

IV

TREATMENT AND INTERVENTIONS

10

A CULTURALLY INFORMED APPROACH TO AMERICAN INDIAN/ ALASKA NATIVE YOUTH SUICIDE PREVENTION

TERESA D. LaFROMBOISE AND SAIMA S. MALIK

According to scholarly accounts, suicide has disproportionately affected the American Indian/Alaska Native (AI/AN) population for well over half a century (Havighurst, 1971). The Indian Health Service (IHS) has reported that the AI/AN youth suicide rate is 3.5 times higher for those 15 to 24 years old than the national average for this age group (IHS, 2002). Suicide accounts for 26.5% of deaths among AI/ANs 15 to 19 years old. Suicide also accounts for 13.5% of deaths among AI/ANs 10 to 14 years old, nearly double the rate for all races in that age group (Centers for Disease Control and Prevention, 2007). Since the introduction of the Garrett Lee Smith Act of 2004, various forms of evidence-based intervention (EBI) efforts within AI/AN communities have attempted to combat this devastating epidemic (Goldston et al., 2010). Though well-intentioned and scientifically sound, these interventions have historically been culturally disconnected and therefore have failed to bring about any real and long-lasting change (Wexler et al., 2015; Wexler &

<http://dx.doi.org/10.1037/14940-011>

Evidence-Based Psychological Practice With Ethnic Minorities: Culturally Informed Research and Clinical Strategies, N. Zane, G. Bernal, and F. T. L. Leong (Editors)

Copyright © 2016 by the American Psychological Association. All rights reserved.

Gone, 2012). In addition, in the exploration of potential solutions to the problem of AI/AN youth suicide, there has been an unfortunate tendency to focus primarily on risk factors associated with AI/AN experiences and to overlook valuable protective factors embedded within AI/AN cultural practices.

We begin this chapter with a discussion of the unique risk and protective factors of the subgroup of AI/AN adolescents who struggle with being suicidal. We assert that to be successful, the content of AI/AN suicide prevention interventions should be based first and foremost on comprehensive knowledge of culturally unique factors. Second, intervention developers should be responsive to the needs of the AI/AN community and actively engage its members in intervention design, evaluation, and implementation. We present the development and evaluation of the American Indian Life Skills (AILS) curriculum as an account of one suicide prevention intervention that acknowledges the importance of both of these tenets. The implementation and subsequent evaluation of the AILS reflect the particular challenges associated with addressing the evidence-based practice mandate of federally funded programs in AI/AN communities (Walker & Bigelow, 2011). Although the gold standard for determining evidence-based practice involves a strict experimental approach with random assignment of participants to treatment groups, doing so becomes challenging in cases where a community is averse to a randomization scheme. Consideration of these challenges is particularly important in light of the current dialogue surrounding tensions between conventional intervention evaluation protocol and maintaining respect for AI/AN life ways.

Information within this chapter is shared with a caveat, out of respect for the complexities of youth suicide within a heterogeneous population. There are 2.9 million AI/ANs representing 565 federally recognized tribes. When those who affiliate with more than one racial group are included, this estimate expands to 5.2 million people (Humes, Jones, & Ramirez, 2011). Each tribal community has its own unique history, practices, cultural identification, and economic resources. For instance, recent writings comparing suicidal behavior among AI/AN youth have found differential rates and correlates of suicide based on residence (Freedenthal & Stiffman, 2004; Pettingell et al., 2008). There exists a widening gap in resources and social status of individuals between different AI/AN communities (Harvard Project on American Indian Economic Development, 2008). These features challenge the validity of generalizing suicide patterns across AI/AN groups.

Adolescent suicide often occurs in contexts such as family conflict, academic and disciplinary difficulties, and disruption in peer relationships. Unlike trends in the U.S. mainstream population, in which the risk of suicide increases with age, death by suicide is particularly salient for AI/ANs during adolescence

into the mid-20s, at which point risk begins to decline. Although the reasons for such high rates occurring during this developmental stage are unclear, speculation regarding this phenomenon abound. For instance, AI/AN adolescents may feel that they have been disappointed, hurt, or abandoned by loved ones dealing with a host of hardships. The future may seem bleak for those who anticipate disrespect and discrimination. There may be an additional burden of role captivity, the perceived inability to detach from family and community turmoil. Alternatively, those who have access to cultural resources such as community support, high-functioning family members, and rituals that increase a sense of belonging may be able to assist others who are undergoing distress.

Reviewing studies of AI/AN youth suicide reveals a multitude of individual-level risk factors including depression, hopelessness, strained interpersonal communication, social isolation, and school difficulties (Howard-Pitney, LaFromboise, Basil, September, & Johnson, 1992; Wexler, 2006). Mullany et al. (2009) found that interpersonal factors such as family or partner conflict precipitated suicide attempts among Apache youth. Experiences such as family members having attempted suicide, being a victim of physical or sexual abuse, being placed in special education classes, being involved in a gang, and having guns available have also been linked to an increased likelihood of AI/AN adolescent suicide attempts (Borowsky, Resnick, Ireland, & Blum, 1999; Medoff, 2007). In addition, age, gender, negative life events, perceived discrimination, and drug use have been associated with the likelihood of thinking about suicide (Yoder, Whitbeck, Hoyt, & LaFromboise, 2006). Alcohol or drug consumption along with depression has also been shown to strongly predict suicidal ideation and suicidal behavior (LaFromboise, Medoff, Lee, & Harris, 2007).

CULTURALLY UNIQUE RISK FACTORS FOR SUICIDE

Although many of the risk factors noted above may be present in the lives of other ethnic minority adolescents, AI/AN youth currently have the highest suicide rates (Goldston et al., 2008), and the prevalence and presentation of these factors in the lives of AI/ANs are distinct. We next consider the impact of historical trauma, acculturation stress, and community violence on individual adaptation. Given the robust nature of substance abuse as either a unique or co-occurring risk factor for suicide, as well as its high prevalence among AI/ANs, we include substance abuse in our discussion.

Historical Trauma

Historical trauma has been described as trauma resulting from successive, compounding events perpetrated on a community over generations to eliminate

the cultural practices and cultural identity of its members (Brave Heart, 2003). These events have included reservation internment, annihilation of ceremonial practices, and "loss of land to which American Indians were spiritually and emotionally tied" (Brave Heart & DeBruyn, 1998, p. 361). Walters et al. (2011) asserted that stress associated with historical loss may not only have a stifling effect on development but also may negatively impact health over generations.

An assimilationist policy most detrimental to cultural identity and family functioning was the forced removal of AI children from their families to boarding schools (Meriam, 1928). According to Evans-Campbell (2008), at least four generations of survivors may have transmitted the trauma they experienced in boarding schools to their children, grandchildren, extended family members, and nondescendants.

Historical trauma may explain a mechanism by which AI/ANs are at greater risk of experiencing psychological turbulence. Whitbeck, Walls, Johnson, Morrisseau, and McDougall (2009) hypothesized that growing up in a context of constant reminders of loss associated with colonization contributes to adolescent depression and demoralization. They found that daily thoughts of historical loss by AI adolescents (11 to 13 years old) were similar to, and sometimes exceeded, those of their adult caretakers. Walls, Chapple, and Johnson (2007) found that several stressors, including coercive parenting and caretaker rejection, were related to suicidal behavior among AI adolescents. More recently, in a study of trauma and suicidal behavior among Canadian Aboriginal people, Elias et al. (2012) found that a youth's personal history of negative boarding school experiences was associated with suicidal thoughts.

