

# REPORT

FINAL REPORT

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## **Addressing Trauma in American Indian and Alaska Native Youth**

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**CONTENTS**


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INTRODUCTION.....	1
SCOPE OF ENVIRONMENTAL SCAN .....	2
SUMMARY OF ENVIRONMENTAL SCAN RESULTS.....	3
TRAUMA-INFORMED CARE AND TRAUMA-SPECIFIC INTERVENTIONS .....	4
<i>Cognitive Behavioral Intervention for Trauma in Schools (CBITS)</i> .....	5
<i>Honoring Children, Mending the Circle</i> .....	5
<i>Honoring Children, Respectful Ways</i> .....	6
<i>Pathway to Hope</i> .....	6
INTERVENTIONS FOCUSED ON SUICIDE PREVENTION AND SUBSTANCE USE DISORDERS.....	7
<i>American Indian/Zuni Life Skills Development Program</i> .....	7
<i>Honoring Children, Honoring the Future</i> .....	7
Community-based college suicide prevention program.....	8
<i>Cherokee Talking Circle and Self-Reliance Model</i> .....	9
<i>Healing of the Canoe</i> .....	9
<i>RezRIDERS</i> .....	10
Interventions listed in the <i>American Indian/Alaska Native Behavioral Health Briefing Book</i> .....	10
PARENTING INTERVENTIONS FOR YOUTH AND THEIR GUARDIANS .....	11
<i>Honoring Children, Making Relatives</i> .....	11
<i>Family Group Decision Making (FGDM)</i> .....	11
<i>Our Life</i> .....	12
<i>Hemish of Walatowa Family Circle Program</i> .....	12
ASPIRATIONAL FRAMEWORKS.....	13
COMMON ELEMENTS OF PROGRAMS ADDRESSING TRAUMA AND RELATED BEHAVIORAL HEALTH NEEDS IN AI/AN YOUTH.....	13
CHALLENGES TO CONDUCTING RESEARCH IN TRIBAL COMMUNITIES .....	14
POLICY IMPLICATIONS.....	15
REFERENCES.....	17
APPENDIX A: SYSTEMATIC DATABASE SEARCH METHODOLOGY .....	23
APPENDIX B. SUMMARIES OF INTERVENTIONS AND EVALUATIONS .....	25

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## INTRODUCTION

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American Indian and Alaska Native (AI/AN) youth experience trauma at higher rates than other youth in the U.S. population. In fact, according to a report by the Indian Country Child Trauma Center (BigFoot et al., 2008), Native youth are 2.5 times more likely to experience trauma compared to their non-Native peers. A recent report from the Attorney General's Advisory Committee on AI/AN Children Exposed to Violence noted that AI/AN juveniles experience posttraumatic stress disorder (PTSD) at a rate of 22 percent, the same rate as veterans returning from Iraq and Afghanistan, and triple the rate of the general population (Dorgan et al. 2014; Robin et al. 1996).

Research also shows higher rates of related behavioral health concerns, including high occurrence of alcohol and substance abuse, mental health disorders, suicide, violence, and behavior-related chronic diseases across Indian Country, which continue to have a profound effect on individuals, families, and communities (Indian Health Service, 2011; Boyd-Ball, et al. 2006). According to the Centers for Disease Control and Prevention (CDC), suicide disproportionately affects AI/ANs and is the second leading cause of death for those between the ages of 10 to 34 (2013). The suicide rate among American Indian/Alaska Native adolescents and young adults ages 15 to 34 (19.5 per 100,000) is 1.5 times higher than the national average for that age group (12.9 per 100,000) (CDC 2013). In some locales (including, for example, many tribal Alaskan villages), Native youth complete suicide at a rate 17 times the U.S. average (Alaska Injury Prevention Center, 2007; Wexler and Gone, 2012; Wexler et al. 2008).

Many studies of trauma in AI/AN youth emphasize the concept of historical trauma as a distinct from other forms of trauma. For example, among AI/AN youth, trauma includes both individual experiences of violence and loss as well as forms of distress connected to historical events, cultural destruction, and ongoing experiences of poverty and discrimination (Kirmayer et al. 2014). The term "historical trauma" encompasses the cumulative exposure of traumatic events that affect an individual and continue to affect subsequent generations (Yellow Horse Brave Heart, 1993; 1999; 2012). As it was initially described, the term brought together notions of historical oppression and current experiences of psychological suffering (Kirmayer et al. 2014; Yellow Horse Brave Heart, 1993, 1999). The concept is now widely used to describe the long term, intergenerational impact of colonization, cultural suppression, and historical oppression of Indigenous peoples (Kirmayer et al 2014). The intergenerational aspect of historical trauma points to internalized and unresolved grief that continues to impact the lives of AI/AN youth today.

An example of the process by which historical trauma continues to affect AI/AN youth today is the long-term impact of the "Boarding School Era" (1870s-1930s). Federal policy mandated the removal of children (in many cases forcibly) from their families and communities in order to attend government- or church-run boarding schools. The goal of the boarding schools was forced assimilation into the dominant society and ultimately the elimination of Native languages and cultures. At the boarding schools, children were not allowed to speak their language, practice their religion, or maintain cultural or spiritual practices and were severely punished for doing so. Moreover, key components of Native identity were eliminated or altered.

For example, children were usually given new Western names, their hair was cut,<sup>1</sup> and ceremonial objects, traditional clothing, and cultural comforts such as toys, dolls, and games were destroyed. Disease, along with physical, psychological, and sexual abuse, was prevalent. For tribal communities, this is a living history. The pernicious effects of the boarding schools and associated trauma and culture loss continue to negatively impact individuals and communities. Forced attendance at boarding schools where youth were often abused was a traumatic event that was internalized by many and later manifested in psychological symptoms. The resulting psychological symptoms are transmitted onto family members and subsequent generations, in the absence of culturally appropriate approaches to healing.

Despite the high prevalence of trauma among AI/AN youth, little is known about interventions targeted specifically for this population. To address this information gap, Mathematica Policy Research conducted an environmental scan of practices and programs for addressing trauma and related behavioral health needs in AI/AN youth. Our goal was not to document where or the extent to which programs are implemented in Indian Country but, rather, to identify which models have been tested and documented in the literature. In this report, we describe the interventions identified through our scan and summarize the evidence base for each. We include several interventions that AI/AN communities are currently using but that have not yet been systematically evaluated. Drawing from recommendations in the literature, we also discuss research and policy implications for advancing existing and developing new programs that can improve outcomes for AI/AN youth.

## **SCOPE OF ENVIRONMENTAL SCAN**

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Although the terms “trauma-informed care” and “trauma-specific services” are often used interchangeably, they are distinct concepts. Trauma-informed care refers to an approach to physical or behavioral health service delivery that recognizes the influence of trauma on behavioral health and related outcomes and aims to create an environment sensitive to such influences. Trauma-specific services are interventions or programs that directly address traumatic stress and the behavioral health needs associated with it (SAMHSA 2014). Because of the limited literature on trauma-informed and trauma-specific interventions for AI/AN youth, we defined the scope of our environmental scan broadly to capture articles on trauma and closely related topics and studies that utilize a range of research methodologies. Based on conversations with staff of the Office of the Assistant Secretary for Planning and Evaluation (ASPE) and the Indian Health Service, we focused on finding programs that employ a trauma-informed care approach but also searched for trauma-specific services. Because of the close link between trauma and substance abuse and suicide, we also obtained articles about interventions addressing these outcomes that were nominated for inclusion by federal staff and other experts or that were commonly cited in other articles we reviewed, even if the interventions did not explicitly focus on trauma.

