular gold standard exists for suicide prevention, the

predominant approach involves a combination of outpatient mental health services for non-acute issues (e.g., psychotherapy, medications) and inpatient mental health services for acute issues (e.g., a locked psychiatric unit). In keeping with this attitude, the CDC lists several specific evidence-based interventions as examples of their suicide prevention strategies, a majority of which target suicide as an individual-centered mental health issue best addressed by medical professionals, thus funneling care within established healthcare systems (Stone et al., 2017). Examples of individual-centered interventions listed by the CDC include suicide prevention (e.g., National Suicide Prevention Lifeline; Gould et al., 2012), treatment to prevent re-attempts (e.g., Cognitive Behavioral Therapy for Suicide Prevention; Stanley et al., 2009), safer suicide care through systems change (e.g., the Zero Suicide Toolkit; Turner et al., 2021), treatment for people at-risk for suicide (e.g., DBT; Linehan, 1987), reducing access to lethal means among persons at-risk (e.g., encouraging safe firearm storage practices; Rowhani-Rahbar et al., 2016), organizational policies and culture (e.g., correctional suicide prevention; Bonner, 2000), social-emotional learning programs (e.g., Good Behavior Game; Tingstrom et al., 2006), post-vention (e.g., the StandBy Response Service; Comans et al., 2013), gatekeeper training (e.g., ASIST; Cwik et al., 2016c), and safe reporting and messaging about suicide (e.g., guiding media representation of suicide; Brownlie et al., 2021).

While a few of these CDC-listed interventions do technically target "systems," the ultimate aim of most of these interventions is to expand conventional mental healthcare services that address problems or deficits as they relate to the individual rather than society. Examples include expanding coverage of mental health conditions in health insurance policies (e.g., mental health parity laws; Buchmueller et al., 2007) and reducing provider shortages in underserved areas (e.g., tele-mental health; Barnett and Kolmes, 2016). Conversely, sample system-centered interventions include housing stabilization policies (e.g., the Neighborhood Stabilization Program; Fraser and Oakley, 2015), organizational policies and culture (e.g., Together for Life; Mishara and Martin, 2012), community-based policies to reduce excessive alcohol use (e.g., reducing alcohol outlet density; Campbell et al., 2009), and community engagement activities (e.g., greening vacant urban spaces; South et al., 2018). Interestingly, several of these interventions focus on the transaction between the individual and a specific setting; that is, they lie in the middle of a conceptual continuum that is anchored on either end by person- and system-centered interventions. These include interventions such as parenting skill and family relationship approaches (e.g., The Incredible Years; Webster-Stratton, 2001) and post-vention (e.g., Attachment-Based Family Therapy; Diamond et al., 2016).

Altogether, while the CDC lists a wide array of evidence-based individual-, transaction-, and system-centered interventions, the number of individual-centered rationales among the CDC's listed interventions is seemingly twice the number of system-centered rationales. This observation is notable for a few reasons. First, this suggests that adherence to broader international recommendations for comprehensive, multilevel approaches (i.e., intervention components across domains, providers, and settings; World Health Organization, 2018) will be somewhat more difficult to achieve if conventional evidence-based interventions for suicide prevention cluster too heavily in the individual domain. Second, this more individual-centered approach tends to locate the deficit or dysfunction within persons as opposed to the demonstrated interest of AI/AN communities that are concerned with collective processes at the community level, including shared historical experiences of systemic and structural disadvantage stemming from colonial subjugation. Third, this relates back to our previously raised question: what might motivate a pattern of methodological trade-offs that prioritizes community responsiveness over tightly controlled scientific research designs? This disproportionate representation of individual-centered interventions is likely related to the difficulty of scientifically assessing the efficacy of system-centered interventions, many of which require unusual or non-existing methodological innovations to scientifically assess upstream factors (e.g., studying the impact of ancestral suffering on current generations of AI/AN people as postulated by the construct of Indigenous historical trauma) (Gone, In Press).

In any case, the preponderance of individual-centered interventions seems somewhat incongruent with the context-sensitive descriptions of many of the CDC's seven suicide prevention strategies (and especially with the corpus of this AI/AN focused systematic review). Thus, despite an emphasis on individual-centered interventions within evidence-based suicide prevention practices, what explains the persistent appeal of system-centered interventions among AI/AN populations? We offer one formulation below. For a more in-depth analysis from the perspective of methodological rigor and outcomes, see Rey et al. (2022) and Pham et al. (2021) respectively.

### 4.2. Indigenous assumptions about suicide

One formulation by Wexler and Gone (2012) roots this persistence within local cultural meanings and practices, specifically four Indigenous assumptions about suicide. Per the first assumption identified by Wexler and Gone (2012), selfhood is a social rather than an intrapersonal and individual construct with striking relationships between identity, culture, family, and community. Based on this assumption, developers for AI/AN suicide prevention programs went on to create protective environments by training not only mental healthcare professionals but also pre-existing networks of supportive others as well. Similarly, developers supported at-risk individuals following a suicide event not only by promoting social work and psychiatry consultation services but also through enlisting the help of other community members as well.

For example, the HSOC and SAC sought to connect at-risk AI students with traditional values and practices (Muehlenkamp et al., 2009; Nebelkopf and Wright, 2011) while Camp Pigaaq sought to connect students with their culture (Barnett et al., 2020). Similarly, Gray and Muehlenkamp (2010) connected at-risk individuals using a holistic system of care that focused the on community; LaFromboise and Howard-Pitney (1994, 1995, 2008) trained youth on how to cope with their emotions by reconnecting them with their peers, family, and community; and Langdon et al. (2016) taught coping and problem-solving skills to youth by recruiting community Elders to discuss the importance of culture.

Per the second assumption identified by Wexler and Gone (2012), selfhood is enacted as an obligation to signal collective distress in the community. From this perspective, suicide is no longer a matter of individual choice but a necessitated and public expression of collective dysfunction for social and spiritual dilemmas within the family, community, and tribal context. Historically speaking, collective AI/AN dysfunction has most notably stemmed from Euro-American repression of AI/AN selfhood and related systems of meaning-making (Spencer, 2000), thus catalyzing a transgenerational "anomie" that led to the pervasive suicide crisis among AI/AN communities. Anomie, literally meaning "no law," refers to the loss of societal mores and norms (Durkheim et al., 1951; Teymoori et al., 2017).