Acculturation Stress

Defined as a systemic overload associated with navigating differences between two or more cultures, *acculturation stress* is most often manifested within the AI/AN population as personal resistance or struggle to maintain AI/AN cultural integrity when functioning in mainstream society. Chadwick and Strauss (1975) found that many AI/AN people living in Seattle since the 1950s were as culturally engaged as those who had recently migrated from their reservations to the city. The impact of resistance to acculturation on AI/AN mental health continues to be evident today (Waldram, 2004).

AI/AN youth who leave their reservations often face increasing challenges in the urban environment. They feel the tension between remaining in a culturally familiar and supportive environment and venturing into an unfamiliar milieu that privileges individual achievement. For example, Dickerson and Johnson (2011) found that AI/AN urban youth experience stress associated with less frequent opportunities to retain traditional knowledge and engage in

traditional activities. Furthermore, they are burdened by challenges associated with negative stereotypes, racism, violence, and gang activity. The relationship of acculturation and suicide was established in studies of suicide patterns in New Mexico by Van Winkle and May (1986, 1993) and was further buttressed by Lester (1999). Both studies found that suicide rates were positively associated with acculturation stress and negatively associated with traditional integration in 18 AI/AN tribes.

Community Violence

AI/AN youth are 2.5 times more likely than other youth to encounter trauma (National Center for Children in Poverty, 2007). It is important to note that although AI/ANs are twice as likely as their non-AI/AN counterparts to experience violent victimization, 70% of the time that violence is inflicted upon them by non-AI/AN perpetrators (Greenfield & Smith, 1999). It is notable that AI/ANs suffer from high rates of posttraumatic stress disorder (PTSD), depression, anxiety symptoms, substance abuse, antisocial behavior, social withdrawal, and academic problems (Boyd-Ball, Manson, Noonan, & Beals, 2006; Goodkind, LaNoue, & Milford, 2010).

Childhood exposure to interparental violence has been found to result in moderate to clinical levels of conduct problems, emotional problems, and lower levels of social functioning among youth (Fantuzzo et al., 1991). Although precise estimates of AI/AN child sexual abuse do not exist, risk factors associated with this form of abuse are greater among AI/ANs than any other racial group (L. EchoHawk, 2001). Untreated victims have a higher risk of continuing this cycle of abuse as adults.

Although little is known about the prevalence of self-cutting, burning, or hitting within this subgroup, a 2011 study of Apache youth indicated greater involvement in nonsuicidal self-injury as compared with youth in the general population. Precipitants of self-injury included conflict with one's family or partner, peer pressure, and mimicking others' self-injurious behavior (Cwik et al., 2011).

Substance Abuse

Adolescents who are exposed to adverse childhood experiences often undergo severe emotional problems and may be more inclined to engage in substance use (Koss et al., 2003). AI/AN youth are an especially high-risk group for the propensity for binge drinking and problems associated with alcohol consumption (Hawkins, Cummins, & Marlatt, 2004; Walls, Whitbeck, Hoyt, & Johnson, 2007). They are more likely than their non-AI/AN peers to report lifetime alcohol use, indicating earlier and more frequent and

problematic alcohol use in this subgroup (Beauvais, Jumper-Thurman, Helm, Plested & Burnside, 2004).

Because the abuse of alcohol is so deeply intertwined with the abuse of other drugs, it is nearly impossible to examine the effects of each separately. According to Brave Heart, Chase, Elkins, and Altschul (2011), AI/ANs are increasingly abusing inhalants, methamphetamines, and IV drugs. Data from the Monitoring the Future annual survey (Wallace et al., 2003) indicate a high prevalence of inhalant abuse among AI/AN youth (9.4% compared with 6.6% in all other ethnic groups). In a recent study on binge substance use, Apache youth reported engaging in this behavior to avoid problems or reduce negative feelings (Tingey et al., 2012).

In light of their salience with the AI/AN population, the risk factors for suicide discussed thus far are essential considerations when testing models for the etiology of suicide and multiple, co-occurring conditions (e.g., bullying, substance use and other forms of self-injury). Furthermore, findings from research on AI/AN youth regarding the correlates of engagement in life-threatening behavior should guide the development and refinement of suicide prevention efforts.

PSYCHOLOGICAL FUNCTIONING

AI/AN youth who struggle with suicide also have unique experiences according to the family and community to which they belong, their cultural orientation, and their psychological functioning. Unique risk factors for suicide may be compounded by the presence of mental disorders such as depressive disorder, bipolar disorder, schizophrenia, and personality disorder (Goldsmith, Pellmar, Kleinman, & Bunney, 2002). According to Beals et al. (1997), 29.4% of AI adolescents 14 to 16 years of age from a Northern Plains reservation met the diagnostic criteria for at least one mental disorder. However, Whitbeck, Yu, Johnson, Hoyt, and Walls (2008) found that 44.8% of early adolescents, 13 to 15 years of age, from a tribe located in the Upper Midwest had a lifetime psychological disorder and 26.6% had a 12-month disorder. These variable rates of mental disorders among AI/AN youth complicate one's understanding of the impact of psychological functioning on suicide.

One diagnostic category that is quite common among AI/AN youth is PTSD. This disorder was more common in the two reservation populations sampled in the AI-SUPERPPF study¹ than in other populations (Beals et al.,

¹The AI-SUPERPPF was the first comprehensive assessment funded by the National Institute of Mental Health of the prevalence of alcohol, drug, and mental health problems in two distinct and heavily populated AI/AN groups.

2005). Rates of full PTSD as high as 10% and rates of subthreshold PTSD as high as 14% were noted in a clinical sample of AI/ANs by Deters, Novins, Fickenscher, and Beals (2006).

CULTURALLY UNIQUE PROTECTIVE FACTORS FOR SUICIDE

Despite Borowsky et al.'s (1999) original discussion of protective factors in suicide attempts among AI/AN youth, scant attention has been paid to the factors that buffer against AI/AN youth suicide. Their large-scale study found that emotional health, discussing problems with friends or family, and connectedness to family protected against suicide attempts. This research also identified that increasing protective factors was more effective than decreasing risk factors in reducing the probability of a suicide attempt.

A population-based study of AI/AN and non-AI/AN youth attending schools off the reservation found a buffering effect of certain protective factors against suicide. These factors included self-esteem, self-efficacy, positive mood/emotional health, family support/connectedness, and parental prosocial norms (Mackin, Perkins, & Furrer, 2012). Not only were AI/ANs at a higher risk for suicide attempts than were non-AI/ANs, but they also had a higher threshold of risk factors marking a suicide attempt. These protective factors had a greater impact for individuals who exhibited a higher level of risk for suicide than for those who exhibited a lower level of risk.