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<sup>1</sup> For many Native people, hair is a key component of cultural identity and is regarded as a physical manifestation of their people’s cosmology and spirituality. In many communities, it is only cut when in mourning. When hair was unceremoniously cut at boarding school, many children likely believed that someone in their family had died. Additionally, names in most tribal communities are connected to important ceremonies, kinships, histories, and traditions and are not given lightly.

We focused on finding programs with a strong evidence base for AI/AN youth, but we also searched for programs and practices that have not yet been systematically researched. Based on a preliminary literature search and conversations with staff at ASPE and the Indian Health Service, we expected to find a limited number of articles on evidence-based practices. We also anticipated that tribal communities are currently using a range of culturally-grounded, community-driven programs that have not yet been systematically studied (promising practices or community-based practices) but that, based on the experiences of program developers and leaders within tribal communities, offer useful insight into potentially effective approaches. Also, although American Indians and Alaska Natives are often grouped and described together for administrative and research purposes, American Indians and Alaska Natives are culturally and historically distinct groups.<sup>2</sup> Therefore, to supplement the core search, we also searched specifically for programs targeting Alaska Native youth.

Using these broad parameters, we conducted a targeted search of peer-reviewed literature using broad keywords to capture articles relevant to the topic areas described above (see Appendix A for more detail). In addition, we scanned select websites of organizations focused on behavioral health and/or tribal communities, including the Substance Abuse and Mental Health Services Administration's (SAMHSA's) website and National Registry of Evidence-based Programs and Practices; the Indian Country Child Trauma Center; the National Native Children's Trauma Center; and the Indian Health Service's Best Practices, Promising Practices, and Local Efforts database. Our website search was broad but not systematic or comprehensive, and our systematic search of the peer-reviewed literature was limited to the past 10 years; as such, the programs we identified may not represent all programs or interventions, and we may have missed evaluations of identified programs that were published before 2006.

We also spoke with two subject matter experts, Dr. Joseph Gone and a second expert in trauma among American Indian populations<sup>3</sup>, to identify any additional evidence-based practices and promising practices that have not been formally evaluated or that otherwise might not appear in a search of academic literature or key websites. Dr. Gone is an Associate Professor of Clinical Psychology and American Indian Studies at the University of Michigan, Ann Arbor. His research focus includes the intersection of cultural competence and evidence-based practice. The second expert develops and implements programs addressing trauma for youth in tribal communities in Arizona, South Dakota, and other states. These two experts provided their insights representing academic and practitioner's perspectives on the topic.

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## **SUMMARY OF ENVIRONMENTAL SCAN RESULTS**

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Our search identified limited literature on trauma-informed and trauma-specific interventions targeting AI/AN youth, but more articles on a range of related topics. Several of the interventions discussed included cultural adaptations of evidence-based practices; the remainder were practices developed in collaboration with AI/AN communities but that, to date, have undergone only limited or no evaluation. In general, we found little evidence regarding the

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<sup>2</sup> Wexler's work (2006, 2001) highlights the importance of developing culturally responsive services designed specifically for Alaska Native populations.

<sup>3</sup> The second expert did not respond to our inquiries about their willingness to be named in our report.

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effectiveness of trauma-related interventions or programs for AI/AN youth. Many of the articles were descriptive in nature, and those that included results from quantitative evaluations all utilized pre-post or quasi-experimental designs with relatively small sample sizes.

Specifically, our scan identified:

- Five articles that discussed trauma-informed or trauma-specific interventions for AI/AN youth
- Seven articles or documents on substance abuse and suicide prevention interventions for AI/AN youth (note, however, that most of these interventions were not explicitly trauma-informed or trauma-focused)
- Four articles on parenting interventions aimed at preventing child abuse and improving interactions between parents and youth
- Three aspirational frameworks that discuss principles for developing programs or practices relevant to addressing trauma in AI/AN youth
- Only one program specifically focused on Alaska Native youth.

Several articles we reviewed confirmed our finding of limited literature on trauma interventions for AI/AN youth. For example, a literature review from 2008 identified no studies focused on culturally based interventions or adaptations for American Indians with PTSD (Pole, Gone, and Kulkarni 2008). Several other articles mention the limited research on trauma and other behavioral health interventions for AI/AN populations in general and specifically for youth.

Below we provide brief descriptions of the programs and practices identified through our scan, along with brief descriptions of any evaluation results reported in the articles we reviewed. The same information is also summarized in a simple bulleted format in Appendix B. We then summarize common elements and important themes that cut across the interventions. Note that articles described programs in varying levels of detail; we describe interventions with as much specificity as possible, based on the information provided in the articles. We found no data indicating the prevalence of implementation of these or other trauma-related interventions across tribal communities, and the reasons for adapting particular evidence-based practices rather than others were not always explained. Given the limited evidence identified, variation in and limitations of evaluation methodologies used, and the diversity of tribal communities, comparing effect sizes across interventions is not advised, and generalizing results to other Native communities should be done with caution. Moreover, the unique historical and cultural experiences of Native communities make comparison to non-Native communities inadvisable.

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## **TRAUMA-INFORMED CARE AND TRAUMA-SPECIFIC INTERVENTIONS**

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We identified three interventions that specifically focus on helping AI/AN youth to address traumatic stress and associated behavioral health needs. Two of these, *Cognitive Behavioral*

*Intervention for Trauma in Schools (CBITS)* and *Honoring Children, Mending the Circle*,<sup>4</sup> adapted evidence-based practices for use with AI/AN youth; however, only CBITS has been specifically evaluated in studies of AI/AN youth populations, and each of the two evaluation studies were small pre-post evaluations without comparison groups. The other trauma-specific intervention, *Honoring Children, Respectful Ways*, was described in the literature, but evaluation results were not presented. Below we describe each of these interventions. We also describe a community-level intervention, *Pathway to Hope*, aimed at encouraging development of approaches for addressing trauma in Alaska Native communities.

### ***Cognitive Behavioral Intervention for Trauma in Schools (CBITS)***

CBITS is an evidence-based practice originally designed for use with groups of adolescents ages 11-15 from ethnically diverse populations and with significant trauma exposure and PTSD symptoms. The intervention involves weekly small group meetings over a 10-week period covering six techniques to reduce maladaptive thoughts and behaviors: relaxation training, cognitive therapy, real life exposure, stress or trauma exposure, and social problem-solving. Jaycox (2004) provides a full description of the original intervention. Two small independent studies examined pre-post outcomes for versions of the practice specifically adapted for use with AI/AN youth.

Morsette et al. (2008) tested an adaptation of CBITS for adolescents on a rural American Indian reservation. To adapt CBITS to American Indian youth, program developers consulted with American Indian health professionals, Elders, teachers, and counselors and included key elements of local culture, such as Native linguistic concepts and elements of local history. The article presented descriptive results, visually comparing pre- and post-test scores for four students ages 11 to 12 who completed the CBITS program. Results showed reductions in PTSD and depressive symptoms in three of the four students.

Goodkind et al. (2010a) assessed an adaptation of CBITS in three American Indian communities in the Southwest. Program developers adapted CBITS to Native culture by removing Eurocentric examples of how to change distorted thoughts related to the trauma (known as cognitive restructuring) and including culturally relevant stories and beliefs. Pre-post analyses among 24 youth ages 12 to 15 who received CBITS showed significant decreases in anxiety and PTSD symptoms, and in avoidant coping strategies. The study also found a marginally significant decrease in depression symptoms.