To illustrate the AI/AN context of forced assimilation into Euro-American values and practices, MASKED interviewed an AI reservation traditionalist named Traveling Thunder who discussed the origins of drinking and depression within his community. Traveling Thunder reported that colonial subjugation, forced assimilation, and dispossession of culture, identity and sacred practices and values eventually led to a loss in identity, purpose, and meaning that might lead to a specific sequence of problems: depression, substance abuse, loss of self-worth, and suicide. This psychosocial anomie was unlikely to be addressed by well-meaning mental health systems that are ill-equipped to promote renewed cultural orientations, connections, and practices that Traveling Thunder designated as the remedy for AI/AN suicide. Thus, it comes as no surprise that program developers who engaged AI/AN communities within the reviewed corpus sought to prevent suicide less frequently by providing AI/AN individuals with psychiatric treatment and/or parenting skills and more frequently by reconnecting individuals with

their identity, community, and culture as a means to rectifying colonialism's negative impacts on AI/AN lives.

In the third assumption identified by Wexler and Gone (2012), non-professional community members, rather than clinical experts, should deliver suicide prevention measures to the community. As Cwik et al. (2016c) put it, "participants were significantly less likely to endorse that helping requires professional skills" (p. 409). This focus on non-professional community members is related to the health sector's longstanding history of irreverence, disrespect, exploitation, and reduction of complex sociocultural experiences into person-rather than system-centered problem explanations, arguably resulting in a deficit-oriented pathologizing approach best suited for a clinician's expert intervention (Glover et al., 2015; Gone and Calf Looking, 2011).

On the other hand, non-professional lay providers (e.g., gatekeepers) provide social connections that target the underlying cultural roots of Indigenous suicide. Furthermore, non-professional lay providers, as members of the same cultural community, can understand local customs, mediate shared socio-cultural meanings, interpret emotional expression and self-representation, identify critical social networks and community resources outside of clinical support systems, and craft culturally meaningful interventions. For example, the Youth Leaders Program set out to create an overall positive school environment by enlisting the help of peer leaders (Wexler et al., 2017). Similarly, programs such as the KGS or ASIST viewed gatekeepers, who youth appeal to during times of crisis, as ideal recipients of suicide training (Bartgis and Albright, 2016; Cwik et al., 2016c).

Even interventions ostensibly centered around individual issues included aspects of AI/AN culture and community. For example, developers wanted to teach coping and problem-solving skills to at-risk individuals with psychological distress, however some AI/AN individuals may view the mental healthcare system and its associated practices with stigma, distrust, and skepticism (Glover et al., 2015; Gone, in press; Wexler and Gone, 2012). Thus, several developers asked lay community members rather than trained professionals to teach coping and problem-solving skills. In the case of the Adolescent Suicide Prevention Project, May et al. (2005) were able to approach at-risk community members regarding conventional mental healthcare services by enlisting the help of other community members.

For the fourth and final assumption identified by Wexler and Gone (2012), suicide interventions should be locally designed as community decolonization projects. This directly contrasts with biomedical health and social service practices that invoke attitudes of Euro-colonial imperialism and cultural subjugation through coercive practices such as involuntary commitment. In keeping with this assumption, a majority of the studies described community-driven programs from beginning to end. For example, the development of the Qungasvik Toolbox included a diverse range of community members over the course of 90 planned meetings (Allen et al., 2009, 2018; Henry et al., 2012; Mohatt et al., 2014). Similarly, the development of the Elder's Resilience Curriculum included collaborative work between the Johns Hopkins Center for American Indian Health and community stakeholders and Elders from the WMAT that took place over the course of four and a half years.

### 4.3. Toward the future

Suicide is a public health crisis for AI/AN communities. The assumptions about suicide within AI/AN communities, as reflected by Traveling Thunder (Gone, 2007, 2008), the reviewed corpus, and the CDC suicide prevention strategies, must feature into the development and implementation of actual AI/AN suicide prevention programs (see Wiglesworth, 2022 for further commentary on this subject matter). Unfortunately, these assumptions have yet to figure into the mainstream mental health services delivered through the mental healthcare system. Thus, the scientific community must rethink the criteria for what makes up a "gold standard" intervention. For example, can an intervention be considered gold standard if it does not incorporate components that are culturally relevant to underrepresented groups such as the AI/AN community?

Currently, large professional bodies (e.g., panels, task forces, steering committees) recommend interventions for inclusion within clinical practice guidelines and health care recommendations such as the American Psychological Association Clinical Practice Guidelines, the American Psychiatric Association Practice Guidelines, the United Kingdom NICE standards, and the Veterans Administration/Department of Defense Clinical Practice Guidelines (Tolin et al., 2015). This broad, top-down approach is critical for systematizing best practices across a wide variety of settings and peoples that conform with quickly evolving and largely scientifically dominated world. At the same time, however, this approach privileges "scientifically-vetted" over locally established treatments, thus running the risk of leaving risk and protective factors specific to Indigenous populations largely unaddressed.

### 4.4. Recommendations

To siphon benefit from both Indigenous and scientific communities, experts on Indigeneity have signaled for studies to articulate and document the effectiveness of cultural activities in terms that modern scientists can understand (Beeker et al., 1998; Wright et al., 2011). Studies at this intersection would have to artfully bridge epistemological gaps between biomedical and Indigenous communities through authentic community based participatory research. For example, programs can culturally adapt a known scientific intervention using input from a specific community (see Navajo-based DBT-A by Kohrt et al., 2017 or Project HOPE by Doll and Brady, 2013). Alternatively, developers can fashion culturally meaningful interventions from the ground up while additionally offering well established, "mainstream" interventions (see the HSOC by Nebelkopf and Wright, 2011). Studies on these interventions should also dutifully document how their logics and rationales map onto the intervention development process. For example, the included articles largely did not indicate who specifically initiated intervention development, a factor that would have added nuance to our discussion on individual-versus system-centered rationales.

### 4.5. Limitations

In terms of systematic reviews, future studies should expand upon the limitations inherent within this review. First, the recent decade has featured more publications when compared to previous years. This leads us to believe that our systematic review will quickly require an update to capture this transformative moment in research history. Second, while we coded these interventions into the CDC suicide prevention strategies using a reflexive dialogue between the first and senior author, we did not employ measures of agreement to index how frequently initial coding differed. Furthermore, while the CDC technical package is detailed, given the potential for cultural incongruities between the CDC categories and the settings and contexts featured within this systematic review, future studies may benefit from a more rigorous CDC coding process. Third, the methods appear from this systematic review may have generated incomplete data regarding the breadth of strategies adopted by interventions. For example, our systematic review did not focus on Native Hawaiian populations. In another example, we included only publications that described an implementation of an intervention to ensure we were describing interventions as they had been executed. Furthermore, while this systematic review did include reflection pieces and protocol outlines with at least some relationship to a separate article with outcomes data, these process descriptions did not include grey literature and stemmed solely from literature screened from the original electronic search (for example process descriptions beyond the scope of our search process, see Wexler et al., 2016 and Rasmus et al., 2014); however, there is some evidence to support including grey literature (Mahood et al., 2014) and publications derived from checking reference lists (Horsley et al., 2011). Thus, to add further depth and nuance, this systematic

review systematic review would also benefit from a broad-form update with looser inclusion/exclusion criteria (e.g., including articles without an explicit connection to the implementation of an intervention, grey literature, literature derived from checking reference lists).