Another key protective factor is enculturation. *Enculturation* refers to the extent to which individuals are grounded in their traditional beliefs, engage in cultural practices, and examine and internalize their cultural identity. Wolsko, Lardon, Mohatt, and Orr (2007) found that Yup'ik people (Alaska) who identified more with their traditional way of life experienced greater happiness, more adherence to spiritual ways of coping, and less frequent drug and alcohol use to manage stress.

In an investigation of suicidal ideation among AI/AN youth from a tribe in the Upper Midwest, Yoder et al. (2006) found that enculturation was a strong predictor of suicidal thoughts and plans such that individuals with higher levels of enculturation were less likely to suffer from suicidal ideation. LaFromboise, Medoff, Lee, and Harris's study (2007) of AI youth living on a Northern Plains reservation also noted the protective role of enculturation and school belonging in deterring suicidal ideation. In addition, LaFromboise, Albright, and Harris (2010) found associations between stronger ethnic/cultural identity and lower levels of hopelessness, a psychological outcome often linked to depression and suicide. Fluency in one's tribal language, an essential feature of enculturation, was not measured in this study because of the complex influence of English and tribal language

use on ethnic identity among AI/AN youth (Moran, Fleming, Somervell, & Manson, 1999).

However, the work of Chandler and colleagues in examining youth suicide within First Nation communities in British Columbia has considered conversational knowledge of one's Aboriginal language along with other cultural continuity factors (Chandler & Proulx, 2006). Hallett, Chandler, and Lalonde (2007) noted that conversational knowledge of language was associated with lower rates of youth suicide above and beyond the presence of other cultural continuity factors (e.g., evidence of a band—the Canadian equivalent of a U.S. tribe or nation—having taken back from government agencies certain rights to self-government).

Although this portfolio of studies reveals a robust relationship between enculturation and psychological well-being, the extent to which cultural identity has a direct impact on suicide remains unclear. However, these findings bolster the need for AI/AN prevention intervention programs to draw on AI/AN cultures and traditions.

SCHOOL-BASED SUICIDE PREVENTION EFFORTS

The risk of youth suicide is compounded when resources offering suicide intervention within communities are inadequate. The IHS receives woefully inadequate funding, particularly for mental health services. In many communities, the infrastructure to support mental health is weak, if present at all. Furthermore, when resources are available, AI/AN youth often avoid seeking psychological services because of internal factors such as self-reliance, embarrassment, lack of problem recognition, and a belief that nobody would help them (Freedenthal & Stiffman, 2007). There is reluctance on the part of many AI/AN families to seek help or engage in therapy. Instead, parents may enlist the help of a family member or close friend to talk with a suicidal child.

We believe that schools can be an effective venue for the delivery of suicide prevention with AI/AN youth, especially when used in combination with other prevention strategies such as gatekeeper training, extensive community outreach, and social-emotional learning programs. May, Serna, Hurt, and DeBruyn (2005) validated the success of such a combined approach with an AI reservation community in the Southwest.

School-based suicide prevention programs typically provide education and awareness about suicide and encourage a positive attitude toward seeking necessary help. School-based suicide prevention programs are generally brief in duration and some incorporate screening for suicide and mental health needs as part of the prevention protocol (Steele & Doey, 2007). Whereas school-based suicide prevention programs have been found to increase knowledge

and improve attitudes concerning mental health and suicide (Breton et al., 2002), too often the content is disconnected from the community they serve (Muehlenkamp, Marrone, Gray, & Brown, 2009). This disconnect is apparent in the identification of the following three EBI prevention programs implemented in schools that have been found to reduce suicidal behaviors: the Good Behavior Game (GBG), Coping and Support Training (CAST), and Sources of Strength.

GBG is a universal primary prevention program targeting elementary school age students (Barrish, Saunders, & Wolf, 1969), with the goal of less aggressive and disruptive behavior among children. GBG has demonstrated long-term effects on decreased impulsive or disruptive behavior, substance use, and lower rates of suicidal ideation and attempts among participants (Kellam et al., 2008). However, the program includes a component of competition and hence may be incongruent with the values of a number of tribal groups. CAST, a program adapted from Reconnecting Youth, utilizes a skills training approach and targets high school students (ages 14–19) who have been identified through an initial suicide assessment interview screen. The goals of CAST include increased mood management, better school performance, and decreased drug involvement. Participants have demonstrated increased problem-solving skills, increase perceived family support and self-control, decreased symptoms of depression and hopelessness, and a significant reduction in anger and suicide risk behavior (Eggert, Thompson, Randell, & Pike, 2002; Thompson, Eggert, Randell, & Pike, 2001). However, similar to GBG, the intervention does not explicitly address cultural factors that may influence suicidal ideation. Sources of Strength is a universal, strength-based comprehensive wellness program that was initially developed for tribal and rural settings and later expanded for the general population. Peer leaders are trained to respond to students who display risk factors for suicide and direct them to a trusting adult. Participants in the program reported reduced suicide attempts and increased knowledge about suicide whereas peer leaders reported increased adaptability in attitudes toward suicide and other mental illnesses and enhanced ability to refer a suicidal friend to a trusted adult (Aseltine & DeMartino, 2004; Aseltine, James, Schilling, & Glanovsky, 2007). Although evaluations reveal decreases in students' suicidal behavior, Sources of Strength does not refer specifically to tribal culture and no outcome studies of the program have been conducted with an adequate AI/AN population. Only 1% of the sample in the outcome evaluation of this intervention was reported to be of AI/AN heritage (Wyman et al., 2010). To our knowledge these three interventions are the only programs that have met the criteria for effectiveness in decreasing suicide risk when following randomized clinical trial procedures. Although these interventions have been received by schools serving AI/ANs, all three have yet to target an adequate sample of AI/ANs in their

evaluation efforts. Thus they have yet to demonstrate effectiveness in reducing suicide risk with American Indian youth or widespread appeal among AI/AN communities, possibly in part because of their inattention to AI/AN culturally specific suicide risk and protective factors. Furthermore, many AI/AN communities prefer culturally sensitive programs over ones apparently packaged for mainstream consumption.

In the following section, we share information about the evolution and evaluation of a community-driven, school-based suicide prevention approach initiated by leaders of the Zuni tribe who believe that the foundation of healthy individuals, families, and communities relies on shared valuing of life.

A CASE EXAMPLE: ZUNI LIFE SKILLS EVALUATION

Developing the Intervention

The Zuni Life Skills Development Curriculum (ZLS) emerged as a response to the specific demands of an AI/AN community and actively engaged community stakeholders during the phases of development, implementation, and evaluation. Intervention content was based on a comprehensive knowledge of both cognitive and behavioral theory as it pertains to adolescence as well as the specific AI/AN risk and protective factors highlighted in this chapter. Evaluation results support the benefits of this intervention with participants. Achieving EBI model program status based on criteria for evidence-based practice in this experience included the following challenges: a lack of understanding on the part of local behavioral health staff regarding the need for school-based prevention efforts, the existence of a relatively small and unique sample population, an initial rejection by community leaders of randomized assignment to treatment, a dearth of qualified AI/AN interventionists, and off-site supervision of the intervention. Although the positive student outcomes reported here reflect the importance of a culturally informed approach to suicide prevention, challenges faced along the way provide insight into the difficulty of implementing evidence-based practice with AI/AN communities. This struggle between evidence-based practice and the healing value of indigenous culture has been hotly contested within the field of behavioral health in recent years (H. Echo-Hawk, 2011; Smith, 1999; Whitbeck, Walls, & Welch, 2012).