### ***Honoring Children, Mending the Circle***

Honoring Children, Mending the Circle (BigFoot and Schmidt, 2010) is a cultural adaptation of trauma-focused cognitive-behavioral therapy (TF-CBT). As originally designed, TF-CBT is an evidence-based treatment for children exposed to trauma that emphasizes addressing distorted thoughts and encouraging children to talk about traumatic experiences with parental or caregiver support. The Indian Country Child Trauma Center at the University of

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<sup>4</sup> The Indian Country Child Trauma Center offers a specialized training program series entitled 'Honoring Children' for behavioral health professionals working in Indian Country. The trainings in the Honoring Children Series cover several different interventions that borrow from existing evidence-based practices but are tailored to Native populations and the unique characteristics of tribal communities.

Oklahoma Health Sciences Center, in conjunction with the National Child Traumatic Stress Network and SAMHSA, has worked to develop culturally relevant trauma intervention models for use with AI/AN children. Program developers selected TF-CBT for adaptation because its core elements (storytelling, identifying and expressing emotions, and involvement of caregiver and family support) fit well with AI/AN cultures. For example, one major component of TF-CBT is for children to repeatedly describe their traumatic experiences, with gradually increasing detail, with the goal of decreasing emotional reactivity to traumatic memories over time.

As a flexible adaptation of TF-CBT, *Honoring Children, Mending the Circle* allows therapists, children and their families to incorporate aspects of Native culture. For example, children may retell their trauma narrative through a traditional dance. Also, TF-CBT emphasizes teaching children relaxation skills to reduce hyperarousal and other physiological manifestations of trauma; in *Honoring Children, Mending the Circle*, therapists may incorporate relaxation imagery that is culturally relevant, such as the image of tensing and relaxing a bow string or soothing images from nature. We did not find an evaluation of *Honoring Children, Mending the Circle*.

### ***Honoring Children, Respectful Ways***

As described by Bigfoot and Braden (2007), *Honoring Children, Respectful Ways* was developed by the Indian Country Child Trauma Center for children with sexual behavior problems. The program was designed for children between the ages of 3 and 12 who have experienced trauma related to violence in the family, physical abuse, and sexual abuse. The program can also be used to prevent negative behavioral health consequences of such experiences. It is designed to help children develop a sense of respect for self, others, and all living things. The curriculum is grounded in traditional approaches to healing and is infused with cultural practices that encourage youth to reconnect and identify with their Native heritage. We did not find an evaluation of *Honoring Children, Respectful Ways*.

### ***Pathway to Hope***

*Pathway to Hope* is a trauma-informed training program aimed at ending the silence surrounding sexual abuse in rural Alaska native communities and promoting community-based approaches to healing (Payne et al., 2013). Alaska Native victim advocates working within tribal communities informed the development of the program.

*Pathway to Hope* is not an individual-level intervention but instead offers culturally relevant practices and principles for addressing trauma caused by child sexual abuse. Major goals are to generate dialogues within communities and to provide guidance and support for community members to develop their own culturally-specific approaches to healing. Since it was originally developed in 2007, *Pathway to Hope* trainings have been presented to more than 270 community leaders and care providers in Alaska and more than 120 participants from 18 tribes in other states. We did not find an evaluation of the *Pathway to Hope* program.

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## **INTERVENTIONS FOCUSED ON SUICIDE PREVENTION AND SUBSTANCE USE DISORDERS**

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We identified three suicide prevention interventions and three interventions addressing substance use disorders among AI/AN youth. Although most of these interventions are not explicitly trauma-informed or trauma-focused, we included them because suicide and substance use disorders are often associated with traumatic stress, and these interventions were nominated for inclusion by federal staff or experts, or commonly cited in other articles we reviewed. Two of the suicide prevention and substance use disorder interventions we examined were evaluated using a quasi-experimental designs, two utilized pre-post evaluation designs with small sample sizes, and two were not evaluated. Below, we describe each intervention and, if available, evidence for its effectiveness. We also describe a briefing book on AI/AN behavioral health that identifies additional interventions relevant to suicide prevention and substance use disorders among AI/AN youth.

### ***American Indian/Zuni Life Skills Development Program***

The *American Indian Life Skills Development Program* (LaFromboise 1995) is a school-based suicide prevention program for middle- and high-school age American Indian youth. Intervention activities promote connection with cultural knowledge. The program emphasizes universal American Indian values, such as respect, kindness, and generosity, with flexibility to tailor the intervention to local context. The curriculum teaches problem solving skills, depression and stress management, anger regulation, and goal setting. The *Zuni Life Skills Development Program* (LaFromboise & Lewis, 2008) is a tribal-specific curriculum that was developed and tested with the people of the Zuni Pueblo in New Mexico and served as the basis for the broader *American Indian Life Skills Development* curriculum. The program focuses on addressing and alleviating the underlying vulnerability that contributes to high risk behavior among youth. Through small group work and sharing of effective coping strategies by adult role models, the program aims to help youth recognize and eliminate self-destructive behaviors and build effective communication and problem solving skills.

The *American Indian/Zuni Life Skills Development Program* was reviewed by the SAMHSA National Registry of Evidence-based Programs and Practices (<http://www.nrepp.samhsa.gov>) and found, through a quasi-experimental study comparing the practice to no intervention, to statistically significantly decrease hopelessness and increase suicide prevention skills (LaFromboise and Howard-Pitney, 1995).

### ***Honoring Children, Honoring the Future***

The Indian Country Child Trauma Center chose to implement LaFromboise's *American Indian Life Skills Development* curriculum (1995) as part of the suicide prevention component of their *Honoring Children* series—*Honoring Children, Honoring the Future* (Bigfoot, 2007). In addition to American Indian Life Skills Development, *Honoring Children, Honoring the Future* includes support for training in risk for suicide, case consultation, and program development (Bigfoot and Braden, 2007). We did not find any studies specifically evaluating *Honoring Children, Honoring the Future*.

## **Community-based college suicide prevention program**

Muehlenkamp et al. (2009) conducted an evaluation of a community-based college suicide prevention program implemented at the University of North Dakota. The program combined American Indian traditional practices with mainstream suicide prevention strategies. It aimed to prevent suicide by connecting Native students to campus services and tribal communities. It was designed to build relationship skills and strengthen resilience through an emphasis on education, culture, and spirituality.

Components of the program represented the four interconnected aspects of the Medicine Wheel. The Medicine Wheel is a sacred symbol that originated among Native people of the Great Plains, particularly the Lakota. In recent history, the Medicine Wheel has become more pan-tribal in its uses and application. A metaphor for the circle of life, the Medicine Wheel is broken into four<sup>5</sup> sections: spiritual, mental, physical, and emotional. Accordingly, the college suicide prevention program included components addressing each of these aspects of life.

The spiritual components of the program included a spiritual advisory committee, sweat lodge, healing ceremonies, and talking circles. Physical components included opportunities for communal dining and engaging in traditional Native foodways at spiritual ceremonies and cultural events. Emotional components included providing participants with an American Indian support team, connections with tribes and the campus American Indian community, stress management techniques, and problem solving and communications skills.