## 5. Conclusion

Comparative differences in frequency and circumstances distinguish suicide among AI/AN individuals from suicide among other ethnoracial groups. To match these differences, a wide variety of interventions and suicide prevention strategies have emerged. To better understand this heterogeneity, we conducted a systematic review that sought to understand the logics and rationales of these suicide prevention strategies. We adopted a broad strategy towards searching and screening that yielded a final corpus of 32 items. Data extraction revealed a diverse literature base that adhered to each of the seven CDC suicide prevention strategies with most promoting connectedness and/or creating protective environments. While the logics and rationales justifying these suicide prevention strategies varied from strategy to strategy, each study rooted their choice of intervention within system-centered rationales (e.g., social relations, community, historical trauma, culture-as-treatment). We related the strong appeal of community system-based rationales to underlying assumptions about suicide within Indigenous communities. Altogether, the presented suicide prevention strategies, logics, and rationales signal towards the necessity for future interventions to incorporate community-driven, system-based rationales with flexibility towards individual-centered rationales and interventions.

## Role of the funding source

This research did not receive any specific grant from funding agencies in the public, commercial, or not-for-profit sectors.

## CRediT authorship contribution statement

**Tony V Pham:** Conceptualization, Methodology, Formal analysis, Investigation, Data curation, Writing – original draft. **Anna Kawennison Fetter:** Conceptualization, Methodology, Formal analysis, Investigation, Data curation, Writing – review & editing. **Andrea Wiglesworth:** Conceptualization, Methodology, Formal analysis, Investigation, Data curation, Writing – review & editing. **LittleDove F. Rey:** Conceptualization, Methodology, Formal analysis, Investigation, Data curation, Writing – review & editing. **Micah L. Prairie Chicken:** Writing – review & editing. **Michael Azarani:** Writing – review & editing. **Amy Riegelman:** Conceptualization, Methodology, Formal analysis, Investigation, Data curation, Writing – review & editing. **Joseph P. Gone:** Conceptualization, Methodology, Formal analysis, Investigation, Data curation, Writing – review & editing, Supervision.

## Declaration of competing interest

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.

## Acknowledgments

None.

## Appendix A. Supplementary data

Supplementary data to this article can be found online at https://doi.org/10.1016/j.ssmmh.2022.100139.

## References

Alcántara, C., & Gone, J. P. (2008). Suicide in Native American communities: A transactional-ecological formulation of the problem. In F. T. L. Leong, & Leach M.M. (Eds.), *Series in Death, Dying, and Bereavement. Suicide Among Racial and Ethnic Minority Groups: Theory, Research, and Practice* (pp. 173–199). New York: Routledge/Taylor & Francis Group.

Alakanuk Community Planning Group, Allen, J., Alstrom, D., Burkett, R., Campbell, D., Chikigak, A., Ebesson, G., Gonzalez, J., Hubalik, N., Mohatt, G. V., Moses, C., Nicholai, D., Orr, E., & Paul, M. Toksook Bay Community Planning Group, Yup'ik Regional Coordinating Council. (2012). *Qungasvik (Toolbox): An Indigenous Intervention Science Model for Alaska Native Communities*. Center for Alaska Native Health Research. http://canhr.uaf.edu/research/past-canhr-projects/qungasvik-toolbox-indigenous-intervention-science-model-alaska-native-communities/.

* Allen, J., Mohatt, G., Fok, C. C. T., Henry, D., & People Awakening, Team. (2009). Suicide prevention as a community development process: understanding circumpolar youth suicide prevention through community level outcomes. *Int. J. Circumpolar Health, 68*(3), 274–291. https://doi.org/10.3402/ijch.v68i3.18328.

* Allen, James, Rasmus, S. M., Fok, C. C. T., Charles, B., Henry, D., & Qungasvik, Team (2018). Multi-level cultural intervention for the prevention of suicide and alcohol use risk with Alaska Native Youth: a nonrandomized comparison of treatment intensity. *Prev. Sci., 19*(2), 174–185. https://doi.org/10.1007/s11121-017-0798-9.

Allen, J., Wexler, L., & Rasmus, S. (2021). Protective factors as a unifying framework for strength-based intervention and culturally responsive American Indian and Alaska native suicide prevention. *Prev. Sci.*, 1–14. https://doi.org/10.1007/s11121-021-01265-0

Barnett, J. E., & Kolmes, K. (2016). The practice of tele-mental health: ethical, legal, and clinical issues for practitioners. *Pract, Innovat., 1*(1), 53. https://doi.org/10.1037/pri0000014

* Barnett, J. D., Schmidt, T. C., Trainor, B., & Wexler, L. (2020). A pilot evaluation of culture camps to increase Alaska Native youth wellness. *Health Promot. Pract., 21*(3), 363–371. https://doi.org/10.1177/1524839918824078.

* Bartgis, J., & Albright, G. (2016). Online role-play simulations with emotionally responsive avatars for the early detection of Native youth psychological distress, including depression and suicidal ideation. *Am. Indian Alaska Native Ment. Health Res., 23*(2), 1–27. https://doi.org/10.5820/aian.2302.2016.1.