Between 1980 and 1987, there were 13 deaths by suicide among youth in the Zuni pueblo, a reservation made up of 9,000 members located in the high desert of northwest New Mexico. At the request of tribal leaders, Teresa LaFromboise was asked to assist in addressing this tragic problem in the Zuni Public School District. Over a 3-year period, she worked in partnership with

community and university educators to develop and evaluate the ZLS, an intervention consisting of life skills training and education about youth suicide prevention (LaFromboise, 1991).

During the initial phase of development, community members participated in asset identification and issue selection wherein they contemplated the potential causes of youth depression and suicide in their community and recommended coping strategies they wished to encourage throughout the intervention (LaFromboise & Howard-Pitney, 1993). Structural issues negotiated during the development phase included which grade levels would receive the intervention, who would deliver the intervention, and what the preferred format of delivery would be.

It was decided that the ZLS would include a thoughtful balance of Zuni socialization methods and psychological approaches. Cultural values of respect, honesty, wisdom, gratitude, and bravery were carefully considered for integration into the new skills curriculum. Opportunities for the inclusion of spiritual teachings delivered by respected Zuni community members were infused throughout the intervention to support the positive involvement of Zuni cultural teachings and practices in the lives of Zuni youth, their families, and their community (LaFromboise & Lewis, 2008). Keeping Zuni adolescent daily experiences in mind, the curriculum included 44 lessons, 10 of which covered suicide crisis intervention training (e.g., how to listen to and seek help for a suicidal friend); 30 sought to increase protective factors such as positive mood and emotional health through skills training to learn to engage in peer-to-peer support, cope with stress, manage anger and depression, and solve problems or resolve conflicts; and four provided background understanding about self-destructive behavior.

The psychological foundations for the intervention stemmed from social-cognitive theory (Bandura, 1986) and cognitive-behavioral theory (Beck, 1976). From a social-cognitive perspective, suicidal behavior is attributed to direct learning or modeling influences (e.g., prevalent suicidal behavior within the community) in conjunction with certain environmental influences (e.g., lifetime exposure to substance abuse) and individual characteristics (e.g., depression and hopelessness) that mediate decisions related to risk behavior (LaFromboise & Rowe, 1983). From a cognitive-behavioral perspective, adolescents are presumed to be at risk for suicide, at least in part, when they are predisposed to having depressive and/or irrational thoughts. Teaching youth new coping mechanisms and strengthening their repertoire of coping responses provides them with some measure of protection against the tendency to avoidant coping (e.g., self-isolation, substance abuse) and other forms of risk behavior. Select material from the Adolescent Coping With Depression Course (Clarke, Lewinsohn, & Hops, 1990) was culturally adapted for inclusion in the intervention.

Oftentimes it may be difficult to find an interventionist who is both intimately aware of the cultural nuances of the local context and well-versed in the specific clinical methodology required for delivery. Although careful selection and training of community members as interventionists can help to ease this challenge somewhat, many AI/AN communities are lacking in relevant resources, requiring the curriculum to be taught either by outsiders or by those from within the community who may not have expertise in social-emotional development. Because of a lack of Zuni teachers at the school at the time, finding an interventionist with expert knowledge about Zuni culture posed a challenge. Soon after the ZLS was launched, Zuni IHS mental health technicians offered to colead the intervention with non-AI/AN teachers/interventionists, providing an ideal solution to this dilemma. Unfortunately, a lack of qualified interventionists remains a challenge in many AI/AN prevention efforts, potentially curtailing the full impact of the program.

Evaluation of a school-based suicide prevention intervention for AI/AN communities poses several fundamental difficulties. Zuni High School is a relatively small school with a small population. At the time of this evaluation, community members did not want the researchers to follow procedures for randomization at the individual level. The close connectedness within the Zuni community raised the possibility of control group contamination. Although community refusal to allow randomization rendered a randomized controlled trial impossible, the evaluation, following a quasi-experimental design with two conditions (intervention and no-intervention), found that participation in ZLS reduced suicidal ideation and hopelessness, increased problem-solving ability, increased confidence to manage anger, and increased suicide prevention skills among participants (LaFromboise & Howard-Pitney, 1995). Youth suicide in Zuni ceased almost immediately after the curriculum was implemented in 1991 (Woodard, 2012). As a testament to its wide-scale acceptability and ecological validity, ZLS is a required course in Zuni High School even today.

Adapting the Intervention to a New Context

In 1990, after completing the ZLS evaluation, Teresa LaFromboise was invited by the Cherokee Nation to implement and evaluate the intervention at Sequoyah High School, a boarding school in Tahlequah, Oklahoma, which served AI/AN students from more than 20 different tribes across Indian Country at that time. To ensure relevance and maximize student engagement in and benefits from the intervention, cultural nuances of the ZLS that were specific to the Zuni tribe were substituted with examples of salient events and cultural teachings from the tribes represented by this

student population. Although the curriculum was culturally adapted for the Sequoyah High School context, the core skills and content of the ZLS remained unchanged.

Simultaneously, a longitudinal study of mental health among students at Sequoyah High School was being conducted by the National Center for American Indian and Alaska Native Mental Health Research. Because this longitudinal study included assessment of reports of suicidal behavior, students participating in the intervention could be monitored throughout their Sequoyah High School career. Results from this natural experiment indicated a reduction in a 20-year suicide and suicide attempt rate with no deaths by suicide noted since the beginning of implementation of the intervention in 1990 (see the National Academy of Sciences/Institute of Medicine Report edited by Goldsmith et al., 2002).

A question that emerged during this particular implementation and evaluation opportunity was that of off-site supervision. We were unsure whether interventionists could balance their role as classroom teacher with their role as prevention intervention facilitator. To tackle this problem, an on-site teaching staff member was appointed to facilitate weekly meetings with the teachers/interventionists to provide technical assistance on intervention content and implementation issues. In this application, all teachers/interventionists were AI. Their collective insight and understanding of the students and their cultural backgrounds were invaluable. Although off-site supervision from the intervention developer was a challenge at that time, the availability of various forms of technology and media-driven delivery systems has eased this challenge and rendered off-site supervision of the AILS more effective.