One component addressing the mental aspect of life was “gatekeeper” training, which involved training all students, as well as faculty and staff who serve on an American Indian support team, to recognize the warning signs of suicide and intervene. The gatekeeper curriculum included Sources of Strength and Question, Persuade, and Refer (QPR) programs. QPR training is an evidence-based training program, which the Indian Health Service adapted for use with American Indians (Quinnet, 1995). The gatekeeper training curriculum also drew from the evidence-based Sources of Strength model (LoMurray, 2007), which was designed for use with Native youth in the Northern Plains and focuses on building support networks. Training in both Sources of Strength and the American Indian-adapted QPR were offered annually. Other program components that addressed mental health included regularly-offered workshops and seminars on topics related to stress management, problem solving, and substance abuse awareness and prevention. Workshops and seminars were adapted from LaFromboise’s American Indian Life Skills Development Curriculum (1996).

The evaluation included pre- and post-test data on effectiveness of workshops and seminars, as well as gatekeeper trainings; it did not include a comparison group. Of a total American Indian enrollment of 368, approximately 90 American Indian students utilized at least one aspect of the suicide prevention program. American Indian students (n=22) who participated in gatekeeper trainings showed improved knowledge about suicide, and students who participated in workshops (n=35) reported improvements in problem solving and communication skills. Seventy-two percent of gatekeeper-training participants indicated they would use the information, and 86 percent stated they were satisfied with the training; 45 percent indicated that

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<sup>5</sup> The number four is sacred and is represented further in the four sacred directions and colors.

the material presented was somewhat new to them. Similarly, 88 percent of students who participated in workshops reported being satisfied to very satisfied, 75 percent reported they would use the information, and 54 percent reported that the information was somewhat new to them.

### ***Cherokee Talking Circle and Self-Reliance Model***

Lowe et al. (2012) tested a culturally-based substance abuse intervention, the *Cherokee Talking Circle and Self-Reliance Model* (CTC), against a standard, non-culturally-based intervention. The CTC is a substance abuse intervention designed for Keetoowah-Cherokee students in the early stages of substance abuse. The program uses talking circles, which aligns with the Native tradition of storytelling. The talking circle is designed to provide a culturally relevant and appropriate setting where stories are shared in a respectful and accepting manner. In CTC, the talking circles are grounded in the *Cherokee Self-Reliance Model*, which emphasizes key Cherokee values identified through prior studies of culturally-specific Cherokee worldviews and beliefs. CTC helps youth achieve balance within the three key Cherokee values of being responsible, being disciplined, and being confident. The program consists of 10, 45-minute talking circle sessions guided once a week by a counselor and cultural expert.

The study employed a two-condition quasi-experimental design in which CTC was compared to a mainstream intervention, *Be a Winner/Drug Abuse Resistance Education*. Participants were Keetoowah Cherokee high school students between 13-18 years of age who were referred for substance abuse counseling and were enrolled in one of the high schools within the tribal jurisdiction. Eighty-seven students were in the standard substance abuse education group, and 92 were in the CTC group. Individual students were not randomized to groups, but which group received CTC was randomly determined. This study consisted of a three year plan using a Community-Based Participatory Research approach. Data collection points included pre-intervention, immediate post-intervention, and 90-day post-intervention. The study found that the culturally-based intervention for AI/AN adolescents, CTC, was statistically significantly more effective for reducing substance abuse and related problems than the standard, non-culturally-based intervention as measured by lower scores on the Substance Abuse Problem Scale immediately post-intervention and at 90-day followup.

### ***Healing of the Canoe***

*Healing of the Canoe* (Donovan et al. 2015) is a community-informed, culturally grounded intervention developed through a partnership between the Suquamish and Port Gamble S'Klallam Tribes in the Pacific Northwest and the University of Washington Alcohol and Drug Abuse Institute. The program aims to prevent substance use disorders by promoting a sense of cultural identity and belonging. It combines cognitive-behavioral life skills with tribally-specific teachings, practices, and values. The program curriculum, called *Holding Up Our Youth*, consists of 11 group sessions, through which community members and Elders teach Native youth how to use social and interpersonal life skills. The program also involves cultural activities and education about the physiological consequences of substance use. Among seven high school students who participated in a pre-post evaluation, hope, optimism, and self-efficacy were statistically significantly higher, and substance use was lower after receiving the intervention.

## ***RezRIDERS***

Yellow Horse Brave Heart, et al. (2012) described *RezRIDERS*, a trauma-informed intervention aimed at reducing substance use disorders and depression among American Indian youth. The program emphasizes participation in extreme sports, with the goal of transferring high-risk behaviors to controlled environments. It also involves sharing of traditional culture and values from adult mentors and building optimism and trust through peer group community projects. We did not find an evaluation of the *RezRIDERS* program.

## **Interventions listed in the *American Indian/Alaska Native Behavioral Health Briefing Book***

The American Indian/Alaska Native Behavioral Health Briefing Book (2011), was developed for Indian health care providers by the Indian Health Service National Tribal Advisory Committee on Behavioral Health and the Behavioral Health Work Group and is intended to provide context for the AI/AN National Strategic Plans on Behavioral Health and Suicide Prevention, both finalized in 2011. The plans identified priorities, goals, and strategic action steps to further develop a system of care and to better address behavioral health concerns in Indian Country. The Briefing Book sought to document the current efforts to address a range of serious behavioral health issues on a national, regional, and local level.

The Briefing Book also explored the work being done to address existing disparities and included a chapter profiling behavioral health programs in the 12 Indian Health Service Areas. The chapter included program spotlights that illustrated the range of approaches being used to treat and heal tribal members, including youth. Many of the programs infused Western evidence-based practices into traditional healing approaches. Each maintained a commitment to including and honoring community-based initiatives that were grounded in tribally-specific healing modalities. Listed below are a few of the programs most relevant to youth. Note that we did not find evaluations of these programs.

- The **Zuni Recovery Center** addressed substance abuse issues by bridging traditional medicine with modern clinical practices. The intervention emphasized use of Native healers to bridge the gap across traditional healing methods and modern medicine. Another core component was the use of cultural educators to teach Zuni history, dance, arts and crafts, and language.
- The **Northern Arapaho Tribe Methamphetamine and Suicide Prevention Initiative Program** followed a similar approach by integrating traditional cultural practices with Western and Native treatment and prevention of suicide. It incorporated Strengthening Families, an evidence based program, and integrated the use of sweat lodges and talking circles for youth, and the inclusion of Elders and traditional healers.
- The **Toiyabe Indian Health Project** utilized the Matrix Model<sup>6</sup> for substance abuse treatment alongside talking circles, sweat lodges, and family groups to provide a focus on

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<sup>6</sup> The Matrix Model is an intensive outpatient treatment program for cocaine and methamphetamine addiction. It is multi-format and includes relapse-prevention groups; individual and family education groups; social support groups;

traditional healing. The project also integrated Red Road to Wellbriety 12-Step Groups into their approach and utilized the American Indian Life Skills Development curriculum to address suicide prevention.

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## **PARENTING INTERVENTIONS FOR YOUTH AND THEIR GUARDIANS**

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Our search also identified four articles on parenting interventions designed to improve parent-child interactions, reduce the potential for child abuse, and help develop children's self-esteem and cultural identity. Two were adaptations of programs originally developed for other populations; neither included an evaluation of the adapted version. The other two were community-based interventions evaluated using pre-post designs with very small samples.