Beeker, C., Guenther-Grey, C., & Raj, A. (1998). Community empowerment paradigm drift and the primary prevention of HIV/AIDS. *Soc. Sci. Med., 46*, 831–842. https://doi.org/10.1016/S0277-9536(97)00208-6

Bonner, R. L. (2000). Correctional suicide prevention in the year 2000 and beyond. *Suicide Life-Threatening Behav., 30*(4), 370–376. https://doi.org/10.1111/j.1943-278X.2000.tb01103.x

Brave Heart, M. Y. H. (2003). The historical trauma response among Natives and its relationship with substance abuse: a Lakota illustration. *J. Psychoact. Drugs, 35*(1), 7–13. https://doi.org/10.1080/02791072.2003.10399988

Brownlie, J., Ho, J. C. T., Dunne, N., Fernández, N., & Squirrell, T. (2021). Troubling content: guiding discussion of death by suicide on social media. *Sociol. Health Illness, 43*(3), 607–623. https://doi.org/10.1111/1467-9566.13245

Buchmueller, T. C., Cooper, P. F., Jacobson, M., & Zuvekas, S. H. (2007). Parity For Whom? Exemptions And The Extent Of State Mental Health Parity Legislation: although many states have passed parity laws, the potency of those laws varies from state to state. *Health Aff., 26*(Suppl. 2), w483–w487. https://doi.org/10.1377/hlthaff.26.4.w483

* Burt, H. (1993). Issues in art therapy with the culturally displaced American Indian youth. *Arts Psychother., 20*(2), 143–151. https://doi.org/10.1016/0197-4556(93)90003-K.

Campbell, C. A., Hahn, R. A., Elder, R., Brewer, R., Chattopadhyay, S., Fielding, J., & Task Force on Community Preventive Services. (2009). The effectiveness of limiting alcohol outlet density as a means of reducing excessive alcohol consumption and alcohol-related harms. *Am. J. Prev. Med., 37*(6), 556–569. https://doi.org/10.1016/j.amepre.2009.09.028

Campbell, C. D., & Evans-Campbell, T. (2011). Historical trauma and Native American child development and mental health: an overview. In P. Spicer, P. Farrell, M. C. Sarche, & H. E. Fitzgerald (Eds.), *American Indian and Alaska Native Children and Mental Health: Development, Context, Prevention, and Treatment* (pp. 1–26). Santa Barbara, CA: Praeger/ABC-CLIO.

Cedar Project, P., Pearce, M. E., Christian, W. M., Patterson, K., Norris, K., Moniruzzaman, A., Craib, K. J. P., Schechter, M. T., & Spittal, P. M. (2008). The Cedar Project: historical trauma, sexual abuse and HIV risk among young Aboriginal people who use injection and non-injection drugs in two Canadian cities. *Soc. Sci. Med., 66*(11), 2185–2194. https://doi.org/10.1016/j.socscimed.2008.03.034, 1982.

Center for Disease Control. (2021). *Leading Causes of Death and Injury*. https://www.cdc.gov/injury/wisqars/LeadingCauses.html.

Centers for Disease Control. (2020). *1999-2018 Wide Ranging Online Data for Epidemiological Research (WONDER), Multiple Cause of Death Files*. https://wonder.cdc.gov/ucd-icd10.html.

Clifford, A. C., Doran, C. M., & Tsey, K. (2013). A systematic review of suicide prevention interventions targeting indigenous peoples in Australia, United States, Canada and New Zealand. *BMC Publ. Health, 13*(1), 463. https://doi.org/10.1186/1471-2458-13-463

Cochrane, Training (2020). *Cochrane Handbook for Systematic Reviews of Interventions*. https://training.cochrane.org/handbook/current.

Comans, T., Visser, V., & Scuffham, P. (2013). Cost effectiveness of a community-based crisis intervention program for people bereaved by suicide. *Crisis J. Crisis Interv. Suicide Prev., 34*(6), 390. https://doi.org/10.1027/0227-5910/a000210

* Cwik, M. F., Barlow, A., Goklish, N., Larzelere-Hinton, F., Tingey, L., Craig, M., Lupe, R., & Walkup, J. (2014). Community-based surveillance and case management for