After the yearlong evaluation was complete, a more tribally heterogeneous version of the ZLS was published as the American Indian Life Skills Development Curriculum (AILS; LaFromboise, 1996). Rather than being a one-size-fits-all intervention, the AILS encourages interventionists to incorporate traditional and contemporary worldviews of the tribes and communities they work with into the curriculum without compromising the core psychological components of the program or displacing the skills training outlined in the manual. Community members interested in culturally adapting the AILS are cautioned during interventionist trainings that spontaneous adaptation of an EBI may alter it to a point that it is rendered unscientific. AILS intervention trainings also include didactic information on strategies covered in the AILS and culturally unique AI/AN risk factors for suicide. Information on how to use the manual and demonstrations to teach core social skills training strategies are shared. Additional topics covered include confidentiality, classroom management, school policy and procedures related to disclosure of suicidal intent or behavior, and the process

of referral for treatment. To date, AILS interventionist trainings have been conducted with community members from more than 100 reservations across Indian country.²

An independent evaluation of the AILS was conducted in 2011 by direct service providers working with AI/AN students in New Mexico and involved 90 participants 14 to 18 years of age. This evaluation of an abbreviated version of the AILS employed a quasi-experimental design with an intervention condition. The intervention consisted of 10 AILS lessons purposefully selected to meet the needs of the Navajo youth who participated in the intervention and its evaluation. Pretest–posttest comparisons supported the positive effect of treatment (Salvatore, 2011). The presence of independent evaluations such as this one indicates an effort toward continuous quality improvement of prevention interventions through evaluation of school- and community-based programs (see also the evaluation of AILS in Cozad, 2008). Although only 10 lessons were selected for this study, each of these lessons adhered to the original lesson content in the AILS manual. Modification of AILS dosage may be viewed as a reflection of programmatic restrictions faced by service providers, something not uncommon in low-resourced, school-based work.

Refining the AILS for Early Adolescents

The staggering rates of suicide among younger children in the AI/AN population led to a growing urgency to extend the benefits of the curriculum to younger adolescents as well. In response to this need, Teresa LaFromboise decided to conduct a pilot trial to evaluate the feasibility and effects of the AILS with a younger student population. The results from these studies have guided modifications of the curriculum toward a version of the AILS that is aimed at addressing the issues of AI/AN early adolescents.

In 2007, an evaluation of the original AILS was conducted with 122 middle school students (11–15 years of age) living on a Northern Plains reservation. During the evaluation, the curriculum was offered twice a week, in 35-minute sessions, over 6 weeks. Scores on scales of hopelessness (Kazdin, Rodgers, & Colbus, 1986) and suicidal ideation (Reynolds, 1988) were determined among students who were randomized to the AILS condition, a comparative treatment condition (Reconnecting Youth; Eggert & Nicholas, 2004), or a “learning period as usual” delayed intervention condition. This evaluation found statistically significant reductions in hopelessness and suicidal ideation

²Locations of trainings include: Anchorage and Bethel, Alaska; Bylas and Phoenix, Arizona; Arcata, California; Detroit, Michigan; Leech Lake and St. Cloud, Minnesota; Wolf Point, Montana; Belcourt and Fort Totten, North Dakota; Macy, Nebraska; Santa Fe, Shiprock, and Zuni, New Mexico; Gardenville and Pyramid Lake, Nevada; Oklahoma City, Oklahoma; Pine Ridge, Rosebud, and Sisseton, South Dakota; and Spokane, Washington.

for students in the comparative treatment group. These results, along with classroom observations and feedback from experts in the field of AI/AN child trauma and special education, led to extensive modifications to the AILS curriculum. These modifications included adjustment of content, reduction in number of lessons from 44 to 30, and restructuring of lesson activities, making the intervention more age-appropriate for students and more user-friendly for teachers/interventionists.

✓ In 2011, Teresa LaFromboise was invited back to the Pueblo of Zuni to implement the AILS at the middle school level and to conduct an evaluation of the AILS modified version. Participants in this study included 141 students attending Zuni Middle School who were randomized to receive the modified AILS immediately or 6 weeks later as a delayed treatment. Findings indicated significantly positive outcomes for those who had engaged in the AILS intervention on measures of life skills efficacy, depression management, stress management, ability to enlist community support, and ability to enlist social resources as compared with the control group (LaFromboise & Malik, 2012). In this study we were fortunate to find one AI/AN interventionist (the other two interventionists were non-AI/AN educators). Statistical comparisons of student outcomes found no interventionist effect, which we attribute to the strength of the curriculum itself. We believe these findings support continued implementation of the early adolescent version of the AILS with evaluation.

CONCLUSION

We began this chapter with a discussion of the risk and protective factors associated with suicide among AI/AN youth. We reviewed a number of studies that highlighted the importance of considering these factors in working with AI/AN adolescents and asserted that suicide prevention interventions should be based on comprehensive knowledge of culturally unique factors as well as be responsive to the needs of diverse AI/AN communities. We reviewed three evidence-based prevention programs found to reduce suicide risk that are also used by schools serving AI/AN youth. We then presented the development and evaluation of the AILS as a case example of one suicide prevention intervention that was based on an understanding of unique AI/AN risk and protective factors, sensitive to the needs of the community, and actively partnered with community members at every phase of development. In our discussion of the AILS, we highlighted challenges inherent in evaluating interventions using currently prescribed highly rigorous evaluation techniques with AI/AN communities and provided examples of the practical solutions employed in this case.

The specific demands of scientific inquiry may sometimes be at odds with the preservation of traditional ways of life. The requirements of funding

agencies regarding evidence-based prevention programs oftentimes overlook the value of such traditional knowledge. This system leaves many AI/AN communities at a disadvantage and may force them to adopt intervention implementation and evaluation styles that are disrespectful of AI/AN protocol and at odds with tribal sovereignty. The design of appropriate measures of intervention outcomes requires a balance between culturally informed AI/AN perspectives of effective practice and conventional ideals of model interventions based on scientific evidence. We hope that examples of our experience developing and evaluating the AILS may contribute toward a more realistic understanding of this form of challenging but very rewarding service.

REFERENCES

- Aseltine, R. H., Jr., & DeMartino, R. (2004). An outcome evaluation of the SOS suicide prevention program. *American Journal of Public Health, 94*, 446–451. <http://dx.doi.org/10.2105/AJPH.94.3.446>
- Aseltine, R. H., Jr., James, A., Schilling, E. A., & Glanovsky, J. (2007). Evaluating the SOS suicide prevention program: A replication and extension. *BMC Public Health, 7*, 161. <http://dx.doi.org/10.1186/1471-2458-7-161>
- Bandura, A. (1986). *Social foundations of thought and action: A social cognitive theory*. Englewood Cliffs, NJ: Prentice-Hall.
- Barrish, H. H., Saunders, M., & Wolf, M. M. (1969). Good behavior game: Effects of individual contingencies for group consequences on disruptive behavior in a classroom. *Journal of Applied Behavior Analysis, 2*, 119–124. <http://dx.doi.org/10.1901/jaba.1969.2-119>
- Beals, J., Manson, S. M., Whitesell, N. R., Spicer, P., Novins, D. K., Mitchell, C. M., & AI-SUPERPPF Team. (2005). Prevalence of DSM-IV disorders and attendant help-seeking in two American Indian reservation populations. *Archives of General Psychiatry, 62*, 99–108. <http://dx.doi.org/10.1001/archpsyc.62.1.99>
- Beals, J., Piasecki, J., Nelson, S., Jones, M., Keane, E., Dauphinais, P., . . . Manson, S. M. (1997). Psychiatric disorder among American Indian adolescents: Prevalence in Northern Plains youth. *Journal of the American Academy of Child & Adolescent Psychiatry, 36*, 1252–1259. <http://dx.doi.org/10.1097/00004583-199709000-00018>
- Beauvais, F., Jumper-Thurman, P., Helm, H., Pledsted, B., & Burnside, M. (2004). Surveillance of drug use among American Indian adolescents: Patterns over 25 years. *Journal of Adolescent Health, 34*, 493–500. [http://dx.doi.org/10.1016/S1054-139X\(03\)00340-9](http://dx.doi.org/10.1016/S1054-139X(03)00340-9)
- Beck, A. T. (1976). *Cognitive therapy and the emotional disorders*. Oxford, England: International Universities Press.