### ***Honoring Children, Making Relatives***

*Honoring Children, Making Relatives* is a cultural adaptation of parent-child interaction therapy developed by the Indian Country Child Trauma Center (BigFoot and Funderbunk, 2011). Parent-child interaction therapy is an evidence-based practice that focuses on improving child-parent interactions and improving parenting skills, with the goal of reducing child physical abuse. Program developers at the Indian Country Childhood Trauma Center selected parent-child interaction therapy for cultural adaptation because its core focus—teaching parents to interact with children attentively and to provide them with instructions and consequences—is consistent with traditional AI/AN approaches to rearing children. We did not find an evaluation of the *Honoring Children, Making Relatives* program.

### ***Family Group Decision Making (FGDM)***

Marcynyszyn, et al. (2012) discuss a cultural adaptation of *Family Group Decision Making* (FGDM) for tribal communities in North America that grew out of a collaboration among Sicangu Child and Family Services on the Rosebud Reservation, Lakota Oyate Wakanyeja Owicakiyapi on the Pine Ridge Reservation, Casey Family Programs, and the University of Minnesota Duluth. This cultural adaptation of FGDM is a child-centered model that is grounded in traditional ways, focusing on community-driven, collaborative problem solving and communal kinship approaches to caring for children. The program uses prevention strategies in hopes of reducing the number of Native children in the child welfare system.

We did not find an evaluation of the cultural adaptation of FGDM. The article includes examples of evaluation tools, including surveys and consent forms, for communities interested in conducting their own evaluations, but it does not report evaluation results. Although various FGDM models have been implemented with diverse populations around the world over the past 20 years, according to the Cochrane Collaboration (Shlonsky et al., 2009), key outcomes for children and families who receive FGDM interventions (safety, permanence and well-being) are not well documented, particularly over the longer term, and evidence of the model's effectiveness with other diverse populations is mixed.

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individual, couples, and family therapy; and urine and breath testing, all delivered over a 16-week period. The integrated therapeutic model incorporates cognitive behavioral, motivational enhancement, and 12-step techniques.

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## ***Our Life***

*Our Life* is a culturally-based intervention to address the root causes of violence exposure for AI/AN youth (Goodkind et al., 2012). The program's main components include recognizing and healing historical trauma; reconnecting youth and parents to traditional culture and language; parenting and social skill-building; and building relationships between parents and youth through equine-assisted psychotherapy. Goodkind et al. (2012) evaluated the effects of the program for a group of 18 youth participants, ages 7 to 17, using a pre-post design. Results showed statistically significant improvements in youth cultural identity, self-esteem, positive coping strategies, quality of life, and social adjustment.

## ***Hemish of Walatowa Family Circle Program***

The Hemish of Walatowa *Family Circle Program* is an intergenerational family substance abuse prevention program that targets youth, parents, and Elders (Shendo et al., 2012). The program was designed and implemented via a partnership between the University of New Mexico's Center for Participatory Research and three New Mexico tribes, including the Pueblo of Jemez (Walatowa). The Walatowa formed an advisory council consisting of service providers, educators, parents, Elders, and youth and co-developed the curriculum with researchers. The curriculum consisted of 14 sessions and was piloted in 2007 and again in 2009 with third-through fifth-grade children and their families. The advisory council helped develop culturally-relevant and appropriate materials for the curriculum, including tribally specific artwork, a videotaped introduction of tribal leaders that focuses on tribal values and history, important oral stories told by Elders, and a facilitator's manual.

Shendo et al. (2012) conducted a mixed method evaluation of the *Family Circle Program*. For each pilot, both children and adults completed pre- and post-test surveys that consisted of Likert-type questions with four to seven response options. The adult survey included approximately 400 questions, and the child survey included 200 questions. The pilots also included journals completed by child participants, mid-program focus groups with families, and self-administered facilitator logs completed after each session. After completion of the intervention, the evaluators employed a 360-degree evaluation method, whereby kids and parents were questioned on how they changed, how their parent or child changed, and how the family changed.

The pre-post survey was administered to 17 adults, 10 in year one and 7 in year two. Twenty-one children completed the pre-post survey, 14 in year one and 7 in year two. The evaluation triangulated qualitative (journals, mid-program evaluation focus groups, facilitator observations, 360 degree questions) and quantitative survey findings. Shendo et al. (2012) cited significant statistical changes in children's responses between pre- and post-test surveys, which indicated increased self-efficacy and coping skills, along with reduced anxiety and depression symptoms. Overall results for parents reflected a similar statistically significant change related to language and culture.

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## **ASPIRATIONAL FRAMEWORKS**

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We found two articles that provided frameworks or common principles for effectively treating trauma and other behavioral health needs in AI/AN youth (Goodkind, et al. 2010b; Garrett 2014). We also found an aspirational framework targeted to AI/AN populations in general that provides principles relevant to youth (BigFoot and Schmidt 2009). These articles emphasize the value of honoring Native ways of healing and culturally responsive interventions and frameworks. They also advocate for a shift towards developing evidence for community-based practices, or practiced-based evidence, instead of evidence-based practices. That is, they would like for policymakers and care providers to show an acceptance of emerging cultural interventions and for traditional Native healing. We discuss the specific themes from these frameworks, along with the common elements of the trauma interventions, substance use disorder and suicide prevention interventions, and parenting interventions in the next section.

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## **COMMON ELEMENTS OF PROGRAMS ADDRESSING TRAUMA AND RELATED BEHAVIORAL HEALTH NEEDS IN AI/AN YOUTH**

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Across the adaptations of evidence-based interventions and community-based practices, identified by our scan, common characteristics include: an emphasis on reconnecting youth to traditional Native teachings and culture, conducting activities in small groups, providing youth with adult mentors from their communities, helping youth develop positive coping strategies and social skills, and encouraging youth to talk about traumatic experiences. Although our scan found limited empirical evidence regarding effectiveness of identified interventions, program developers and other experts in the field emphasized many of these characteristics as critical for effectively addressing trauma and related behavioral health needs in AI/AN youth.

**Reconnecting youth to traditional Native teachings and culture.** Virtually all of the interventions we reviewed include methods for connecting youth to tribal culture and, in some cases, language. Given the history of acculturation, experts emphasize that reconnecting youth to tribal culture can be a healing experience and serve as a protective factor. Many community-based interventions include cultural elements and beliefs that are common across tribal communities. As Brave Heart et al. 2011 stated:

“Although there are numerous linguistic and cultural differences within Indigenous populations there are some common cultural features that might inform intervention design, including: focus on a collectivist culture; indirect communication styles; focus on harmony and balance; shared traditional beliefs in the existence of animal spirits as guides, ancestor spirits, and feeding the spirits; and attachment to all of creation.”

At the same time, several articles emphasized the importance of recognizing the unique local context of each tribal community and appropriately adapting interventions in response. For example, several studies described a process of modifying programs that blended elements or beliefs common across AI/AN tribes to more specifically reflect aspects of local culture, such as language or community-specific activities.

Aspects of local culture, such as language, stories, local history, and traditions, infused the adaptations of evidence-based practices described in the literature. Experts pointed out that certain evidence-based practices may lend themselves well to cultural adaptations because their core elements align with aspects of Native cultures (e.g., Trauma-focused Cognitive Behavioral Therapy). Across interventions identified through our scan, key cultural elements added to existing evidence-based practices were generally selected in consultation with local tribal leaders.