suicide prevention: an American Indian tribally initiated system. *Am. J. Public Health, 104*, e18–23.
* Cwik, M. F., Tingey, L., Maschino, A., Goklish, N., Larzelere-Hinton, F., Walkup, J., & Barlow, A. (2016a). Decreases in suicide deaths and attempts linked to the White Mountain Apache suicide surveillance and prevention system, 2001-2012. *Am. J. Public Health, 106*(12), 2183–2189.
* Cwik, M. F., Tingey, L., Lee, A., Suttle, R., Lake, K., Walkup, J. T., & Barlow, A. (2016b). Development and piloting of a brief intervention for suicidal American Indian adolescents. *Am. Indian Alaska Native Ment. Health Res., 23*(1), 105–124.
* Cwik, M. F., Tingey, L., Wilkinson, R., Goklish, N., Larzelere-Hinton, F., & Barlow, A. (2016c). Suicide prevention gatekeeper training: can they advance prevention in Indian country?. *Arch. Suicide Res., 20*(3), 402–411. https://doi.org/10.1080/13811118.2015.1033122.
* Cwik, M., Goklish, N., Masten, K., Lee, A., Suttle, R., Alchesay, M., O'Keefe, V., & Barlow, A. (2019). "Let our Apache heritage and culture live on forever and teach the young ones": development of the elders' resilience curriculum, an upstream suicide prevention approach for American Indian youth. *Am. J. Community Psychol., 64*(1–2), 137–145. https://doi.org/10.1002/ajcp.12351.
Czyzewski, K. (2011). Colonialism as a broader social determinant of health. *Int. Indigen. Pol. J., 2*(1). https://doi.org/10.18584/iipj.2011.2.1.5
* DeBruyn, L. M., Hymbaugh, K., & Valdez, N. (1988). Helping communities address suicide and violence: the special Initiatives team of the Indian health service. *Am. Indian Alaska Native Ment. Health Res.: J. Natl. Cent., 1*(3), 56–65. https://doi.org/10.5820/aian.0103.1988.56.
Diamond, G., Russon, J., & Levy, S. (2016). Attachment-based family therapy: a review of the empirical support. *Fam. Process, 55*(3), 595–610. https://doi.org/10.1111/famp.12241
* Doll, J., & Brady, K. (2013). Project HOPE: implementing sensory experiences for suicide prevention in a Native American community. *Occup. Ther. Ment. Health, 29*(2), 149–158. https://doi.org/10.1080/0164212X.2013.788977.
Duran, E., Firehammer, J., & Gonzalez, J. (2008). Liberation psychology as the path toward healing cultural soul wounds. *J. Counsel. Dev., 86*(3), 288–295. https://doi.org/10.1002/j.1556-6678.2008.tb00511.x
Durkheim, E. (1951). *Suicide: A Study in Sociology*. Glencoe, IL: Free Press. J. A. Spaulding & G. Simpson, Trans.
Echo-Hawk, H. (2011). Indigenous communities and evidence building. *J. Psychoact. Drugs, 43*(4), 269–275. https://doi.org/10.1080/02791072.2011.628920
Evans-Campbell, T. (2008). Historical trauma in American Indian/Native Alaska communities: a multilevel framework for exploring impacts on individuals, families, and communities. *J. Interpers Violence, 23*(3), 316–338. https://doi.org/10.1177/0886260507312290
Findling, M. T., Blendon, R. J., Benson, J. M., & Miller, C. (2020). The unseen picture: issues with health care, discrimination, police and safety, and housing experienced by Native American populations in rural America. *J. Rural Health*. https://doi.org/10.1111/jrh.12517
* Fleming, C. M. (1994). The blue bay healing center: community development and healing as prevention. *Am. Indian Alaska Native Ment. Health Res., 4*(Mono), 134–165. https://doi.org/10.5820/aian.mono04.1994.134.
Fraser, J. C., & Oakley, D. (2015). The neighborhood stabilization program: stable for whom? *J. Urban Aff., 37*(1), 38–41. https://doi.org/10.1111/juaf.12159
Garland, John (2013). Foreword. In Shotton, Heather J., Lowe, Shelly C., Waterman, & Stephanie J. (Eds.), *Beyond the Asterisk: Understanding Native Students in Higher Education*. Sterling, Virginia: Stylus Publishing, LLC.
Glover, M., Kira, A., Johnston, V., Walker, N., Thomas, D., Chang, A. B., Bullen, C., Segan, C. J., & Brown, N. (2015). A systematic review of barriers and facilitators to participation in randomized controlled trials by Indigenous people from New Zealand, Australia, Canada and the United States. *Global Health Promot., 22*(1), 21–31. https://doi.org/10.1177/1757975914528961
Godoy Garraza, L., Kuiper, N., Goldston, D., McKeon, R., & Walrath, C. (2019). Long-term impact of the Garrett Lee Smith youth suicide prevention program on youth suicide mortality, 2006-2015. *JCPP (J. Child Psychol. Psychiatry), 60*(10), 1142–1147. https://doi.org/10.1111/jcpp.13058
Goldston, D. B., Walrath, C. M., McKeon, R., Puddy, R. W., Lubell, K. M., Potter, L. B., & Rodi, M. S. (2010). The Garrett Lee Smith memorial suicide prevention program. *Suicide Life-Threatening Behav., 40*(3), 245–256. https://doi.org/10.1521/suli.2010.40.3.245
* Gray, J., & Muehlenkamp, J. (2010). Circle of Strength: a case description of culturally integrated suicide prevention. *Arch. Suicide Res., 14*(2), 182–191. https://doi.org/10.1080/13811111003704852.
Gray, A. P., Richer, F., Harper, S., O'Keefe, V. M., Tucker, R. P., Cole, A. B., Hollingsworth, D. W., & Wingate, L. R. (2018). Understanding indigenous suicide through a theoretical lens: a review of general, culturally-based, and indigenous frameworks, 2016 *Transcult. Psychiatr., 55*(6), 775–799. https://doi.org/10.1177/1363461518778937.
Griffiths, K., Coleman, C., Lee, V., & Madden, R. (2016). How colonisation determines social justice and Indigenous health—a review of the literature. *J. Popul. Res., 33*(1), 9–30. https://doi.org/10.1007/s12546-016-9164-1
Gone, J. P. (2007). "We never was happy living like a Whiteman": mental health disparities and the postcolonial predicament in American Indian communities. *Am. J. Community Psychol., 40*(3), 290–300. https://doi.org/10.1007/s10464-007-9136-x
Gone, J. P. (2008). 'So I can be like a Whiteman': the cultural psychology of space and place in American Indian mental health. *Cult. Psychol., 14*(3), 369–399. https://doi.org/10.1177/1354067X08092639
Gone, J. P. (2013). Redressing First Nations historical trauma: theorizing mechanisms for indigenous culture as mental health treatment. *Transcult. Psychiatr., 50*(5), 683–706. https://doi.org/10.1177/1363461513487669
Gone, J. P. (In Press). Researching with American Indian and Alaska Native communities: Pursuing partnerships for psychological inquiry in service to Indigenous futurity. In Cooper, H., Coutanche, M., Panter, A. T., McMullen, L. M., Rindskopf, D., & Sher, K. (Eds.), APA Handbook of Research Methods in Psychology (2nd ed., 2). Washington, DC: American Psychological Association.
Gone, J. P., & Calf Looking, P. E. (2011). American Indian culture as substance abuse treatment: pursuing evidence for a local intervention. *J. Psychoact. Drugs, 43*(4), 291–296. https://doi.org/10.1080/02791072.2011.628915
Gould, M. S., Munfakh, J. L., Kleinman, M., & Lake, A. M. (2012). National suicide prevention lifeline: enhancing mental health care for suicidal individuals and other people in crisis. *Suicide Life-Threatening Behav., 42*(1), 22–35. https://doi.org/10.1111/j.1943-278X.2011.00068.x
Hamby, S., Schultz, K., & Elm, J. (2020). Understanding the burden of trauma and victimization among American Indian and Alaska native elders: historical trauma as an element of poly-victimization. *J. Trauma & Dissociation, 21*(2), 172–186. https://doi.org/10.1080/15299732.2020.1692408
Harlow, A. F., Bohanna, I., & Clough, A. (2014). A systematic review of evaluated suicide prevention programs targeting indigenous youth. *Crisis J. Crisis Interv. Suicide Prev., 35*(5), 310–321. https://doi.org/10.1027/0227-5910/a000265
* Harvey, E. B., Gazay, L., & Samuels, B. (1976). Utilization of a psychiatric-social work team in an Alaskan native secondary boarding school. *J. Am. Acad. Child Psychiatr., 15*(3), 558–574. https://doi.org/10.1016/S0002-7138(09)61629-0.
* Henry, D., Allen, J., Fok, C. C. T., Rasmus, S., & Charles, B. (2012). Patterns of protective factors in an intervention for the prevention of suicide and alcohol abuse with Yup'ik Alaska Native youth. *Am. J. Drug Alcohol Abuse, 38*(5), 476–482. https://doi.org/10.3109/00952990.2012.704460.
Horsley, T., Dingwall, O., & Sampson, M. (2011). Checking reference lists to find additional studies for systematic reviews. *Cochrane Database Syst. Rev.*, (8).
Hofstra, E., Van Nieuwenhuizen, C., Bakker, M., Özgül, D., Elfeddali, I., de Jong, S. J., & van der Feltz-Cornelis, C. M. (2020). Effectiveness of suicide prevention interventions: a systematic review and meta-analysis. *Gen. Hosp. Psychiatr., 63*, 127–140. https://doi.org/10.1016/j.genhosppsych.2019.04.011
Institute of Medicine (US) Committee on Pathophysiology and Prevention of Adolescent and Adult Suicide. (2002). In S. K. Goldsmith, T. C. Pellmar, A. M. Kleinman, & W. E. Bunney (Eds.), *Reducing Suicide: A National Imperative*. National Academies Press (US).
Jaramillo, J., Mello, Z. R., & Worrell, F. C. (2016). Ethnic identity, stereotype threat, and perceived discrimination among Native American adolescents. *J. Res. Adolesc., 26*(4), 769–775. https://doi.org/10.1111/jora.12228
Kerr, B., Stephens, D., Pham, D., Ghost Dog, T., McCray, C., Caughlan, C., Gaston, A., Gritton, J., Jenkins, M., Craig Rushing, S., & Moreno, M. A. (2020). Assessing the usability, appeal, and impact of a web-based training for adults responding to concerning posts on social media: pilot suicide prevention study. *JMIR Mental Health, 7*(1). https://doi.org/10.2196/14949*
Kirmayer, L. J., Boothroyd, L. J., Laliberté, A., & Simpson, B. L. (1999). Suicide prevention and mental health promotion in first Nations and inuit communities. *Cult. Ment. Health Res. Unit Rep.*
* Kohrt, B. K., Lincoln, T. M., & Brambila, A. D. (2017). Embedding DBT skills training within a transactional-ecological framework to reduce suicidality in a Navajo adolescent female. *Clin. Case Stud., 16*(1), 76–92. https://doi.org/10.1177/1534650116668271.
* LaFromboise, T. D., & Howard-Pitney, B. (1994). The Zuni Life Skills Development curriculum: a collaborative approach to curriculum development. *Am. Indian Alaska Native Ment. Health Res., 4*(Mono), 98–121. https://doi.org/10.5820/aian.mono04.1994.98.
* LaFromboise, T., & Howard-Pitney, B. (1995). The Zuni life skills development curriculum: description and evaluation of a suicide prevention program. *J. Counsel. Psychol., 42*(4), 479–486. https://doi.org/10.1037/0022-0167.42.4.479.
* LaFromboise, T. D. (1996). *American Indian Life Skills Development Curriculum* (Workbook edition). Chicago, IL: University of Wisconsin Press.
* LaFromboise, T. D., & Lewis, H. A. (2008). The Zuni life skills development program: a school/community-based suicide prevention intervention. *Suicide Life-Threatening Behav., 38*(3), 343–353. https://doi.org/10.1521/suli.2008.38.3.343.
* Langdon, S. E., Golden, S. L., Arnold, E. M., Maynor, R. F., Bryant, A., Freeman, V. K., & Bell, R. A. (2016). Lessons learned from a community-based participatory research mental health promotion program for American Indian youth. *Health Promot. Pract., 17*(3), 457–463. https://doi.org/10.1177/1524839916636568.
* Le, T. N., & Gobert, J. M. (2015). Translating and implementing a mindfulness-based youth suicide prevention intervention in a Native American community. *J. Child Fam. Stud., 24*(1), 12–23. https://doi.org/10.1007/s10826-013-9809-z.
Leavitt, R. A., Ertl, A., Sheats, K., Petrosky, E., Ivey-Stephenson, A., & Fowler, K. A. (2018). Suicides among American Indian/Alaska natives—national violent death reporting system, 18 states, 2003–2014. *MMWR (Morb. Mortal. Wkly. Rep.), 67*, 237–242. https://doi.org/10.15585/mmwr.mm6708a1
Linehan, M. M. (1987). Dialectical behavioral therapy: a cognitive behavioral approach to parasuicide. *J. Pers. Disord., 1*(4), 328. https://doi.org/10.1521/pedi.1987.1.4.328
Mahood, Q., Van Eerd, D., & Irvin, E. (2014). Searching for grey literature for systematic reviews: challenges and benefits. *Res. Synth. Methods, 5*(3), 221–234. https://doi.org/10.1002/jrsm.1106
Mann, J. J., Apter, A., Bertolote, J., Beautrais, A., Currier, D., Haas, A., Hegerl, U., Lonnqvist, J., Malone, K., Marusic, A., Mehlum, L., Patton, G., Phillips, M., Rutz, W., Rihmer, Z., Schmidtke, A., Shaffer, D., Silverman, M., Takahashi, Y., et al. (2005). Suicide prevention strategies: a systematic review. *JAMA, 294*(16), 2064–2074. https://doi.org/10.1001/jama.294.16.2064