- Borowsky, I. W., Resnick, M. D., Ireland, M., & Blum, R. W. (1999). Suicide attempts among American Indian and Alaska Native youth: Risk and protective factors. *Archives of Pediatrics & Adolescent Medicine*, 153, 573–580. <http://dx.doi.org/10.1001/archpedi.153.6.573>
- Boyd-Ball, A. J., Manson, S. M., Noonan, C., & Beals, J. (2006). Traumatic events and alcohol use disorders among American Indian adolescents and young adults. *Journal of Traumatic Stress*, 19, 937–947. <http://dx.doi.org/10.1002/jts.20176>
- Brave Heart, M. Y. (2003). The historical trauma response among natives and its relationship with substance abuse: A Lakota illustration. *Journal of Psychoactive Drugs*, 35, 7–13. <http://dx.doi.org/10.1080/02791072.2003.10399988>
- Brave Heart, M. Y., Chase, J., Elkins, J., & Altschul, D. B. (2011). Historical trauma among Indigenous peoples of the Americas: Concepts, research, and clinical considerations. *Journal of Psychoactive Drugs*, 43, 282–290. <http://dx.doi.org/10.1080/02791072.2011.628913>
- Brave Heart, M. Y., & DeBruyn, L. M. (1998). The American Indian Holocaust: Healing historical unresolved grief. *American Indian and Alaska Native Mental Health Research*, 8, 56–78.
- Breton, J. J., Boyer, R., Bilodeau, H., Raymond, S., Joubert, N., & Nantel, M. A. (2002). Is evaluative research on youth suicide programs theory-driven? The Canadian experience. *Suicide and Life-Threatening Behavior*, 32, 176–190.
- Centers for Disease Control and Prevention. (2007). *Deaths: Leading causes for 2004*, National Vital Statistics Reports, 56(5). Available at <http://www.cdc.gov/men/lcod/2004/index.htm>
- Chadwick, B. A., & Strauss, J. H. (1975). The assimilation of American Indians into urban society: The Seattle case. *Human Organization*, 34, 359–369.
- Chandler, M., & Proulx, T. (2006). Changing selves in changing worlds: Youth suicide on the fault-lines of colliding cultures. *Archives of Suicide Research*, 10, 125–140. <http://dx.doi.org/10.1080/13811110600556707>
- Clarke, G. N., Lewinsohn, P. M., & Hops, H. (1990). *Instructor's manual for the Adolescent Coping With Depression Course*. Eugene, OR: Castalia Press.
- Cozad, A. R. (2008). *Saving the next generation: A "Life skills" curriculum for rural Oklahoma youth*. Unpublished manuscript. Indian Health Service Injury Prevention Fellowship. Lawton, OK: Indian Health Service.
- Cwik, M. F., Barlow, A., Tingey, L., Larzelere-Hinton, F., Goklish, N., & Walkup, J. T. (2011). Nonsuicidal self-injury in an American Indian reservation community: Results from the White Mountain Apache surveillance system, 2007–2008. *Journal of the American Academy of Child & Adolescent Psychiatry*, 50, 860–869. <http://dx.doi.org/10.1016/j.jaac.2011.06.007>
- Deters, P. B., Novins, D. K., Fickenscher, A., & Beals, J. (2006). Trauma and post-traumatic stress disorder symptomatology: Patterns among American Indian adolescents in substance abuse treatment. *American Journal of Orthopsychiatry*, 76, 335–345. <http://dx.doi.org/10.1037/0002-9432.76.3.335>

- Dickerson, D. L., & Johnson, C. L. (2011). Design of a behavioral health program for urban American Indian/Alaska Native youths: A community informed approach. *Journal of Psychoactive Drugs*, 43, 337–342. <http://dx.doi.org/10.1080/02791072.2011.629152>
- Echo-Hawk, H. (2011). Indigenous communities and evidence building. *Journal of Psychoactive Drugs*, 43, 269–275. <http://dx.doi.org/10.1080/02791072.2011.628920>
- EchoHawk, L. (2001). Child sexual abuse in Indian Country: Is the guardian keeping in mind the seventh generation? *Journal of Legislation and Public Policy*, 5(1), 83–127.
- Eggert, L. L., & Nicholas, L. J. (2004). *Reconnecting Youth: A peer group approach to building life skills*. Bloomington, IN: National Educational Service.
- Eggert, L. L., Thompson, E. A., Randell, B. P., & Pike, K. C. (2002). Preliminary effects of brief school-based prevention approaches for reducing youth suicide—Risk behaviors, depression, and drug involvement. *Journal of Child and Adolescent Psychiatric Nursing*, 15, 48–64. <http://dx.doi.org/10.1111/j.1744-6171.2002.tb00326.x>
- Elias, B., Mignone, J., Hall, M., Hong, S. P., Hart, L., & Sareen, J. (2012). Trauma and suicide behaviour histories among a Canadian indigenous population: An empirical exploration of the potential role of Canada's residential school system. *Social Science & Medicine*, 74, 1560–1569. <http://dx.doi.org/10.1016/j.socscimed.2012.01.026>
- Evans-Campbell, T. (2008). Historical trauma in American Indian/Native Alaska communities: A multilevel framework for exploring impacts on individuals, families, and communities. *Journal of Interpersonal Violence*, 23, 316–338. <http://dx.doi.org/10.1177/0886260507312290>
- Fantuzzo, J. W., DePaola, L. M., Lambert, L., Martino, T., Anderson, G., & Sutton, S. (1991). Effects of interparental violence on the psychological adjustment and competencies of young children. *Journal of Consulting and Clinical Psychology*, 59, 258–265. <http://dx.doi.org/10.1037/0022-006X.59.2.258>
- Freedenthal, S., & Stiffman, A. R. (2004). Suicidal behavior in urban American Indian adolescents: A comparison with reservation youth in a southwestern state. *Suicide and Life-Threatening Behavior*, 34, 160–171.
- Freedenthal, S., & Stiffman, A. R. (2007). They might think I was crazy: Young American Indians' reasons for not seeking help when suicidal. *Journal of Adolescent Research*, 22, 58–77. <http://dx.doi.org/10.1177/0743558406295969>
- Goldsmith, S. K., Pellmar, T. C., Kleinman, A. M., & Bunney, W. E. (Eds.). (2002). *Reducing suicide: A national imperative*. Washington, DC: The National Academies Press.
- Goldston, D. B., Molock, S. D., Whitbeck, L. B., Murakami, J. L., Zayas, L. H., & Hall, G. C. N. (2008). Cultural considerations in adolescent suicide prevention and psychosocial treatment. *American Psychologist*, 63, 14–31. <http://dx.doi.org/10.1037/0003-066X.63.1.14>