**Group-based interventions/programs.** The majority of programs and practices identified through our scan take the form of group therapy or group activities. For example, the adaptations of CBITS involve weekly small group sessions through which youth support each other in a process of cognitive restructuring (i.e., changing maladaptive thoughts related to trauma). Many of the interventions addressing substance use disorders involve group skill-building or cultural activities. One expert we spoke with mentioned the importance of the group experience for breaking the isolation that youth experience and helping them to develop a peer support network.

**Providing youth with adult mentors.** Several articles emphasized the importance of providing youth with strong adult mentors from within tribal communities, both to model healthy behaviors and to provide support for youth who lack strong parental figures due to substance abuse or other issues within their families. In particular, some experts mentioned the importance of Native Elders serving as teachers and role models for youth.

**Helping youth develop positive coping strategies and social skills.** The articles we reviewed emphasized the importance of helping youth develop methods for coping with stress, boredom, and feelings of emptiness and powerlessness related to individual and historical trauma. Many programs emphasize helping youth learn social skills and problem-solving behaviors to replace harmful coping mechanisms, such as social withdrawal and substance abuse (Garrett 2014). Such efforts may help youth to develop resilience in overcoming trauma.

**Encouraging youth to talk about experiences and identify feelings.** Several programs focus on talking about traumatic experiences and identifying related thoughts and feelings. For example, *Honoring Children, Mending the Circle*, a cultural adaptation of trauma-informed cognitive-behavioral therapy, includes a process for children to tell narratives of their traumatic experiences. In describing her work with youth in tribal communities, one program developer emphasized the importance of encouraging them to talk openly about the trauma they have faced in talking circles or other group activities.

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## **CHALLENGES TO CONDUCTING RESEARCH IN TRIBAL COMMUNITIES**

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Articles identified in our environmental scan emphasized the need for more research and evidence, particularly on community-based interventions. At the same time, they point out the many challenges associated with conducting mental health research within tribal communities. Below, we summarize the major challenges to advancing the evidence base regarding programs and interventions for AI/AN youth.

- **Bridging the gap between mainstream and Native approaches and conceptions of mental health and wellness.** Within tribal community contexts, articles emphasize the importance of the cultural meaning associated with healing. The Western clinical framework includes a focus on treatment and measurable clinical outcomes, whereas in many tribal communities the emphasis remains on healing and achieving balance rather than treatment. As Gone (2009) stated, “In contrast to the targeted scope of treatment, Native healing moves well beyond mere clinical concerns with distress and coping toward a more robust state of wellness, as indicated by strong Aboriginal identification, cultural reclamation, spiritual wellbeing, and purposeful living.”(p. 759). (See also Wexler 2011.) Experts emphasize the importance of recognizing and honoring time-honored Native approaches to mental health and wellness. As a result, experts point to the need for inclusion of practice-based evidence standards that account for the diversity of tribes and special considerations for esoteric components of wellness connected directly to Native spirituality and cultures.
- **Developing measures of effectiveness.** Another key challenge is that many tribal communities are averse to imposing outside measures of effectiveness on practices that for them are core elements of culture and may date to time immemorial. Experts point to the tension that exists surrounding the issue of ‘what counts’ as evidence between the scientific and Native perspectives. From the tribal perspective, outside scientific efforts to ascribe quantitative measures of effectiveness to qualitative, culturally bound approaches to wellness are inaccurate Western impositions. The manner in which outside researchers historically studied tribal communities—whereby researchers often misrepresented tribal communities, published and misinterpreted sacred rites without permission, uncovered prevalence of particular pathologies but offered little in the way of possible culturally relevant interventions, and took part in unauthorized secondary analysis of data—has led many communities to insulate themselves from research. As a result, tribal communities are not interested in research that further pathologizes communities, points to deficits, or dismisses community strengths.
- **Lack of resources.** Several articles mentioned the lack of funding devoted to understanding and intervening to address the unique manifestations of trauma that impact AI/AN youth.
- **Additional challenges in conducting research in Indian Country.** Additional challenges to conducting rigorous quantitative research include small diffuse, diverse populations; bureaucratic burdens associated with obtaining approvals to conduct studies in tribal communities; variance among tribal IRBs; tribal politics and leadership turnover, which can affect tribal priorities; challenges associated with rural infrastructures; and challenges associated with interpreting, generalizing, and disseminating research findings across tribal communities. (Gone & Trimble 2012; Wexler & Gone 2012; Hawkins & Walker 2005).

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## **POLICY IMPLICATIONS**

In light of the limited research on trauma-informed care, adaptations of evidence-based practices, and community-based practices addressing trauma among AI/AN youth, and the challenges in conducting research in Indian country discussed above, several articles discussed policy implications and put forward suggestions for advancing the evidence base. Key recommendations from the literature include:

- **Encouraging development of community-based practices with evaluation components.** This would involve providing resources (grants, technical assistance) to help tribal communities sustain programs that are currently in place and develop new programs where they do not currently exist. In the absence of strong evidence on effective programs for this population, the focus could be on ways to support tribes in the practices and interventions they think will work that are in keeping with the common factors identified by experts, as discussed above. Given culturally divergent notions of health and healing, evaluations could be designed in collaboration with tribes to determine how they would define and assess success, rather than predetermining required evaluation outcomes and methods. At the same time, evaluators may consider ways to measure and communicate success in ways that will be compelling to funders.

Given the diversity of tribal communities, experts recommend against attempts to impose single or specific models on Native populations. Moreover, based on experience from time immemorial, Native people consider many traditional practices to be effective but are loathe to share or document these practices for Western academics. Instead, supporting programs driven by individual tribal communities would ensure the inclusion of local and traditional knowledge, if appropriate, into the program development, implementation, and evaluation processes. Given the limitations of existing data and evidence-based practices, subject matter experts along with tribal leaders suggest a preference for tribally-driven programs that build skills and capacity of communities to engage in community-level program evaluation of existing promising local and traditional practices. This work might also include inquiry into how interventions are selected and implemented across communities.

- **Conducting additional research on trauma among AI/AN youth.** Experts point out that the prevalence of trauma and types of traumatic stresses experienced varies widely across tribal communities. In response, some recommend additional studies on the specific behavioral health needs of tribal communities. One expert we spoke with recommended funding existing tribal epidemiology centers to conduct studies on the prevalence of trauma in tribal communities. Given the challenges associated with doing this type of research, the studies could be led by members of tribal communities, perhaps working together with trauma experts, to develop methods for studying traumas and abuses that may not be discussed openly and are, therefore, hard to study. Having more data on prevalence of trauma in general and on the specific types of trauma common within individual communities could help tribal communities, trauma intervention and research experts, and program developers and planners design interventions that are specifically relevant to local needs and conditions (Morsette et al., 2008). Explorations regarding the means of identifying youth in need of trauma-related services and engaging and keeping them in care might also yield useful information for Native communities implementing such practices. In addition, further documenting where and the extent to which trauma-related practices have been implemented in Indian country might be of use to those wishing to support or develop such practices.