* May, P. A., Serna, P., Hurt, L., & DeBruyn, L. M. (2005). Outcome evaluation of a public health Approach to suicide prevention in an American Indian tribal nation. *Am. J. Public Health, 95*(7), 1238–1244. https://doi.org/10.2105/AJPH.2004.040410.

Merzel, C., & D'Afflitti, J. (2003). Reconsidering community-based health promotion: promise, performance, and potential. *Am. J. Public Health, 93*(4), 557–574. https://doi.org/10.2105/AJPH.93.4.557

Mishara, B. L., & Martin, N. (2012). Effects of a comprehensive police suicide prevention program. *Crisis J. Crisis Interv. Suicide Prev., 33*(3), 162. https://doi.org/10.1027/0227-5910/a000125

* Mohatt, G. V., Fok, C. C. T., Henry, D., & Allen, J. (2014). Feasibility of a community intervention for the prevention of suicide and alcohol abuse with Yup'ik Alaska native youth: the Elluam Tungiinun and Yupiucimta Asvairtuumallerkaa studies. *Am. J. Community Psychol., 54*(1), 153–169. https://doi.org/10.1007/s10464-014-9646-2.

Muehlenkamp, J. J., Marrone, S., Gray, J. S., & Brown, D. L. (2009). A college suicide prevention model for American Indian students. *Prof. Psychol. Res. Pract., 40*(2), 134–140. https://doi.org/10.1037/a0013253*

* Nebelkopf, E., & Wright, S. (2011). Holistic system of care: a ten-year perspective. *J. Psychoact. Drugs, 43*(4), 302–308. https://doi.org/10.1080/02791072.2011.628922.

Novins, D. K., Beals, J., Roberts, R. E., & Manson, S. M. (1999). Factors associated with suicide ideation among American Indian Adolescents: does culture matter? *Suicide Life-Threatening Behav., 29*(4), 332–346. https://doi.org/10.1111/j.1943-278X.1999.tb00528.x

Office of the Surgeon General. (2012). *US 2012 National Strategy for Suicide Prevention: Goals and Objectives for Action: A Report of the US Surgeon General and of the National Action Alliance for Suicide Prevention.* US National Action Alliance for Suicide Prevention.