- 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 and Life-Threatening Behavior*, 40, 245–256.
- Goodkind, J. R., LaNoue, M. D., & Milford, J. (2010). Adaptation and implementation of cognitive behavioral intervention for trauma in schools with American Indian youth. *Journal of Clinical Child and Adolescent Psychology*, 39, 858–872. <http://dx.doi.org/10.1080/15374416.2010.517166>
- Greenfield, L., & Smith, S. (1999). *American Indians and crime*. U.S. Department of Justice, Office of Justice Programs, Bureau of Justice Statistics. Washington, DC: U.S. Government Printing Office.
- Hallett, D., Chandler, M. J., & Lalonde, C. E. (2007). Aboriginal language knowledge and youth suicide. *Cognitive Development*, 22, 392–399. <http://dx.doi.org/10.1016/j.cogdev.2007.02.001>
- Harvard Project on American Indian Economic Development. (2008). *The state of the Native nations: Conditions under U.S. policies of self-determination*. New York, NY: Oxford University Press.
- Havighurst, R. J. (1971). The extent and significance of suicide among American Indians today. *Mental Hygiene*, 55, 174–177.
- Hawkins, E. H., Cummins, L. H., & Marlatt, G. A. (2004). Preventing substance abuse in American Indian and Alaska native youth: Promising strategies for healthier communities. *Psychological Bulletin*, 130, 304–323. <http://dx.doi.org/10.1037/0033-2909.130.2.304>
- Howard-Pitney, B., LaFromboise, T. D., Basil, M., September, B., & Johnson, M. (1992). Psychological and social indicators of suicide ideation and suicide attempts in Zuni adolescents. *Journal of Consulting and Clinical Psychology*, 60, 473–476. <http://dx.doi.org/10.1037/0022-006X.60.3.473>
- Humes, K. R., Jones, N. A., & Ramirez, R. R. (2011, March). *Overview of race and Hispanic origin: 2010* (2010 Census Briefs No. C2010BR-02). Washington, DC: U.S. Census Bureau.
- Indian Health Service. (2002). *Regional differences in Indian health 2002–2003 edition*. Washington, DC: U.S. Department of Health and Human Services.
- Kazdin, A. E., Rodgers, A., & Colbus, D. (1986). The hopelessness scale for children: Psychometric characteristics and concurrent validity. *Journal of Consulting and Clinical Psychology*, 54, 241–245. <http://dx.doi.org/10.1037/0022-006X.54.2.241>
- Kellam, S. G., Brown, C. H., Poduska, J. M., Ialongo, N. S., Wang, W., Toyinbo, P., . . . Wilcox, H. C. (2008). Effects of a universal classroom behavior management program in first and second grades on young adult behavioral, psychiatric, and social outcomes. *Drug and Alcohol Dependence*, 95(Suppl. 1), S5–S28. <http://dx.doi.org/10.1016/j.drugalcdep.2008.01.004>
- Koss, M. P., Yuan, N. P., Dightman, D., Prince, R. J., Polacca, M., Sanderson, B., & Goldman, D. (2003). Adverse childhood exposures and alcohol dependence

- among seven Native American tribes. *American Journal of Preventive Medicine*, 25, 238–244. [http://dx.doi.org/10.1016/S0749-3797\(03\)00195-8](http://dx.doi.org/10.1016/S0749-3797(03)00195-8)
- LaFromboise, T. D. (1991). *Zuni life skills development curriculum*. Unpublished curriculum. Stanford, CA: School of Education, Stanford University.
- LaFromboise, T. D. (1996). *American Indian life skills development curriculum*. Madison: University of Wisconsin Press.
- LaFromboise, T. D., Albright, K., & Harris, A. (2010). Patterns of hopelessness among American Indian adolescents: Relationships by levels of acculturation and residence. *Cultural Diversity and Ethnic Minority Psychology*, 16, 68–76. <http://dx.doi.org/10.1037/a0016181>
- LaFromboise, T. D., & Howard-Pitney, B. (1993). The Zuni Life Skills Development Curriculum: A collaborative approach to curriculum development. *American Indian and Alaska Native Mental Health Research, The Journal of the National Center*, 4, 98–121.
- LaFromboise, T. D., & Howard-Pitney, B. (1995). The Zuni Life Skills Development Curriculum: Description and evaluation of a suicide prevention program. *Journal of Counseling Psychology*, 42, 479–486. <http://dx.doi.org/10.1037/0022-0167.42.4.479>
- LaFromboise, T. D., & Lewis, H. A. (2008). The Zuni Life Skills Development Program: A school/community-based suicide prevention intervention. *Suicide and Life-Threatening Behavior*, 38, 343–353.
- LaFromboise, T. D., & Malik, S. S. (2012, May). *Development of the American Indian Life Skills Curriculum: Middle School Version*. Poster presentation, Second Biennial Conference of the Society for the Psychological Study of Ethnic Minority Issues, Ann Arbor, MI.
- LaFromboise, T. D., Medoff, L., Lee, C., & Harris, A. (2007). Psychosocial and cultural correlates of suicidal ideation among American Indian early adolescents on a Northern Plains reservation. *Research in Human Development*, 4(1–2), 119–143.
- LaFromboise, T. D., & Rowe, W. (1983). Skills training for bicultural competence: Rationale and application. *Journal of Counseling Psychology*, 30, 589–595. <http://dx.doi.org/10.1037/0022-0167.30.4.589>
- Lester, D. (1999). Native American suicide rates, acculturation stress and traditional integration. *Psychological Reports*, 84, 398. <http://dx.doi.org/10.2466/pr0.1999.84.2.398>
- Mackin, J., Perkins, T., & Furrer, C. (2012). The power of protection: A population-based comparison of Native and non-Native youth suicide attempters. *American Indian and Alaska Native Mental Health Research*, 19(2), 20–54. <http://dx.doi.org/10.5820/aian.1902.2012.20>
- 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. *American Journal of Public Health*, 95, 1238–1244. <http://dx.doi.org/10.2105/AJPH.2004.040410>