In addition to the need for more research on trauma and on interventions that are tailored to the needs of AI/AN youth, the articles we reviewed also highlighted the need to make services more accessible to AI/AN youth and to address their needs more holistically (Brave Heart, et al. 2011; Goodkind, et al. 2010; Garrett 2014). Key recommendations include:

- **Providing mental health treatment in integrated and school-based settings.** Several articles mention the need to provide behavioral health care in primary care and school-based settings. AI/AN youth may lack transportation to behavioral health providers, and schools are often a more accessible alternative. In addition, visiting primary care clinics or schools is generally a less stigmatizing experience than visiting a mental health provider, and, therefore, youth may be more receptive to seeking and receiving treatment in these settings.
- **Promoting use of Native healers.** Evidence suggests that a large share of AI/AN youth seek care from Native healers for mental health needs. Caregivers and parents also tend to be more trusting of Native healers (Walls, Johnson, Whitbeck, & Hoyt, 2006). Some experts advocate for behavioral health systems to certify traditional healers and for increasing the number of insurers who reimburse for their services.
- **Addressing current life factors that contribute to stress and vulnerability.** Many of the articles we reviewed pointed out that Native youth experience a range of life stressors in addition to psychological trauma, with poverty as a key underlying factor. Experts emphasized the importance of providing income support, youth development programs, and other social services to improve life circumstances and overall wellbeing for AI/AN youth.

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## **APPENDIX A: SYSTEMATIC DATABASE SEARCH METHODOLOGY**

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We conducted a targeted search of peer-reviewed and other publicly available literature on evidence-based and promising, community-based practices addressing trauma in AI/AN youth. First, we searched academic literature from 2006-2016 using EBSCO Academic Search Premier and PsycINFO. Among the numerous psychology, psychiatry, and behavioral health journals included in these databases are several that are particularly likely to include articles relevant to the AI/AN population. These include American Indian and Alaska Native Mental Health Research; American Indian Culture and Research Journal; American Indian Quarterly; American Journal of Community Psychology; Culture & Psychology; Culture, Medicine, and Psychiatry; the Native Health Database; Transcultural Psychiatry; and Wicazo Sa Review Journal. Our specific search string was as follows:

- trauma (mentioned in the abstract) AND
- American Indian or Alaska Native or Native American or First Nation (mentioned in abstract) AND
- youth or children or young or adolescent (key word) AND
- intervention or treatment or healing or practice or clinical trials or community based or participatory (key word) AND
- Behavioral health or mental or substance or suicide or psychological or psychiatric or intergenerational or historical

We included the term “trauma” to target the search to only interventions that specifically addressed trauma or used trauma-informed approaches. We selected broad intervention-related terms to capture both articles discussing community-based interventions and research on evidence-based practices. The fifth set of terms included multiple possible descriptors to capture interventions targeting an array of behavioral health concerns and outcomes, including substance use disorders, suicide, mental health challenges, and intergenerational and historical trauma.

We conducted a second search in which we omitted the age-related terms (third bullet above), to identify interventions that might be relevant for youth but not exclusively limited to them, such as those targeting multiple age groups within tribal communities. We also broadened the second search to include the Scopus database, which includes a large number of additional journals in the areas of science, medicine, social science, and arts and humanities.

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**APPENDIX B**

**SUMMARIES OF INTERVENTIONS AND EVALUATIONS**

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# Trauma-Informed Care and Trauma-Specific Interventions

# **Adaptations of Cognitive Behavioral Intervention for Trauma in Schools (CBITS)**

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- **Original intervention**

- **CBITS is an evidence-based practice that involves weekly small-group meetings to reduce trauma-related maladaptive thoughts and behaviors**
- **Designed for adolescents ages 11 to 15 with significant trauma exposure and post-traumatic stress disorder (PTSD)**

- **Two cultural adaptations**

- **Morsette et al. (2008)**
- **Goodkind et al. (2010a)**

# CBITS Adaptation/Study 1

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- **Morsette et al. (2008) tested an adaptation of CBITS that included key aspects of local culture, such as Native linguistic concepts and elements of local history**
  - **Population**
    - Students ages 11 and 12 on a rural American Indian reservation
  - **Methods**
    - Visually compared pre- and post-test scores (n=4)
  - **Findings**
    - Reductions in PTSD and depressive symptoms in three of four students

# CBITS Adaptation/Study 2

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- **Goodkind et al. (2010a) assessed an adaptation of CBITS that removed Eurocentric examples of cognitive restructuring (that is, changing maladaptive thoughts related to trauma) and included culturally relevant stories and belief**
  - **Population**
    - Youth ages 12 to 15 in three American Indian communities in the Southwest
  - **Methods**
    - Pre-post analyses (n=24)
  - **Findings**
    - Significant reductions in anxiety, PTSD symptoms, avoidant coping strategies
    - Marginally significant decreases in depression symptoms

# Honoring Children, Mending the Circle

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- **Cultural adaptation of trauma-focused cognitive-behavioral therapy (TF-CBT) (BigFoot and Schmidt 2010)**
  - TF-CBT is an evidence-based practice that teaches children relaxation skills to reduce hyperarousal and other physiological manifestations of trauma
- **Adaptation**
  - Developed by the Indian Country Child Trauma Center (ICCTC)
  - Incorporates important aspects of Native culture, including storytelling, caregiver and extended family support, identifying/expressing emotions in culturally relevant ways
  - Population: not specified
- **No evaluation found**

# Honoring Children, Respectful Ways

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- **Community-based program developed by the ICCTC for children with sexual behavior problems (BigFoot and Braden 2007)**
  - **Curriculum is grounded in Native approaches to healing and aims to:**
    - Help children develop a sense of respect for self, others, and all living things
    - Encourage reconnection and identification with Native heritage
  - **Population**
    - Designed for children ages 3 to 12 who have experienced trauma related to violence in the family, physical abuse, and sexual abuse
- **No evaluation found**

# Pathway to Hope

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- **Trauma-informed training program promotes community-based approach to healing trauma resulting from child sexual abuse (Payne et al. 2103)**
- **Developed collaboratively by Alaska Native victim advocates and researchers**
- **Designed to end silence surrounding sexual abuse in rural Alaska Native communities**
  - **Offers culturally relevant practices and principles for addressing trauma caused by child sexual abuse**
  - **Goals include:**
    - **Generating dialogues within communities**
    - **Providing guidance and support for community members to develop their own culturally specific approaches to healing**
- **Trainings have been presented to more than 270 community leaders and care providers in Alaska and more than 120 participants from 18 tribes in other states**
- **No evaluation found**

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# **Suicide Prevention and Substance Use Disorder Interventions**

# **American Indian Life Skills Development Curriculum**

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- **School-based suicide prevention program for middle- and high-school-age American Indian youth**
- **Developed by LaFromboise (1995) in collaboration with students and community members from the Zuni Pueblo and the Cherokee Nation of Oklahoma**
- **Emphasizes American Indian values: respect, kindness, and generosity**
- **Curriculum includes:**
  - Problem-solving skills
  - Depression and stress management
  - Anger regulation
  - Goal setting
- **Curriculum can be tailored to local context**

# **Evaluation of American Indian/Zuni Life Skills Development Curriculum**

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- **Reviewed by SAMHSA National Registry of Evidence-Based Programs and Practices in 2007—results based on LaFromboise and Howard-Pitney (1995)**
- **Population**
  - Adolescents ages 13 to 17
- **Methods**
  - Quasi-experimental design comparing the practice to no intervention
- **Findings**
  - Decreased hopelessness (n=128)
  - Increased suicide prevention skills (n=62)

# Honoring Children, Honoring the Future

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- **Suicide prevention program that uses the American Indian Life Skills Development Curriculum (BigFoot 2007)**
- **Includes support for training in risk for suicide, case consultation, and program development**
- **Developed by the ICCTC**
- **No evaluation found**