* O'Keefe, V. M., Haroz, E. E., Goklish, N., Ivanich, J., Celebrating Life, T., Cwik, M. F., & Barlow, A. (2019). Employing a sequential multiple assignment randomized trial (SMART) to evaluate the impact of brief risk and protective factor prevention interventions for American Indian Youth Suicide. *BMC Publ. Health, 19*(1), 1675. https://doi.org/10.1186/s12889-019-7996-2.

O'Keefe, V. M., Waugh, E., Grubin, F., Cwik, M., Chambers, R., Ivanich, J., Weeks, R., & Barlow, A. (2022). *Development of" CULTURE FORWARD: A Strengths and Culture-Based Tool to Protect Our Native Youth from Suicide.* Cultural Diversity & Ethnic Minority Psychology.

Ouzzani, M., Hammady, H., Fedorowicz, Z., & Elmagarmid, A. (2016). Rayyan—a web and mobile app for systematic reviews. *Syst. Rev., 5*(1), 210. https://doi.org/10.1186/s13643-016-0384-4

Pham, T. V., Fetter, A. K., Wiglesworth, A., Rey, L. F., Prairie Chicken, L., Azarani, M., & Gone, J. P. (2021). Suicide interventions for American Indian and Alaska Native populations: a systematic review of outcomes. *SSM - Ment. Health, 1*(100029). https://doi.org/10.1016/j.ssmmh.2021.100029

Rad, M. S., Martingano, A. J., & Ginges, J. (2018). Toward a psychology of Homo sapiens: making psychological science more representative of the human population. *Proc. Natl. Acad. Sci. USA, 115*(45), 11401–11405. https://doi.org/10.1073/pnas.1721165115

Redvers, J., Bjerregaard, P., Eriksen, H., Fanian, S., Healey, G., Hiratsuka, V., et al. (2015). A scoping review of Indigenous suicide prevention in circumpolar regions. *Int. J. Circumpolar Health, 74*(1), Article 27509. https://doi.org/10.3402/ijch.v74.27509

Rasmus, S. M., Charles, B., & Mohatt, G. V. (2014). Creating Qungasvik (a Yup'ik intervention "toolbox"): case examples from a community-developed and culturally-driven intervention. *Am. J. Community Psychol., 54*(1), 140–152. https://doi.org/10.1007/s10464-014-9651-5

Rowhani-Rahbar, A., Simonetti, J. A., & Rivara, F. P. (2016). Effectiveness of interventions to promote safe firearm storage. *Epidemiol. Rev., 38*(1), 111–124. https://doi.org/10.1093/epirev/mxv006

Rey, L. F., Wiglesworth, A., Prairie Chicken, M. L., Fetter, A. K., Azarani, M., Riegelman, A., & Gone, J. P. (2022). A systematic review of research methodologies in American Indian and Alaska Native suicide research from 2010 to 2020. *Cult. Divers Ethnic Minor. Psychol.*. https://doi.org/10.1037/cdp0000531

Robinson, J., Bailey, E., Witt, K., Stefanac, N., Milner, A., Currier, D., et al. (2018). What works in youth suicide prevention? A systematic review and meta-analysis. *EClinicalMedicine, 4*, 52–91. https://doi.org/10.1016/S2215-0366(16)30030-X

Schünemann, H. J. B. J., Brożek, J., Guyatt, G., & Oxman, A. E. (2013). *Handbook for Grading the Quality of Evidence and the Strength of Recommendations Using the GRADE Approach. Updated October*, 2013 https://gdt.gradepro.org/app/handbook/handbook.html.

Siddaway, A., Wood, A., & Hedges, L. (2019). How to do a systematic review: a best practice guide for conducting and reporting narrative reviews, meta-analyses, and meta-syntheses. *Annu. Rev. Psychol., 70*. https://doi.org/10.1146/annurev-psych-010418-102803

Smith, L. T. (1999). *Decolonizing Methodologies: Research and Indigenous Peoples*. London, UK: Zed Books; University of Otago Press.

Stanley, B., Brown, G., Brent, D. A., Wells, K., Poling, K., Curry, J., Kennard, B. D., Wagner, A., Cwik, M. F., Klomek, A. B., Goldstein, T., Vitiello, B., Barnett, S., Daniel, S., & Hughes, J. (2009). Cognitive-behavioral therapy for suicide prevention (CBT-SP): treatment model, feasibility, and acceptability. *J. Am. Acad. Child Adolesc. Psychiatry, 48*(10), 1005–1013. https://doi.org/10.1097/CHI.0b013e3181b5dbfe

Sotero, M. (2006). A conceptual model of historical trauma: implications for public health practice and research. *J. Health Disparit. Res. Pract., 1*(1), 93–108. https://ssrn.com/abstract=1350062.

South, E. C., Hohl, B. C., Kondo, M. C., MacDonald, J. M., & Branas, C. C. (2018). Effect of greening vacant land on mental health of community-dwelling adults: a cluster randomized trial. *JAMA Netw. Open, 1*(3), Article e180298. https://doi.org/10.1001/jamanetworkopen.2018.0298. e180298.

Spencer, D. J. (2000). Anomie and demoralization in transitional cultures: the Australian Aboriginal Model. *Transcult. Psychiatr., 37*(1), 5–10. https://doi.org/10.1177/136346150003700109

Stone, D. M., Holland, K. M., Bartholow, B., Crosby, A. E., Davis, S., & Wilkins, N. (2017). *Preventing Suicide: A Technical Package of Policies, Programs, and Practices*. https://doi.org/10.15620/cdc.44275

Substance Abuse and Mental Health Services Administration. (2018). *National Survey on Drug Use and Health: Detailed Tables.* Center for Behavioral Health Statistics and Quality Data. https://www.samhsa.gov/data/report/2018-nsduh-detailed-tables.

Teymoori, A., Bastian, B., & Jetten, J. (2017). Towards a psychological analysis of anomie. *Polit. Psychol., 38*(6), 1009–1023. https://doi.org/10.1111/pops.12377

* Tingey, L., Larzelere-Hinton, F., Goklish, N., Ingalls, A., Craft, T., Sprengeler, F., McGuire, C., & Barlow, A. (2016). Entrepreneurship education: a strength-based approach to substance use and suicide prevention for American Indian adolescents. *Am. Indian Alaska Native Ment. Health Res., 23*(3), 248–270. https://doi.org/10.5820/aian.2303.2016.248.