- Medoff, L. R. (2007). Suicidal ideation and related factors in Native American adolescents with and without learning disabilities. *Dissertation Abstracts International: Section B. The Sciences and Engineering* 67(9-B), 5414.
- Meriam, L. (Ed.). (1928). *The problem of Indian administration*. Baltimore, MD: Johns Hopkins University Press.
- Moran, J. R., Fleming, C. M., Somervell, P., & Manson, S. M. (1999). Measuring bicultural ethnic identity among American Indian adolescents: A factor analytic study. *Journal of Adolescent Research*, 14, 405–426. <http://dx.doi.org/10.1177/0743558499144002>
- Muehlenkamp, J. J., Marrone, S., Gray, J. S., & Brown, D. L. (2009). A college suicide prevention model for American Indian students. *Professional Psychology: Research and Practice*, 40, 134–140. <http://dx.doi.org/10.1037/a0013253>
- Mullany, B., Barlow, A., Goklish, N., Larzelere-Hinton, F., Cwik, M., Craig, M., & Walkup, J. T. (2009). Toward understanding suicide among youths: Results from the White Mountain Apache tribally mandated suicide surveillance system, 2001–2006. *American Journal of Public Health*, 99, 1840–1848. <http://dx.doi.org/10.2105/AJPH.2008.154880>
- National Center for Children in Poverty. (2007). *Facts about trauma for policymakers*. Retrieved from http://www.nccp.org/publications/pub_746.html
- Pettingell, S. L., Bearinger, L. H., Skay, C. L., Resnick, M. D., Potthoff, S. J., & Eichhorn, J. (2008). Protecting urban American Indian young people from suicide. *American Journal of Health Behavior*, 32, 465–476. <http://dx.doi.org/10.5993/AJHB.32.5.2>
- Reynolds, W. M. (1988). *Suicidal Ideation Questionnaire: Professional manual*. Lutz, FL: Psychological Assessment Resources.
- Salvatore, N. F. (2011). *American Indian Life Skills Curriculum: Evaluation results in San Juan County local implementation of classes, Fall 2010 and Spring 2011* (Unpublished report). Farmington, NM: Author.
- Smith, L. T. (1999). *Decolonizing methodologies: Research and Indigenous peoples*. New York, NY: Zed Books.
- Steele, M. M., & Doey, T. (2007). Suicidal behaviour in children and adolescents. Part 2: Treatment and prevention. *Canadian Journal of Psychiatry*, 52(6, Suppl. 1), 35S–45S.
- Thompson, E. A., Eggert, L. L., Randell, B. P., & Pike, K. C. (2001). Evaluation of indicated suicide risk prevention approaches for potential high school dropouts. *American Journal of Public Health*, 91, 742–752. <http://dx.doi.org/10.2105/AJPH.91.5.742>
- Tingey, L., Cwik, M., Goklish, N., Alchesay, M., Lee, A., Strom, R., . . . Barlow, A. (2012). Exploring binge drinking and drug use among American Indians: Data from adolescent focus groups. *The American Journal of Drug and Alcohol Abuse*, 38, 409–415. <http://dx.doi.org/10.3109/00952990.2012.705204>
- Van Winkle, N. W., & May, P. A. (1986). Native American suicide in New Mexico, 1957–1979: A comparative study. *Human Organization*, 45, 296–309. <http://dx.doi.org/10.17730/humo.45.4.f1159w1x64k164t4>

- Van Winkle, N. W., & May, P. A. (1993). An update on American Indian suicide in New Mexico, 1980–1987. *Human Organization*, 52, 304–315.
- Waldram, J. B. (2004). *Revenge of the Windigo: The construction of the mind and mental health of North American Aboriginal peoples*. Toronto, Ontario, Canada: University of Toronto Press.
- Walker, R. D., & Bigelow, D. A. (2011). A constructive Indian country response to the evidence-based program mandate. *Journal of Psychoactive Drugs*, 43, 276–281. <http://dx.doi.org/10.1080/02791072.2011.628910>
- Wallace, J. M., Jr., Bachman, J. G., O'Malley, P. M., Schulenberg, J. E., Cooper, S. M., & Johnston, L. D. (2003). Gender and ethnic differences in smoking, drinking and illicit drug use among American 8th, 10th and 12th grade students, 1976–2000. *Addiction*, 98, 225–234. <http://dx.doi.org/10.1046/j.1360-0443.2003.00282.x>
- Walls, M. L., Chapple, C. L., & Johnson, K. D. (2007). Strain, emotion, and suicide among American Indian youth. *Deviant Behavior*, 28, 219–246. <http://dx.doi.org/10.1080/01639620701233100>
- Walls, M. L., Whitbeck, L. B., Hoyt, D. R., & Johnson, K. D. (2007). Early-onset alcohol use among Native American youth: Examining female caretaker influence. *Journal of Marriage and Family*, 69, 451–464. <http://dx.doi.org/10.1111/j.1741-3737.2007.00376.x>
- Walters, K. L., Mohammed, S. A., Evans-Campbell, T., Beltran, 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 Natives. *Du Bois Review*, 8, 179–189. <http://dx.doi.org/10.1017/S1742058X1100018X>
- Wexler, L. M. (2006). Inupiat youth suicide and culture loss: Changing community conversations for prevention. *Social Science & Medicine*, 63, 2938–2948. <http://dx.doi.org/10.1016/j.socscimed.2006.07.022>
- Wexler, L. M., Chandler, M., Gone, J. P., Cwik, M., Kimayer, L. J., LaFromboise, T., . . . Allen, J. (2015). Advancing suicide prevention research with rural American Indian and Alaska Native populations. *American Journal of Public Health*, 105, 891–899. <http://dx.doi.org/10.2105/AJPH.2014.302517>
- Wexler, L. M., & Gone, J. P. (2012). Culturally responsive suicide prevention in indigenous communities: Unexamined assumptions and new possibilities. *American Journal of Public Health*, 102, 800–806. <http://dx.doi.org/10.2105/AJPH.2011.300432>
- Whitbeck, L. B., Walls, M. L., Johnson, K. D., Morrisseau, A. D., & McDougall, C. M. (2009). Depressed affect and historical loss among North American Indigenous adolescents. *American Indian and Alaska Native Mental Health Research*, 16, 16–41. <http://dx.doi.org/10.5820/aian.1603.2009.16>
- Whitbeck, L. B., Walls, M. L., & Welch, M. L. (2012). Substance abuse prevention in American Indian and Alaska Native communities. *The American Journal of Drug and Alcohol Abuse*, 38, 428–435. <http://dx.doi.org/10.3109/00952990.2012.695416>

- Whitbeck, L. B., Yu, M., Johnson, K. D., Hoyt, D. R., & Walls, M. L. (2008). Diagnostic prevalence rates from early to mid-adolescence among indigenous adolescents: First results from a longitudinal study. *Journal of the American Academy of Child & Adolescent Psychiatry*, 47, 890–900. <http://dx.doi.org/10.1097/CHI.0b013e3181799609>
- Wolsko, C., Lardon, C., Mohatt, G. V., & Orr, E. (2007). Stress, coping, and well-being among the Yup'ik of the Yukon-Kuskokwim Delta: The role of enculturation and acculturation. *International Journal of Circumpolar Health*, 66(1), 51–61. <http://dx.doi.org/10.3402/ijch.v66i1.18226>
- Woodard, S. (2012). Suicide is epidemic for American Indian youth: What more can be done? *Open Channel*. Retrieved from http://investigations.nbcnews.com/_news/2012/10/10/14340090-suicide-is-epidemic-for-american-indian-youth-what-more-can-be-done
- Wyman, P. A., Brown, C. H., LoMurray, M., Schmeelk-Cone, K., Petrova, M., Yu, Q., . . . Wang, W. (2010). An outcome evaluation of the Sources of Strength suicide prevention program delivered by adolescent peer leaders in high schools. *American Journal of Public Health*, 100, 1653–1661. <http://dx.doi.org/10.2105/AJPH.2009.190025>
- Yoder, K. A., Whitbeck, L. B., Hoyt, D. R., & LaFromboise, T. (2006). Suicidal ideation among American Indian youths. *Archives of Suicide Research*, 10, 177–190. <http://dx.doi.org/10.1080/13811110600558240>

EVIDENCE-BASED
PSYCHOLOGICAL
PRACTICE WITH
ETHNIC MINORITIES
CULTURALLY INFORMED RESEARCH
and CLINICAL STRATEGIES

Edited by

NOLAN ZANE, GUILLERMO BERNAL, and FREDERICK T. L. LEONG

2016

American Psychological Association • Washington, DC