# **Community-Based College Suicide Prevention Program**

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- **Combines American Indian traditional practices with mainstream suicide prevention strategies (Muehlenkamp et al. 2009)**
- **Developed at the University of North Dakota**
- **Emphasizes building relationship skills and strengthening resilience through education, culture, and spirituality**
- **Core components include:**
  - **A gatekeeper training, based on two-evidence based practices (Question, Persuade, and Refer; and Sources of Strength), that helps students recognize warning signs of suicide and learn how to intervene**
  - **Workshops on topics such as stress management, problem solving, and substance abuse awareness and prevention**

# Evaluation of Community-Based College Suicide Prevention Program

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- **Population**

- American Indian college students at the University of North Dakota

- **Methods**

- Pre- and post-test data on effectiveness of trainings (n=22) and workshops (n=35)

- **Findings**

- Students who participated in the gatekeeper trainings showed improved knowledge about suicide
- Students who participated in the workshops reported improvements in problem-solving and communication skills

# Cherokee Talking Circle and Self-Reliance Model

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- **Community-based substance abuse intervention (known as CTC) designed for Keetoowah Cherokee students in the early stages of substance abuse (Lowe et al. 2012)**
- **Developed in collaboration with Keetoowah-Cherokee community representatives and a tribal Elder**
- **Core components**
  - **Talking circles, which provide a culturally relevant setting for sharing stories**
  - **The Cherokee Self-Reliance Model, which emphasizes key Cherokee values, including being responsible, disciplined, and confident**

# Evaluation of CTC

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- **Population**

- Keetoowah Cherokee high school students ages 13 to 18 who were referred for substance abuse counseling

- **Methods**

- Two-condition quasi-experimental design comparing CTC (n=92) to a mainstream intervention, Be a Winner/Drug Abuse Resistance Education (n=87)
- Individual students were not randomized to groups, but which group received CTC was randomly determined

- **Findings**

- CTC was significantly more effective for reducing substance abuse and related problems than the standard intervention that was not culturally based

# Healing of the Canoe

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- **Community-based intervention that aims to prevent substance use disorders by promoting a sense of cultural identity and belonging (Donovan et al. 2015)**
- **Developed through a partnership between the Suquamish and Port Gamble S’Klallam Tribes in the Pacific Northwest and the University of Washington Alcohol and Drug Abuse Institute**
- **Program combines cognitive-behavioral life skills with tribally specific teachings, practices, and values**

# Evaluation of Healing of the Canoe

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- **Population**
  - High school students
- **Methods**
  - Pre- and post-test design (n=7)
- **Findings**
  - Increases in hope, optimism, and self-efficacy
  - Reductions in substance use

# RezRiders

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- **Community-based, trauma-informed intervention aimed at reducing substance use disorders and depression among American Indian youth (Yellow Horse Brave Heart et al. 2012)**
- **Emphasizes participation in extreme sports to transfer high-risk behaviors to controlled settings**
- **Other components:**
  - **Sharing of traditional culture from adult mentors**
  - **Building optimism and trust through peer-group community projects**
- **No evaluation found**

# **Interventions from the *American Indian/Alaska Native Behavioral Health Briefing Book (1)***

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- Documents the current efforts to address a range of serious behavioral health issues in AI/AN communities
- Developed for Indian health care providers by the Indian Health Service (IHS) National Tribal Advisory Committee on Behavioral Health and the Behavioral Health Work Group
- Includes a chapter profiling behavioral health programs in the 12 IHS areas and showing the range of approaches used to treat and heal tribal members, including youth
- Many of the programs infused Western evidence-based practices into traditional healing approaches

# **Interventions from the *American Indian/Alaska Native Behavioral Health Briefing Book (2)***

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- **The Zuni Recovery Center**
  - Addressed substance abuse issues by bridging traditional medicine with modern clinical practices
  - Intervention emphasized use of Native healers to bridge the gap between traditional healing methods and modern medicine

# **Interventions from the *American Indian/Alaska Native Behavioral Health Briefing Book (3)***

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- **The Northern Arapaho Tribe Methamphetamine and Suicide Prevention Initiative Program**
  - Integrated traditional cultural practices with Western approaches to treatment and prevention of suicide
  - Incorporated Strengthening Families, an evidence-based program, and the use of sweat lodges and talking circles for youth
  - Included Elders and traditional healers

# **Interventions from the *American Indian/Alaska Native Behavioral Health Briefing Book* (4)**

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- **The Toiyabe Indian Health Project**
  - **Used the Matrix Model, an evidence-based practice addressing substance abuse, alongside talking circles, sweat lodges, and family groups to provide a focus on traditional healing**
  - **Integrated Red Road to Wellbriety 12-step groups, a culturally based practice, for substance abuse**
  - **Used the American Indian Life Skills Development curriculum to address suicide prevention**

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# Parenting Interventions for Youth and Their Guardians

# Honoring Children, Making Relatives

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- **Cultural adaptation of parent-child interaction therapy (PCIT) (BigFoot and Funderbunk 2011)**
  - PCIT is an evidence-based practice focused on improving child-parent interactions and improving parenting skills
  - Teaches parents to interact with children attentively and to provide them with instructions and consequences
  - Goal is to reduce child physical abuse
- **Adaptation**
  - Developed by the ICCTC
  - PCIT was selected for cultural adaptation because its focus is consistent with traditional AI/AN approaches to rearing children
  - Population: not specified
- **No evaluation of the cultural adaptation found**

# Family Group Decision Making (FGDM)

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- **Marcynyzyn et al. (2012) culturally adapted FGDM for tribal communities in North America**
- **Adaptation developed through a collaboration between Sicangu Child and Family Services on the Rosebud Reservation, Lakota Oyate Wakanyeja Owicakiyapi on the Pine Ridge Reservation, Casey Family Programs, and the University of Minnesota—Duluth**
- **Adaptation**
  - **Child-centered model that is grounded in traditional ways, focusing on community-driven, collaborative problem-solving and communal kinship approaches to caring for children**
  - **Uses prevention strategies in hopes of reducing the number of Native children in the child welfare system**
- **No evaluation of the cultural adaptation found; mixed reviews of evidence for various FGDM models used with other diverse populations (Cochrane Collaborative 2009)**

# Our Life

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- **Culturally based intervention to address the root causes of violence exposure for AI/AN youth (Goodkind et al. 2012)**
- **Main components include:**
  - Recognizing and healing historical trauma
  - Reconnecting youth and parents to traditional culture and language
  - Parenting and social skill-building
  - Building relationships between parents and youth through equine-assisted psychotherapy

# Evaluation of Our Life

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- **Population**
  - Youth ages 7 to 17
- **Methods**
  - Pre- and post-test design (n=18)
- **Findings**
  - Improvements in youth cultural identity, self-esteem, positive coping strategies, quality of life, and social adjustment

# **Hemish of Walatowa Family Circle Program**

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- **Intergenerational family substance abuse prevention program that targets youth, parents, and Elders (Shendo et al. 2012)**
- **Designed and implemented via a partnership between the University of New Mexico's Center for Participatory Research and three New Mexico tribes, including the Pueblo of Jemez (Walatowa)**

# Evaluation of the Hemish of Walatowa Family Circle Program

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- **Population**
  - Children and their parents
- **Methods**
  - Pre- and post-test design with children (n=21) and parents (n=17)
- **Findings**
  - **Children: statistically significant improvements in self-efficacy and coping skills as well as reductions in anxiety and depression symptoms**
  - **Parents: statistically significant improvements in awareness of language and culture**

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