* Tingey, L., Larzelere, F., Goklish, N., Rosenstock, S., Jennings Mayo-Wilson, L., O'Keefe, V., Pablo, E., Goklish, W., Grass, R., Sprengeler, F., Ingalls, A., Craig, M., & Barlow, A. (2020). Behavioral and mental health outcomes from an RCT of a Youth Entrepreneurship Intervention among Native American adolescents. *Child. Youth Serv. Rev., 119*, Article 105603. https://doi.org/10.1016/j.childyouth.2020.105603.

Tingstrom, D. H., Sterling-Turner, H. E., & Wilczynski, S. M. (2006). The good behavior game: 1969-2002. *Behav. Modif., 30*(2), 225–253. https://doi.org/10.1177/0145445503261165

Tolin, D. F., McKay, D., Forman, E. M., Klonsky, E. D., & Thombs, B. D. (2015). Empirically supported treatment: recommendations for a new model. *Clin. Psychol. Sci. Pract., 22*(4), 317–338. https://doi.org/10.1111/cpsp.12122

Turner, K., Sveticic, J., Almeida-Crasto, A., Gaee-Atefi, T., Green, V., Grice, D., Kelly, P., Krishnaiah, R., Lindsay, L., Mayahle, B., Patist, C., Van Engelen, H., Walker, S., Welch, M., Woerwag-Mehta, S., & Stapelberg, N. J. (2021). Implementing a systems approach to suicide prevention in a mental health service using the Zero Suicide Framework. *Aust. N. Z. J. Psychiatr., 55*(3), 241–253. https://doi.org/10.1177/0004867420971698

U.S. Commission on Civil Rights. (2020). *Broken Promises: Continuing Federal Funding Shortfull for Native Americans*. https://www.usccr.gov/pubs/2018/12-20-Broken-Promises.pdf.

U.S. Department of Health and Human Services. (2021). Office of Surgeon general. The Surgeon General's Call to Action to Implement the National Strategy for Suicide Prevention https://www.hhs.gov/sites/default/files/sprc-call-to-action.pdf.

Walter, M., & Andersen, C. (2013). *Indigenous Statistics: A Quantitative Research Methodology* (first ed.). Routledge. https://doi.org/10.4324/9781315426570

Walters, K. L., Mohammed, S. A., Evans-Campbell, T., Beltrán, R. E., Chae, D. H., & Duran, B. (2011). Bodies don't just tell stories, they tell histories: embodiment of historical trauma among American Indians and Alaska Natives1. *Du. Bois Rev.: Soc. Sci. Res. Race, 8*(1), 179–189.

Walrath, C., Garraza, L. G., Reid, H., Goldston, D. B., & McKeon, R. (2015). Impact of the Garrett Lee Smith youth suicide prevention program on suicide mortality. *Am. J. Public Health, 105*(5), 986–993. https://doi.org/10.2105/AJPH.2014.302496

Weniger, J., Young, S., & Hernandez, C. (2020). Risk and protective factors with Native American Indian and Alaska Native children who have a history of suicidal behavior. *J. Indig. Res., 8*, 2. https://doi.org/10.26077/6qnp-z328, 2020.

Wexler, L., McEachern, D., DiFulvio, G., Smith, C., Graham, L. F., & Dombrowski, K. (2016). Creating a community of practice to prevent suicide through multiple channels: describing the theoretical foundations and structured learning of PC CARES. *Int. Q Community Health Educ., 36*(2), 115–122. https://doi.org/10.1177/0272684X16630886

Wexler, L. M., & Gone, J. P. (2012). Culturally responsive suicide prevention in indigenous communities: unexamined assumptions and new possibilities. *Am. J. Public Health, 102*(5), 800–806. https://doi.org/10.2105/AJPH.2011.300432

Wexler, L., Chandler, M., Gone, J. P., Cwik, M., Kirmayer, L. J., LaFromboise, T., et al. (2015). Advancing suicide prevention research with rural American Indian and Alaska Native populations. *Am. J. Public Health, 105*(5), 891–899. https://doi.org/10.2105/AJPH.2014.302517, 5.

* Wexler, L., Poudel-Tandukar, K., Rataj, S., Trout, L., Poudel, K. C., Woods, M., & Chachamovich, E. (2017). Preliminary evaluation of a school-based youth leadership and prevention program in rural Alaska Native communities. *Sch. Ment. Health, 9*(2), 172–183. https://doi.org/10.1007/s12310-016-9203-2.

* Wexler, L., Rataj, S., Ivanich, J., Plavin, J., Mullany, A., Moto, R., Kirk, T., Goldwater, E., Johnson, R., & Dombrowski, K. (2019). Community mobilization for rural suicide prevention: process, learning and behavioral outcomes from promoting community conversations about research to end suicide (PC CARES) in Northwest Alaska. *Soc. Sci. Med., 232*, 398–407. https://doi.org/10.1016/j.socscimed.2019.05.028.

Webster-Stratton, C. (2001). The incredible years: parents, teachers, and children training series. *Resid. Treat. Child. Youth, 18*(3), 31–45. https://doi.org/10.1300/J007v18n03_04

Wiglesworth, A. (2022). Commentary: understanding how patient-specific factors might violate assumptions of suicide risk and impact the well-being of mental health care providers following patient suicidal behavior. *Clin. Psychol.: Sci. Pract., 29*(2), 117–120. https://doi.org/10.1037/cps0000086

Wiglesworth, A., Rey, L., Fetter, A. K., Prairie Chicken, M. L., Azarani, M., Davis, A., & Gone, J. P. (2022). Attempted suicide in American Indian and Alaska Native populations: a systematic review of research on protective factors. *Clin. Psychol.: Sci. Pract.*. https://doi.org/10.1037/cps0000085

World Health Organization. (2018). *National Suicide Prevention Strategies: Progress, Examples and Indicators*. World Health Organization. World Health Organization http://www.who.int/mental_health/suicide-prevention/national_strategies_2019/en/.

Wright, S., Nebelkopf, E., King, J., Mass, M., Patel, C., & Samuel, S. (2011). Holistic system of care: evidence of effectiveness. *Subst. Use Misuse, 46*(11), 1420–1430. https://doi.org/10.3109/10826084.2011.592438

Zalsman, G., Hawton, K., Wasserman, D., van Heeringen, K., Arensman, E., Sarchiapone, M., et al. (2016). Suicide prevention strategies revisited: 10-year systematic review. *Lancet Psychiatr., 3*(7), 646–659. https://doi.org/10.1016/S2215-0366(16)30030-X